

# ENIGMA 2000 NEWSLETTER



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



GCHQ Bude

ISSUE 75  
March 2013

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

## Editorial

A good set of logs once again from our members; many thanks to all contributors

A request to help make the job easier. When you present logs to E2k either via Group or direct please present them in the adopted ENIGMA2000 style which now replaces others.

Two members have berated Paul saying their logs, although presented are never included in the newsletter. It has to be pointed out that putting a newsletter together is a complicated and somewhat onerous task. With different desks having to rewrite logs it is no wonder that some logs are not included.

If you need guidance on how to present your logs then please see the first section in the Chart Section which explains at length the why's and wherefors of the style.

Certain emails, one of which issued a death threat [from a limp-wristed moron the other side of the pond] who wasn't going to be accepted as a member of E2k has prompted me to write this little intro into joining E2k:

## Membership matters

As current members know we like an active group and expect members to contribute with some input and we reserve the right to remove those that don't.

For perspective members who are reading this it doesn't have to be logs and can be news cuttings and suchlike also.

Joining is a bit of a process and we try to ensure that we do not encourage lurkers or those who wish to use our product for their own ends.

Perspective members who write along the lines of 'I don't own a radio but might buy one later.....' really don't have a place in this Group; we are happy to attract learners but find that most end up being removed after a few posts that basically seem to be to stop being thrown out.

So perspective members be aware that you are expected to be active. Those who cannot put their name, age and location down or give reasons to join that seem a little daft, or beyond, will be refused.

The sad thing is there are certain persons who seem to think it is their right to be a member, take it badly when they are refused. However, we have a reasonably active membership and we wish to keep that going. If anyone has any ideas on furthering E2k please let us know. What we will not be doing is IRC chat/Podcasts.

Now onto the Newsletter content:

## Morse Station Roundup.

UNID Two particularly interesting reports this time in the Unid Morse section. Firstly from JPL on 17 Jan with a station on 4468kHz, in progress at 2148z. The detail sent **(863 863 000)**, using short zeros sent without pauses looks suspiciously like a number station as does the second report, this time from Tony (ATC), who logged a station on 04 Feb sending grps & ending with **678 678**.

Unfortunately, we don't have enough detail to be able to confirm ID or to pin these two down to a specific group.

M08a Far fewer reports this time of either M08a or the accompanying SK01 transmissions. This is largely due to the increasing use by this organisation of the new Hybrid Mode (HM01). West1us, however, remind us that M08a is not yet dead. Will M08a be missing permanently from our logs soon?

M12 Brian (BR) & Fritz (FN) became concerned during the first 10 days of Jan as large sections of regular sched were missing. BR then remembered that the same had occurred during this period in the previous year, & blowing the dust from last year's logs confirmed that this was the case. Why does M12 have an extra long New Year's break?

M23 More questions than answers from M23 this time with a confusing series of sendings. Four separate msgs were sent, but on only the first & last of these did the group count (GC) actually tally with the number of grps transmitted. In addition msg repeats were usually cut-off part-way during transmission.

M89 Jean Paul (JPL) continues to find the variations, changes and new freqs for this very prolific station, which seems to be busier than ever.

M97 Two new msgs appeared in January, which have been repeated intermittently throughout both January & February - Although there has been much reduced activity during the latter..

Beacons We have a very comprehensive list of Morse Beacon logs this time. Thanks to all contributors especially Ary (AB), who provided the Lion's share of the logs.

## 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.

## UNID CW

3765	1623 - 1633z	17 Jan	UNK (In tfc) (Remote Tuner Finland) (In tfc - 1623z)	JPL	THU
			512 62665 62665 (1624z) 111000 111000 111000 (1626z) CFM 62665 512 512 512 62665 SK (1629z)		
4468	2146 - 2155z	17 Jan	UNK (In progress) (Remote Tuner Finland)	JPL	THU
	2146z (IP)		<b>863 863 (2146z) 000</b> (2148z - Silent) Short zeros sent without pauses. There was a 2 minute gap before the zeros were sent. <i>(This is possibly a number station, but we don't have enough detail on this to identify it)</i>		

4496	1848z (IP)	04 Feb	[678 ?????] 1852z Very Strong.. Ended <b>678 678</b> <i>Arrived part way through, groups not logged</i>	ATC	MON
6853	1920z onwards	08 Jan	(IP) Cyrillic 5 ltr grps. During pauses another weaker station heard replying <i>Most likely Russian Mil ?</i>	SR	TUE

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

#### January 2013:

4490	2000z	01 Jan	'197' 257 30 ==	15589...	...LG 39404 == Strong, fast. Repeat errors grps05 & 30.	BR	TUE
	2000z	03 Jan	'197' 127 30 //	00662...	...LG 77765 // Strong, fast. Ends 2009z grp28 77309 <b>44309</b>	CB	THU
	2000z	08 Jan	'197' 726 30 //	22710...	...LG 84904 // Strong, fast. Errors grps24, 27 & 28	BR	TUE
	2000z	10 Jan	'197' 473 30 ==	15535...	...LG 38330 == Strong, fast. Multiple errors.	BR/CB	THU
	2000z	15 Jan	'197' 512 30 ==	34428...	...LG 34428 == Good, fast. High noise. With errors	BR/CB	TUE
	2000z	17 Jan	'197' 584 30 ==	00517...	...LG 83280 == Strong, fast. Rpt errors on grps 07 & 09	BR/CB	THU
	2000z	22 Jan	'197' 086 30 ==	91714...	...LG 65904 == Strong, fast. Numerous errors	BR/CB	TUE
	2000z	24 Jan	'197' 015 30 ==	06113...	...LG 45187 == Strong, V.fast. Long call-up, error grp16	BR/CB	THU
	2000z	29 Jan	'197' 798 30 ==	86391...	...LG 71193 == Strong, fast. Errors grps16 & 23	CB	TUE
	2000z	31 Jan	'197' 217 30 ==	59525...	...LG 42472 == Strong, fast. Errors in call-up & last grps	CB	THU
5320	1800z	01 Jan	'197' 159 30	14627...	...LG 81809 == Strong, med-fast. With errors	BR	TUE
	1800z	03 Jan	'197' 481 30 ==	... 54...	...LG 03074 == Fair, fast. Start DK GC sent as 338 55	BR	THU
	1800z	08 Jan	'197' 319 30 //	54664...	...LG 80971 // Good, fast. Repeat errors grps02 & 27	BR/CB	TUE
	1800z	10 Jan	'197' 526 30 ==	22321...	...LG 40214 == Strong, fast. V. noisy. Poor copy	BR/CB	THU
	1800z	15 Jan	'197' 782 30 ==	81952...	...LG 17340 == Strong, fast. Grp 01 881952 81952	BR/CB	TUE
	1800z	17 Jan	'197' 319 30 ==	00 ...	...LG 85049 == Weak, V.fast. Possible errors	BR/PPL	THU
	1800z	22 Jan	'197' 319 30 ==	62755...	...LG 67971 == Strong, fast. Numerous errors. Speed varied	BR/CB	TUE
	1800z	24 Jan	'197' 138 30 ==	22751...	...LG 46864 == Good, fast. Grp08 90180 9080. 3 x GC ending	BR/CB	THU
	1800z	29 Jan	'197' 257 30 ==	68055...	...LG 35035 == Strong, started slow increasing speed twice	CB	TUE
	1800z	31 Jan	'197' 328 30 ==	06449...	...LG 63472 == Strong, V.fast. Grp09 sent x3 grp10 sent x1	CB	THU
5465	0700z	06 Jan	'197' 856 30 ==	12579...	...LG 10029 == Strong, fast. Error grp23. Grp27 sent once	BR	SUN
	0700z	13 Jan	'197' 421 30 ==	18158...	...LG 30821 == Good, V.fast. Good start but became chaotic	BR	SUN
	0700z	20 Jan	'197' 218 30 ==	88672...	...LG .7822 == Strong, fast. Errors grps.05, 12, 25 & 30	BR	SUN
	0700z	27 Jan	'197' 748 30 //	01874...	...LG 40587 // Good, fast. Grp30 40587 40584	BR	SUN
5810	1500z	05 Jan	'197' 719 30 ==	10566...	...LG 35038 == Strong, fast. Error grp02. Grp04 sent 3 times	BR	SAT
	1500z	12 Jan	'197' 278 30 ==	02813...	...LG 14179 == Strong, V.fast. Perfect sending, excellent CW	BR	SAT
	1500z	19 Jan	'197' 172 30 ==		Strong	PSP	SAT
	1500z	26 Jan	'197' 386 30 ==	04268...	...LG 16574 == Good, med-fast. Corrected error in call-up	BR	SAT

#### February 2013:

4490	2000z	05 Feb	'197' 421 30 ==	.....	...LG 34913 == Strong, fast. Numerous errors	BR/CB	TUE
	2006z	07 Feb	'197' 526 30 ==	81425...	...LG 71184 == Strong, med-fast. Late start. Several errors	BR	THU
	2000z	12 Feb	'197' 121 30 ==	77602...	...LG 23233 == Strong, fast. Grp03 99754 99454	BR/CB/RNGB	TUE
	2000z	14 Feb	'197' 598 30 ==	31440...	...LG 84719 == Strong, v.fast. Poorly defined on figs 5 & 6	CB/BR	THU
	2000z	19 Feb	'197' 405 30 //	63748...	...LG 25906 // Strong, med-fast. Perfect CW.	BR	TUE
	2000z	21 Feb	'197' 127 30 ==	78442 ...	...LG 07744 == Good, fast. Start DK sent as 7127 127	BR	THU
5320	1800z	05 Feb	'197' 868 30 ==	85161...	...LG 12830 == V.strong, quick, and grps 21& 22 sent 3 times.	CB/RNGB	TUE
	1800z	07 Feb	'197' 741 30 //	32331...	...LG 88452 == Strong, med-fast. Rpt errors grps04 & 15	BR	THU
	1800z	12 Feb	'197' 078 30 ==	01013...	...LG 50368 == Good. fast. Grp05 60523 50523	BR/CB	TUE
	1800z	14 Feb	NRH			BR/CB	THU
	1800z	19 Feb	'197' 726 30 //	43477...	...LG 34071 // V.Strong, med-fast. Error in starting DK	BR	TUE
	1800z	21 Feb	'197' 736 30 ==	77962...	...LG 20286 == V.strong, pauses in grp20. == missing at EOM	BR	THU
	1800z	26 Feb	'197' 349 30 //	42107...	...LG 03162 // Strong, fast. DK / GC sent as 249 20 at Start.	CB	TUE
5465	0700z	03 Feb	'197' 123 30 ==	25359...	...LG 52381 == Strong, fast. Late start. Grp29 03638 03629	BR	SUN
	0700z	10 Feb	'197' 280 30 ==	96385...	...LG 55835 == Strong, v.fast. Errors from grp22 onwards	BR	SUN
	0700z	17 Feb	'197' 180 30 ==	77815...	...LG 11140 == Strong, v.fast. Grp20 ar 8985 18985	BR	SUN
	0700z	24 Feb	NRH			BR	SUN
5810	1500z	02 Feb	'197' 788 30 ==	106.1...	...LG 57647 == Weak, fast. Difficult copy	BR	SAT
	1500z	09 Feb	'197' 037 30 ==	60788...	...LG 25115 == Weak, v.fast. Very poor copy	BR	SAT
	1500z	16 Feb	'197' 263 30 ==	85897...	...LG 36110 == Good, fast. Grp07 07571 04541	BR	SAT
	1500z	23 Feb	'197' 381 30 ==	80996 96645 ...71773 73031 == 1510z		tING	SAT

**M01a** (formerly end of month TXs, now random)  
No reports

#### M01b

#### January 2013:

5941	1603z	03 Jan	'159' 542 30 =	54622 06313 37003....32527 (strong)	RNGB	THU
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### February 2013:

Guy (GD) reports; *Copy of M01b has been very poor, these are the first I have heard for some weeks*

2485	2042z	14 Feb	'382' 527 30 =	GD	THU
3160	2042z	07 Feb	'382' 527 30 =	GD	THU
3545	1932z	07 Feb	'910' 527 30 =	GD	THU
	1932z	14 Feb	'910' 527 30 =	GD	THU
5938	1605z	14 Feb	'159' 378 30 =	GD	THU

### M01c

No reports

### M03 III ICW, some CW

4828	1115z	02 Jan	650/00	RNGB	WED
5358	1535z	08 Jan	790/38 = 55072 57152 97008 31852.....97271	RNGB	TUE
	1535z	19 Jan	798/00	HFD	TUE
	1535z	29 Jan	798/00 =	CB	TUE
	1542z	05 Feb	798/00 (This one late on parade? Or new time schedule?)	RNGB	TUE
	1535z	09 Feb	798/00 = 0 0 0 (Ends 1538z) (hand keyed Vs heard this freq at 1530z)	CB	SAT
	1535z	12 Feb	<b>792/34 = 90.93.....LG ? 74254 74245 ? ends 1553z</b>	CB	TUE
			<i>(Note change in call up to 792, very weak signal here (France) with QSB and hi noise, only a few groups copied)</i>		
	1535z	16 Feb	798/00 = = 0 0 0 (Ends 1538z)	CB	SAT
	1535z	23 Feb	<b>792/33 = = 0_556 ... faded out completely! 1552z?</b>	tiNG	SAT
13911	1420z	04 Jan	879/00	HFD	FRI
	1420z	06 Jan	879/00	RNGB	SUN
	1420z	01 Feb	879/00	RNGB	FRI
	1440z*	01 Feb	871/36 72571 46557 ... (*In progress - Missed start)	Gert	FRI

### M03c (Stutter groups)

No reports

### M03d

No reports

### M03e

No reports

### M08a XVIII ICW / CW, some MCW

Very few M08a reports this time as the new HM01 mode is now the latest preferred method from the Cuban stations.

### January 2013:

6854	2215z	03 Jan	[ - - - 22802 35231] QSA5 Simultaneously on 8009kHz & 6854 kHz (Usually 6854kHz)	HT	THU
7519	2200z	04 Jan	[52671 65012 77431] QSA3	Ggs/HT	FRI
7579	1300z	22 Jan	[12412 25741] End 1333z	Ggs	TUE
8009	2212z	03 Jan	[ - - - 22802 35231] QSA5 Simultaneously on 8009kHz & 6854 kHz (Usually 6854kHz)	HT	THU
8096	1400z	03 Jan	[53022 66351 80672] QSA3	HT	THU
	1400z	04 Jan	[50832 63361 76681] QSA3	HT	FRI

### February 2013:

7554	2000z	02 Feb	(In progress) No call-up ( <i>This was formerly a Monday thru Friday schedule</i> ).	Westt1us	SAT
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Westt1us writes; *I haven't seen anyone log an M08a transmission in over a month however it is not dead yet. When I have had time I have looked for transmissions and have failed to find any at the expected primary times only secondary transmission times seem to be used at the moment. Perhaps all the primary schedules have changed frequency but I doubt it somehow.*

*In addition the 1900/2000z V02a on Tuesday and Thursday seems to have vanished and I have failed to find any of the others during my limited attempts.*

7554	2000z	16 Feb	(In progress) NRH on expected primary of 6785kHz at 1900z Nothing found at 2100z	Westt1us	SAT
	2000z	17 Feb	(In progress) NRH on expected primary of 6785kHz at 1900z Nothing found at 2100z	Westt1us	SUN
	2000z	22 Feb	(In progress) NRH on expected primary of 6785kHz at 1900z Nothing found during search	Westt1us	FRI
	2000z	25 Feb	(In progress) NRH on expected primary of 6785kHz at 1900z Nothing found during search	Westt1us	MON
	2000z	26 Feb	(In progress) NRH on expected primary of 6785kHz at 1900z Nothing found during search	Westt1us	TUE
8009	1400z	25 Feb	(In progress) NRH on expected primary of 7579kHz at 1300z Nothing found during search	Westt1us	MON
	2300z	25 Feb	(In progress) NRH on expected primary of 7519kHz at 2200z Nothing found during search	Westt1us	MON
8097	1400z	18 Feb	(In progress) NRH on expected primary of 7579kHz at 1300z	Westt1us	MON
	1400z	19 Feb	(In progress) NRH on expected primary of 7579kHz at 1300z	Westt1us	TUE
	1400z	20 Feb	(In progress) NRH on expected primary of 7579kHz at 1300z	Westt1us	WED
	1400z	21 Feb	(In progress) NRH on expected primary of 7579kHz at 1300z	Westt1us	THU
	1400z	22 Feb	(In progress) NRH on expected primary of 7579kHz at 1300z	Westt1us	FRI
	1400z	26 Feb	(In progress) NRH on expected primary of 7579kHz at 1300z Nothing found during search	Westt1us	TUE

8135	2300z	21 Feb	(In progress) NRH on expected primary of 7519kHz at 2200z	West1lus	THU
	2300z	26 Feb	(In progress) NRH on expected primary of 7526kHz at 2200z Nothing found during search	West1lus	TUE

**M08c**  
No reports

**M08d**  
No reports

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

To be read in conjunction with Brian's included monthly charts. New ID's may be only for the month/sched shown, but not necessarily unknown , all are clearly identified on Brian's charts. The reason for their reuse, some after long periods of time, is unknown.

There was some concern expressed between Fritz (FN) and Brian (BR) as the new year started and the main M12 IDs were missing from the schedules, while the few scheds that were heard were all null.

Then Brian remembered this happening before and, sure enough, when he blew the dust from last January's logs discovered the same lean loggings for the first week or 10 days of the year. It seems that M12 must give their operatives an extra week off for the festivities.

#### **January 2013:**

4457/4157/---	0530/0550/0610z	07 Jan	417 000	FN	MON
	0530/0550/0610z	14 Jan	417 000	FN/HFD	MON
	0530/0550/0610z	21 Jan	417 000	FN	MON
5284/5784/---	0730/0750/0810z	03 Jan	277 000	FN/HFD	THU
	0730/0750/0810z	10 Jan	277 000	FN	THU
	0730/0750/0810z	17 Jan	277 000	FN	THU
	0730/0750/0810z	24 Jan	277 000	FN	THU
5361/4461/---	2200/20/40z	02 Jan	340 000	FN/HFD	WED
	2200/20/40z	09 Jan	340 000	FN	WED
	2200/20/40z	23 Jan	340 000	FN	WED
5838/7438/---	0600/20/40z	19 Jan	842 000	FN	SAT
	0600/20/40z	26 Jan	842 000	FN	SAT
6835	0720z	15 Jan	975 1 Unable to copy message as tx very garbled. A 2 fig. group count. [NRH] Tuning transmitter 0718z, no transmission. 0700z and 0740z NRH	RNGB	TUE
	0720z	22 Jan		FN	TUE
7697/6797/---	1500/20/40z	02 Jan	157 000	FN/HFD/RNGB	WED
	1500/20/40z	09 Jan	157 1 (323 167) 11537... Repeat of 07Jan 1300z	FN	WED
	1500/20/40z	16 Jan	157 1 (974 139) 51064... Repeat of 14Jan 1300z	FN	WED
	1500/20/40z	23 Jan	157 000	CB/FN	WED
8047/6802/5788	1700/20/40z	09 Jan	463 1 (2379 54) 30240...	FN/HFD	WED
	1700/20/40z	16 Jan	463 1 (3309 41) 17336... LG 76046 0 0 0 (Strong signal in France)	CB/FN	WED
	1700/20/40z	23 Jan	463 1 (8544 56) 94882...	FN	WED
8112/7552/6792	1300/20/40z	07 Jan	157 1 (323 167) 11537...	FN	MON
	1300/20/40z	14 Jan	157 1 (974 139) 51064...	FN/HFD	MON
	1300/20/40z	21 Jan	157 000	FN	MON
	1300/20/40z	28 Jan	157 1 (148 195)	GD	MON
9168/7968/---	1830/1850/1910z	02 Jan	194 000	FN	WED
	1830/1850/1910z	06 Jan	194 000	FN	SUN
	1830/1850/1910z	09 Jan	194 1 (461 159) 68952...	FN	WED
	1830/1850/1910z	13 Jan	194 1 (461 159) 68952... V.Weak 9168kHz Repeat of 09Jan 1830z	FN	SUN
	1830/1850/1910z	16 Jan	194 1 (219 127) 14425...	FN	WED
	1830/1850/1910z	20 Jan	194 1 (219 127) 14425... Weak sig 9168kHz Repeat of 16 Jan 1830z	FN	SUN
	1830/1850/1910z	23 Jan	194 000	FN	WED
	1830/1850/1910z	27 Jan	194 000	FN	SUN
	1830/1850/1910z	31 Jan	194 1	HFD	WED
9176/7931/6904	1700/20/40z	10 Jan	257 1 (9791 59) 17061...	FN	THU
	1900/20/40z	10 Jan	257 1 (4458 62) 31610...	FN	THU
	1700/20/40z	14 Jan	257 1 (6477 70) 80196... QRM dig station on 6904kHz	FN	MON
	1800/20/40z	14 Jan	257 1 (8502 45) 95292...	FN	MON
	1900/20/40z	14 Jan	257 1 (7158 65) 68119...	FN	MON
	1700/20/40z	17 Jan	257 1 (9178 82) 58632...	FN	THU
	1900/20/40z	17 Jan	257 1 (3587 60) 33112... QRM tact CIS Mil Morse station. 7931kHz	FN	THU
	1700/20/40z	21 Jan	257 1 (5386 74) 65683... QRM dig station on 7931kHz	FN	MON
	1800/20/40z	21 Jan	257 1 (3438 50) 38871... Weak sig 9176kHz. QRM dig station 7931kHz	FN	MON
	1900/20/40z	21 Jan	257 1 (5976 61) 90997... Weak sigs on 9176 & 7931kHz	FN	MON
	1700/20/40z	24 Jan	257 1 (8832 81) 67992... QRM dig station on 6904kHz	FN	THU
	1900/20/40z	24 Jan	257 1 (9394 43) 19452... Weak sig 9176kHz	FN	THU
10343/9264/8116	1700/20/40z	10 Jan	124 1 (9249 78) 89298...	FN/HFD	THU
	1800/20/40z	10 Jan	124 1 (1639 86) 27402...	FN	THU
	1800/20/40z	11 Jan	124 1 (4653 81) 81945...	FN	FRI
	1830/1850/1910z	15 Jan	124 1 (4123 58) 12737... NRH on 10343 & 9264kHz	FN	TUE
	1700/20/40z	17 Jan	124 1 (375 74) 45402...	FN	THU
	1800/20/40z	17 Jan	124 1 (6405 53) 37726...	FN	THU
	1800/20/40z	18 Jan	124 1 (1052 79) 85194...	FN	FRI

10343/9264/8116 (Continued)	1830/1850/1910z	22 Jan	124 1 (1372 69) 15942... Weak signal on 10343kHz	FN/HFD	TUE
	1700/20/40z	24 Jan	124 1 (9701 77) 30054... Weak signal on 10343kHz	FN	THU
	1800/20/40z	24 Jan	124 1 (7456 87) 71080... V.weak sig 10343kHz, weak sig 9264kHz	FN	THU
	1800/20/40z	25 Jan	124 1 (8299 74) 72522... NRH 10343kHz, V.weak sig 9264kHz	FN	FRI
11435/10598/9327	1830/1850/1910z	16 Jan	938 1 ... NRH on 11435 & 10598kHz, very weak sig 9327kHz	FN	WED
	1830/1850/1910z	23 Jan	938 1 (1654 70) ... ??] NRH 11435 & 10598kHz, V.weak sig 9327kHz	FN/HFD	WED
12162/11566/10711	1600/20/40z	14 Jan	546 1 (696 49) 02362...	FN/HFD	MON
	1600/20/40z	21 Jan	546 1 (1622 88) 29350...	FN	MON
13369/14669/---	1010/30/50z	03 Jan	369 000	FN	THU
	1010/30/50z	06 Jan	369 000	FN	SUN
	1010/30/50z	10 Jan	369 1 (282 107) 90683...	FN	THU
	1010/30/50z	13 Jan	369 1 (282 107) 90683... Repeat of 10 Jan 1010z	FN	SUN
	1010/30/50z	17 Jan	369 1 (470 99) 41880...	FN	THU
	1010/30/50z	24 Jan	369 000	FN	THU
	1010/30/50z	27 Jan	369 000	FN	SUN
<b><u>February 2013:</u></b>					
4617/5317/---	0530/0550/0610z	04 Feb	638 000	FN	MON
	0530/0550/0610z	18 Feb	638 000	FN	MON
	0530/0550/0610z	25 Feb	638 000	FN	MON
5429/4629/---	2200/20/40z	06 Feb	460 000	FN	WED
	2200/20/40z	13 Feb	460 000	FN	WED
5884/6884/---	0730/0750/0810z	07 Feb	888 000	FN	THU
	0730/0750/0810z	21 Feb	888 000	FN	THU
7637/9137/10237	0600/20/40z	02 Feb	612 1 (9941 87) 68875...	FN	SAT
	0600/20/40z	09 Feb	612 000	FN	SAT
	0600/20/40z	16 Feb	612 000	FN	SAT
7697/6797/5397	1500/20/40z	06 Feb	214 1 (908 167) 15354... Repeat of 04 Feb 1300z	FN	WED
	1500/20/40z	13 Feb	214 1 (713 141) 24346...	FN	WED
	1500/20/40z	20 Jan	214 1 (8336 155) 22160... Repeat of 18Feb 1300z	FN	WED
8047/6802/5788	1700/20/40z	06 Feb	463 1 (2052 59) 87013...	FN	WED
	1700/20/40z	13 Feb	463 1 (1222 57) 78172...	FN	WED
	1700/20/40z	20 Feb	463 1 (1446 62) 81147...	FN	WED
9176/7931/6904	1700/20/40z	04 Feb	257 1 (6289 79) 19168...	FN	MON
	1800/20/40z	04 Feb	257 1 (9406 47) 29048...	FN	MON
	1900/20/40z	04 Feb	257 1 (2259 78) 80059...	FN	MON
	1700/20/40z	07 Feb	257 1 (9197 85) 85676...	FN	THU
	1900/20/40z	07 Feb	257 1 (2573 68) 74208...	ATC/FN	THU
	1700/20/40z	11 Feb	257 1 (1521 71) 55569...	FN	MON
	1800/20/40z	11 Feb	257 1 (1910 59) 36693...	FN	MON
	1900/20/40z	11 Feb	257 1 (4136 63) 87770...	FN	MON
	1700/20/40z	14 Feb	257 1 (4619 76) 28853...	FN	THU
	1900/20/40z	14 Feb	257 1 (8181 59) 77098...	FN	THU
	1700/20/40z	18 Feb	257 1 (6697 76) 08116...	FN	MON
	1800/20/40z	18 Feb	257 1 (7095 43) 31313...	FN	MON
	1900/20/40z	18 Feb	257 1 (4704 61) 73634...	FN	MON
	1700/20/40z	21 Feb	257 1 (9761 74) 30723...	FN	THU
	1900/20/40z	21 Feb	257 1 (8743 53) 97789...	FN	THU
	1700/20/40z	25 Feb	257 1 (1496 80) 54382... QRM CIS tactical CW network on 7931kHz	FN	MON
	1800/20/40z	25 Feb	257 1 (2988 65) 46703... QRM CIS tactical CW network on 7931kHz	FN	MON
	1900/20/40z	25 Feb	257 1 (5614 53) 57605... QRM CIS tactical CW network on 7931kHz	FN	MON
9223/ 8193/7463z	1300/20/40z	04 Feb	214 1 (908 167) 15354...	FN	MON
	1300/20/40z	11 Feb	214 1 (713 141) 24346...	FN	MON
	1300/20/40z	18 Feb	214 1 (8336 155) 22160...	FN	MON
	1300/20/50z	25 Feb	214 1 (8561 143) 19310...	FN	MON
10250	1019z (IP)	20 Feb	Jan writes; 'While turning the dial I bumped into an M12 in progress' last groups: .... 71528 01313 31460 15179 62282 97586 26610 Ends 000 000 at 1024z	Jan	WED
10343/9264/8116	1800/20/40z	01 Feb	124 1 (8352 74) 15825...	FN	FRI
	1830/1850/1910z	05 Feb	124 1 (5219 61) 42586...	CB/FN	TUE
	1700/20/40z	07 Feb	124 1 (4051 70) 27258...	FN	THU
	1800/20/40z	07 Feb	124 1 (4105 79) 03491...	FN	THU
	1800/20/40z	08 Feb	124 1 (9183 94) 86561...	FN	FRI
	1830/1850/1910z	12 Feb	124 1 (9946 56) 40209...	FN	TUE
	1700/20/40z	14 Feb	124 1 (5945 79) 13595...	FN	THU
	1800/20/40z	14 Feb	124 1 (8985 91) 19718...	FN	THU
	1800/20/40z	15 Feb	124 1 (5788 75) 33190...	FN	FRI
	1830/1850/1910z	19 Feb	124 1 (9238 63) 10982...	FN	TUE
	1700/20/40z	21 Feb	124 1 (6005 77) 62502...	FN	THU
	1800/20/40z	21 Feb	124 1 (1156 50) 06238...	FN	THU
	1800/20/40z	22 Feb	124 1 (6784 78) 68758...	FN	FRI

11435/10598/9327	1830/1850/1910z	06 Feb	938 1 (1179 53) 04862...		FN	WED
	1830/1850/1910z	13 Feb	938 1 (7461 53) 81895...		FN	WED
	1830/1850/1910z	20 Feb	938 1 (6582 50) 72848...		FN	WED
12162/11566/10711	1600/20/40z	04 Feb	546 1 (5993 88) 22247...		FN	MON
	1600/20/40z	11 Feb	546 1 (7639 77) 55770...		FN	MON
	1600/20/40z	18 Feb	546 1 (4977 86) 27998...		FN	MON
	1600/20/40z	25 Feb	546 1 (8038 89) 45342...		FN	MON
12217/10617/9317	1830/1850/1910z	10 Feb	263 1 (214 153) 17422...		FN	SUN
	1830/1850/1910z	13 Feb	263 1 (631 137) 23062...		FN	WED
	1830/1850/1910z	17 Feb	263 1 (631 137) 23062... Repeat of 13 Feb 1830z		FN	SUN
	1830/1850/1910z	20 Feb	263 1 (5770 189) 42230...		FN	WED
	1830/1850/1910z	24 Feb	263 1 (5770 189) 42230... Repeat of 20 Feb 1830z		FN	SUN
13569/14869/16269	1010/30/50z	03 Feb	582 1 (316 75) 95913...		FN	SUN
	1010/30/50z	07 Feb	582 1 (496 61) 91793... Transmission problems on 14869 & 16269kHz		FN	THU
	1010/30/50z	10 Feb	582 1 (496 61) 91793... Repeat of 07 Feb 1010z		FN	SUN
	1010/30/50z	14 Feb	582 000		FN	THU
	1010/30/50z	17 Feb	582 000		FN	SUN
	1010/30/50z	21 Feb	582 1 (6180 93) 63012...		FN	THU
	1010/30/50z	24 Feb	582 1 (6180 93) 63012... Repeat of 21 Feb 1010z		FN	SUN

**M12a** (two message variant)  
No reports

#### **M14** IA MCW / ICW / MCWCC, short 0

4636	1821z	08 Jan	186 (173 15) = 72629 17263 84028 16374....18329	GD/RNGB	TUE
	1820z	22 Jan	186 (173 15) = 73629 17263 84028 16374 28491....18329	RNGB	TUE
	1820z	12 Feb	186 (752 15) = 73921 64093 17384 62849 16382....72800 <i>Unusual as there are NO digit repeats in the first 6 numbers (186752) - maybe a real message?</i>	RNGB	TUE
4761	1920z	23 Jan	748 (382 15) = 73921 48207 28614 39747 28105....20482	RNGB	WED
5431/5561	0800/0900 z	05 Jan	171 (265 15) = 6?825 19374 26473.... (Weak)	RNGB	SAT
	0800/0900z	16 Feb	171 (148 15) = 37283 09463 27184.... 18469	RNGB	SAT
5561	0900z	12 Jan	171 (265 15) =	GD	SAT
	0900z	19 Jan	171 weak	HFD	SAT
5785	0700z	08 Jan	178 00000	RNGB	TUE
	0700z	12 Feb	178 00000	RNGB	TUE
5895	0800z	12 Feb	178 00000	RNGB	TUE

<b>M14 5431/5561kHz 0800/0900z 16 Feb13</b>
171 148 15 =
37283 09463 27184 27364 10374
27196 26194 28361 04872 27364
92763 17263 28392 48506 18469
= 148 15 00000
<i>Courtesy RNGB</i>

**M14a** (two message variant)  
No reports

#### **M18** IC Time strings, UTC+4

3803	1936z	04 Jan	[0239 0239 0239 ...]		FN	FRI
	1419z	07 Jan	(In Progress - sending Time strings - Long zero) (Remote Tuner Sweden)		JPL	MON
	0031z	09 Jan	(In Progress - sending Time strings - Long zero) (Remote Tuner Russia)		JPL	WED
	2208z	11 Jan	[0308 0308 0308 0309 0309 etc...]		AB	FRI
	2010z	26 Jan	[2024 2024 2024 ...] "The Clock"		FN	SAT
	1934z	01 Feb	[0041 0041 0041 ...]		FN	FRI
	2203z	11 Feb	[0305 0305 0305 0306 0306 etc...]		AB	MON
	1929z	15 Feb	[0231 0231 0231 ...]		FN	FRI
	2013z	24 Feb	[0012 0012 0013 0013 0013 etc...]		AB	SUN

## M23 O ICW

As a result of a small log from Fritz (FN) on 07 Jan, a whole new set of transmissions were discovered (Thanks Fritz - great find!). Strength in the South of the UK was variable and ranged from Strong through to weak - even over the duration of some transmissions. Richard reported the signal as good, but reported that the CW was painfully slow.

This set of transmissions raises some puzzling questions, not the least of which concerns the structure of the msgs. The call-up sequences were comprised of various three number sequences, 222, 444 & 666. However, these appear arbitrary since they were not used sequentially and were often interchanged even when the same msg was being repeated on subsequent transmissions.

From previous experience a sequence using an ODD number as the call sends no msg, whereas with an EVEN number call a msg is sent, a rule confirmed by the calls used in this sequence of transmissions.

However, another puzzle relates to the length of the msgs sent. It would seem logical to assume that the two number digit sent twice after the call-up would be the group count (GC). However, apart from the first msg (20 grps) and the last msg (32 grps), none of the msgs lengths matched the GCs exactly - although they were reasonably close, and closer than would be expected by chance. So why not send the correct GC? In all the cases where the GC did not match the msg count, the GC used was HIGHER than the number of grps contained in the msg . . .

Finally, the hourly 'dits' that were a trademark of the M23 transmissions over the last months of 2012, were missing in this set - a shame, as these proved very useful in indicating an active M23 freq, especially when no transmissions were heard over several days..

6937	0820z (IP)	07 Jan	'747' (R..) i.p., ends around 0835z	FN	MON
1730 - 1749z	09 Jan	'222' (R12) BT 20 20 BT [20 grp msg, with part rpt - see box below]	BR/RNGB	WED	
1830 -	09 Jan	'222' (R14) Signal disappeared in local noise at 1840z.	BR	WED	
1930 - 1949z	09 Jan	'222' (R12) Repeat of 1730z transmission inc. same time-out cut off	BR	WED	
1729 - 1754z	10 Jan	'444' (R15) BT 28 28 BT [26 grps msg with part rpt - see box below]	BR/RNGB	THU	
1829 - 1854z	10 Jan	'444' (R15) Repeat of 1729z transmission inc. same time-out cut off	BR/RNGB	THU	
1929 - 1954z	10 Jan	'666' (R15) Repeat of 1729z msg inc. same time-out cut off	BR/RNGB	THU	

*Although the msg had a 28 grp group count - only a 26 grp msg was transmitted. Call was changed to '666' for the 1929z transmission.*

1659 - 1729z	11 Jan	'444' (R15) BT 44 44 BT [40 grp msg with part rpt - see box below]	ATC/BR	FRI
1829 - 1855z	11 Jan	'222' (R15) Repeat of 1659z msg. Earlier cut-off on repeat msg	BR/GD	FRI
2259 - 2326z	11 Jan	'222' (R15) Repeat of 1659z msg. Earlier cut-off on repeat msg	BR	FRI

*This msg with a 44 grp group count, but only a 40 grp msg was sent. Call changed back to '222' for the 1829z & 2259z transmissions.*

1259 - 1329z	12 Jan	'444' (R15) Repeat of 40 grp msg from 11 Jan.	BR	SAT
1659 - 1729z	12 Jan	'444' (R15) Repeat of 40 msg grp	BR	SAT
1259 - 1329z	13 Jan	'666' (R15) Repeat of 40 grp msg from 11 Jan.	BR/RNGB	SUN
1659 - 1729z	13 Jan	'666' (R15) Repeat of 40 msg grp	BR	SUN
1700z	14 Jan	'666' Msg sent - Not logged	JPL	MON
1729 - 1756z	14 Jan	'444' (R15) BT 36 36 BT [32 grp msg with part rpt - see box below]	BR/RNGB	MON
1929 - 1956z	14 Jan	'444' (R15) Repeat of 1729z msg.	BR	MON

*So, another new msg. Once again GC differed from the actual msg count. This msg with a 36 grp group count, but with a 32 grp msg.*

1315 - 1320z	15 Jan	'444' 5- min call-up only. No msg	BR/GD	TUE
1335- 1357z	15 Jan	'444' (R10) BT 32 32 BT [Repeat of 32 grp msg from 14 Jan] AR AR	BR/GD	TUE

**Note:** *This transmission not only had the correct GC, but the rpt was also allowed to complete, with msg ending AR AR*

1601 -1605z (IP)	15 Jan	'747' (In Progress - Cont'd) (Remote Tuner UK)	JPL	TUE
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*Note: Tried to find // freq, but no luck. Returned to 6937 at 1615z and freq was silent. So appears no msg was sent during this schedule.*

No further transmissions were heard on this frequency.

6935	1600 - 1611z (IP)	29 Jan	'747' (In progress - Ended 1611z). No msg	RNGB	TUE
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M23 6937kHz 1730z / 1830/ 1930z 09 Jan 13	
222 (R12)	BT
20 20 BT	
48247 55232 11505 81880 70326	
07480 31309 19602 89419 76660	
65667 80499 13203 05428 66069	
68916 31735 50511 80829 25871	
BT IMI IMI BT	
20 20 BT	
(Repeated msg to grp08 - Cut-off mid-group )	
(Courtesy BR / RNGB)	

M23 6937kHz 1729/1829/1929*z 10 Jan13	
444 (R15)	BT
28 28 BT	
21322 50848 87191 18668 58762	
08301 06525 28768 74068 55253	
50525 15386 14268 62674 76951	
95191 35944 11901 81357 26922	
10380 26862 88514 84820 87028	
89951	
BT IMI IMI BT	
28 28 BT	
(Repeated msg to grp23 - Cut-off mid number)	
(Courtesy BR / RNGB)	
(* 1929z used 666 call)	

<p><b>M23 6937kHz 1659/1829z*/2259* 11 Jan13</b></p> <p>444 (R15) BT</p> <p>44 44 BT 46596 36439 62600 37941 14704 74871 18749 40725 42722 65843 19553 03526 66227 50396 99776 08475 23061 00776 82534 75044 44769 06662 24287 99445 37310 66717 63528 87496 48135 63319 18378 28263 69870 79828 07912 40741 35339 87516 29757 91253</p> <p>BT IMI IMI BT</p> <p>44 44 BT (Repeated msg to grp34 - Cut-off mid number)</p> <p style="text-align: center;">(Courtesy BR) (* 1829z &amp; 2259z used 222 call)</p>	<p><b>M23 6937kHz 1729z / 1929z 14 Jan 13</b></p> <p>444 (R12) BT</p> <p>36 36 BT 56163 07748 73472 07888 69513 06110 00958 53463 19302 47728 52098 58586 79006 27455 02112 07895 22065 53770 59233 09000 72743 25106 70989 20391 05261 26785 74803 56488 01461 97169 94977 99823</p> <p>BT IMI IMI BT</p> <p>36 36 BT (Repeated msg to grp26 - Cut-off mid-group )</p> <p style="text-align: center;">(Courtesy BR)</p>
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#### M24 IA MCW / ICW / MCWCC (high speed version of M14), short 0

5380	1910z (IP)	28 Jan	??? ( 359 142) = Ended 19536 359 142 00000 <i>Expect it started at 1900. Maybe a repeat of an 1800z or 1830z</i>	RNGB	MON
13955/11138	1100/1130z	04 Feb	215 (973 86) = 22918 23430 36301 41091 36694.....87283 (10kHz up from normal freqs)	RNGB	MON
	1100/1130z	11 Feb	215 (406 83) = 60341 32380 97203 11291 90690.....81314	RNGB	MON
13945/11128	1030/1100z	05 Feb	215 (973 86) = 22918 23430 etc (repeat of 04 Feb)	RNGB	TUE

**M24a** as M24 with 2nd addressee hand keyed, rarely intercepted.

No reports

**M45/1 XIV** (525 sched for Nov -Feb) MCW, slow, hand, paired gps Will change to M45/3 for Mar/Apr on 4555//4955 at 1802z clg '555"

3323	1842z	31 Jan	'323' 284 30 = ( <i>Should have been S21 on this frequency</i> )	GD	FRI
4025	1802z	08 Jan	'525' 284 30 =	GD	TUE

#### M51 XIX

6853	1725z (IP) 0820z (IP)	08 Jan 09 Jan	CW about 34WPM. Sending msgs of 5 ltr grps 5 - ltr grps. Msgs dated 1985 ( <i>Still going from yesterday!</i> )	SR BR	TUE WED	
3881//6825	1300z	09 Jan	5 - ltr grps. Msgs dated 1985. ( <i>Started almost immediately after M51a sched</i> )	BR	WED	
<b>M51a (FAV22)</b> Daily Mon - Fri, Sun & some Sats. See NL 72 for details						
3881//6825	1230 - 1259z 1230 - 1310z 1230 - 1256z 1230 - 1302z 1230 - 1302z	07 Jan 08 Jan 09 Jan 09 Jan 10 Jan	Lecon 02-1/1 Codé, 02-1/2 Clair, 02-1/3 Codé, 02-1/4 Clair Lecon 03-1/1 Codé, 03-1/2 Clair, 03-1/3 Codé, 03-1/4 Clair Lecon 04-1/1 Codé, 04-1/2 Clair, 04-1/3 Codé, 04-1/4 Clair Lecon 05-1/1 Codé, 05-1/2 Clair, 05-1/3 Codé, 05-1/4 Clair Lecon 05-2/1 Code, 05-2/2 Clair, 05-2/3 Code, 05-2/4 Clair	(600 grps/hr) (720 grps/hr) (840 grps/hr) (960 grps/hr) (960 grps/hr)	BR BR BR BR BR	MON TUE WED THU FRI

#### M89 O

JPL has written an excellent in-depth report on this station entitled 'M89 or the Communication Network of the Second Artillery Corps / Force' which can be found on page 67 of the ENIGMA 2000 Newsletter 73 (Nov 2012) or now downloadable from the 'Articles' section of the ENIGMA 2000 website.

#### **Operator Chat from M89**

3235	1552 - 1553z	06 Jan	(In tfc/chat) (Remote Tuner Siberia) (In tfc/chat - hand sent - 1552z) ( <i>Repeats grps from msg</i> )	JPL	SUN
3237	1443 - 1506z	10 Jan	(In tfc) (Remote Tuner Siberia)	JPL	THU
	(1443z) (1445z)		(In tfc - Hand sent ) AR K (1443z) RPT 34W BT TN RPT 34W BT UTN4 UTN4 BT R GA K (1444z) R .. K R GA K (1945z) ,34 AA (1447z) (Silent - 1447z)		
3287	2100 - 2101z	10 Jan	(In chat) (Remote Tuner Siberia)	JPL	THU

(2100z)  
(Lost remote tuner @ 2101z)

(In Chat - Hand sent) QSA 2 AR AR//B VVV \*KSKH\* QSA 2 K//B QSA 2 AR AR//B (Silent - 2101z)

3341	1422 - 1432z	11 Jan (In tfc) (Fri) (Remote Tuner Siberia)	JPL	FRI
	(1422z)	(In tfc - Hand sent) 47T6 5U33 AND..3T U4A6 D65. (Cont'd) AR K (1423z) BT 5.74 TNDN TA54 AR K BT 57N.. 5774 AR K NR PT K (1424z) V D7NU 33U5 AR K ..ND5. AR K N BT ... (1426z) N BT UTAN TDN4 AR K ... UTAN AR K N BT 6..4 6UT4 AR K (1627z) 63W BT A364 A364 AR K N BT UN3. UN3A AR K N BT A5.N EEE BT A5NN N43U AR K (1438z) N GI. W TO 76W BT U57N 773D A56T .... T3T4 AR K N N SK (1430z – Silent)		
3343	1444 - 1449z	09 Jan (In tfc) (Remote Tuner Siberia)	JPL	WED
	(1444z)	(In tfc - Hand sent) D3TA AUT4 46.. (Cont'd) AR QSL ? K OK NR 16 K//B (Both stations on same freq) R RPT 13W .. R HR RP. 13W TO 15W 3.6 6J39 BJ92 K R OK QSL 1 EEE RPT *QSL 22..* K//B R U MSG GA K R HR MSG GA CY		
	(1449z)	HR *MSG NR 036/CCK CK ..63 0209 2230 RMKS 62.5 TO ..317.* R GA K R BT BT ..D6 63A7 .7AD 5DAU (Cont'd)(Lost tuner @ 1449z)		
3363	1410 - 1412z	09 Jan M89 (In tfc) (Remote Tuner Siberia)	JPL	WED
	(1310z)	(In tfc – hand sent) QSL 1.... <b>DE PGNI</b> GB (1312z – Silent)		
3388	1412 - 1415z	09 Jan M89 (In tfc) (Remote Tuner Siberia)	JPL	WED
		(In tfc – hand sent – 1412z) ( <i>Lost remote tuner @ 1415z</i> )		
3395	1820 - 1828z	09 Jan M89 (In Chat) (Remote Tuner Siberia)	JPL	WED
	(1820z)	(In chat - Hand sent) <b>DE 6Q8E</b> (1820z) VV <b>UDQ5 DE 6Q8E K</b> (1821z) (Unsure about 1st call sign) VV EE VV <b>DMU5F DE 6Q8E K</b>		
	(1842z)	R QSA 2 K R R OK NIL SK GB AR (1824z - Silent)		
3396	1716 - 1726z	09 Jan M89 (In tfc) (Remote Tuner Siberia)	JPL	WED
	(1716z)	(In tfc - Hand sent) 674N 5TN4 6U6. 56A5 A475 UN4N ... (Cont'd) AR K (1719z) RPT 79 W BT U6G. U6.N AR K (1719z)		
	(1726z)	OK (Switched to Voice – 1720z) (Switched to some sort of data mode - 1720z) (Back to voice 1723z, then back to data mode) (Silent at 1725z)		
3677	1557 - 1558z	06 Jan (In tfc/chat) (Remote Tuner Siberia)	JPL	SUN
	(1557z)	(In tfc - 4 fig cut numbers – hand sent) <b>P2CF DE VIV8</b> K (1559z) RPT K R .O.QSY NR 26.. <b>DE OIY</b> .. GA K (1600z)		
4190	1602 - 1603z	06 Jan (In tfc) (Remote Tuner Siberia)	JPL	SUN
		(In tfc - 4 fig cut numbers – hand sent – 1602z)		
4238	1929 - 1941z	09 Jan M89 (In Chat) (Remote Tuner Siberia)	JPL	WED
	(1929z)	(In tfc - Hand sent) 3A5D UD74 D764 3TN5 .... (Cont'd) AR (1932z) VV <b>OP3 DE YD.4 K</b> (Poor copy) R6JW TU D.UD7 K R 63W 3T53 3..3 K RPT K (1934z) B.Z. NR 02 K VV <b>3MSW DE Y.W4 K</b> QRM PSE QSY L. EEE 63W 3T.. 3T53 K		
	(1941z)	R ... NR 22 K VV 6DF EEE VV <b>6DFG DE YB.4 K</b> R (1936z) R. GA R GA (1937z) *QSL0343 K* .. LSB WK (1941z – to voice)		
4444	2045 - 2103z	30 Jan M89 (In tfc) (Remote Tuner Hong Kong)	JPL	WED
	(2045z)	(In tfc) BT 47NA 4V? 534T 635. 5N6A 5DTA 746M 47NA 4E 34T6 35U4 5N6 A. AR AR AR AR ANAL . AR AR BT BT BT 63T7 7UD5 ? ? 5T75 T4356D A5NU T6.. U67AV ?? 67AU 43N6 ? 4UU? 43ND D..N (2047z) 4.? 346D DNA4 ? DNADE NEDNA447N ... 3F? ? 7.. 737? ? U? “ 43 K 67.36 3UG A3UTD A5A DA5T75734UAX7456DU4N5N6 ? N67D D6TA NA : 7A53G 4 AR AR II II BT BT II BT TE BT BT BT BT BT BT (2049z) NR NR NNNR NR NR NR NR NR NR NR 555N N5U ? N5UT TA3U 45N7 37D ? 37DT 46A7 U4A7 DA34 N56D 63DT 63AN D4N7 675A ...AU3 4TTA3U 6U.D 7UDN 5T764 D35 ? ? 4D35 BT734 A.D D ? 4U.D 657N 3ATT D6NU ..AU 5DNV ? 5DNU 467A 4D3T 43N5 T753 AUN6 4UAD 3DN4 5T6. 77T6 A ? 7T6A 5 ? 45N7 NDU ? D3UA 536U D4T7 ? 57 ? 7V 73TD 4N56 436N A4? A34T 4ATU UT65 AT6D 37UN D5A7 DD67 NN5T DA36 TT47 ND5U 4A4U 335T AA7U 64DU N6?? 6T3U ND ? ND4 ? ND56 43N7 76TD 43.. (2054z – Silent) (Hand sent – groups run together) (2057z) (Very weak station in tfc in background – mostly U/R - 2057z)		

4444	1209 - 1227z	31 Jan M89 (In tfc) (Remote Tuner Hong Kong)	JPL	THU
	(1209z)	AGN (1209z) AGN AGN AGN (1211z) AGN AGN 7G (1212z) AGN 1AT EEE U EEE AGN ..EEE AGN 10.3..TO .1. (1213z)(Faded) AGN (1215z) AGN AGN (1216z) AS AS (1217z) AS AS AS AS AS QSY TO. 1 NR 01 K (1218z) QSY TO NR 01/01 K (1218z) A QSY TO NR 03/03 K (1218z) A QSY TO NR 03/3 K K K (1219z) A QSY TO NR 03/03 K (1219z) K A QSY TO NR 03 NR 03 K		
	(1226z)	AS (1220z) .WT.Y TO EEE U QSY TO 5555 U QSY TO 5555 K (1221z) U QSY TO 5555 K (Checked 5555, but N/H) (Silent – 1226z)		
4581	1407 - 1411z	11 Jan M89 (In tfc) (Remote Tuner Siberia)	JPL	FRI
	(1407z)	(In tfc - Hand sent) AR K K (14 *QSL 2210 K* (1408z) K K SK SK R TU (Silent – 1409z)		
4786	1447 - 1503z	11 Jan M89 (In tfc) (Remote Tuner Siberia)	JPL	FRI
	(1447z)	(In tfc - Hand sent) TU A2.1/C.D3II BT 161/.2D3 AR <b>VV XSG 2 DE UT.Q K</b> R R QS. K K R R AS AS <b>VV SJL3 DE UTQU</b> (1449z) <b>Unsure to 2nd call sign</b> VV SJ.. DE U.. K (1450z) R R QSL K K RPT TIME 224. (Lost remote tuner @ 1452z) (Tuner back up – 1456z) R R R RPT 1.T54A T54A K (1456z) ...W BT BT 635N 635N K R R PT K R R PT 5.W UATN AATNTT (1458z) <b>VV EWGS DE... K K VV EWGS DE U.Q. K</b> R QSL K (1459z) RR. G. 2253 2253 K RR PT 9337UT 37. K R R PT 4.W 4TU 54 TU5 K (1602z) RR PT 4.W 3A4N 3A4N AR K (1601z) S..SK SK (1602z - Silent)		
4786	1810 - 1835z	11 Jan M89 (In tfc) (Remote Tuner Siberia)	JPL	FRI
	(1810z)	(In tfc - Hand sent - Very weak) DU63 N356 ... (Cont'd) AR .... <b>DE UTE. K</b> (1821z) QSL ? K 63W BT.UA DE 4UA. R BT 3... K <b>VV SJL3 DE U... K VV EWGS DE UTEQ K</b> (1823z) QSL ? K R AS ..Y QSY QSY QSY 16 16 QSY 16 16 QSY 16 16 K ... K (1824z) QSA .K .. 3U4 7.U4 K 79W 37UN 37UN K (1826z) R R A VA VA VA (1827z - Silent) <b>VV EW.S DE U... K</b> ... QSY QSY QSY 111 QSY NH 91. . <b>VV .... DE UTEQ K</b> (1831z) QSY ... ... MSG K MSG MSG *MSG NR NR 5. 947 T.0302 35 RMKS* (1830z) ... (Fading badly- Lost remote tuner @1835z)		
	(1835z)			
5006	1038 - 1052z	10 Feb M89 (In chat) (Remote Tuner Hong Kong)	JPL	SUN
	(1038z)	(In chat - Someone already had the remote tuner on this freq, so did not have to search for this freq!) ? R R 8W BT A77T AR (1038z) R 51W BT BT 6TN4 AR 8. ? 88W BT A6D4 AR (1038z) OK U MSG GA (1041z) OK GA (1042z)		
	(1050z)	R ? RPT 47W K (1046z) RPT 47W K RPT 47 W K (1049z) *QSL 1849 * R *NR 126* SK GB (1050z)		
5207	0107 - 0125z	24 Jan M89 (In tfc) (Remote Tuner Finland)	JPL	THU
	(0107z)	(In Chat) AS HR MSG GA *MSG NR 076 NR 076 NR 076 CK 99 1801 24 0910 BT* 4NUA 4.ID ND76 4UD3 DT5. 7T.. (Cont'd - 0109z) AR (0112z) QSL ? K *QSL 0910 K //B (much weaker) U MSG GA K *NR MSG NR 074 CK 99 1801 24 09..* BT //B (Into tfc - faded - 0114z) AR (0118z) QSL ... K//A R RPT 27W K//A RRPT 27W 7UG. K R R RPT 2. (Both stns fading badly) R* QSL 0920 K* //A HR WK NR 45 K//A R R ..18 K//B R HR NIL SK//A R ..//B (0121z)		
	(0121z)			
5555	1744 - 1752z	11 Jan M89 (In tfc) (Remote Tuner Siberia)	JPL	FRI
	(1744z)	(In tfc - Hand sent – Very weak) ANAU 76N4 D3T. TDT4 557U ... (Cont'd) AR (1747z) BT 6... NM. (Silent – 1748z)		
8009	0501 - 0513z	06 Jan (In chat) (Remote Tuner Siberia)	JPL	SUN
	(0501z)	(In chat – hand sent) <b>ZTLA ZTLA K XDP QOP C K HVNJ HVNJ K</b> OK KOPCQGPCN L.K CNNL.SK SK .VIM EE K NCDJ.. K NIL SK SK HBIS R A K OK U... A NIL SK SK SK SK <b>ZTLA ZTLA K HVNJ HVNJ K</b> OK <b>HVIJ HVIJ</b> NIL SK SK SK SK (0506z) <b>ZTLA ZTLA K</b> (0505z) <b>ZTLA ZTLA K</b> (Silent 0506z)		

**January 2013:**

(New pairings marked in **bold** type)

JPL reports; "In regards to the new M89 station MW3D DE 2SLC, I've come to the conclusion that it's probably a change of call sign and frequencies for Q7NW. 2SLC was previously used and upon checking the ITU monitoring website, found that Direction Finding locations for Q7NW and 2SLC indicates they are probably located at the same area. Also note that frequency being used is now 3330 vice 3329."

Note: New set of call signs!!! Further research shows that these call signs were first used in the early 2000s using the following freqs: 3330 / 4440 / 5580 / 7074

<b>3329//3642</b>	2123 - 2124z	06 Jan	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Siberia)	JPL	SUN
(3329 only)	1419 - 1420z	09 Jan	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Siberia)	JPL	WED
(3329 only)	1656 - 1657z	09 Jan	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Siberia)	JPL	WED
(3329 only)	1350 - 1410z	09 Jan	(In tfc) (This freq used by 2SLC) (Remote Tuner Siberia)	JPL	WED
	(1350z)	(In tfc - Hand sent)	7N4D 3NTD 4D3T T57U UA74 (Cont'd) AR (1357z - Silent)		
(3329 only)	1403 - 1404z	10 Jan	V MW3D (x3) DE 2SLC (x2) (Cont'd)(Remote Tuner Siberia)	JPL	THU
(3329 only)	1513 - 1520z	10 Jan	(In tfc) (Remote Tuner Siberia)	JPL	THU
	(1513z)	(In tfc - Hand sent)	U5D4 63T3 6U5U 47UA 6747 (Cont'd) (Lost remote tuner @ 1520z)		
(3329 only)	1652 - 1658z	10 Jan	(In tfc) V MW3D (x3) DE 2SLC (x2)(Cont'd) (Remote Tuner Siberia)	JPL	THU
	(1652z)	(In tfc - Hand sent)	DN74 NUN4 5DN5 AN4U 436U ATDA 36U6 (Cont'd) AR (1657z - Return to R/S)		

*Note: Over the last few days I have monitored 2SLC previous freqs without any luck.*

*Have also noticed that Q7NW has not been heard since 6 Jan 13, when 2SLC appeared. Could this be a change in call sign for Q7NW?*

(3329 only)	1405 - 1406z	11 Jan	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Siberia)	JPL	FRI
(3330 only)	1645 - 1700z	30 Jan	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
(3330 only)	2016 - 2016z	30 Jan	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
(3330 only)	1244 - 1306z	31 Jan	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
	(1258z)	(In tfc)	RMKS 94W80 TO 4884 UGT COMM.. BT 21961/4884/2130/237NR/438 AR BT 21961/4884/2EEE BT 21961/4884/2130/237NR/9438 AR (Return to R/S 1300z) (Got up to get a coffee and of course this is when 2SLC decides to send tfc...)		
<b>3642//5230</b>					
(3642 only)	1546 - 1547z	06 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Siberia)	JPL	SUN
	0129 - 0130z	08 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
(3642 only)	1700 - 1701z	09 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Siberia)	JPL	WED
	0028 - 0029z	11 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI
	2014 - 2015z	30 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
<b>3642//7602</b>					
(7602 only)	1943 - 1944z	06 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Siberia)	JPL	SUN
	0035 - 0036z	07 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON
(7602 only)	1230 - 1231z	11 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI
(7602 only)	1237 - 1245z	11 Jan	(In tfc) V DKG6 (x3) DE 3A7D (x2)(Cont'd) (Remote Tuner Russia)	JPL	FRI
	(1237z)	(In tfc - Hand sent)	? (1237z) BT BT 36AU D546 46AU D53A NUTA 6U73 5643 (Cont'd) AR QSL ? HR WK NR 10 (Return to R/S 1243z)		
	1444 - 1445z	11 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Siberia)	JPL	FRI
	1553 - 1602z	11 Jan	(In tfc) V DKG6 (x3) DE 3A7D (x2)(Cont'd) (Remote Tuner Siberia)	JPL	FRI
	(1553z)	(In tfc - Hand sent )	//3642 6763 UA65 DT5A TATA T6U. (Cont'd) AR QSL ? HR WK NR 23 (1601z – Return to R/S)		

(7602 only)	1548 - 1549z	15 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
(7602 only)	1653 - 1654z	15 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
(7602 only)	1639 - 1640z	16 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED
(7602 only)	1752 - 1753z	16 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED
(7602 only)	1918 - 1919z	16 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED
(7602 only)	2141 - 2142z	16 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED
(7602 only)	1344 - 1345z	18 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Finland)	JPL	FRI
(7602 only)	1405 - 1406z	21 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON
(7602 only)	1355 - 1356z	24 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Finland)	JPL	THU
(7602 only)	1430 - 1431z	27 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Finland)	JPL	SUN

<b>3724//7607</b>					
(3724 only)	1835 - 1836z	09 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Siberia)	JPL	WED
	1411 - 1412z	10 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Siberia)	JPL	THU
(3724 only)	1412 - 1413z	11 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Siberia)	JPL	FRI
	2214 - 2215z	13 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	SUN

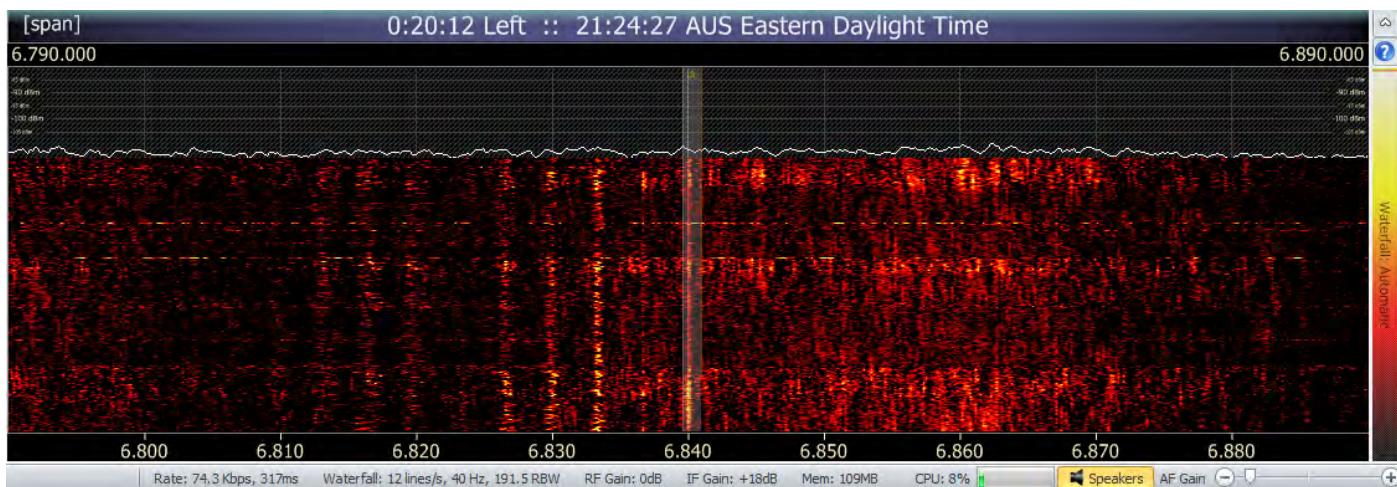
<b>3797//4512</b>	1507 - 1508z	10 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Siberia)	JPL	THU
	1417 - 1418z	11 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Siberia)	JPL	FRI
(4512 only)	1632 - 1633z	16 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
(4512 only)	1757 - 1758z	16 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
(4512 only)	1125 - 1126z	21 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
(4512 only)	2014 - 2015z	24 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU

<u>4225//5500</u>						
(5500 only)	1258 - 1259z	08 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE	
(5500 only)	1441 - 1442z	08 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE	
(4225 only)	1415 - 1416z	11 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Siberia)	JPL	FRI	
	1549 - 1550z	11 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Siberia)	JPL	FRI	
(4225 only)	1551 - 1552z	13 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN	
(5500 only)	1302 - 1303z	14 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON	
(4225 only)	1630 - 1637z	14 Jan	(In tfc) V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON	
	(1630z)	(In tfc)	/6454 6847/6303 MSG NR 0. CCK CK 25 37 0115 0030 RMKS 3083 TO			
6733/3493/8783/6.54/6492/6454/6847/6303		BT BT	3664 TAA4 1. A7 TTN3 A3T4 T674 TA73 TT44 ATN3 7TUA 4ND5 5D4A 47D5 6..7 NT43 6547 U547 7TDT			
	(1634z)		653N 734. A45T 35UN 65A3 AR AR			
			(1634z – Return to R/S)			
(4225 only)	1425 - 1426z	15 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE	
(4225 only)	1647 - 1648z	15 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE	
	1605 - 1606z	17 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU	
	2300 - 2301z	17 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU	
(4225 only)	1518 - 1519z	18 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI	
	1115 - 1116z	21 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON	
(5500 only)	1115 - 1116z	22 Jan	(In tfc) V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE	
	(1111z)	(In tfc – Hand sent – Long zeros)				
		VV TC9 UGT COMM BT BT BT BT 6369/1010/73/3083 AR				
		VV TC8 VVV TC92				
		VV TC9 UGT COMM BT 636D				
	(1117z)	VV TC9 UGT COMM BT BT 6369/1010/73/3083 AR (Silent – 1115z) (Return to R/S 1117z)				
(5500 only)	1701 - 1702z	22 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE	
(5500 only)	1943 - 1944z	22 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE	
(4225 only)	1613 - 1614z	23 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED	
(5500 only)	2011 - 2012z	23 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED	
(4225 only)	1408 - 1409z	24 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU	
(4225 only)	1528 - 1529z	24 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU	
(4225 only)	2012 - 2013z	24 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU	
(5500 only)	1555 - 1556z	25 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI	
	1615 - 1616z	29 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE	
(5500 only)	1638 - 1639z	30 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED	
(5500 only)	1059 - 1100z	31 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU	
(5500 only)	1236 - 1237z	31 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU	
<u>4474//NRH</u>	0033 - 0034z	07 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON	
	0134 - 0135z	08 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE	
	1426 - 1427z	10 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Sweden)	JPL	THU	
	0026 - 0027z	11 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI	
	0205 - 0206z	13 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	SUN	
	1749 - 1750z	13 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	SUN	
	2210 - 2211z	13 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	SUN	
	0031 - 0032z	13 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON	
	2012 - 2013z	13 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Japan)	JPL	MON	
	2100 - 2101z	15 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE	
	1754 - 1755z	16 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED	
	1919 - 1920z	16 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED	
	2139 - 2140z	16 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED	
	1612 - 1613z	17 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Finland)	JPL	THU	
	2129 - 2130z	17 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU	
	2254 - 2255z	17 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Ukraine)	JPL	THU	
	1347 - 1348z	18 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI	
	0033 - 0034z	21 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON	
	1414 - 1415z	21 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON	
	2223 - 2224z	21 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON	
	1655 - 1656z	22 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE	
	1939 - 1940z	22 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE	
	1625 - 1626z	23 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED	
	2007 - 2008z	23 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED	
	0100 - 0101z	24 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU	
	1357 - 1358z	24 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Finland)	JPL	THU	
	1520 - 1521z	24 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU	
	1602 - 1603z	25 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Finland)	JPL	FRI	
	1926 - 1927z	25 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI	
	1428- 1429z	27 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Finland)	JPL	SUN	
	1740- 1741z	27 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	SUN	
	1633 - 1634z	29 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Finland)	JPL	TUE	
	1510 - 1511z	30 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Finland)	JPL	WED	
	1623 - 1624z	30 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Finland)	JPL	WED	
	1510 - 1511z	31 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Finland)	JPL	THU	
	1623 - 1624z	31 Jan	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Finland)	JPL	THU	

<u>4512//3776//3797</u>	1541 - 1542z 1939 - 1940z 1949 - 1950z	06 Jan 06 Jan 06 Jan  (1949z)  (1950z)	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Siberia) V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Siberia) (In tfc) V H2FL (x3) DE DRV8 (x2)(Cont'd) (Remote Tuner Siberia)  (In tfc – hand sent) /68 AR UGTC OMM BT .59/5.17/5747/01/.7.0420. 760/A/6/.68 AR UGT COMM BT 45./5.1/5747/0./..104.0/..0/A/62/68 AR ( Return to R/S - 1950z)	JPL JPL JPL	SUN SUN SUN
<i>(3776//3797 only)</i>	1426 - 1427z	09 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Siberia)	JPL	WED
<i>(4512 only)</i>	2207 - 2208z	13 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
<i>(4512 only)</i>	1427 - 1428z	15 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
<i>(4512 only)</i>	1649 - 1650z	15 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
<i>(4512 only)</i>	1129 - 1130z	22 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
<i>(4512 only)</i>	1559 - 1600z	25 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
<i>(4512 only)</i>	1918 - 1919z	25 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
<i>(4512 only)</i>	1735 - 1736z	27 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
<i>(3797//4512 only)</i>	1128 - 1129z	29 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
<i>(4512 only)</i>	1642 - 1643z	30 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
<i>(4512 only)</i>	2011 - 2012z	30 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
<i>(3797//4512 only)</i>	1101 - 1102z	31 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
<i>(3797//4512 only)</i>	1240 - 1241z	31 Jan	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
<u>4590//7607</u>	1945 - 1946z	06 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Siberia)	JPL	SUN
<i>(7607 only)</i>	1148 - 1149z	08 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
<i>(7607 only)</i>	1300 - 1301z	08 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
<i>(4590 only)</i>	1345 - 1346z	09 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Siberia)	JPL	WED
<i>(7607 only)</i>	1545z	13 Jan	[V WITN WITN WITN de GNXG GNXG]	FN	SUN
<i>(4590 only)</i>	1630 - 1631z	16 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
<i>(4590 only)</i>	1641 - 1642z	16 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Wed) (Remote Tuner Russia)	JPL	WED
<i>(4590 only)</i>	1519 - 1520z	18 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
<i>(4590 only)</i>	1131 - 1132z	22 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
<i>(4590 only)</i>	1659 - 1700z	22 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
<i>(4590 only)</i>	1557 - 1558z	25 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1514 - 1515z	30 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Finland)	JPL	WED
	1625 - 1626z	30 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Finland)	JPL	WED
	1640 - 1641z	30 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	2009 - 2008z	30 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
<i>(7607 only)</i>	1152 - 1153z	31 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Finland)	JPL	THU
	1238 - 1239z	31 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
<u>4860// 6840</u>					
<i>(6840 only)</i>	1320 - 1325z	11 Jan	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Russia)	JPL	FRI
<i>(6840 only)</i>	1620z	12 Jan	[VVV Q2M Q2M Q2M de NYZ NYZ]	FN	SAT
	1420 - 1425z	15 Jan	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	TUE
<i>(6840 only)</i>	1920 - 1925z	16 Jan	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	WED
	1520 - 1525z	18 Jan	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	FRI
	1120 - 1125z	20 Jan	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SUN
	1119 - 1124z	21 Jan	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	MON
	1119 - 1124z	22 Jan	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	TUE
<i>(4860 only)</i>	1620 - 1625z	23 Jan	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	WED
<i>(6840 only)</i>	1420 - 1425z	24 Jan	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Australia)	JPL	THU
<i>(6840 only)</i>	2020 - 2025z	24 Jan	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	THU
<i>(6840 only)</i>	1920 - 1925z	25 Jan	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Australia)	JPL	FRI
<i>(6840 only)</i>	1420 - 1425z	27 Jan	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Australia)	JPL	SUN
<i>(6840 only)</i>	1219 - 1224z	28 Jan	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Australia)	JPL	MON
<i>(6840 only)</i>	1619 - 1624z	28 Jan	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Russia)	JPL	MON
	1119 - 1124z	29 Jan	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	TUE
	2020 - 2025z	30 Jan	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	WED
<u>5230//NRH</u>	1620z	05 Jan	[V DKG6 DKG6 DKG6 de 3A7D 3A7D 3A7D]	FN	SAT
	2212 - 2213z	13 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	SUN
	0022 - 0025z	09 Jan	(In tfc) V DKG6 (x3) DE 3A7D (x2)(Cont'd) (Remote Tuner Russia)	JPL	WED
		(0022z)	(In tfc - Hand sent) 4 5319 QRW .16 ....5327 QSL ? HR NR 11 (Return to R/S -0023z)		
	1408 - 1409z	10 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Siberia)	JPL	THU
	1428 - 1429z	10 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Sweden)	JPL	THU
	1800 - 1802z	17 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	BR	THU
	1614 - 1615z	17 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Finland)	JPL	THU
	2131 - 2132z	17 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU
	2256 - 2257z	17 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Ukraine)	JPL	THU
	0035 - 0036z	21 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON
	1657 - 1658z	22 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
	1941 - 1942z	22 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
	2009 - 2010z	23 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED
	0051 - 0052z	24 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU
	1306 - 1307z	25 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI
	1319 - 1325z	25 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI
		(1319z)	(In tfc – hand sent) 9/5585/EEEEEE RMKS 5329/5585/531./COMM/.200.LZ.92A9/5.27.5585 AR		
		(1321z)	QSL ? HR WN EEE HR WK NR 170 (Return to R/S – 1321z)		

1928 - 1929z	25 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI
1230 - 1231z	28 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia) <i>(Switched from night freq of 5801)</i>	JPL	MON
1308 - 1312z	28 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON
1618 - 1619z	28 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON
2012 - 2013z	28 Jan	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON
<u>5763//NRH</u>	0034 - 0035z	14 Jan V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON
<u>5801//10180</u>				
<i>(10180 only)</i>	1133 - 1134z	08 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Sweden)	JPL	TUE
	1150 - 1151z	08 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
<i>(10180 only)</i>	1015 - 1016z	09 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Sweden)	JPL	WED
<i>(10180 only)</i>	0959 - 1000z	10 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU
<i>(10180 only)</i>	0709 - 0710z	11 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Sweden)	JPL	FRI
	0209 - 0210z	13 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	SUN
	0303 - 0304z	17 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU
<i>(10180 only)</i>	1106 - 1107z	20 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	SUN
	0307 - 0308z	21 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON
<i>(10180 only)</i>	1028 - 1029z	21 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON
	1133 - 1134z	22 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
	0308 - 0309z	24 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU
<i>(5801 only)</i>	1225 - 1230z	28 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia) <i>(Switched to night freq of 5230)</i>	JPL	MON
	0346 - 0347z	29 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
<i>(5801 only)</i>	1133 - 1134z	29 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
<i>(10180 only)</i>	1138 - 1139z	29 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Finland)	JPL	TUE
	1146 - 1147z	29 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
	1643 - 1644z	29 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
	0302 - 0303z	30 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED
<i>(10180 only)</i>	1229 - 1230z	30 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED
	1103 - 1104z	31 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
<i>(10180 only)</i>	1149 - 1150z	31 Jan V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Finland)	JPL	THU
<u>6773//8040</u>	0444 - 0445z	06 Jan V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Siberia)	JPL	SUN
<i>(8040 only)</i>	0549 - 0550z	08 Jan V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Siberia)	JPL	TUE
<i>(6773 only)</i>	0353 - 0354z	10 Jan V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Siberia)	JPL	THU
	0045 - 0046z	24 Jan V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
<u>6840//10640</u>	0519 - 0524z	06 Jan VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SUN
	0120 - 0125z	08 Jan VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	TUE
	0920 - 0925z	09 Jan VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Australia)	JPL	WED
<i>(6840 only)</i>	0220 - 0225z	13 Jan VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SUN
	0020 - 0025z	14 Jan VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	MON
	0319 - 0324z	17 Jan VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	THU
	0320 - 0325z	24 Jan VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	THU
	0120 - 0125z	31 Jan VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	THU
<i>(6830 Only)</i>	1120 - 1125z	31 Jan VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Australia)	JPL	THU

Note: Using Australian SDR Remote tuner. Visually saw a signal appear on 6830 which turned up to be NYZ. Visually, I could also see 3 signals. One on 6830, another on 6833 and yet another on 6827. There was also another image of these 3 signals centered on 6818. Possibly transmitter problems.



Thu 31 Jan 2013 1120z M97 on 6830kHz with spurious at 6833kHz, 6827kHz & fainter set of images centred on 6818kHz Courtesy JPL

<u>7582//8110</u>					
<i>(7582 only)</i>	0436 - 0437z	06 Jan V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN	
<i>(7582 only)</i>	0031 - 0032z	07 Jan V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON	
<i>(7582 only)</i>	0402 - 0403z	07 Jan V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON	
	0117 - 0118z	08 Jan V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE	
<i>(7582 only)</i>	0532 - 0533z	08 Jan V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE	
<i>(8110 only)</i>	1026 - 1027z	09 Jan V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Australia)	JPL	WED	
<i>(7582 only)</i>	0337 - 0338z	10 Jan V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU	

(7582 only)	0158 - 0159z	13 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	0026 - 0027z	14 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	0256 - 0257z	17 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
	0341 - 0342z	18 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
(8110 only)	1110 - 1111z	20 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	0040 - 0041z	24 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
	0314 - 0315z	24 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
(8110 only)	0401 - 0402z	29 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(7582 only)	0042 - 0043z	31 Jan	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
<u>7607//NRH</u>	1454 - 1455z	13 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Sweden)	JPL	SUN
	1549 - 1550z	13 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1750 - 1751z	13 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	SUN
	2050 - 2051z	13 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	SUN
	1304 - 1305z	14 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1641 - 1642z	14 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1959 - 2000z	14 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON
	1617 - 1618z	29 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	1640 - 1641z	29 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Finland)	JPL	TUE
	1645 - 1646z	29 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
<u>8789//10779</u>					
(10779 only)	0438 - 0439z	06 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
(10779 only)	0534 - 0535z	08 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(10779 only)	0911 - 0912z	09 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Sweden)	JPL	WED
(10779 only)	0926 - 0927z	09 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Australia)	JPL	WED
(10779 only)	1017 - 1018z	09 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Sweden)	JPL	WED
(10779 only)	0304 - 0305z	30 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED
	0059 - 0119z	31 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
	1105 - 1106z	31 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
(10779 only)	1116 - 1117z	31 Jan	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Australia)	JPL	THU

**February 2013:** (New pairings marked in **bold** type)

<u>3330//NRH</u>	1526 - 1527z	03 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1724 - 1735z	03 Feb	(In tfc) V MW3D (x3) DE 2SLC (x2)(Cont'd) (Remote Tuner Hong Kong)	JPL	SUN

(In tfc – 1724z – Very fast – groups run together) EE UADN (1727z) (Return to R/S 1728z)

1955 - 2002z	03 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
2046 - 2105z	03 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
1851 - 1852z	04 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
2034 - 2115z	04 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
2317 - 2318z	04 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
1150 - 1151z	05 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1359 - 1400z	05 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1614 - 1626z	05 Feb	(In tfc) V MW3D (x3) DE 2SLC (x2)(Cont'd) (Remote Tuner Hong Kong)	JPL	TUE

(In tfc – 1614z) 64UT N465 37UD 57TA 456U TN74 (Cont'd) AR (1623z)(Return to R/S)

1927 - 1937z	05 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
2258 - 2259z	06 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
1634 - 1645z	07 Feb	(In tfc) V MW3D (x3) DE 2SLC (x2)(Cont'd) (Remote Tuner Hong Kong)	JPL	THU

(In tfc – 1634z) TTTU DNT3 NAA3 ATN7 U7AA 5575 6U33 5TTU 6535 D6U3 643A T57A (Cont'd – running groups together)

AR (1642z)

**MSG NR 027 CK 301 44 0208 003** (1642z) (Silent – return to R/S – 1643z)

1234 - 1235z	08 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1525 - 1526z	08 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1602 - 1632z	08 Feb	(In tfc - Probably 2SLC) (Remote Tuner Hong Kong)	JPL	FRI

(In tfc – 1602z) 5UN4 D6NT U3A3 3634 4N7N 75TD A6N5 5T65 T6N3 (Cont'd)

(Since M89 stations like to send tfc on the hour, I had to decide between 4474 and 3330. As luck would have it, I decided on 4474 due to the heavy amount of tfc today. You guessed it, wrong choice!)

AR (1614z – Silent) (Operator appears to have forgotten to turn the R/S ON after the msg was sent!)

**Note: Observations on M89 cipher traffic:**

1. Messages usually contain 99, 199 or 299 groups
2. The more groups, the faster the message is sent
3. Messages by QV5B, GNXG, DRV8, CZT2, 3A7D, and 2SLC on their normal broadcast frequencies are normally electronically sent. Because of this, if you miss the message header, you can guess what the group count for the message was.
4. Messages with 99 groups take 5 minutes, 199 groups take 10 minutes, and 299 groups takes 15 minutes. So the above message was probably a 299 group message. Not scientific, but pretty close from my observations thus far.

1735 - 1838z	08 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
(Into tfc @ 1803z)	VVV ?? CQ H3 RMKS M781O TO 1783/1158O UGT COMM ARS BT BT	39169/1783/O3OO/117NR/781O AR I		
AR BT BT 39169/1783/O3OO/117NR/M781O AR AR (1805z) (Return to R/S @ 1806z)				
2044 - 2045z	08 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1018 - 1019z	09 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
1726 - 1727z	09 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
1226 - 2337z	09 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
1829 - 1830z	10 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
1926 - 1936z	10 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
2036 - 2037z	10 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
2152 - 2202z	10 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
2301 - 2302z	10 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
1054 - 1055z	11 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
1130 - 1145z	11 Feb	(In tfc) V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
(In tfc - 1130z)	*CK 301 44 0211 1930 BT*	5DU6 NTTA 3.T5 T3A7 A5T. (Cont'd)	*MSG NR 041 CK 301 44 0211 1930 BT*	
		5DU6 NTTA 3DT5 T3.7 A5TN D5D7 DTA6 (Cont'd - Repeat of msg - 1143z)	(Silent - 1155z)	(Return to R/S 1155z)
1439 - 1440z	11 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
1609 - 1619z	11 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
1825 - 1826z	11 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
2054 - 2103z	11 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
1509 - 1519z	12 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1750 - 1816z	12 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
2202 - 2207z	12 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1710 - 1719z	13 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
1831 - 1832z	13 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
2037 - 2052z	13 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
2325 - 2331z	13 Feb	(In tfc - Probably 2SLC) (Remote Tuner Hong Kong)	JPL	WED
		(In tfc - very weak - 4 fig cut nr msg) AR (2327z) (Silent)		
1834 - 1835z	14 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
2043 - 2044z	14 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
0037 - 0055z	15 Feb	(In tfc) V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
(0007z)	(In tfc - very weak signal)	6734 5.5T 36AN U.D. ND75 N4U. (Cont'd)	AR (0040z)	NR . CK ...
(Fading badly)		*MSG NR ... CK ..3 44 ..35 ..*	*MSG NR 0.3 CK 3.0 44 ..1.	*(0042z) *NR 03. CK 3... BT*
(0054z)	(Into 4 Fig cut nr tfc - 0042z)	AR (0054z) (Return to R/S)		
1014 - 1015z	15 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1414 - 1419z	15 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1618 - 1619z	15 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1930 - 1933z	15 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
2140 - 2141z	15 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1359 - 1400z	17 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
1746 - 1747z	17 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
1937 - 1938z	17 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
2202 - 2219z	17 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
1235 - 1236z	18 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Mon) (Remote Tuner Hong Kong)	JPL	MON
1518 - 1519z	18 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Mon) (Remote Tuner Hong Kong)	JPL	MON
1811 - 1819z	18 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Mon) (Remote Tuner Hong Kong)	JPL	MON
2029 - 2030z	18 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Mon) (Remote Tuner Hong Kong)	JPL	MON
2148 - 2149z	18 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Mon) (Remote Tuner Hong Kong)	JPL	MON
2201 - 2214z	18 Feb	(In tfc) (Probably 2SLC) (Mon) (Remote Tuner Hong Kong)	JPL	MON
(In tfc - 2201z)	T576 TN5A 7UA7 5T7D DU55 5U3A (Cont'd)	BT UADN AR (2208z - Silent)		
1214 - 1215z	19 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1532 - 1533z	19 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1751 - 1752z	19 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1937 - 1938z	19 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
2046 - 2047z	19 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
2211 - 2219z	19 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
0138 - 0139z	20 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
1332 - 1333z	20 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
1644 - 1645z	20 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
1843 - 1844z	20 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
2006 - 2013z	20 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
2212 - 2219z	20 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
1249 - 1250z	21 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
1450 - 1451z	21 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
1706 - 1719z	21 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
2037 - 2038z	21 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
1117 - 1118z	22 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1318 - 1319z	22 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1925 - 1926z	22 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1039 - 1040z	23 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
1333 - 1334z	23 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
1846 - 1847z	23 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT

2034 - 2035z	23 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT	
1332 - 1333z	24 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN	
1444 - 1445z	24 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN	
1658 - 1659z	24 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN	
1907 - 1919z	24 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN	
1057 - 1058z	25 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON	
1641 - 1642z	25 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON	
1859 - 1900z	25 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON	
2203 - 2204z	25 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON	
1216 - 1219z	26 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE	
1625 - 1626z	26 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE	
1739 - 1740z	26 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE	
1919 - 1920z	26 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE	
2118 - 2119z	26 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE	
<u>3642//5230</u>					
(5230 only)	2330 - 2331z	04 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
(3642 only)	2358 - 2359z	04 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON
(5230 only)	1610 - 1611z	05 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(5230 only)	1613 - 1614z	07 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU
(5230 only)	1724 - 1725z	07 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU
(5230 only)	1532 - 1011z	09 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	SAT
(5230 only)	1233 - 1234z	18 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
(5230 only)	1517 - 1518z	18 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
(5230 only)	1809 - 1810z	18 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	2146 - 2147z	18 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
(3642 only)	1749 - 1750z	19 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	2044 - 2045z	19 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	2209 - 2210z	19 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(3642 only)	1642 - 1643z	20 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
(3642 only)	1841 - 1842z	20 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
(3642 only)	2004 - 2005z	20 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
(3642 only)	2210 - 2211z	20 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
(5230 only)	1448 - 1449z	21 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
	1704 - 1705z	21Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
	2035 - 2036z	21 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
(3642 only)	1316 - 1317z	22 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
(3642 only)	1927 - 1928z	22 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	2254 - 2255z	22 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI
	1330 - 1331z	24 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1442 - 1443z	24 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1656 - 1657z	24 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1905 - 1906z	24 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
(5230 only)	2324 - 2325z	24 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	SUN
	1639 - 1640z	25 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Hong Kong)	JPL	MON
	1857 - 1858z	25 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Hong Kong)	JPL	MON
	2201 - 2202z	25 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Hong Kong)	JPL	MON
<u>3642//7602</u>					
(3642 only)	1743 - 1742z	23 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
(3642 only)	1844 - 1845z	23 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	2031 - 2032z	23 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
<u>3725//NRH</u>					
	1739 - 1740z	23 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	1840 - 1841z	23 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	2029 - 2030z	23 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	1326 - 1327z	24 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1438 - 1439z	24 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1652 - 1653z	24 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1901 - 1902z	24 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1635 - 1636z	25 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1853 - 1854z	25 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	2159 - 2200z	25 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1212 - 1213z	26 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	1225 - 1230z	26 Feb	(In tfc) V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	(In tfc - 1225z)	4756 AN45 7ND4 A6TN 3A45 A47N 6DN7 76UN (Cont'd)	AR HR WK NR .6 (Return to R/S - 1228z)		
	1628 - 1629z	26 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	1733 - 1734z	26 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	1915 - 1916z	26 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	2112 - 2113z	26 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
<u>3725//7607</u>	<b>Note: Previously on 3724</b>				
(3725 only)	1828 - 1828z	13 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
(3725 only)	2033 - 2034z	13 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
(3725 only)	2252 - 2253z	13 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	1830 - 1831z	14 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
(3725 only)	2039 - 2040z	14 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
	2047 - 2048z	14 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU
(3725 only)	1352 - 1353z	17 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
(3725 only)	1740 - 1741z	17 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
(3725 only)	1933 - 1934z	17 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
(3725 only)	2158 - 2159z	17 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN

1513 - 1514z	18 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
1805 - 1806z	18 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
2026 - 2027z	18 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
2142 - 2143z	18 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
(3725 only) 1328 - 1329z	20 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
(3725 only) 1638 - 1639z	20 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
(3725 only) 1836 - 1837z	20 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
(3725 only) 1959 - 2000z	20 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
(3725 only) 2207 - 2208z	20 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
1312 - 1313z	22 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1931 - 1932z	22 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
(3725 only) 2258 - 2259z	22 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI
<b><u>3725//4590</u></b>				
(3725 only) 1244 - 1245z	21 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
(3725 only) 1446 - 1447z	21 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
(3725 only) 1700 - 1701z	21 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
2031 - 2032z	21 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
<b><u>3797//4512</u></b>				
1318 - 1319z	02 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
1428 - 1429z	03 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
1014 - 1015z	04 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
2326 - 2327z	04 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
1108 - 1109z	05 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1405 - 1406z	05 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1612 - 1613z	05 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1919 - 1920z	05 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(3797 only) 1633 - 1634z	07 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
(3797 only) 1238 - 1239z	08 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1558 - 1558z	08 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
2043 - 2044z	08 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1517 - 1018z	09 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
1733 - 1734z	09 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
1834 - 1835z	10 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
2150 - 2151z	10 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
1052 - 1053z	11 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
1437 - 1438z	11 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
1607 - 1608z	11 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
1827 - 1828z	11 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
2051 - 2052z	11 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
1507 - 1508z	12 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1747 - 1748z	12 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
2200 - 2201z	12 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
0939 - 0940z	13 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
1708 - 1709z	13 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
1829 - 1830z	13 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
2035 - 2036z	13 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
1059 - 1100z	14 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
1832 - 1833z	14 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
2041 - 2142z	14 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
1008 - 1009z	15 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1617 - 1618z	15 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1926 - 1927z	15 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
2136 - 2137z	15 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1357 - 1358z	17 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
1742 - 1743z	17 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
1935 - 1936z	17 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
2000 - 2001z	17 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
1230 - 1231z	18 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
1515 - 1516z	18 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
1807 - 1808z	18 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
2028 - 2029z	18 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
2144 - 2145z	18 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
1212 - 1213z	19 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1529 - 1530z	19 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1747 - 1748z	19 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1935 - 1936z	19 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
2042 - 2043z	19 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
2207 - 2208z	19 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1207 - 1208z	20 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
1330 - 1331z	20 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
1640 - 1641z	20 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
1838 - 1839z	20 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
2000 - 2003z	20 Feb	(In tfc) V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED

(In tfc – 2000z) /993/A/91/31 AR

UGT COMM BT 750/5269/5979/02/21/0430/993/A/91/31 AR

UGT COMM BT 750/5269/5979/02/21/0430/993/A/91/31 AR

(Return to R/S 2002z)

2208 - 2209z      20 Feb      V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)

JPL

WED

2225 - 2229z	20 Feb	(In tfc) V H2FL (x3) DE DRV8 (x2)(Cont'd) (/ 3797 not checked)	JPL	WED
(In tfc – 2226z)		TN55 5.DD A6UA A.A5 34D6 UD47 753N (Cont'd)	AR (2227z – Return to R/S)	
1246 - 1247z	21 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
1438 - 1439z	21 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
1702 - 1703z	21 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
2033 - 2034z	21Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
1113 - 1114z	22 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1314 - 1315z	22 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1929 - 1930z	22 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) ((Remote Tuner Hong Kong)	JPL	FRI
(4512 only)	2300 - 2301z	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
1029 - 1030z	23 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
1329 - 1330z	23 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
1741 - 1742z	23 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
1842 - 1843z	23 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
2033 - 2034z	23 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
1328 - 1329z	24 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
1440 - 1441z	24 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
1654 - 1655z	24 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
1903 - 1904z	24 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
1052 - 1053z	25 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
(3797 only)	1637 - 1638z	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
(3797 only)	1855 - 1856z	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
1214 - 1215z	25 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1627 - 1628z	26 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1735 - 1736z	26 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
1917 - 1918z	26 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
2114 - 2115z	26 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
<u>4225//5500</u>				
(5500 only)	2341 - 2342z	02 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	1426 - 1427z	03 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1010 - 1011z	04 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1104 - 1105z	05 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	1401 - 1402z	05 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(4225 only)	1606 - 1607z	05 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(4225 only)	1915 - 1916z	05 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(4225 only)	2253 - 2254z	06 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	2329 - 2330z	06 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
(5500 only)	1232 - 1233z	08 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1555 - 1556z	08 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1515 - 1516z	09 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	1729 - 1730z	09 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	2330 - 2331z	09 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	0001 - 0002z	10 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	0013 - 0014z	10 Feb (In chat) V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
		VV VV VV (0013z - Silent - Switched to day freqs 7582//8110kHz)		
	1052 - 1053z	10 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1827 - 1828z	10 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	2203 - 2204z	10 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1048 - 1049z	11 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1435 - 1436z	11 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1605 - 1606z	11 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1818 - 1819z	11 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	2045 - 2046z	11 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1504 - 1505z	12 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	1745 - 1746z	12 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	1704 - 1705z	13 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	1818 - 1819z	13 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	2250 - 2251z	13 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	1055 - 1056z	14 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
	1825 - 1828z	14 Feb (In UGT COMM Msg - mostly U/R) (Remote Tuner Hong Kong)	JPL	THU
	1004 - 1005z	15 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1407 - 1408z	15 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
(5500 only)	1528 - 1529z	15 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Australia)	JPL	FRI
	1613 - 1614z	15 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1922 - 1923z	15 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
(5500 only)	2131 - 2132z	15 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1350 - 1351z	17 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1738 - 1739z	17 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1931 - 1932z	17 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	2156 - 2157z	17 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1226 - 1227z	18 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1511 - 1512z	18 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1803 - 1804z	18 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	2025 - 2026z	18 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	2140 - 2141z	18 Feb V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1156 - 1210z	19 Feb (In tfc) V 7NPE (x3) DE QV5B (x2) (Cont'd) // 4225 In tfc)	JPL	TUE
(In tfc - Hand sent - 1156z)		(Checked //5500 as this freq usually much louder, but sending usual R/S) *MSG NR 1053 155230219 1930 K* K (1158z)		
		BT AT53 A55A 3TUA NAN3 TKK AI6 AS ..(Silent 1200z)		

(5500 only)	1526 - 1527z	19 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(5500 only)	1743 - 1744z	19 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(5500 only)	1931 - 1932z	19 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(5500 only)	2039 - 2040z	19 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(5500 only)	2203 - 2204z	19 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	1202 - 1204z	20 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500 (Wed) (Remote Tuner Hong Kong)	JPL	
	1316 - 1317z	20 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500 (Wed) (Remote Tuner Hong Kong)	JPL	

Note: There is another station on 4225 sending 4 fig cut nr tfc - a bit louder than QV5B who is very weak on this freq

1317 - 1325z      20 Feb    (In tfc) (Wed) (Remote Tuner Hong Kong) JPL

(In tfc - 4 fig cut nr - 1317z)    (QV5B in background sending R/S)    RPT ..N 5 K. //A    WA K K //B (Both stations on this freq)  
RPT 8. W //A (1320z)    RPT NR. RPT //A    QS RP 80W //B    R BT 4..VADU K //B    \*QSL 21.0 K //A\*    .. K K //B    GB //B (1321z)

(Silent)

(It turned out that both stations were on the same freq, so in affect 3 stations active on this freq counting QV5B!!!)

(5500 only)	1636 - 1637z	20 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	1834 - 1835z	20 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	1956 - 1957z	20 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	2004 - 2005z	20 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	1242 - 1243z	21 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
	1440 - 1441z	21 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
	1658 - 1659z	21 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
	2029 - 2030z	21 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
	1025 - 1026z	23 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	1325 - 1326z	23 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	1737 - 1738z	23 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	1838 - 1839z	23 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	2027 - 2028z	23 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
(5500 only)	1318 - 1319z	24 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1650 - 1651z	24 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1859 - 1900z	24 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1048 - 1049z	25 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1633 - 1634z	25 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1851 - 1852z	25 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
(5500 only)	2157 - 2158z	25 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1210 - 1211z	26 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	1630 - 1631z	26 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	1731 - 1732z	26 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	1909 - 1914z	26 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	2110 - 2111z	26 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE

4474//NRH	0140 - 0141z	01 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI
	1406 - 1407z	01 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI
	2350 - 2351z	02 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Sweden)	JPL	SAT
	1501 - 1502z	04 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON
	2333 - 2354z	04 Feb	(In tfc) (Mon) (Remote Tuner Hong Kong)	JPL	MON

(2333z)      A63D N6T7 A4U5 NA4D U7T5 365A 63N4 U7T7D 35N7 4DT6

UA47 6NDT AU35 D5AU 47T3 6N5U DA4N 7T36 5N7UD AT34 76U. (Cont'd)

(2349z) (Silent – Unusually long message)

(This frequency normally used by CZT2, but due to strength of signal, probably not CZT2)

2356 - 2357z	04 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON	
<i>Note: This confirms that CZT2 did not send tfc on 4474 at 2333z</i>					

0004 - 0005z	05 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
1925 - 1926z	05 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
2301 - 2302z	06 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED
1843 - 1844z	08 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Finland)	JPL	FRI

1239 - 1357z      08 Feb    (In tfc) (Remote Tuner Hong Kong)      JPL      FRI

(1239z)      365D T74N 3A6U U5D4 N7T3 6UN5 3D76 (Cont'd)

(This freq normally used by CZT2, but signal too strong to be CZT2 - Frequency very noisy)

AR (1254z)    N4T5 3 D6T. UA5 U47N DT3U 7N56 TUA3 D4T7 36DA (Cont'd – 1255z - Did not send a msg header) AR (1310z)//A

\*R QSL 2110\* K/B (Both stations on same freq)    R HR ZGA EEEE R 7G GA K//A    NGAK/B    R //A  
R AS G\* NR 65 CK 181 .88 073 08 1000 K\*//A (Hand sent – poor CW!)    GA K/B    R BT 367T ANU4  
5D7T 5N43 (Cont'd) (1312z)//A

AR//A (1328z)    BT 3D67 U5NA .T3U 5D7A T6.. (Cont'd – 1328z)

(Thought he was repeating the message, but this does not appear to be the case. Did same thing at 1255z)

AR //A (1344z)(Silent)    BT 3D6. //A (1347z) (Lost audio) Again begins a msg without sending msg header – kind of strange)

(1357z) (All of the messages being sent are extremely long – longer than usual)    AR //A (1357z)(Lost remote tuner)

1511 - 1519z      08 Feb    4474 CW M89 (In tfc) (Remote Tuner Hong Kong)      JPL      FRI

(1511z) (In tfc – hand sent and slow CW- Appears to be the weaker station previously on this freq denoted by //B -  
 (Sending 4 fig cut number groups. Weak signal and fading badly – Mostly U/R)  
 (1518z) AR//A (1517z) QSL //A R R Q.. //B NW KN NIL ..//A (Silent 1518Z)

2341 - 2342z	09 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	SAT
2106 - 2107z	11 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON
0047 - 0048z	12 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
0047 - 0048z	13 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED
2337 - 2338z	13 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED
2049 - 2050z	14 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU
2142 - 2143z	15 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI
1939 - 1940z	17 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
2230 - 2231z	17 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	SUN
2252 - 2253z	22 Feb	V RXP7 (x3) DE CZT2 (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI

<b><u>4512//6773</u></b>	2255 - 2256z	06 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	2334 - 2335z	09 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	2307 - 2308z	10 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN

<b><u>4590//7607</u></b>	1433 - 1434z	03 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1148 - 1149z	05 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	1403 - 1404z	05 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(4590 only)	1608 - 1609z	05 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(4590 only)	1917 - 1918z	05 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	2257 - 2258z	06 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	1606 - 1607z	07 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Finland)	JPL	THU
(4590 only)	1631 - 1632z	07 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
	1236 - 1237z	08 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1556 - 1557z	08 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
(4590 only)	2041 - 2042z	08 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1832 - 1833z	10 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	2148 - 2149z	10 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	2305 - 2306z	10 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1102 - 1103z	11 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1126 - 1126z	11 Feb	(In tfc) V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON

(1126z) (In tfc) 3T45 N6U. T5.3 6N37 N67U 6NUA (Cont'd) AR .. K (1129z – Return to R/S)

	1615 - 1616z	15 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1924 - 1925z	15 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	2134 - 2135z	15 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
(7607 only)	1210 - 1211z	19 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(4590 only)	1527 - 1528z	19 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(4590 only)	1745 - 1746z	19 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(4590 only)	1933 - 1934z	19 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(4590 only)	2041 - 2042z	19 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(4590 only)	2205 - 2206z	19 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE

<b><u>4860// 6840</u></b>	1319 - 1324z	02 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SAT
	1420 - 1425z	03 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SUN
	1520 - 1525z	03 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SUN
	1920 - 0025z	05 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	TUE
	2320 - 2325z	06 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	WED
(6840 only)	1719 - 1724z	07 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Russia)	JPL	THU
	1520 - 1525z	08 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Russia)	JPL	FRI
	2320 - 2325z	08 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	FRI
	1020 - 1025z	09 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SAT
	1720 - 1725z	09 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SAT
	0020 - 0025z	10 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SUN
	1920 - 1925z	10 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SUN
	1120 - 1125z	11 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	MON
	1620 - 1625z	11 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	MON
	1819 - 1824z	11 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	MON
	1520 - 1525z	12 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	TUE
	1720 - 1725z	13 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	WED
	1820 - 1825z	13 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	WED
	2320 - 2325z	13 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	WED
	1120 - 1125z	14 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	THU
	2220 - 2225z	17 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SUN
	1520 - 1525z	18 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	MON
	2020 - 2025z	18 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	MON
	1220 - 1225z	19 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	TUE

Note: NYZ on 6840 was very chirpy and mostly U/R on 6840. Signal seemed to be centered on 6839 or 6838. TX problems again.  
 1520 - 1525z 19 Feb VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong) JPL TUE

Note: NYZ signal on 6840 is now back to normal.

(4860 only)	2220 - 2225z	19 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	TUE
	1220 - 1225z	20 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	WED
	2220 - 2225z	20 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	WED
	1520 - 1525z	21 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	THU
	1719 - 1724z	21 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	THU
	1120 - 1125z	22 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	FRI
(4860 only)	1320 - 1325z	22 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	FRI
	1920 - 1925z	22 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	FRI

1320 - 1325z	23 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SAT	
1920 - 1925z	23 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SAT	
1320 - 1325z	24 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SUN	
1920 - 1925z	24 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SUN	
1220 - 1225z	26 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	TUE	
1620 - 1625z	26 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	TUE	
1920 - 1925z	26 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	TUE	
2120 - 2125z	26 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	TUE	
<b>5230//NRH</b>	1205 - 1206z	01 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI
	1736 - 1737z	03 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	0006 - 0007z	05 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
	2303 - 2304z	06 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED
	2309 - 2310z	10 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	1727 - 1728z	13 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED
	2335 - 2336z	13 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	WED
	1928 - 1929z	15 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	2138 - 2139z	15 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
<b>5230//5801</b>	1228 - 1229z	19 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
<b>5500//7582</b>	1435 - 1319z	24 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
<b>5588//NRH</b>	Note: <b>NEW FREQ for 2SLC</b> - Have been looking for the daytime freq for some time!!!				
	2337 - 2341z	06 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	2333 - 2350z	08 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1053 - 1059z	10 Feb	(In tfc - Probably 2SLC) (Remote Tuner Hong Kong)	JPL	SUN
	(1053z) (In tfc)	TDA6 4DDN T4A7 5T37 3U46 N375 67U6 A77A TUN7 6TDE (1054z) AR (1057z) (Silent)			
	0045 - 0046z	12 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	0943 - 0944z	13 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	0114 - 0119z	22 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1056 - 1057z	25 Feb	V MW3D (x3) DE 2SLC (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	<b>Note: At 1057z switched from day to night frequency of 3330kHz</b>				
<b>5763//10779</b>	1105 - 1106z	05 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	1057 - 1058z	14 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
	0027 - 0031z	15 Feb	(In tfc) V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	(In tfc - 0027z) COMM. /0915/LZ2.9A2/3897/3.74 AR HR WK NR 16 (Returns to R/S - 0028z)				
(10779 only)	0227 - 0228z	15 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1006 - 1007z	15 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
<b>5801//10180</b> <i>(10180 only)</i>	0730 - 0731z	04 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON
	1016 - 1017z	04 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON
	1111 - 1112z	05 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
<i>(10180 only)</i>	1026 - 1027z	07 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU
<i>(10180 only)</i>	1101 - 1102z	07 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU
<i>(10180 only)</i>	1010 - 1011z	09 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	SAT
<i>(10180 only)</i>	0325 - 0326z	10 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	SUN
<i>(10180 only)</i>	1056 - 1057z	11 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
<i>(10180 only)</i>	0941 - 0942z	13 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
<i>(10180 only)</i>	0210 - 0211z	14 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
<i>(10180 only)</i>	0232 - 0232z	14 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU
<i>(10180 only)</i>	1037 - 1038z	14 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Finland)	JPL	THU
<i>(10180 only)</i>	1102 - 1103z	14 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
<i>(10180 only)</i>	0229 - 0230z	15 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
<i>(10180 only)</i>	0952 - 0953z	15 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI
<i>(10180 only)</i>	1010 - 1011z	15 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
(5801 only)	1216 - 1217z	19 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
<i>(10180 only)</i>	1209 - 1210z	20 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	1115 - 1116z	22 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
<i>(10180 only)</i>	1032 - 1037z	23 Feb	(In tfc) V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	(In tfc - 1032Z) 656U ... (Cont'd - mostly U/R) AR (Return to R/S - 1036z)				
<i>(10180 only)</i>	1331 - 1332z	23 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	1203 - 1205z	24 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	SUN
<i>(10180 only)</i>	1054 - 1055z	25 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Hong Kong)	JPL	MON
<b>6773//8040</b>	2342 - 2343z	02 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	0005 - 0006z	10 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
<i>(6773 only)</i>	0043 - 0044z	12 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
<i>(6773 only)</i>	2333 - 2334z	13 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	0034 - 0035z	15 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	0133 - 0134z	20 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
<i>(6773 only)</i>	0110 - 0111z	22 Feb	V H2FL (x3) DE DRV8 (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
<b>6840//10640</b>	0220 - 0225z	01 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	FRI
<i>(10640 only)</i>	0320 - 0325z	02 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SAT

	0419 - 0424z	03 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SUN
(6840 only)	1020 - 1025z	04 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	MON
(6840 only)	2319 - 2324z	04 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	MON
	0020 - 0025z	05 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	TUE
	0120 - 0125z	12 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	TUE
	1020 - 1025z	13 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	WED
	0220 - 0225z	14 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	THU
(6840 only)	0820 - 1825z	17 Feb	VVV Q2M DE NYZ 1825z Weak	ATC	SUN
			<b>*Note: NYZ on 6841 vice 6840 - very raspy TX - Technical issues?</b>		
	0220 - 0225z*	15 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	FRI
(10640 only)	1420 - 1425z*	15 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	FRI
	1520 - 1525z*	15 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Australia)	JPL	FRI
	1620 - 1625z*	15 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	FRI
	0120 - 0125z	22 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	FRI
	1020 - 1025z	23 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	SAT
	0520 - 0525z	25 Feb	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) (Remote Tuner Hong Kong)	JPL	MON
<u>7582//8110</u>					
(7582 only)	0131 - 0132z	01 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
(7582 only)	0310 - 0311z	02 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	0403 - 0405z	03 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	2330 - 2331z	08 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	0016 - 0016z	10 Feb	(In tfc) V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
			<i>(Switched from night freqs (4225/5500kHz) - In tfc - 0016z 0/.32 AR (0016z) (Return to R/S @ 0018z)</i>		
	0407 - 0408z	11 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	0036 - 0040z	12 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
	0934 - 0935z	13 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	0206 - 0207z	14 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
	0025 - 0026z	15 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	0225 - 0226z	15 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	0445 - 0446z	18 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	0129 - 0130z	20 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	0105 - 0106z	22 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	0330 - 0331z	22 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1109 - 1110z	22 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1310 - 1311z	22 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1816 - 1817z	22 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1932 - 1933z	22 Feb	V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	0504 - 0505z	25 Feb	<b>Note: Very unusual that QV5B did not change from day to night freqs.</b>	JPL	MON
			V 7NPE (x3) DE QV5B (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
<u>7602//NRH</u>					
	2352 - 2353z	02 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Sweden)	JPL	SAT
	0049 - 0050z	12 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
	2045 - 2046z	14 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU
	1355 - 1356z	17 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
	2233 - 2234z	17 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	SUN
	0125 - 0126z	22 Feb	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI
<u>7607//NRH</u>					
	1207 - 1208z	01 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1600z	02 Feb	V WITN WITN WITN de GNXG GNXG]	FN	SAT
	1056 - 1100z	07 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU
			<i>Note: Switched from daytime to night time freqs at 1055.</i>		
	1410 - 1411z	15 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	1526 - 1527z	15 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Australia)	JPL	FRI
	1530 - 1531z	15 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	FRI
	1228 - 1229z	15 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	1205 - 1206z	20 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
<u>8789//10779</u>					
(10779 only)	0133 - 0134z	01 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
(10779 only)	0200z	01 Feb	(End of UGT Comm msg) WITN WITN WITN DE GNXG GNXG	ElmarE2K	FRI
	0312 - 0313z	02 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	1325 - 1326z	02 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	2343 - 2344z	02 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
(10779 only)	0406 - 0407z	03 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
(10779 only)	0702 - 0703z	04 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	MON
	1012 - 1013z	04 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
(10779 only)	2328 - 2329z	04 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
(10779 only)	0028 - 0029z	05 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	TUE
(10779 only)	1029 - 1055z	07 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	THU
(10779 only)	1012 - 1013z	09 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	SAT
(10779 only)	1434 - 1435z	09 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	SAT
(10779 only)	1731 - 1732z	09 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	SAT
	2332 - 2333z	09 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
	0003 - 0004z	10 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SUN
(10779 only)	0326 - 0327z	10 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Russia)	JPL	SUN
	0409 - 0410z	11 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
(10779 only)	1039 - 1040z	11 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Finland)	JPL	MON
	1050 - 1051z	11 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
	0041 - 0042z	12 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	TUE
(10779 only)	0936 - 0937z	13 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED

(10779 only)	0208 - 0209z	14 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	THU
(10779 only)	1035 - 1036z	14 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Finland)	JPL	THU
(8789 only)	0047 - 0048z	18 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
(10779 only)	0131 - 0132z	20 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	WED
	0107 - 0109z	22 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
	0332 - 0333z	22 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	FRI
(10779 only)	1027 - 1028z	23 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
(10779 only)	1327 - 1328z	23 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	SAT
(8789 only)	0506 - 0507z	25 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON
(8789 only)	1050 - 1051z	25 Feb	V WITN (x3) DE GNXG (x2) (Cont'd) (Remote Tuner Hong Kong)	JPL	MON

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

The first report for 2013 was on Wed 09 Jan - still sending the two msgs SD77 & SD 78 first sent on 16 Nov 2012. The 2nd msg is sent immediately after the first with a one minute pause between each complete sending. There are three complete sendings of the two msgs..

10375 1457 - 1537z 09 Jan      **Msgs SD77 SN80 & SD 78 SN30 reported on 09 Jan** All other days NRH      BR      WED

Two new msgs appeared on Thu 17 Jan. Reception was poor into S.E. England and logging was done via Global Tuners, Mojave Desert (Thanks T!). M97 reception via the Hong Kong tuner, usually very strong has been weak or non-existent for some weeks now.

10375	1457 - 1538z	17 Jan	New msgs SD79 SN60 & SD 80 SN55	BR/FN	THU
	1457 - 1538z	18 - 31 Jan	Msgs SD79 SN60 & SD 80 SN55 reported on 18, 21, 22, 24, 30, 31 Jan All other days NRH		
	1457 - 1538z	01 - 28 Feb	Msgs SD79 SN60 & SD 80 SN55 reported on 20,21 Feb All other days NRH		

Due to the poor reception of this signal in both the UK and Canada, GlobalTuners receivers at Mohave Desert & Sydney - as well as the Twente SDR, were used frequently to confirm the msg detail. Reception in S.E. England is still quite variable.

AAAAAAAAAAAAAAAAAAAAAAAA  
 SD79 KKK SD79 KKK SD79 KKK TK TK TK  
 SN60 SN60 SN60  
 30009 68644 28502 27753 55687  
 89375 25496 64092 06719 62286  
 02869 83955 76278 99306 06733  
 83113 08131 75493 70618 22423  
 17441 96749 27726 08410 67372  
 00852 70398 96158 47558 40131  
 75167 89831 86990 37190 08743  
 69531 44666 41119 07431 29745  
 09149 88419 14903 21036 85952  
 10813 39729 75025 23601 16767  
 37544 70604 67067 07938 40243  
 25285 91271 67129 51619 41547  
 KKKKKKKKKKKKKKKKKKKKKKKKKKK  
*Courtesy BR*

**SK01 (Data Mode generic classification, Cuban TX's)** See Control List & NL49 for old RDFT detail. See P29-30 of NL72 for details of New Format SK01

[with M08a and V02a]

No reports this time - It seems this mode has been abandoned in favour of HM01 (See elsewhere in this newsletter).

### Marker Beacons (MX MXI)

3593.7	2202z	11 Jan	MX CW Beacon "D"		AB	FRI
	2159z	28 Jan	MX CW Beacon "D"		AB	MON
3593.8	2202z	11 Jan	MX CW Beacon "P"		AB	FRI
3593.9	2202z	11 Jan	MX CW Beacon "S"		AB	FRI
	2159z	28 Jan	MX CW Beacon "S"		AB	MON
3658	2202z	11 Jan	MX CW Beacon "V"		AB	FRI
	1838z	29 Jan	MX CW Beacon "V" Khiva		AB	TUE
	2202z	11 Feb	MX CW Beacon "V"		AB	MON
	2014z	24 Feb	MX CW Beacon "V"		AB	SUN
4557.8	2202z	11 Jan	MX CW Beacon "P"		AB	FRI
4557.9	2202z	11 Jan	MX CW Beacon "S"		AB	FRI
4558.3	1112z	15 Feb	CW Beacon "K" QSA1		HT	FRI
5153.7	1718z	11 Jan	MX CW Beacon "D"		AB	FRI
5153.9	1718z	11 Jan	MX CW Beacon "S"		AB	FRI
	1526z	24 Feb	MX CW Beacon "S"		AB	SUN
5154	2202z	11 Jan	MX CW Beacon "C"		AB	FRI
5154.2	0959z	11 Jan	MX CW Beacon "F"		(AB-Sib)	FRI
5154.3	1102z	07 Feb	CW Beacon "K" QSA1		HT	WED
	1107z	15 Feb	CW Beacon "K" QSA1		HT	FRI
	1620z	23 Feb	MX CW Beacon "K"		AB	SAT

5154.4	1107z	15 Feb	CW Beacon "M" QSA1	HT	FRI
5156.8	1439z	12 Jan	Russian naval beacon 'L' St Petersburg.	AB	SAT
	1154z	29 Jan	MX CW Beacon "L"	AB	TUE
5157	1654z	29 Jan	MX CW Beacon "L" (Cont'd) (// 6957) (Remote Tuner UK)	JPL	TUE
5158	1434z	10 Jan	MX CW Beacon "L" (Cont'd) (// 6918 and 8498) (Remote Tuner Sweden)	JPL	THU
6916.5	All Day	29 Jan	CW Beacon "L"	RNGB	TUE
6917.9	1059z	11 Jan	MX CW Beacon "L"	AB	FRI
6918	1434z	10 Jan	MX CW Beacon "L" (Cont'd) (// 5158 and 8498) (Remote Tuner Sweden)	JPL	THU
	1654z	29 Jan	MX CW Beacon "L" (Cont'd) (//5157) (Remote Tuner UK)	JPL	TUE
7038.7	0833z	23 Feb	MX CW Beacon "D"	AB	SAT
7038.9	0959z	11 Jan	MX CW Beacon "S"	AB	FRI
	0833z	23 Feb	MX CW Beacon "S"	AB	SAT
	2013z	24 Feb	MX CW Beacon "S"	AB	SUN
7039	0959z	11 Jan	MX CW Beacon "C"	AB	FRI
7039.2	0959z	11 Jan	MX CW Beacon "F"	(AB-Sib)	FRI
7039.3	1620z	23 Feb	MX CW Beacon "K"	AB	SAT
7039.4	0959z	11 Jan	MX CW Beacon "M"	(AB-Sib)	FRI
	1105z	07 Feb	CW Beacon "M" QSA2	HT	WED
	1620z	23 Feb	MX CW Beacon "M"	AB	SAT
8112	2000z	04 Feb	CW Beacon "W"	RNGB	TUE
	2040 - 2100z	04 Feb	On again from 2040z with wwwww k Short message at 2100 after V V	AB	TUE

Ary reports; This is a Russian Air Force marker. Usually on at h20-h22 and h40-h42 sending wwwww k and sometimes followed by a message sent by 4ASU. These messages are connected to Tu-95 Bear flights. Sometimes also on the hour. Occasional "N" is sent instead of "W"

	1800z	06 Feb	CW Russian Air Force "W" marker	AB	WED
	1812z	06 Feb	CW Russian Air Force "RRK" followed by a msg at 1816z. Very weak. Not the "W" station - (AB)	AB	WED
	1820z	06 Feb	CW Russian Air Force "W" marker	AB	WED
	1840z	06 Feb	CW Russian Air Force "W" marker followed by a barely audible msg from another station in this net	AB	WED
8494.8	0833z	23 Feb	MX CW Beacon "P"	AB	SAT
	0807z	24 Feb	MX CW Beacon "P"	AB	SUN
8494.9	0959z	11 Jan	MX CW Beacon "S"	AB	FRI
8495	0959z	11 Jan	MX CW Beacon "C"	AB	FRI
	0833z	23 Feb	MX CW Beacon "C"	AB	SAT
	0807z	24 Feb	MX CW Beacon "C"	AB	SUN
8495.1	0959z	11 Jan	MX CW Beacon "A"	(AB-Sib)	FRI
8495.2	0959z	11 Jan	MX CW Beacon "F"	(AB-Sib)	FRI
8495.3	0959z	11 Jan	MX CW Beacon "K"	(AB-Sib)	FRI
8495.4	0959z	11 Jan	MX CW Beacon "M"	(AB-Sib)	FRI
8497.8	0959z	11 Jan	MX CW Beacon "L"	AB	FRI
	1439z	12 Jan	Russian naval beacon 'L' St Petersburg	AB	SAT
	1154z	29 Jan	MX CW Beacon "L"	AB	TUE
8498	1434z	10 Jan	MX CW Beacon "L" (Cont'd) (// 5158 and 6918) (Remote Tuner Sweden)	JPL	THU
10871.7	0833z	23 Feb	MX CW Beacon "D"	AB	SAT
	0807z	24 Feb	MX CW Beacon "D"	AB	SUN
10871.8	0959z	11 Jan	MX CW Beacon "P"	AB	FRI
	0833z	23 Feb	MX CW Beacon "P"	AB	SAT
	0807z	24 Feb	MX CW Beacon "P"	AB	SUN
10871.9	0833z	23 Feb	MX CW Beacon "S"	AB	SAT
10872	0959z	11 Jan	MX CW Beacon "C"	AB	FRI
	0833z	23 Feb	MX CW Beacon "C"	AB	SAT
	0807z	24 Feb	MX CW Beacon "C"	AB	SUN
10872.1	0959z	11 Jan	MX CW Beacon "A"	AB	FRI
10872.4	0812z	23 Feb	MX CW Beacon "M"	(AB-HK)	SAT
13527.7	0959z	11 Jan	MX CW Beacon "D"	AB	FRI
	0833z	23 Feb	MX CW Beacon "D"	AB	SAT
13527.8	0959z	11 Jan	MX CW Beacon "P"	AB	FRI
	1315z	24 Feb	MX CW Beacon "P"	AB	SUN
13528	0833z	23 Feb	MX CW Beacon "C"	AB	SAT
13528.1	0959z	11 Jan	MX CW Beacon "A"	AB	FRI
13528.2	1620z	23 Feb	MX CW Beacon "F"	AB	SAT
13528.4	0812z	23 Feb	MX CW Beacon "M"	(AB-HK)	SAT
	1620z	23 Feb	MX CW Beacon "M"	AB	SAT
16331.7	0959z	11 Jan	MX CW Beacon "D"	AB	FRI
	0833z	23 Feb	MX CW Beacon "D"	AB	SAT
16331.9	0833z	23 Feb	MX CW Beacon "S"	AB	SAT
16332	0130z	23 Feb	CW Beacon "K" QSA3	DanAR	SAT

16332.1	0959z	11 Jan	MX CW Beacon "A"	AB	FRI
16332.2	1620z	23 Feb	MX CW Beacon "F"	AB	SAT
16332.3	2145z	06 Feb	CW Beacon "K" QSA4	HT	WED
16332.4	1620z	23 Feb	MX CW Beacon "M"	AB	SAT
20047.7	0959z	11 Jan	MX CW Beacon "D"	AB	FRI
	0833z	23 Feb	MX CW Beacon "D"	AB	SAT
20047.9	0959z	11 Jan	MX CW Beacon "S"	AB	FRI
	0833z	23 Feb	MX CW Beacon "S"	AB	SAT
20048	0959z	11 Jan	MX CW Beacon "C"	AB	FRI

**Contributors:** AB, ATC, BR, CB, DanielAR, ElmarE2Kde, FN, GD, Gert, Ggs, HFD, HT, Jan, JPL, PPL, PSP, RRGB, SR, T!, tiNG, westtlus.

Thank you all for your logs.

### **Mixed Mode Station HM01**

Since its discovery this seems very much the mode of choice for the Cubans with V02a and M08a transmissions consigned to the back burner. We continue to log these sendings to investigate the schedule. However a surprise set of files from AnonUS suggests that M08a is not as dead as V02a....unless you know better. If you do its time to get those logs in to us.

### **Voice Stations Round up**

E06

Much as before with high group counts seen on the Friday 0600z schedule.

E07

Messages seen through January on Mon/Wed 2000z, Thu 2110z and 0800z Tuesday/Friday Schedules. Some good strengths recorded along with usual noises and strong carrier vs weak audio.

February saw a sudden change with the sending of XPA2 instead of the Tuesday slot of the 0800z scheduled E07.

E07a

As usual good strengths with a couple of messages sent. Some strength variation in February. Spiiffingly long dk: 2200 and 7337, read the column.

E17z

Continues much as expected; few reports seen in February.

E25

Good coverage of sendings from AIK in January on both 6140 and 9450kHz; nothing for February.

G06

Usual signals and good coverage.

S06 group of sigs is continuing as expected sending a variable signal strength short message groups across a wide range of frequencies. A big working schedule.

V02a

Not many active sendings noted since the rise of the mixed mode HM01

V21

Reported in depth towards end of January.

Polytones.

XPA

Usual sending at expected strengths. XPA c sent a two message format on Saturday 12/01 It was on Saturday 09/02 that PLdn noted a change in the tones used in the header for a null message. The tone set used to produce 000 was not the nominal 760, 1200, 760Hz but had changed to a 300ms long 760Hz tone that produces 000 on Rivet as well as on HOKA [thanks KW].

It was thought to be a mistake but this modified tone set has now been seen on XPAc again Wednesday 13/02 and on a weak trace of XPAe Tuesday 12/02 allowing us to assume the tone set used was by design.

### **German Report**

Report from ENIGMA2000's German Branch (E2Kde) and X06 team

Hallo liebe Freunde und Kollegen der deutschen Branche und des X06 Teams (Hello dear friends and colleagues of the German Branch and X06 team)

In this first E2Kde report of 2013, we have one interesting German Branch note, before we have the X06 section as usual.

G21 – song identified!

As a result of an interesting cooperation between E2K and E2Kde, the song used by the former GDR numbers station G21 (Music and Morse letter) is identified: "Schlaf schön, Rosmarie" (Sleep well, Rosmarie), produced 1978 by Peter Tschernig, a popular hit maker of the former GDR, who was also more often heard in the West.

The story of the identification began with a note from Mr. Glenn Raainfall, Hawaii/USA, a new E2K member, who served for the US army in the 70s in Augsburg/Southern Germany. There he heard the song and remembered it, as he listened to G21. After writing this group message by Glenn, tiNGE2Kde (Thomas) posted the song to me, and I confirmed it as the one used by G21. Thanks to Glenn and Thomas for the cooperation, which brought us a good step forward.

#### X06 Mazielka (1C) logs section

Date	Day UTC	Freq	Scale	Monitor	Comments
20130109	Wed 0907	16116	134265	Websat/UK	M501
20130110	Thu 0758-0819	12300	161616	RNGB	X06a i. p. - changed into X06b
20130110	Thu 0819	12300	153616	RNGB	X06b (missed end - was after 0840)
20130111	Fri 1500-1505	9076	215346	Fritz/CH	G
20130117	Thu 0720-0721	17468	436512	Webweasel	S9+ (heard by Aspen via SDR), M502
20130124	Thu 0710-0900	7730	121212	RNGB	X06a i. p.
20130124	Thu 0803-0808	16153	153624	RNGB	Alert type 2 (both i. p. and G) 1
20130124	Thu 0811	14550	153624	RNGB	2.2 Shortie (only heard 1 bar)
20130124	Thu 0850-0901	8100	121212	Ian Wraith	X06a, then CROWD36 (0925-0926)
20130124	Thu 1122-1130	21825	314265	Eddy/AU	Weak/fair with fading, new freq, R
20130125	Fri 1629	7861	?	4z5/IL	Strong shortie on new freq
20130205	Tue 0800	16190	123456	Websat	Weak X06c (i. p.)
20130205	Tue 0926-0930	12149	154263	Hans/NO	Alert 2.1 Fair (i. p.), M503
20130205	Tue 0931-0935	13401	154263	Hans	2.2 Weak, M504
20130213	Wed 0901-0903	13419	465132	RNGB	Monitored i. p., M505
20130213	Wed 0905-0907	18245	134265	RNGB	Monitored i. p., M506
20130220	Wed 0853-0906	17470	216354	Websat	R - followed by C36 on 17460 kHz
20130220	Wed 0958-1002	17445	362154	Websat	G - followed by C36 on 17460 kHz
20130220	Wed 1630-1643	4565	212112	Fritz	Special X06a variant i. p.

Especially this last one is very interesting, and we'll see, what's going on with X06 and the variants. Thanks to all contributors for this nice stuff.

Till next time I say as usual "Auf Wiedersehen" and "Good-bye"

*Jochen Schäfer, KopfE2Kde and X06 Teamkopf*

#### HM01 MIXED MODE STATION

**Note:** THE FULL HM01 SCHEDULE CAN BE FOUND IN THE CHARTS SECTION

#### January 2013

Time/Date order

16180kHz2114z	01/01 strong	gil	TUE
17480kHz2208z	01/01 strong	gil	TUE
9065kHz0845z	02/01 HM01 in progress , good carrier but weak audio	DanAr	WED
9240kHz0900z	02/01 HM01 good carrier but weak audio	DanAr	WED
14375kHz0500z	03/01 Extremely weak signal	Anon	WED
12120kHz0900z	03/01[86722 03257 28045 72551 52715 71293]	RNGB	THU
12180kHz1000z	03/01[86722 03257 28045 72551 52715 71293]	RNGB	THU
14375kHz0600z	03/01[86722 03257 28045 72551 52715 71293] THU TX confirmed using Canadian Global Tuner.	Anon	THU
86722 04696521.txt 03257 24722695.txt 28045 02090041.txt 72551 37785161.txt 52715 68783805.txt 71293 36230978.txt			
10715kHz 2200z	04/01[45411 66871 73361 38501 38361 68751] note all callups end in 1. Currently callups change every 3 days.	Anon	THU
14375kHz 0500z 14375kHz 0600z	05/01[45411 66871 73361 38501 38361 68751] via global tuners Canada 05/01[45411 66871 73361 38501 38361 68751] via global tuners Canada	Anon Anon	FRI FRI
13435kHz 0700z	05/01[45411 66871 73361 38501 38361 68751] via Global Tuners	Anon	FRI
16180kHz2130z	05/01 in progress, no // found.	HS	SAT
17480kHz2200z	05/01 voice and RDFT. No // found	HS	SAT

17540kHz2302z	05/01 Carrier started on time, voice was late. Solid S9 signal. So far, no // found.	HS	SAT
13435kHz0745z	08/01[55864 26015 74421 56545 52116 74224] i/p	RNGB	TUE
5855kHz0500z	09/01[56545 52116 74224 55864 26015 74421]	Anon	WED

File decodes as follows  
56545 58662662.txt  
52116 25835066.txt  
74224 83086477.txt  
55864 26882581.txt  
26015 25048303.txt  
74421 47836170.txt

These callups were first noted during the evening of 07/01/2013

11530kHz2300z	09/01[56545 52116 74224 55864 26015 74421] QSA2 QRM3	DanAR	WED
5855kHz0500z	11/01[88714 17382 72854 81155 21733 72141]	Anon, PLdn	FRI

Decodes  
88714 60434623.txt  
17382 65558465.txt  
72854 78760831.txt  
81155 18711616.txt  
21733 75461710.txt  
72141 00657507.txt

9330kHz0700z	11/01[72141 88714 17382 72854 81155 21733]Fair, QRM3	PLdn	FRI
9065kHz0802z	11/01[72141 88714 17382 72854 81155 21733]Fair	PLdn	FRI
12120kHz0900z	12/01 Very poor, just audible	PLdn	SAT
17540kHz2300z	12/01[88716 17384 72856 81157 21735 72143]	Anon	SAT
10715kHz2200z	13/01[17051 17385 16111 81158 21736 72144]	Anon	SUN

9330kHz0700z	11/01[72141 88714 17382 72854 81155 21733]Fair, QRM3	PLdn	FRI
9065kHz0802z	11/01[72141 88714 17382 72854 81155 21733]Fair	PLdn	FRI
17540kHz2300z	12/01[88716 17384 72856 81157 21735 72143]	Anon	SAT
11635kHz2130z	13/01 i/p	AK	SUN
10715kHz2200z	13/01[17051 17385 16111 81158 21736 72144]	Anon	SUN
11530kHz2300z	13/01[17051 17387 16110 81178 21736 72144] QSA2 QRM4	DanAR	SUN
9065kHz0800z	14/01[17384 72856 81157 21735 72143 88716] QSA2 QRM4	DanAR	MON
11635kHz2103z	14/01 i/p	AK	MON
10715kHz2200z	14/01[17052 17386 16112 21511 36131 72145]	Anon	MON
11530kHz2300z	14/01[17052 17386 16112 21511 36131 72145] QSA2 QRM2	DanAR, AK	MON
12120kHz0500z	15/01 In progress, [17052 17386 16112 21511 36131 72145.]	Anon	TUE
16180kHz2100z	15/01[64441 17053 17387 16113 21712 36132] QSA2 QRN2	DanAR, Anon	TUE

New file was for 64441 30570617.txt

10715kHz2200z	16/01[17053 17387 16113 21512 36132 64441]	Anon	WED
12120kHz0500z	17/01[only 16113 confirmed as a callup] via global tuner in Colorado	Anon	THU
14375kHz0500z	17/01 Extremely weak on global tuner in Colorado but voice and RDFT lead in tones definitely audible.	Anon	THU
16180kHz2100z	17/01[17054 65611 16114 21513 36133 64442]	Anon	THU

Note incrementing +1

10715kHz 2200z	18/01[17055 65612 13115 21514 36134 64443]	Anon	FRI
12120kHz0500z	19/01[17055 65612 13115 21514 36134 64443]	Anon	SAT
14375kHz0500z	19/01[17055 65612 13115 21514 36134 64443]	Anon	SAT
16180kHz2100z	19/01[66111 65613 16116 21515 36135 64444]	Anon	SAT
Note new callup in position 1.			
10715kHz2200z	20/01[64445 66112 65614 16117 18061 36136] QSA3 QRM2	DanAR	SUN
11530kHz2300z	20/01[64445 66112 65614... ]	DanAR	SUN
10715kHz2200z	20/01[66112 65614 16117 18061 36136 64445]	Anon	SUN
New callup in position 4. with associated text file 65272461.TXT			
5855kHz0500z	21/01	Ggs, Sher	MON
9065kHz0800z	21/01[64445 66112 65614 16117 18061 36136] QSA2 QRM1	DanAR	MON
11530kHz2300z	21/01[64446 66113 65615 33751 18062 36137] QSA2 QRM4	DanAR	MON
5855kHz0500z	23/01[66114 65616 33752 18063 88451 64447]	Anon	WED
New text files and associated callups			
33752 22235071.txt			
18063 65272461.txt			
88451 01548510.txt			
9065kHz0800z	23/01[88451 64447 66114 65616 33752 18063 + data]	RNGB	WED
9240kHz0900z	23/01	RNGB	WED
11635kHz2100z	23/01[66115 78501 33573 18064 88452 64448]	Anon	WED
This TX had been missing in recent days but has returned.			
New File for callup 78501 38876224.txt			
10715kHz2200z	23/01[64448 66115 78701 33753 18064 88472] ??? grps QSA1 QRM2	DanAR	WED
5855kHz0500z	25/01[66116 78502 33574 18065 88453 03801]	Anon	FRI
New callup in position 6 and associated new text file 03801 71637521.txt			
11530kHz 1700z	27/01[78505 72261 46852 88456 03804 53383] Addition to the current known schedules.	Anon	SUN
11635kHz1800z	27/01[78505 72261 46852 88456 03804 53383]	Anon	SUN
9240kHz0900z	28/01[53383 78707 72261 46872 88456 03804] QSA2 QRM2	DanAR	MON
11435kHz1600z	28/01[78506 72262 46853 88457 003805 53384]	Anon	US
11435kHz1600z	29/01[53385 66431 72263 46854. 33331 87401]	Anon	TUE
11530kHz1700z	29/01[ 53385 66431 72263 46854. 33331 87401]	Anon	TUE
11635kHz1800z	29/01[ 53385 66431 72263 46854. 33331 87401]	Anon	TUE
17480kHz2230z	31/01[53387 66433 72265 36671 33333 87403] QSA2 QRM1	DanAR	THU
17540kHz2334z	31/01[53387 66433 72265 36671 33333 87403] QSA2	DanAR	THU

PY4ZBZ writes:

On 31.01.2013 from 22:56 to 23:55 UTC at 17,540 kHz AM, transmission copied completely, which has the following structure:

1 - Start with a sequence of repeated 8 groups of 6 numbers with 5 digits each (voice):

53387 66433 72265 36761 33333 87403

This sequence of numbers reports the sequence of next RDFT transmissions.

2 - then follows a sequence of 5 RDFT repeated transmissions, each with 6 files, identified by numbers of 5 digits spoken in the preceding list:

voice : 53387 RDFT : 17527626.TXT  
 voice : 66433 RDFT : 40740465.TXT  
 voice : 72265 RDFT : 40037714.TXT  
 voice : 36761 RDFT : 88374124.TXT  
 voice : 33333 RDFT : 86070161.TXT  
 voice : 87403 RDFT : 34140043.TXT

3 - then follows a repeated sequence of 5 groups of 6 numbers with 5 digits(voice)(identical to item 1 above):

53387 66433 72265 36761 33333 87403

4 - Ends with the same RDFT sequence of item 2 above.

5 - each file is transmitted therefore 10 times in 1 hour!

The files were decoded with the program of my authorship: the DIGTRX,  
and can be downloaded here:

<http://www.qsl.net/py4zbz/en.htm/#a>

Interestingly, from the 6 TXT files, 5 are the same on the 29th (two days before) with the SAME content, but their identification has spoken numbers increased by 2:

day 29-01-2013 : 53385 66431 72263 46854 33331 87401  
day 31-01-2013 : 53387 66433 72265 36761 33333 87403

### **February 2013**

5855kHz0500z 01/02[53387 66433 72265 36761 33333 87403]

Anon

FRI

Text file names listed below.

53387 17527626.txt  
66433 40740465.txt  
72265 40037714.txt  
36761 88374124.txt  
33333 86070161.txt  
87403 34140043.txt

11530kHz2300z 01/02[36411 66434 72266 36762 33334 87404] QSA2 QRM2

DanAR

FRI

16180kHz2100z 02/02 See below

PY4ZBZ

SAT

36412 : 21522421.TXT  
66435 : 40740465.TXT  
72267 : 40037714.TXT  
36763 : 88374124.TXT  
33335 : 86070161.TXT  
87405 : 34140043.TXT

Each day the 6 numbers (voice identification) are increased by 1.

But the correspondent TXT file content is the same!

Each 2 days, there is 1 new file !:

29-01-2013 : 53385 66431 72263 46854 33331 87401  
30-01-2013 : not listen...  
31-01-2013 : 53387 66433 72265 36761 33333 87403  
01-02-2013 : 36411 66434 72266 36762 33334 87404  
02-02-2013 : 34412 66435 72267 36763 33335 87405

9065kHz0830z 03/02[36412 66435 72267 36763 33335 87405]

RNGB

SUN

11530 kHz2300z 03/02[the SAME transmission as 02/02 on 16180 and 17540 kHz:

PY4ZBZ

SUN

36412 : 21522421.TXT  
66435 : 40740465.TXT  
72267 : 40037714.TXT  
36763 : 88374124.TXT  
33335 : 86070161.TXT  
87405 : 34140043.TXT

9065kHz0800z 04/02[87245 80875 78322 28804 68663 36417] QSA2 QRM2

DanAR, ATC

MON

9240kHz0900z 04/02[28804 68663 36417 87245 80875 78322]

RNGB

MON

5855kHz1000z 04/02[28804 68663 36417 87245 80875 78322] // 9155  
9155kHz1000z 04/02[28804 68663 36417 87245 80875 78322] // 5855

RNGB

MON

RNGB

MON

11530kHz2300z 04/02[36418 87246 80876 78323 28805 68664] QSA2 QRM1

DanAR

MON

12120kHz0500z	05/02[36418 87246 80876 78323 28805 68664] QSA2 QRM1	DanAR	TUE
11435kHz1600z	05/02[34231 87247 27521 78324 44501 68665]	AnonUS	TUE
11530kHz1700z	05/02[34231 87247 27521 78324 44501 68665]	AnonUS	TUE
16180kHz2130z	05/02	PY4ZBZ	TUE
17540kHz2300z	05/02	PY4ZBZ	UE

voice : 34231 RDFT : 70384586.TXT  
 voice : 87247 RDFT : 41355215.TXT  
 voice : 27251 RDFT : 74741802.TXT  
 voice : 78324 RDFT : 48057481.TXT  
 voice : 44501 RDFT : 15577711.TXT  
 voice : 68665 RDFT : 67882876.TXT

The TXT files are here:

<http://www.qsl.net/py4zbz/hdsstv/05022013.zip>

<http://www.qsl.net/py4zbz/en.htm#>

#### Sample Txt file [voice : 34231 RDFT : 70384586.TXT] :

UÉßàm¤ÉÈ<sup>ü</sup>cÓ"üp[  
 BÔXu=Cô<Fs™Ol<sup>ü</sup>xcâòmSR ØI‰,——ZÁQ‡iEbÙg@t R Ø'ØObz†X¥x,ÜZçfl@'  
 Yl[É½ž Ø,þpØ2FÈ#CØð~Ø,AÙWØ°Ø~“ØxnðÖ,7ùOu<sup>ü</sup>Hë(zðø×\*ØñçÓ•þþö—a,,(äÈ½cylØ×^2kø\*pEVØ•A+›)(N'Ø?iØ;Eœ†A¥UZ|wx+f Ø  
 M,uSdÓN»A&s S6  
 ðØlië?ñ~Øw2éj<sup>ü</sup><ÛØž2ÝhøfØ#IBÅ·RšiØ&illf<sup>ü</sup>øêØiØXWLØy<sup>ü</sup>óíTM>ÍP«q;      <|9áT«  
 a  
 (|\*½<!À  
 BŒ|RØµOøEØ Q±÷.Ø"ša³"Øe@Ø;]ØØ^Ži1«Wt±ØçêéAØyy"  
 w eR    Äß~    ÈCZ+"G+÷kwh-Ý'lØä%ÙnS"Øskižú±rûN\_v~íëaÙÈ÷•Ø|E«Oá6  
 |q)@~ñ  
 Çñ    "Üjå+;e- p•ÀºX•  
 ENæ  
 z  
 T<Ø T³ #—\*)Ø)"‰,~[      §F    B-Øj~f,,L  
 7-ÉA  
 þ³@«êôµiØ»,þÈ'fyN0/4E#«ñ‰Øe\_½áØA?vf2-Ø}ÀØ6TMØ"RØ)Øx...  
 Hø • Ü  
 #?ýØåTØKØBsÙa#  
 ^Œ'ø  
 d/\*ÙµÓc7i ØpWü1Ø>Ø[s‰ÙøHØÆØ'f)Ø\_fX\$3<sup>ü</sup>÷À"ØAP"nG  
 BÙÄÙlq"!k<sup>ü</sup>"Ø~Ø-fN ænýNt b<sup>ü</sup>ølØ-Ø\_8A;ZœÝÅ§F<sup>ü</sup>iOCØ+p<sup>ü</sup>øç,,ÉA [d • "Ø"...í  
 è³ 17\...-\$Ý\$  
 ÚÈýde;øt •    á...ø4  
 BØmNAúj<sup>ü</sup>ØZØM \*Ø?³ÈØhNšØEN7[ýØÝ  
 { \_iYM]zØÝ...ØgIL.  
 è\$F¥œ6TMØÙK<sup>ü</sup>ØÈ8fl•þ E•,ñ‰áú ¥  
 p<sup>ü</sup>AU6+u<sup>ü</sup>EØ

Numbers for several days [Check files above]:

d 29-01-2013 : 53385 66431 72263 46854 33331 87401  
 d 31-01-2013 : 53387 66433 72265 36761 33333 87403

d 01-02-2013 : 36411 66434 72266 36762 33334 87404  
 d 02-02-2013 : 34412 66435 72267 36763 33335 87405  
 d 03-02-2013 : 34412 66435 72267 36763 33335 87405

m04-02-2013 : 36417 87245 88875 78322 28804 68663  
 e 04-02-2013 : 36418 87246 80876 78323 28805 68664

d 05-02-2013 : 34231 87247 27521 78324 44501 68665

fm PY4ZBZ, thanks Roland.

11530kHz2300z	06/02[34232 56361 27522 78325 44502 68666] QSA2 QRM2	DanAR	WED
12120kHz0515z	07/02[????? ???? ???? ???? ???? ???? ] QSA1 QRM2	DanAR	THU
12180kHz1000z	07/02[34232 53641 27522 78325 44502 68666] QSA3 QRM1	DanAR	THU
16180kHz2100z	07/02 content as below	PY4ZBZ	THU

17540kHz2300z	07/02 content as below	PY4ZBZ	THU
voice : 34233 RDFT : 70384586.TXT			
voice : 53643 RDFT : 81820097.TXT			
voice : 27253 RDFT : 74741802.TXT			
voice : 78326 RDFT : 48057481.TXT			
voice : 44503 RDFT : 15577711.TXT			
voice : 68667 RDFT : 67882876.TXT			
11530kHz2300z	08/02[34234 53643 27254 08251 44504 68668]	PY4ZBZ	FRI
17540kHz2300z	09/02[34234 53643 27254 08251 44504 68668]	PY4ZBZ	SAT
voz : 34234 RDFT : 70384586.TXT			
voz : 53643 RDFT : 81820067.TXT			
voz : 27254 RDFT : 74741802.TXT			
voz : 08251 RDFT : 55140360.TXT			
voz : 44504 RDFT : 15577711.TXT			
voz : 68668 RDFT : 67882876.TXT			
The new file is 08251 : 55140360.TXT			
9240kHz0900z	10/02[34235 53644 27525 08252 44505 56231]	PY4ZBZ	SUN
voice : 34235 RDFT : 70384586.TXT			
voice : 53644 RDFT : 81820067.TXT			
voice : 27525 RDFT : 74741802.TXT			
voice : 08252 RDFT : 55140360.TXT			
voice : 44505 RDFT : 15577711.TXT			
voice : 56231 RDFT : 64733702.TXT			
The new file is : 64733702.TXT			
12180kHz1000z	12/02[08254 44507 56233 81551 53646 27567] strong	RNGB	TUE
17540kHz2300z	12/02[81552 53647 07861 08255 54301 56234] QSA2 QRM1	DanAR	TUE
11635kHz1800z	14/02[81554 38512 07863 32561 54303 30071]	Anon	THU
17540kHz2300z	14/02[81554 38512 07863 32561 54303 30071] QSA2 QRM1	DanAR	THU
9065kHz0800z	15/02[81554 38512 07863 32561 54303 30071]		
9240 kHz0900z	15/02[81554 38512 07863 32561 54303 30071]		
1071 kHz2200z	15/02[81555 38513 07864 32562 54304 30072] QSA2 QRM1	DanAR	FRI
11530kHz2300z	15/02[81555 38513 07864 32562 54304 30072] QSA3 QRM2	DanAR	FRI
12120 kHz0900z	16/02[81556 38514 07865 32563 54305 30073]		
17540kHz2300z	16/02[81555 38513 07864 32562 54304 30072]		
The 5 digit file numbers (in voice) are incremented each day, but the correspondent RDFT encripted TXT files are the same !:			
81554 = 81555 = 81556 = 30403120.TXT 979 bytes			
38512 = 38513 = 38514 = 65368180.TXT 978 bytes			
07863 = 07864 = 07865 = 68365270.TXT 975 bytes			
32561 = 32562 = 32563 = 61734547.TXT 976 bytes			
54303 = 54304 = 54305 = 24148630.TXT 959 bytes			
30071 = 30072 = 30073 = 38882071.TXT 981 bytes			

The LSD of the 5 digit file number is simply the number of TX repetitions.  
 Sometimes, 1 or more new files (LSD=1) replace the older (LSD>1) For example:  
 32561 replaced 08256 (from 14-02) with a new file.  
 30071 replaced 56235 (from 14-02) with a new file.

Tnx PY4ZBZ

17540kHz2300z	16/02[81556 38514 07865 32563 54305 30073] QSA3 QRM1	DanAR	SAT
10715kHz2200z	17/02[64611 38515 07866 32564 54306 30074] QSA2 QRM1	DanAR	SUN
11530kHz2300z	17/02[64611 38515 07866 32564 54306 30074] QSA3 QRM2	DanAR	SUN
17540kHz 2300z	19/02[64614 68762 13812 32567 28322 30077] QSA3 QRM1	DanAR	TUE
17540kHz2300z	21/02[64616 68764 13814 78142 28324 56432] QSA3 QRM1	DanAR	THU
11635kHz2100z	22/02[64617 68765 13815 78143 28325 56433] QSA2 QRM1	DanAR	FRI
10715kHz2200z	22/02[64617 68765 13815 78143 28325 56433] QSA2 QRM3	DanAR	FRI
11530kHz2300z	22/02[64617 68765 13815 78143 28325 56433] QSA2 QRM4 QRM from BC 5 khz up	DanAR	FRI
17540 kHz2300z	23/02[64618 68766 13816 78144 28326 56434] QSA3 QRM1	DanAR	SAT
10345kHz0600z	25/02 local QRM.	ggs	MON
17540kHz2300z	26/02[74403 48263 45611 78147 84463 32802] QSA3 QRM1	DanAR	SAT

Please note: Transmissions from Feb 24th and before had callup 13816 (1381 being the unique part) and the last 4 of the text file was also 1381 57011381.TXT 1094 bytes  
That file was over 1024 bytes which is a little unusual also. [Txn Anon]

**THE FULL HM01 SCHEDULE CAN BE FOUND IN THE CHARTS SECTION;** The entries have been made using solely E2k members offerings.  
Thanks to all the contributors on this new mode

## VOICE STATIONS

### E06

We start with PoSW's logs:

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

3-Jan-13:- 4,836 kHz, call-up did not get going until approx 2032 UTC, call "321", DK/GC "836 836 15 15", long pause between the call-up and the start of the 5F groups. Had the unpleasant rasping noise on the speech as noted many times in the past.

17-Jan-13:- 4,836 kHz, "321" and "836 836 15 15" again, this time without without the noises.

7-Feb-13:- 4,836 kHz, call "321", DK/GC "836 836 15 15" - same as in January, good audio.

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

4-Jan-13:- 4,760 kHz, call "472", DK/GC "177 177 15 15", had the rasping noises as yesterday's 2030z sending.

18-Jan-13, 4,760 kHz, "472" and "177 177 15 15", no unpleasant distortion.

8-Feb-13, 4,760 kHz, call "472", DK/GC "177 177 15 15", same as last month as was yesterday's 2030z transmission.

#### Second Wednesday in the Month 1920 + 2020 UTC Schedule:-

9-Jan-13:- Unable to find a transmission at 1920z, 2020z sending found with about a minute to go:- 2023 UTC, 3,729 kHz, "218 218 218 00000", inside the 80 metre amateur band, had the same rasping noise on the speech noted on the Thursday and Friday transmissions.

13-Feb-13:- 1920 UTC, 3,526 kHz, "218 218 218 00000", the first sending which proved elusive in January. S9 signal inside the 80 metre amateur band, many strong CW stations on close frequencies. Had the same rasping noise as noted many times.

#### Sunday Following the Second Wednesday in the Month, 1120 + 1220 UTC Schedule:-

13-Jan-13:- 1120 UTC, 7,316 kHz, not found until after 1122 UTC, "218 218 218 00000".

Signal strength S3 to S4 at best, had that "rasping" noise on the speech, BC station on LF side removed by using receiver in USB mode. 1220 UTC, 6,814 kHz, second sending, started approx 30 seconds late, carrier on 6,814 noted just after 1200 UTC, had the unpleasant noise on the speech, signal strength S3.

RNGB's logs:

**E06 log January**

Thurs 3rd	07:00	15810	'139' 258 104 78992 96357 41844 63975....25929
	20:32	4836	'321' 836 15 26857 10285 18362 91037 17263....22202
Friday 4th	21:30	4760	'472' 177 15 72635 19482 37295 17493 27489....19374
Weds 9th	20:20	3729	'218' 00000
Sun 13th	11:21	7316	'218' 00000
	12:20	6814	'218' 00000
Thurs 17th	07:00	15810	'139' 258 104 78992 96357 41844 63975 80091....25929
	20:30	4836	'321' 836 15 26857 10285 18362 91037 17263....22202

**E06 log February**

Thurs 7th	07:00	17460	'702' 594 103 81006 33946 28228 17492 26557....61312
	20:30	4836	'321' 836 15 26857 10285 18362 91037 17263....22202
Friday 8th	07:00	17470	'702' 594 103 81006 33946 28228 17492 26557....61312
	21:30	4760	'472' 177 15 72635 19482 37295 17493 27489....19374

**E07 log January**

Tues 1st	08:00	20258	'258' 000
Weds 2nd	20:00	6982	'981' 000
Thurs 3rd	21:10	6777	'744' 1 427 62 88215 01276 24258 85410.....
Friday 4th	08:00	20258	'258' 000
Sun 6th	18:00	6774	'788' 000
Mon 7th	20:20	5882	'981' 1 525 58 38286 24612 56098 01985....97406
Tues 8th	08:00	20258	'258' 1 211 113 70835 16630 21389 12936....20533
Weds 9th	18:00	6774	'788' 000
	20:20	5882	'981' 1 525 58 38286 24612 56098 01985....97406
Sat 12th	09:00	11123	'114' 000
Sun 13th	18:00	6774	'788' 000
Mon 14th	20:00	6982	'981' 000
Tues 15th	08:00	20258	'258' 1 140 87 75761 45737 92605 45453....84287
Friday 18th	08:00	20258	'258' 1 851 131 11997 60466 11917 11227....93450
Sat 19th	09:00	11123	'114' 000
Sun 20th	18:00	6774	'788' 000
Mon 21st	19:20	5882	'981' 1 466 87 94655 97945 86521.....
Tues 22nd	08:00	20258	'258' 000
Weds 23rd	18:40	4893	'788' 1 132 80 86777 05567 10670 83427.....
	20:20	5882	'981' 000
Tues 29th	08:00	20258	'258' 1 675 127 11259 22682 58812 70320....08169

Now onto others' logs:

**January 2013**

4760kHz2130z	04/01[472 177 15 72635 ... 19374 177 15 00000(s)] 2138z Fair QRN3 QSB3	Spectre, M8	FRI
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E06 4760kHz 2130z 04/01 Transcript:

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472 177 15
72635 19482 37295 17493 27489
36290 17362 37462 94836 18336
74929 18364 92763 19374 19374
177 15 00000 Courtesy Spectre, M8
(Clear call up then scratchy audio during the message.)

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4836kHz2030z	03/01[321 836 15 26857 ... 22202 836 15 00000(s)] 2038z Fair, QRM3 Very noisy, late and poor construction	PLdn, FR, HJH, AB THU
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321 836 15
26657 10285 18362 91037 17263
96716 18375 29472 19372 28674
19200 37284 57263 19377 22202
836 15 00000 Courtesy FR, Spectre, M8

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2030z	17/01[321 836 15 26857 ... 22202 836 15 00000(s)] 2039z Fair	(8m40s)	FR, PLdn	THU
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13390kHz0600z	04/01 Weak signal, strong noise, signal too weak to make a copy	FR	FRI
0600z	18/01 [139 258 104 78992 ... 25929 258 104 00000] Strong signal, moderate/strong noise	FR	FRI

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139 258 104
78992 96357 41844 63975 80091 72723 45109 22935 65290 36982
88886 09991 20233 04051 56231 57782 69904 82816 86370 11446
59971 76588 45742 27554 70255 44208 02255 89177 08765 63980
13708 91746 59738 67623 66315 79386 84129 36436 24258 36453
95962 76848 76210 63906 63014 17564 89775 95256 05245 95460
09777 31732 89415 22460 61319 01383 43350 50532 43589 71790
38243 77038 25304 71090 12487 57593 77763 96965 35437 18625
06435 81331 34548 86844 67011 99370 34338 77785 76882 00636
80598 10617 57945 36872 48301 41415 71713 96274 56626 32080
32633 50862 39566 97077 10573 12643 45527 95209 58402 15286
64372 58585 25611 25929 258 104 00000 Courtesy FR

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## February 2013

4760kHz2130z 2130z	08/02[472 177 15 72635 ... 19374 177 15 00000(s)] 2139z Fair, QRM3  472 177 15 72635 19482 37295 17493 27489 36290 17362 37462 94836 18336 74925 18364 92763 19374 19374 177 15 00000 <i>Courtesy ATC</i> Note:Repeat of 04/01 + 18/01/13 <i>Also Spectre</i>	(9m31s)	PLdn, Spectre ATC , Spectre	FRI
4836kHz2030z 2030z	07/02[321 836 15 26857 ... 22202 836 15 00000(s)] 2039z Fair, QRM3/4 21/02[321 836 15, repeat from 03/01] Very strong signal QRM	(8m40s)	PLdn, Spectre FR, HJH, Spectre	THU
	E06 4836kHz 2030z 07/21/02 Transcript:  321 836 15 26857 10285 18362 91037 17265 93716 18375 29472 19372 28374 19200 37284 57263 19377 22202 836 15 00000 <i>Courtesy Spectre</i>			
6814kHz1220z	17/02[218 218 218 00000 R4m] 1224z QSA5 QRM5 QRN4 QSB5		tiNG, ATC	SUN
7316kHz1120z	17/02[218/00000] 1125z Very Weak		ATC	SUN
15920kHz 0600z	08/02[702 594 103 81006 ... 61312 594 103 00000] Very strong signal, weak noise		FR	FRI
	702 594 103 81006 33946 28228 17492 26557 84269 39083 99823 38859 45590 36444 98918 88257 24592 03512 54604 68760 38847 40821 07425 52304 56901 10402 40578 80226 24384 10116 65379 09137 62105 07849 15980 53361 47051 90264 09367 91168 12233 05793 79545 26940 26317 06534 05858 26497 32984 18796 84358 67748 02942 96913 15703 73866 08540 40066 07972 21167 91913 76767 17871 38878 02613 46724 78773 43005 41624 34734 88956 71449 05756 36334 58606 12593 99298 59870 38891 44527 98913 94675 81632 27111 82676 00056 02937 14048 59227 94761 49953 77176 57942 51635 90061 60148 66092 27120 82473 03687 23901 80322 87137 09626 13459 61312 594 103 00000 <i>Courtesy FR</i>			

## E07

PoSW leads us in with his logs:

### Sunday + Wednesday Schedule, 1800 UTC Start:-

2-Jan-13, Wednesday:- 1800 UTC, 6,774 kHz, “788 788 788 000”, reasonable audio.  
Missed second sending, should be 5,836 kHz.

13-Jan-13, Sunday:- 1800 UTC, 6,774 kHz, “788 788 788 000”.

1820 UTC, 5,836 kHz, second sending inside 49 metre band, difficult copy due to strong broadcast station on 5,835.

27-Jan-13, Sunday:- 1800 UTC, 6,774 kHz, “788 788 788 000”, low audio, difficult copy.

30-Jan-13, Wednesday:- 1800 UTC, 6,774 kHz, “788 788 788 000”, low audio again.

3-Feb-13, Sunday:- 1800 UTC, 7,697 kHz, “689 689 689 000”, S9 with reasonable audio.

1820 UTC, 6,863 kHz, second sending, strong FSK station idling on LF side, removed by using receiver in USB mode.

6-Feb-13, Wednesday:- 1820 UTC, 6,863 kHz, “689 689 689 000”, S9 signal with better than usual audio, the FSK station still there.

10-Feb-13, Sunday:- 1800 UTC, 7,697 kHz, “689 689 689 000”, S9 with reasonable audio.

1820 UTC, 6,863 kHz, second sending, the FSK station is still in business on the LF side.

17-Feb-13, Sunday:- 1800 UTC, 7,697 kHz and 1820 UTC, 6,863 kHz, the FSK station still there, “689 689 689 000”

### Monday + Wednesday Schedule, 2000 UTC Start:-

2-Jan-13, Wednesday:- 2000 UTC, 6,982 kHz, “981 981 981 000”, S9 with reasonable audio.  
2020 UTC, 5,882 kHz, second sending, S9+ to S9+.

7-Jan-13, Monday:- 2000 UTC, 6,982 kHz, “981 981 981 1”, DK/GC “525 58” x 2.

2020 UTC, 5,882 kHz, second sending, S9+ with good audio.

2040 UTC, 5,182 kHz, a full message gets a third sending, S9+ with good audio.

14-Jan-13, Monday:- 2020 UTC, 5,882 kHz, “981 981 981 000”, audio low but readable.

23-Jan-13, Wednesday:- 2000 UTC 6,982 kHz and 2020 UTC, 5,882 kHz, “981 981 981 000”. Audio low compared with carrier strength.

28-Jan-13, Monday:- 2000 UTC, 6,982 kHz, weak signal, low audio, unreadable. Carrier went QRT just before 2002 and 30 seconds UTC so must be “no message”.

2020 UTC, 5,882 kHz, “981 981 981 000”, a much better transmission than the 2000z.

11-Feb-13, Monday:- 2000 UTC, 7,724 kHz, “798 798 798 000”, S9 signal with reasonable audio.

2020 UTC, 6,924 kHz, second sending.

13-Feb-13, Wednesday:- 2000 UTC, 7,724 kHz and 2020 UTC, 6,924 kHz, both S9+ with good audio, “798 798 798 000”.

Thursday Schedule, 2110 UTC Start:-

3-Jan-13:- 2110 UTC, 6,777 kHz, "744 744 744 1", DK/GC "427 62" x 2.

2130 UTC, 5,449 kHz, second sending, S9 signal with good audio, a weak VOMET YL on the HF side.

2150 UTC, 4,483 kHz, third sending, S9+ with good audio.

This schedule uses the same call and frequencies throughout the months of November, December, January and February but I think this is the first time this winter I have logged

a "full message" and the activation of the 2150z third frequency.

24-Jan-13:- 2110 UTC, 6,777 kHz and 2130 UTC, 5,449 kHz, "744 744 744 000".

31-Jan-13:- 2110 UTC - I expected the frequency to be 6,777 kHz but when I tuned in the receiver I made it somewhat low, perhaps 6,775 point something. The receiver in use at the time was a somewhat ancient but reliable Lowe HF225 and I thought perhaps the microprocessor was having a funny five minutes and putting in a frequency offset in some way so I switched it off and on again to re-initialise but got the same result. I tried to get another receiver with digital frequency readout connected up and powered on but this was a "no message" transmission of just over two minutes and had gone QRT before I could do so. A quick check of the frequencies of the broadcasters in the 49 metre band lower down showed no indicated errors. If E07 really was a bit low in frequency this would be most unusual.

2130 UTC, 5,449 kHz, no frequency problems here!, "744 744 744 000" with RAF VOLMET for company.

7-Feb-13:- 2110 UTC, 6,777 kHz - for sure! - "744 744 744 000", good audio.

2130 UTC, 5,449 kHz, second sending, S9+ with good audio.

14-Feb-13:- 2110 UTC, 6,777 kHz, "744 744 744 000".

Wednesday E07a SSB Schedule, 2100 UTC Start:-

2-Jan-13:- 2100 UTC, 5,864 kHz, "815 815 815 000", strong signal.

2120 UTC, 5,164 kHz, second sending, also strong.

23-Jan-13:- 2120 UTC, 5,164 kHz, second sending, full message format, "815 815 815 1 67976", DK/GC "949 48" x 2.  
2140 UTC, 4,564 kHz, third sending.

6-Feb-13:- 2100 UTC, 5,864 kHz and 2120 UTC, 5,164 kHz, "815 815 815 000", both transmissions strong SSB signals.

13-Feb-13:- 2100 UTC, 5,864 kHz and 2120 UTC, 5,164 kHz, both very strong, "815 815 815 000".

Saturday E07a SSB Schedule, 0900 UTC Start:-

5-Jan-13:- 0900 UTC, 11,123 kHz, "114 114 114 000", strength S6.

0920 UTC, 12,123 kHz, second sending, inside 25 metre broadcast band, strength S8 to S9,  
flattening a weaker BC station on 12,120, possibly Chinese language.

12-Jan-13:- 0900 UTC, 11,123 kHz and 0920 UTC, 12,123 kHz, "114 114 114 000".

19-Jan-13:- 0900 UTC, 11,123 kHz, "114 114 114 000", very weak signal this morning.  
0920 UTC, 12,123 kHz, second sending, stronger, S5 to S6.

26-Jan-13:- 0900 UTC, 11,123 kHz, a full message this morning, "114 114 114 1 39097", DK/GC "528 82" x 2.  
0920 UTC, 12,123 kHz, second sending.  
0940 UTC, 13,423 kHz, third sending.

9-Feb-13:- 0920 UTC, 12,153 kHz, second sending, "015 015 015 000".

16-Feb-13:- 0900 UTC, 11,053 kHz, first sending, "015 015 015 000"

RNGB's E07 and E07a logs

**E07 log February**

Friday 1st	08:00	20258	'258' 1 701 139 36599 82978 70431 47219....90327
Mon 4th	20:00	7724	'798' 000
	20:20	6924	'798' 000
Tues 5th	08:00	20258	'258' 1 255 113 59104 70487 38571
Weds 6th	18:20	6863	'689' 000
Friday 8th	08:00	20258	'258' 1 918 143 47845 38147 52458 68362....03049
Sat 9th	09:00	11053	'015' 000
Sun 10th	18:00	7697	'689' 000
Mon 11th	20:00	7724	'798' 000

**E07a log January**

Sat 5th	09:00	11123	'114' 000
	09:20	12123	'114' 000
Weds 9th	21:00	5864	'815' 000
Weds 23rd	21:00	5864	'815' 1 67976 949 48 67976 08470 14288 59581 82221....73508
Weds 30th	21:00	5864	'815' 1 62421 326 69 24887 91749 00775....75223

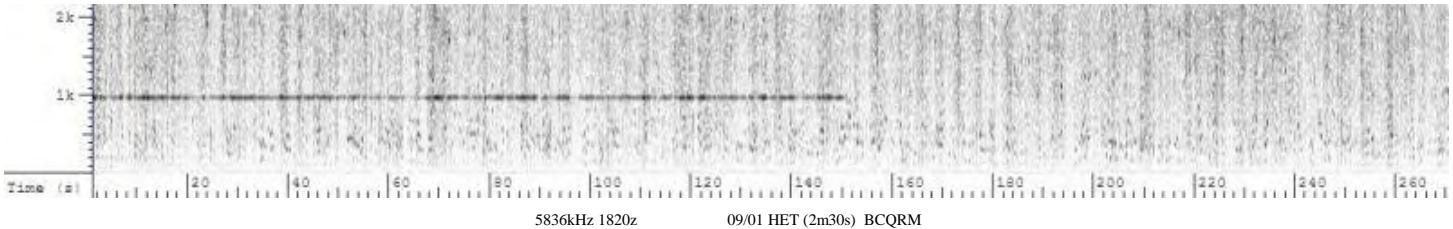
**E07a February log**

Sat 2nd	09:00	11053	'015' 000
Sat 9th	09:00	11053	'015' 000
Weds 13th	21:20	5164	'815' 000
Sat 16th	09:00	11053	'015' 000

Now others' logs

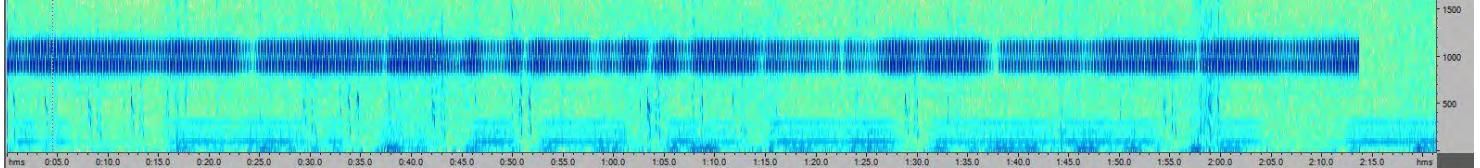
**January 2013**

4483kHz2150z	03/01[744 1 427 62 88215 ... 59317 000 000] Fair	(8m47s)	FR, PLdn, Spectre	THU
	744 1 62 88215 01276 24258 85410 49269 15348 66788 40863 47385 85472 65827 56069 32279 10822 16095 10212 10021 27533 30111 03606 56112 20895 19133 73871 24176 20703 39738 33154 21905 23391 33992 42977 12652 25836 53262 41026 89236 69376 15520 84950 29005 36610 14867 12321 23942 12054 11185 69033 44107 06172 52238 44441 39765 26305 02172 26077 81741 71123 15792 90161 13625 59317 000 000 <i>Courtesy Spectre</i>			
4983kHz1840z	23/01[788 1 132 80 86777 ... 28155 000 000] 1851z Fair	(10m31s)	CM, PLdn, Spectre	WED
5182kHz 2040z	07/01[981 1 525 58 38286 ... 97406 000 000] Weak	(8m24s)	PLdn, Spectre	MON
	981 1 525 58 38286 24612 56098 01985 99394 20722 96312 65430 48761 84854 28592 58701 14961 96033 49163 04885 49781 34262 26511 34284 63129 26712 74934 89626 20055 59957 29634 79494 39705 98714 75247 33557 12460 71800 05943 17407 66712 05425 28063 11372 26033 27968 81439 21266 05773 99040 56372 05005 83584 50485 95975 17030 89442 79142 64016 75860 74533 97406 000 000 <i>Courtesy Spectre</i>			
2040z	09/01[981 1 525 58 38286 ... 97406 000 000] Fair to strong	(8m24s)	PLdn	WED
5449kHz2130z	03/01[744 1 427 62 88215 ... 59317 000 000] Fair and noisy	(8m47s)	FR, PLdn, Spectre	THU
	744 1 927 62 88215 01276 24258 85410 49269 15348 66788 40863 47385 18082 65827 56069 32279 10822 16095 10212 10021 27533 30111 03606 56112 20895 19133 73871 24176 20703 39738 33154 21905 23391 33992 42977 12652 25836 53262 41026 89236 69376 15520 84950 29005 36610 14867 12321 23942 12054 11185 69033 44107 06172 52238 44441 39765 26305 02172 26077 81741 71123 15792 90161 15625 59317 000 000 <i>Courtesy FR</i>			
2130z	10/01[744 00] Weak, noisy	(2m13s)	PLdn, MP	THU
2130z	17/01[744 00] Fair	(2m13s)	PLdn	THU
2130z	24/01[744 00] Weak & noisy	(2m13s)	PLdn	THU
2130z	31/01[744 00] Weak & noisy	(2m13s)	PLdn	THU
5836kHz1820z	06/01[788 000] Strong signal, bleeding		FR , Spectre	SUN
1820z	09/01 HET (2m30s) BCQRM	see below	PLdn	WED



1820z	16/01[788 000] (QRM from loud b/cast stn adjacent)	CB	WED
1820z	23/01[-] BCQRM5	FR , CM	WED
1820z	27/01[788 000] HET& BCQRM3	(2m13s)	PLdn
1820z	30/01[788R3x/000] Weak QRM5 frm IBB		ATC
5882kHz2020z	02/01[981 000] Fair	PLdn	WED
2020z	07/01[981 1 525 58 38286 ... 97406 000 000] Weak	(8m24s)	Spectre, PLdn
2020z	09/01[981 1 525 58 38286 ... 97406 000 000] Fair	(8m24s)	PLdn
2020z	14/01[981 000] Fair	(2m14s)	Spectre, PLdn
2020z	16/01[981 000] Weak and noisy	(2m14s)	PLdn
2020z	21/01[981 1 ??????] Very Weak faded out	(2m14s)	ATC
2020z	23/01[981 000] Weak and noisy	(2m14s)	PLdn
2020z	28/01[981 000] Weak and noisy	(2m14s)	PLdn
2020z	30/01[981 000] Fair, QRM2	(2m14s)	PLdn
6774kHz1800z	06/01[788 000] Strong signal, moderate noise, fading	Spectre, FR, M8	SUN
1800z	09/01[788 000] Weak and noisy	(2m13s)	PLdn
1800z	13/01[788 000] Strong signal, moderate noise, fading	FR	SUN
1800z	16/01[788 000] Strong	(2m13s)	PLdn
1800z	23/01[788 1 132 80 86777 ... 28155 000 000] Strong signal, QRM, QSB	FR, CM	WED
1800z	27/01[788 000] Weak, noisy	(2m13s)	PLdn

6777kHz2110z	03/01[744 1 427 62 88215 ... 59317 000 000]		FR, Spectre	THU
2110z	10/01[744 000] Weak	(2m13s)	PLdn, MP	THU
2110z	17/01[744 00] Fair	(2m13s)	FR, PLdn	THU
2110z	24/01[744 00] Fair & noisy	(2m13s)	PLdn	THU
2110z	31/01 Carrier only		PLdn	THU
6982kHz2000z	02/01[981 000] Fair		PLdn	WED
2000z	07/01[981 1 525 58 38286 ... 97406 000 000] Weak	(8m24s)	PLdn	MON
2000z	09/01[981 1 525 58 38286 ... 97406 000 000] Fair	(8m24s)	PLdn	WED
2000z	14/01[981 000] Weak and noisy	(2m14s)	PLdn	MON
2000z	16/01[981 000] Fair	(2m14s)	PLdn	WED
2000z	23/01[981 000] Fair, QRN2	(2m14s)	PLdn, FR	WED
2000z	30/01[981 000] Fair	(2m14s)	PLdn	WED
15858kHz0840z	15/01[258x3 1 140 87 140 87]		GD	TUE
0840z	18/01[258 1 851 131 11997 ... 93450 000 000] Strong signal, QRM		FR	FRI
17558kHz0820z	18/01 Broadcast on 17560kHz too strong to hear anything		FR	FRI
20258kHz0800z	01/01[258x3 000]		GD	TUE
0800z	04/01[ 258x3 000]		GD	FRI
0800z	08/01[258x3 1 211 113 211 113]		GD	TUE
0800z	11/01[258x3 1 575 79 575 79]		GD	FRI
0800z	15/01[258x3 1 Rest U/R]		GD	TUE
0800z	18/01[258 1 851 131 11997 ... 93450 000 000] Very strong signal QRM		FR, GD	FRI
	258 1 851 131 11997 60466 11917 11227 58301 78770 50131 62185 22109 86607 96752 01703 49211 49756 48062 39982 21146 21913 81987 84551 07441 16539 49772 08512 58159 88467 95175 51629 65476 82919 65638 37795 05548 24467 21999 11245 39304 04885 31627 77196 87272 06206 80388 19795 50940 02342 87479 50143 79860 41769 69690 65259 13013 31783 18883 51728 50667 24862 56285 36136 83137 20361 56474 27438 27154 34406 33559 99910 31347 76437 10119 04613 54331 12684 70707 76297 35128 93843 93116 63394 42860 34846 24513 04288 43281 54656 35910 07788 02679 55167 75124 70020 52955 67585 93974 23396 73639 75908 75097 42777 59757 55812 16452 99200 13743 80048 36454 24109 16993 88557 69827 54289 77367 88693 34543 77718 19883 16008 12761 99805 55036 86184 46134 93935 51083 27935 06223 82401 55273 43721 93450 000 000	Courtesy FR		
0800z	22/01[258x3 000]		GD	TUE
0800z	25/01[258x3 1 970 233 970 233.....]		GD	FRI
0800z	29/01[258x3 1 675 127 675 127]		GD	TUE
E07a 5864/5164/4564kHz 2100/2120/2140z 23/01 Transcript:		E07a 5146/5846/6846kHz 0530/0550/610z 24/01 Transcript:		
815 1 67976 949 48 08470 14288 59581 82221 55121 44188 25957 93299 07076 23187 46215 25731 76649 71576 03643 29759 35345 42017 55420 75656 95459 70681 90497 43353 08709 06012 48060 13497 27092 95746 18619 60222 74836 44392 74149 69952 40919 60318 81402 24491 73706 50464 89723 76169 28522 33934 63222 73508 000 000	Courtesy Spectre	188 1 67976 949 48 08470 14288 59581 82221 55121 44188 25957 93299 07076 23187 46215 25731 76649 71576 03643 29759 35345 42017 55420 75656 95459 70681 90497 43353 08709 06012 48060 13497 27092 95746 18619 60222 74836 44392 74149 69952 40919 60318 81402 24491 73706 50464 89723 76169 28522 33934 63222 73508 000 000	Courtesy Spectre	
E07a 5864/5164/4564kHz 2100/2120/2140z 30/01 Transcript:		E07a 5146/5846/6846kHz 0530/0550/610z 31/01 Transcript:		
815 1 62421 326 69 24887 91749 00775 94382 71776 29486 77143 30357 61336 66139 98412 67721 49005 64900 31274 14063 20133 88524 31477 19298 67843 55073 37000 68119 33396 00247 27647 28344 61973 26807 99770 40863 16820 38019 48804 02940 85957 27149 02426 10724 31091 28598 92399 40554 10817 53567 81370 86088 32030 79069 03329 22768 16597 38241 11100 36038 80998 80801 34395 12180 78262 22273 17488 30141 03775 98656 90643 26469 75223 000 000	Courtesy Spectre	188 1 62421 326 69 24887 91749 00775 94382 71776 29486 77143 30357 61336 66139 98412 67721 49005 64900 31274 14063 20133 88524 31477 19298 67843 55073 37000 68119 33396 00247 27647 28344 61973 26807 99770 40863 16820 38019 48804 02940 85957 27149 02426 10724 31091 28598 92399 40554 10817 53567 81370 86088 32030 79069 03329 22768 16597 38241 11100 36038 80998 80801 34395 12180 78262 22273 17488 30141 03775 98656 90643 26469 75223 000 000	Courtesy Spectre	
<b>February 2013</b>				
5449kHz2130z	07/02[744 00] Strong	(2m13s)	PLdn	THU
2130z	21/02[744 00] Strong	(2m14s)	PLdn	THU
2130z	28/02[744 000] Strong carrier , fair audio	(2m14s)	PLdn, HJH	THU
5824kHz2040z	25/02[798 1 176 96 46348....80065] 2052z Fair		ATC	MON
6777kHz2110z	07/02[744 000] Very weak	(2m14s)	PLdn, FR	THU
2110z	14/02[744 000] Very strong signal, weak noise		FR	THU
2110z	21/02[744 00] Strong	(2m14s)	PLdn	THU
2110z	28/02[744 000] Strong carrier, weak audio	(2m14s)	PLdn, FR	THU



6865kHz1820z	03/02[689 000] Fair, TTYQRM2	See image above	(2m14s)	PLdn	SUN
1820z	06/02[689 000] Fair, TTYQRM2		(2m14s)	PLdn	WED
1820z	10/02[689 000] Fair, TTYQRM3		(2m15s)	PLdn	SUN
1820z	13/02[689 000] Strong, TTYQRM3		(2m14s)	PLdn	WED
1820z	17/02[689 000] Weak, TTYQRM2		(2m15s)	PLdn	SUN
1820z	20/02[689 000] Weak, TTYQRM2		(2m15s)	PLdn	WED
1820z	24/02[689 000] Weak, TTYQRM4		(2m15s)	PLdn	SUN
1820z	27/02[689 000] Fair, TTYQRM3		(2m15s)	PLdn	WED

6924kHz2020z	11/02[798R3x/000] 2022z Weak		ATC	MON
2020z	25/02[798 1 176 96 46348....80065] 2032z Very Weak		ATC	MON

7697kHz1800z	03/02[689 000] Strong		(2m14s)	PLdn	SUN
1800z	06/02[689 000] Fair, QRM2		(2m14s)	PLdn	WED
1800z	10/02[689 000] Fair		(2m15s)	PLdn	SUN
1800z	13/02[689 000] Weak		(2m14s)	PLdn	WED
1800z	17/02[689 000] Fair		(2m15s)	PLdn	SUN
1800z	20/02[689 000] Fair		(2m15s)	PLdn	WED
1800z	24/02[689 000] Fair		(2m15s)	PLdn	SUN
1800z	27/02[689 000] Fair		(2m15s)	PLdn	WED

7724kHz2000z	11/02[798R3x/000] 2002z Weak		ATC	MON
2000z	25/02[798 1 176 96 46348....80065] 2012z Weak		ATC	MON

798 1 176 96  
46348 81785 01893 66529 24372 43920 51292 21451 23383 14148  
26501 01649 60861 73508 35987 53120 01689 48493 29617 86897  
27969 76349 02275 91134 52967 03527 78891 59543 33308 31036  
04323 84708 57472 47796 14361 10823 78488 32595 26171 45083  
73707 09964 05359 83855 85099 34716 47341 71119 41993 57402  
27527 32355 22934 14078 68733 24058 39461 97670 81932 35807  
33465 63608 07327 16583 73513 13285 47946 77838 91677 62052  
53871 76241 68699 06667 43067 14229 37874 98047 95723 20332  
88749 04464 45244 75319 60842 93395 17478 51845 44252 37656  
08012 90023 28933 56580 21719 80065 000 000 Courtesy ATC

15858kHz0840z	01/02[258x3 1 701 139 701 139]		GD	FRI
0840z	05/02[258 1 255 113 59104 ... 03409 000 000 ] Very strong signal, QRM		FR, ATC	TUE

17558kHz0820z	08/02 Broadcast on a nearby frequency too strong to hear		FR	TUE
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20258kHz0800z	01/02 DK and GC missed		GD	FRI
0800z	05/02[258 1 255 113 59104 ... 03409 000 000 ] Very strong signal, QRM		FR	TUE

258 1 918 143  
47845 38147 52458 68362 47301 40364 66576 07225 22336 38799  
20731 00669 01426 85010 70758 65316 93266 09384 56679 41383  
96999 14399 79970 86316 47415 31388 42727 85224 43374 75994  
90000 01446 02126 35737 57823 64209 85618 40266 18675 18823  
75889 01098 12100 23187 36294 67562 81482 09262 33261 87525  
35083 41315 76042 72742 95607 22093 00417 14805 24621 90704  
19035 05518 04103 24737 40257 80863 76573 86007 12762 89695  
52797 35337 28163 79442 05302 36047 15802 28082 15903 62338  
79400 56747 91755 03146 83662 41864 68857 23538 34928 36643  
43691 02026 28870 43400 78821 55930 42109 58179 85623 71686  
01543 43124 35558 88454 93127 22266 69753 20155 12710 29462  
43933 32250 97541 38215 62100 96189 10016 66575 41553 34362  
47667 59949 88909 53053 91746 57012 80642 85630 39231 21910  
35886 84546 22428 72062 32099 00777 25970 16014 87418 57046  
47922 38149 03049 000 000 Courtesy FR

The expected E07 Tuesday/Friday schedule at 0800/0820/0840z on 20258/17558/15858kHz surprisingly changed to XPA2 on 12/02, the secondary frequency of 17558kHz likely changed to 18058kHz, which placed it inside an amateur band, which as RNGB stated, and I concur, probably for the first time.  
The resultant message train was:

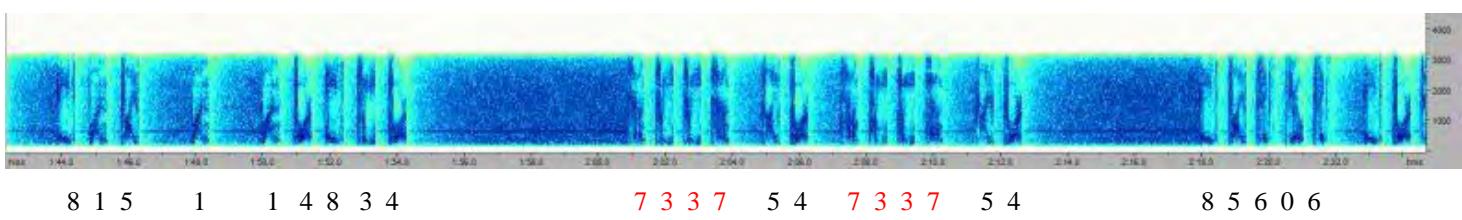
XPA2...was E07

20258kHz0800z	12/02[00316 00127 98763 31680]	RNGB, GD	TUE
18058kHz0820z	12/02[00316 00127 98763 31680]	RNGB	TUE
15858kHz0840z	12/02[00316 00127 98763 31680]	RNGB	TUE

**E07a**  
**January 2013**

4564kHz2140z	23/01[815 1 67976 949 48 08470 ... 73508 000 000] Strong, QRM3	(6m33s)	PLdn, HJH, FR	WED
	815 1 67976 949 48 08470 14288 59581 82221 55121 44188 25957 93299 07076 23187 46215 25731 76649 71576 03643 29759 35345 42017 55420 75656 93459 70681 90497 43353 08709 06012 48060 13497 37092 95746 18619 20222 74836 44392 74149 69952 40919 60318 81402 24491 73706 50464 89723 76169 28522 33934 63222 73508 000 000 <i>Courtesy FR, HJH</i>			
2140z	30/01[815 1 62421 326 69 24887... 75223 000 000] Very strong	(8m15s)	PLdn	WED
5146kHz0530z	03/01[188 000] Very strong 0530z 10/01[188 000] Very strong 0530z 17/01[188 000] Very strong 0530z 24/01[188 1 67976 949 48 08470 ... 73508 000 000] Very strong 0530z 31/01[188 1 62421 326 69 24887... 75223 000 000] Very strong	(2m14s) (2m14s) (2m14s) (6m33s) (8m15s)	PLdn PLdn PLdn PLdn PLdn	THU THU THU THU THU
5164kHz2120z	02/01[815 000] Very strong, PLTQRM2 (Removed with ANC4) 2120z 09/01[815 000] Very strong 2120z 16/01[815 000] Very strong 2120z 23/01[815 1 67976 949 48 08470 ... 73508 000 000] Strong, QRM3 2120z 30/01[815 1 62421 326 69 24887... 75223 000 000] Very strong	(2m14s) (2m16s) (2m16s) (6m33s) (8m15s)	PLdn, HJH, ATC PLdn PLdn PLdn, HJH, FR PLdn, HJH	WED WED WED WED WED
	815 1 62421 326 69 24887 91749 00775 94382 71776 29486 77143 30357 61336 66139 98412 67721 49005 64900 31274 14063 20133 88524 31477 19298 67843 55073 37000 68119 33396 00247 27647 28344 61973 26807 99770 40863 16820 38019 48804 02940 85957 27149 02426 10724 31091 28598 92399 40554 10817 53567 81370 86088 32030 76069 03329 22768 16597 39241 11100 36038 80998 80801 34395 12180 78262 22273 17488 30141 03775 98656 90643 26469 75223 000 000 <i>Courtesy ATC</i>			
5846kHz0550z	03/01[188 000] Very strong, QRM2 0550z 10/01[188 000] Very strong 0550z 17/01[188 000] Very strong 0550z 24/01[188 1 67976 949 48 08470 ... 73508 000 000] Very strong 0550z 31/01[188 1 62421 326 69 24887... 75223 000 000] Very strong	(2m14s) (2m14s) (2m14s) (6m33s) (8m15s)	PLdn PLdn PLdn PLdn PLdn	THU THU THU THU THU
5864kHz2100z	02/01[815 000] Very strong, PLTQRM3 (Removed with ANC4) 2100z 09/01[815 000] Very strong 2100z 16/01[815 000] Very strong 2100z 23/01[815 1 67976 949 48 08470 ... 73508 000 000] Strong 2100z 30/01[815 1 62421 326 69 24887... 75223 000 000] Very strong	(2m14s) (2m16s) (2m16s) (6m33s) (8m15s)	PLdn, HJH, ATC PLdn PLdn PLdn, HJH, FR PLdn, HJH	WED WED WED WED WED
6846kHz0610z	24/01[188 1 67976 949 48 08470 ... 73508 000 000] Very strong 0610z 31/01[188 1 62421 326 69 24887... 75223 000 000] Very strong	(6m33s) (8m15s)	PLdn PLdn	THU THU
11123kHz0800z	05/01[114x3 000]		GD	SAT
12123kHz0820z	05/01[114x3 000]		GD	SAT

**February 2013**



4564kHz2140z	20/02[815 1 62421 326 69 24887... 75223 000 000] Very strong prev 30/01	(8m15s)	PLdn, ATC	WED
2140z	27/02[815 1 14834 7337 54 85606 ... 64128 000 000] Very strong	(6m58s)	PLdn	WED
5146kHz0530z	07/02[188 000] Very strong 0530z 14/02[188 000] Very strong 0530z 21/02[188 1 62421 326 69 24887... 75223 000 000] Very strong prev 31/01	(2m14s) (2m14s) (8m15s)	PLdn PLdn PLdn	THU THU THU
0530z	28/02[188 1 14834 7337 54 85606 ... 64128 000 000] 0537z Fair QRN3 QSB3		Spectre	THU
5164kHz2120z	06/02[815 000] Strong 2120z 13/02[815 000] Very strong 2120z 20/02[815 1 62421 326 69 24887... 75223 000 000] Very strong prev 30/01	(2m14s) (2m14s) (8m15s)	PLdn PLdn, HJH PLdn, ATC	WED WED WED
2120z	27/02[815 1 14834 7337 54 85606 ... 64128 000 000] Very strong, QRM2	(6m58s)	PLdn	WED

5846kHz0550z	07/02[188 000] Very strong 14/02[188 000] Very strong 0550z 21/02[188 1 62421 326 69 24887... 75223 000 000] Very strong prev 31/01 0550z 28/02[188 1 14834 7337 54 85606 ... 64128 000 000] 0557z Fair QRN3 QSB3	(2m14s) (2m14s) (8m15s)	PLdn PLdn PLdn Spectre	THU THU THU THU
E07a 5864/5164/4564kHz 2100/2120/2140z 27/02 Transcript:				
	815 1 14834 <b>7337</b> 54 85606 84250 02974 45679 21100 08901 59688 87926 48228 35841 73312 73385 70029 28944 69085 72616 98722 30111 08483 01358 57145 75980 33913 79146 39366 29891 81610 66281 70834 98064 23386 18147 71986 55491 52763 96964 11584 67904 08824 28299 04207 09646 78613 57347 62924 87068 82575 82160 60283 46219 64901 46060 15952 64128 000 000 <i>Courtesy Spectre</i>			
5864kHz2100z	06/02[815 000] Strong 2100z 13/02[815 000] Strong 2100z 20/02[815 1 62421 326 69 24887... 75223 000 000] Very strong prev 30/01	(2m14s) (2m14s) (8m15s)	PLdn PLdn PLdn, ATC, HJH	WED WED WED
815 1 62421 326 69 24887 91749 00775 94382 71776 29486 77143 30357 61336 66139 98412 67721 49005 64900 31274 14063 20133 88524 31477 19298 67843 55073 37000 68119 33396 00247 27647 28344 61973 26807 99770 40863 16820 38019 48804 02940 85957 27149 02426 10724 31091 28598 92399 40554 10817 53567 81370 86088 32030 79069 03329 22768 16597 39241 11100 36038 80998 80801 34395 12180 78262 22273 17488 30141 03775 98656 90643 26469 75223 000 000 <i>Courtesy Spectre &amp; ATC</i>				
2100z	27/02[815 1 14834 <b>7337</b> 54 85606 ... 64128 000 000] Very strong	(6m58s)	PLdn	WED
6846kHz0610z	21/02[188 1 62421 326 69 24887... 75223 000 000] Very strong prev 31/01	(8m15s)	PLdn	THU
E07a 5146/5846/6846kHz 0530/0550/0610z 21/02 Transcript:				
	188 1 62421 326 69 24887 91749 00775 94382 71776 29486 77143 30337 61336 66139 98412 67721 49005 64900 31274 14063 20133 88524 31477 19298 67843 55073 37000 68119 33396 00247 27647 28344 61973 26807 99770 40863 16820 38019 48804 02940 85957 27149 02426 10724 31091 28598 92399 40554 10817 53567 81370 86088 32030 79069 03329 22768 16597 39241 11100 36038 80998 80801 34395 12180 78262 22273 17488 30141 03775 98656 90643 26469 75223 000 000 <i>Courtesy Spectre</i>			
0610z	28/02[188 1 14834 7337 54 85606 ... 64128 000 000] 0617z Fair QRN3 QSB3		Spectre	THU
11053kHz0900z	02/02[015 015 015 000] 0902z Weak QRN3 QSB3 0900z 09/02[015 000] Weak 0900z 16/02[015 000] Fair TTYQRM2 0900z 23/02[015 1 65855 <b>2200</b> 51 483 02 ... 36321 000 000] Very strong	(2m14) (2m14s) (7m14s)	Spectre, GD,FR PLdn PLdn PLdn, Spectre	SAT SAT SAT SAT
12153kHz0920z	02/02[015 015 015 000] 0922z Weak QRN3 QSB3 0920z 09/02[015 000] Weak 0920z 16/02[015 000] Weak 0920z 23/02[015 1 65855 2200 51 48302 ... 36321 000 000] Very strong	(2m14) (2m14s) (7m14s)	Spectre, ATC PLdn PLdn PLdn, Spectre	SAT SAT SAT SAT
13353kHz0940z	23/02[015 1 65855 2200 51 48302 ... 36321 000 000] Very strong	(7m14s)	PLdn, Spectre, FR	SAT
015 1 65855 2200 51 48302 89433 69448 04628 70837 05701 96042 67268 80959 21786 64915 21841 37990 59571 59571 15198 10542 88392 00957 13100 86349 76838 84315 94145 31992 17149 52817 20694 41232 77673 09493 14208 80531 50128 41886 04283 16352 75916 54751 04450 56797 47345 94711 06299 88956 49157 16144 37703 53604 56127 36321 000 000 <i>Courtesy FR</i>				
<b>E11[III]</b>				
<b>E11 Jan/Feb log:</b>				
4441kHz	0900z 03/01 [248/00] Weak 1445z 16/01 [287/00] Weak 0900z 17/01 [248/00] Weak 0900z 19/01 [248/00] Very weak 1445z 19/01 [287/00] Weak 0900z 02/02 [248/00] Weak 0900z 07/02 [248/00]		RNGB RNGB RNGB RNGB RNGB RNGB RNGB	THU WED THU SAT SAT SAT THU
4536kHz	2000z 04/01 [576/00] Strong 2000z 08/02 [576/00] Strong		RNGB RNGB	FRI FRI

5082kHz	1730z	03/01 [416/00] Out 1733z S9+10	Marco	THU
	1730z	10/01 [416/00]	RNGB	THU
	0450z	14/01 [416/00] 0453z Fair QRN2 QSB2	Spectre	MON
	1730z	17/01 [416/00] 1733z Fair QRN3 QSB2	Spectre	THU
	1730z	24/01 [416/00} Out 1733z S9	Malc	THU
	0450z	11/02 [416/00] 0453z Strong	Tony	MON
	1730z	14/02 [416/00] Strong	Fox	THU
	1730z	21/02 [416/00]	Thomas, Malc	THU
	1730z	28/02 [416/00] Good	RNGB	THU
7317kHz	0820z	07/01 [438/00]	RNGB, Malc	MON
	0820z	10/01 [438/00]	RNGB	THU
	0820z	14/01 [438/00]	RNGB	MON
	0820z	17/01 [438/00]	RNGB	THU
	0820z	24/01 [438/00]	RNGB	THU
	0820z	28/01 [438/00]	RNGB	MON
	0820z	31/01 [438/00]	RNGB	THU
	0820z	04/02 [438/00]	RNGB	MON
	0820z	07/02 [438/00]	RNGB	THU
7840kHz	0645z	03/01 [517/00]	RNGB	THU
	0645z	08/01 [517/00]	RNGB	TUE
	0645z	15/01 [517/00]	RNGB	TUE
	0645z	17/01 [517/00] 0648z Fair QRN4 QSB3	Spectre	THU
	0645z	05/02 [517/00] 0648z Strong	Tony	TUE
	0645z	12/02 [517/00]	RNGB	TUE
	0645z	26/02 [517/00] 0648z Fair	Tony	TUE
8091kHz	1045z	02/01 [469/00]	RNGB	WED
	1045z	08/01 [469/00]	RNGB	TUE
	1045z	09/01 [469/00] 1048z Weak QRN3 QSB4	Spectre	WED
	1045z	15/01 [469/00]	RNGB	TUE
	1045z	16/01 [469/00]	RNGB	WED
	1045z	29/01 [469/00] Good	RNGB	TUE
	1045z	05/02 [469/00] Good	RNGB	TUE
9446kHz	0900z	02/01 [534/00]	RNGB	WED
	0830z	04/01 [649/00]	RNGB	FRI
	0900z	07/01 [534/00]	RNGB	MON
	0900z	09/01 [534/00]	RNGB	WED
	0830z	14/01 [649/00] Out 0833z S2	Malc	MON
	0900z	14/01 [534/00]	RNGB	MON
	0830z	18/01 [649/00]	RNGB	FRI
	0830z	21/01 [649/00] Good	RNGB, Malc	MON
	0900z	21/01 [534/00] Fair	RNGB, Malc	MON
	0900z	23/01 [534/00] Good	RNGB	WED
	0830z	01/02 [649/00]	RNGB	FRI
	0900z	04/02 [534/00]	RNGB	MON
	0900z	06/02 [534/00]	RNGB	WED
	0830z	08/02 [649/00]	RNGB	FRI
	0830z	11/02 [649/00]	RNGB	MON
	0900z	11/02 [534/00]	RNGB	MON
	0900z	13/02 [534/00] Weak	RNGB	WED
	0830z	18/02 [649/00] Out 0833z QRM2 S9+10	Marco	MON
	0900z	20/02 [534/00] Out 0903z QRM3 S9+20	Marco	WED
10800kHz	0710z	01/01 [633/00] Weak	RNGB	TUE
	0710z	08/01 [633/00] Good	RNGB	TUE
	0710z	11/01 [633/00]	RNGB, Douglas	FRI
	1045z	15/01 [576/00]	RNGB	TUE
	0710z	18/01 [633/00] Fair	RNGB	FRI
	0710z	22/01 [633/00]	RNGB	TUE
	1045z	22/01 [576/00] Good	RNGB	TUE
	1045z	25/01 [633/00]	RNGB	FRI
	0710z	29/01 [633/00]	RNGB	TUE
	1045z	29/01 [576/00]	Ary	TUE
	0710z	01/02 [633/00]	RNGB	FRI
	0710z	05/02 [633/00] Fair	RNGB	TUE
	1045z	05/02 [576/00] Good	RNGB, Tony	TUE
	0710z	12/02 [633/00]	RNGB	TUE
	1045z	12/02 [576/00] Good	RNGB	TUE
	0710z	15/02 [633/00]	RNGB	FRI
15632kHz	1155z	02/01 [718/00]	RNGB	WED
	1155z	09/01 [718/00] 1158z Very Weak	Tony	WED
	1155z	10/01 [718/00]	RNGB	THU
	1540z	13/01 [228/00] Strong BC QRM1 Out 1543z	Douglas	SUN
	1540z	14/01 [228/00] 1543z Weak QRN3 QSB3	Spectre	MON
	1155z	16/01 [718/00] Good	RNGB	WED
	1540z	21/01 [228/00] Strong	RNGB	MON
	1155z	24/01 [718/00]	RNGB	THU
	1540z	28/01 [228/00]	RNGB	MON

1155z	31/01 [718/00] Good	RNGB	THU
1155z	07/02 [718/00]	RNGB	THU
1540z	10/02 [228/00] 1543z Fair	Tony	SUN
1540z	11/02 [228/00] Very weak	Tony	MON
1155z	13/02 [718/00]	RNGB	WED
16112kHz	0745z 01/01 [335/00] Very weak	RNGB	TUE
	0745z 08/01 [335/00] 0748z Fair QRN3 QSB3	Spectre	TUE
	0745z 10/01 [335/00] Strong	RNGB	THU
	0745z 15/01 [335/00]	RNGB	TUE
	0745z 17/01 [335/00] Good	RNGB	THU
	0745z 22/01 [335/00] Strong	RNGB	TUE
	0745z 24/01 [335/00]	RNGB	THU
	0745z 31/01 [335/00]	RNGB	THU
	0745z 07/02 [335/00]	RNGB	THU
	0745z 14/02 [335/00]	RNGB	WED

#### E11a Jan/Feb log:

4441kHz	1445z 02/01 [286/38 53759 52331 01254 80219 83436.....48248] Out 1455z, Weak	RNGB	WED
	0900z 05/01 [241/34 13502 82258 28471 16314 28460.....02333] Weak	RNGB	SAT
	0900z 12/01 [243/32 37494 019-3 19025 43353 18667.....--43] Very weak	RNGB	SAT
	0900z 31/01 [244/33 00768 89562 06038 21566 77881.....90677] Very weak	RNGB	THU
	0900z 09/02 [248/37 57812 52681 57972 83109 11027.....68542] Weak	RNGB	SAT
	0900z 14/02 [248/34 04380 3660? 84804 67125 417?8.....] Very weak	RNGB	THU
5082kHz	0450z 21/01 [412/33 97998 19762 24978 45192.....26313] 0459z Fair QSB3	Tony, Spectre	MON
	1730z 31/01 [416/35 76121 58800 25131 70418 87411.....27661]	RNGB	THU
	1730z 07/02 [415/38 51614 08466 19286 83396 81479.....15233] V Strong	Fox	THU
6923kHz	1710z 04/01 [959/29 79525 45271 56643 10626 66790.....25495] 1718z Strong	Fox, RNGB	FRI
	1710z 07/01 [953/21 59066 68090 32247 10358 74058.....85748] Fair	RNGB	MON
	1710z 11/01 [955/30 82840 59568 10490 94607 79199.....06056]	Spectre	FRI
	1710z 18/01 [957/30 50419 68061 21413 32458 01633.....63809] Good	RNGB	FRI
	1710z 21/01 [959/24 56865 05647 92636 23151 60006.....51069] Good	RNGB	MON
	1710z 25/01 [953/26 46820 96783 43511 48489 32689.....49923]	RNGB	FRI
	1710z 28/01 [955/21 63764 95682 67401 88343 80613.....12842]	RNGB	MON
	1710z 01/02 [953/30 08022 27281 98622 86848 74238.....56776] 1718z V Strong	Tony, RNGB	FRI
	1710z 04/02 [959/27 12359 71373 91413 62693 21791.....07194] Strong	RNGB	MON
	1710z 08/02 [957/21 43369 37688 15997 61743 69837.....40852]	RNGB	FRI
	1710z 11/02 [959/27 50595 93722 60924 81079 87773.....04446]	RNGB	MON
	1710z 15/02 [953/25 39323 71504 96199 55306 86397.....37630] 1717z V Strong	Tony	FRI
	1710z 22/02 [953/21 30434 71706 80796 26268 44344.....82863] S7	Malc, Thomas	FRI
7317kHz	0820z 03/01 [435/32 53822 70033 05945 81325 54714.....09443]	RNGB	THU
	0820z 21/01 [436/37 63753 90209 22511 24276 42807.....51409] Good	RNGB, Malc, Tony	MON
	0820z 11/02 [430/37 38597 19114 57280 11360 18819.....61309] Good	RNGB, Tony	MON
7840kHz	0645z 01/01 [510/37 33204 68409 47538 80581 60742.....51401]	RNGB	TUE
	0645z 24/01 [518/34 47594 81119 24792 42157 57590.....08159] Fair	RNGB	THU
	0645z 07/02 [510/34 80479 25310 75436 16287 11938.....24905]	RNGB	THU
8091kHz	1045z 22/01 [462/37 66482 31964 38936 86744 06805.....24778] Fair	RNGB	TUE
	1045z 30/01 [464/34 43761 07660 83723 47545 02055.....44055] 1054z Strong	Tony	WED
	1045z 06/02 [461/33 42934 16298 83901 50572 01171.....28195] Good	RNGB	WED
	1045z 12/02 [460/38 07661 48564 90468 42455 12863.....62584] Good	RNGB, Tony	TUE
9446kHz	0830z 07/01 [647/36 60203 99413 00406 09878 45664.....80100] Out 0840z	RNGB, Malc	MON
	0830z 11/01 [641/38 75514 07585 86687 33286 30375.....65083]	RNGB	FRI
	0900z 16/01 [532/35 29195 40842 24492 27871 25877.....31665]	RNGB	WED
	0900z 28/01 [530/36 66615 50348 23362 45947 16760.....62744]	RNGB	MON
	0830z 04/02 [644/31 71300 79197 61800 31158 10088.....55283] Good	RNGB	MON
	0830z 15/02 [640/35 73601 48650 92896 13210 23111.....16967]	RNGB	FRI
	0900z 18/02 [532/34 03151 35335..] Out 0910z Scarcely Audible QRM4 S9	Marco, Malc	MON
10213kHz	1810z 05/01 [984/10 07110 41314 38401 29402 60119.....33616] Weak	RNGB	SAT
	1810z 08/01 [987/10 01465 34957 37699 82624 84952.....65617] Fair	RNGB	TUE
	1810z 15/01 [984/10 31406 50281 37427 57433 30315.....15217] Weak	RNGB	TUE
	1810z 22/01 [981/10 42206 56599 32143 93483 76308.....36213] Fair	RNGB	TUE
	1810z 26/01 [982/10 50747 41667 51430 36005 70191.....84070] 1815z V. Strong	Tony, Malc	SAT
	1810z 02/02 [982/10 93012 16602 73510 15225 75873.....20177]	RNGB	SAT
	1810z 05/02 [982/10 08744 89571 04409 04239 77881.....84787] Good	RNGB, Tony	TUE
	1810z 09/02 [982/10 92847 68467 77881 79166 06438.....42760] Good, QRM	RNGB	SAT
	1810z 12/02 [985/10 96612 27426 09567 80305 49101.....84519] Good	RNGB, Fox	TUE
	1810z 23/02 [982/10 65683 31361 38357 92113 76307.....55548]	Marco	SAT
	1810z 26/02 [958/10 38937 05679 20479 14241 95111.....22091] 1815z	Tony	TUE
10690kHz	1400z 01/01 [981/10 82580 07253 51359 16660 29250.....37459] Very strong	Fox	TUE
	1400z 05/01 [985/10 19982 26622 21703 46021 08672.....80254]	Fox, Malc	SAT
	1400z 08/01 [984/10 34984 65827 93050 38050 83363.....47568] Good	RNGB	TUE
	1400z 12/01 [985/10 01059 77519 80299 07512 21237.....75077] Good	RNGB, Tony	SAT
	1400z 15/01 [983/10 79108.....66061] 1405z Weak	Tony	TUE

1400z	19/01 [982/10 32045 34600 84020 60747 30247....33246] Good	RNGB, Malc	SAT
1400z	22/01 [982/10 05802 94726 10568 29348 00090....09874] Good	RNGB	TUE
1400z	26/01 [981/10 44287 81112 38400 30020 42113....35863] Out 1405z	Tony, Malc	SAT
1400z	29/01 [982/10 37644 33385 60918 68259 66072....08948] Good	RNGB	TUE
1400z	02/02 [981/10 01631 35219 92086 49426 82452....13127] V strong	Fox	SAT
1400z	05/02 [981/10 78074 52816 18388 75162 62743....91560]	RNGB, Tony	TUE
1400z	08/02 [981/10 86124.....LG15765 out (ends 1405z)]	Chris B	SAT
1400z	12/02 [984/10 80784 27837 06709 60908 75460....33233] Good	RNGB, Tony	TUE
1400z	16/02 [981/10 47438 30646 83264 61101 46689....75533]	Tony	SAT
1400z	23/02 [981/10 31355 77758 07922 86911 52895....15262]	Fox	SAT
1400z	26/02 [984/10 27741 69510 81376 16829 45203.....63714] 1405z V Weak	Tony	TUE
10800kHz	0710z 04/01 [631/36 72660 00109 21610 76706 05780....12230] Strong	Fox, Tony	FRI
	1045z 08/01 [573/37 33050 87904 97141 69088 39993....74914] Good	RNGB	TUE
	0710z 15/01 [631/36 59061 50135 58247 17193 26348....92463]	RNGB, Tony	TUE
	0710z 08/02 [631/30 14101 01982 40704 78928 64364....87731]	RNGB, Fox	FRI
	0710z 26/02 [631/35 28964 21463 50499 75254 19055.....16328] 0719z V Weak	Tony	TUE
14410kHz	1110z 07/01 [952/31 51983 56632 05947 24801 05360....51318]	RNGB, Malc, Chris	MON
	1110z 11/01 [954/35 20365 38192 72995 34270 51518....54066]	RNGB	FRI
	1110z 14/01 [952/31 59004 79390 99526 91185 02114....03470]	RNGB	MON
	1110z 18/01 [952/35 25765 04316 03635 17450 04705....89792] Good	RNGB	FRI
	1110z 21/01 [954/31 32809 82943 89369 22563 49848....35559] Good	RNGB, Malc, Tony	MON
	1110z 25/01 [958/38 05265 48172 85479 35169 45189....51710]	RNGB	FRI
	1110z 28/01 [954/31 45036 62781 41810 69016 84271....06203]	RNGB	MON
	1110z 01/02 [952/40 57481 40722 35541 62736 32901....14662]	RNGB	FRI
	1110z 04/02 [954/31 43882 89909 45686 81283 20166....55188]	RNGB	MON
	1110z 08/02 [958/39 61063 65815 62427 37001 02902....26276]	Fox	FRI
	1110z 15/02 [952/31 92538 15638 93728 23753 04955....44268] Fair	RNGB	FRI
	1110z 18/02 [952/40 07691 62581 68907 61334 56380....21228] 1121z QRM3 S8	Marco	MON
15632kHz	1155z 03/01 [713/32 47129 05245 14249 03407....82820] Weak	RNGB	THU
	1155z 17/01 [712/37 64941 23385 57036 69490 48473 ....42904] Good	RNGB	THU
	1540z 20/01 [227/38 66213 27769 47741 17133 58702....21142] Good	RNGB, Tony	SUN
	1155z 23/01 [712/35 04370 65119 98556 44426 61045....83355] 1205z V Strong	Tony, RNGB	WED
	1540z 27/01 [227/37 16763 42603 53707 77690....66589] Out 1550z V Strong	Tony	SUN
	1540z 04/02 [220/32 88050 81420 65600 91061 51947....26793] Good with QRM	RNGB, Chris S	MON
	1155z 14/02 [717/30 21244 05424 48276 87006 82191....70408]	RNGB, Guy	THU
	1155z 21/02 [718/31 69519 23178 20450 52461 28688....18761] Out 1208z S9	Marco	THU
16112kHz	0745z 03/01 [333/31 96571 44943 62231 40090 54367....37433] Out 0754z, Good	RNGB	THU
	0745z 29/01 [337/37 57000 41519 39859 12374 22088....11684] Good	RNGB	TUE
	0745z 05/02 [338/37 07247 65672 61891 41029 92324....17039] Good	RNGB, Tony	TUE

### E11a transcripts, all courtesy of Spectre who also supplied excellent logs across this family.

E11a 10213kHz 1810z 16/02 Transcript:

984/10 Attention  
29632 45337 75095 21262 58292 64219 65651 83580 33510 94321  
Out

E11a 10213kHz 1810z 23/02 Transcript:

982/10 Attention  
65683 31361 38357 92113 76307 48560 55635 37251 48464 55548  
Out

E11a 10690kHz 1400z 09/02 Transcript:

981/10 Attention  
86614 32139 80121 79641 22508 53750 78439 01408 56166 15765  
Out

E11a 10690kHz 1400z 19/02 Transcript:

987/10 Attention  
79899 31615 39619 56280 38593 48121 61320 07390 54678 05407  
Out

E11a 10690kHz 1400z 23/02 Transcript:

981/10 Attention  
31355 77758 07922 86911 52895 16544 02915 48820 86487 15262  
Out

E11a 15632kHz 1155z 21/02 Transcript:

718/31 Attention  
69519 23178 20450 52461 28688 96808 92419 55539 35907 55558  
35258 12906 56197 62336 04822 24094 12639 54972 83665 56998  
23663 79890 27428 91142 04720 91379 52021 31708 02009 95808  
18761  
Out

E11a 14410kHz 1110z 25/02 Transcript:

952/31 Attention  
51790 28192 54893 36732 27829 63051 21018 80885 26324 15760  
02669 50284 07406 48151 68513 81415 44898 41810 32698 94217  
41861 77240 94641 12814 67321 32573 32344 00255 24148 21216  
99064  
Out

### E11c Jan/Feb log:

4909kHz	2000z 01/01 [757/0000/00]	Gary	TUE
	2000z 08/01 [757/0000/00] Good	RNGB	TUE
	2000z 15/01 [757/0000/00] 2003z Weak	Tony	TUE
	2000z 22/01 [757/0200/00] Good	RNGB	TUE
	2000z 29/01 [757/0000/00] Strong	RNGB	TUE
	2000z 05/02 [757/2200/00] Strong	RNGB, Tony	TUE
	2000z 19/02 [757/2202/00] Strong	Fox, Gary	TUE
	2000z 26/02 [757/2200/00] 2003z Strong	Tony	TUE

6923kHz	0700z	01/01 [758/0000/00]	RNGB	TUE
	1925z	03/01 [758/0000/00]	RNGB	THU
	0700z	08/01 [758/0000/00] Good	RNGB	TUE
	1925z	08/01 [758/2210/00] Strong	RNGB	TUE
	1925z	10/01 [758/0000/00]	Gary	THU
	0700z	15/01 [758/0000/00] Strong	RNGB	TUE
	1925z	15/01 [758/0000/00]	RNGB	TUE
	1925z	17/01 [758/0000/00]	RNGB, Gary, Malc	THU
	0700z	22/01 [758/0000/00] Good	RNGB	TUE
	1925z	22/01 [758/1000/00] Good	RNGB	TUE
	0700z	29/01 [758/2200/00] Strong	RNGB	TUE
	1925z	29/01 [758/2000/00] Good	RNGB	TUE
	1925z	31/01 [758/0000/00]	RNGB, Gary	THU
	0700z	05/02 [758/0000/00]	Chris Smolinski	TUE
	1925z	05/02 [758/0000/00] Good	RNGB	TUE
	1925z	07/02 [758/0000/00] Very strong	Fox	THU
	0700z	12/02 [758/0000/00] Strong	RNGB	TUE
	1925z	12/02 [758/0000/00] Strong	RNGB	TUE
	1925z	14/02 [758/0000/00] Strong	RNGB	THU
	1925z	21/02 [758/2000/00] S7	Malc, Fox	THU
	1925z	28/02 [758/1000/00] Good	RNGB, Gary	THU

### E17z January 2013

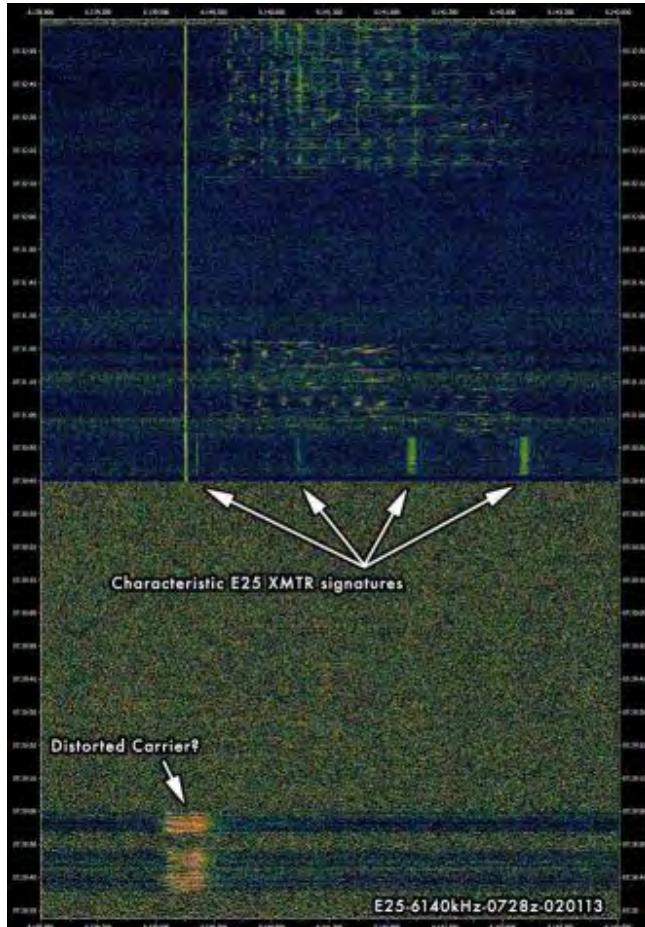
9820kHz	0810z	03/01[674 258 5 05928 67844 67328 98823 78873 258 5 00000(s)] 0815z Fair QRN3 QSB3	Spectre, M8, GD	THU
	0810z	10/01[674 258 5 05928 67844 67328 98823 78873 258 5 00000(s)] 0815z Weak QRN3 QSB3	Spectre THU	
	0810z	17/01[674 289 5 34682 97455 52122 42277 76294 289 5 00000(s)] 0815z Fair QRN4 QSB3	Spectre THU	
	0810z	24/01[674 289 5 34682 97455 52122 42277 76294 289 5 00000(s)] 0815z Fair QRN3 QSB3	Spectre THU	

11170kHz	0800z	03/01[674 258 5 05928 67844 67328 98823 78873 258 5 00000(s)] 0805z Fair QRN3 QSB3	Spectre,M8, GD	THU
	0800z	10/01[674 258 5 05928 67844 67328 98823 78873 258 5 00000(s)] 0805z Weak QRN3 QSB3	Spectre	THU
	0800z	17/01[674 289 5 34682 97455 52122 42277 76294 289 5 00000(s)] 0805z Fair QRN4 QSB3	Spectre	THU
	0800z	24/01[674 289 5 34682 97455 52122 42277 76294 289 5 00000(s)] 0805z Fair QRN3 QSB3	Spectre	THU
	0800z	31/01[674x3 00000]	GD	THU

### February2013

9820kHz	0810z	21/02[674 230 5 46062 68672 97478 39685 30485 230 5 0 0 0 0 0] QSA2	JO	THU
11170kHz	0800z	21/02[674 230 5 46062 68672 97478 39685 30485 230 5 0 0 0 0 0] QSA2/3 QRM2	JO, GD	THU

### E25



January 2013

6140kHz 0728z 02/01 /// INTERMITTENT DISTORTED CARRIER WEAK - 0729z

6140kHz 0730z 02/01 /// XMTR ON FOLLOWED BY ARABIC MUSIC, MUSLIM PRAYER  
STYLE FOR ABOUT 28 SEC. THEN DEAD AIR. CARRIER STIL PRESENT... WEAK - -z  
6140kHz 0732z 02/01 /// ARABIC MUSIC STARTS, POP/MODERN STYLE. ABRUPT  
END/XMTR OFF. WEAK - 0733z

AIK

WED

"New" anomaly seems to have started, the doubling of "END OF XMSN". See image above

6140kHz 0926z 08/01 ///XMTR ON, MAIN XMSN STARTS about 4' later... - - -z  
6140kHz 0930z 08/01 YL [333 333 333 333 333 333 333 333 333 333 333 333  
333 333

MESSAGE MESSAGE MESSAGE  
1090 0160 1182 2108 6225 5932 2993 1332 0160  
REBEAT REBEAT REBEAT  
1090 0160 1182 2108 6225 5932 2993 1332 0160]  
///TONE INTRO. XMTR OFF @ 0941z. STRONG EOM EOT/EOT 0934z

AIK

TUE

6140kHz 1114z 08/01 ///XMTR ON, MAIN XMSN STARTS about 1' later... - - -z  
6140kHz 1115z 08/01 YL [880 880 880 880 880 8-0 880 880 880 880 880 880  
880 880 880 880 880 880

MESSAGE MESSAGE MESSAGE  
1110 2011 5791 3548 8456 9876 5444 7697 2528 5594 1110  
(DEAD AIR FROM 1118z-1120z)  
REBEAT REBEAT REBEAT  
1110 2011 5791 3548 8456 9876 5444 7697 2528 5594 1110  
(DEAD AIR FOR 30 SEC.)] ///TONE INTRO. XMTR OFF @ 1125z STRONG END OF MSG, END  
OF XMSN, END OF XMSN 1122z

AIK

TUE

6140kHz 0841z 09/01 //CARRIER ONLY - - 0842z

6140kHz 0909z 09/01 //CARRIER UP-XMTR ON, MAIN XMSN STARTS about 5' later... - - -z  
6140kHz 0914z 09/01

YL [950 950 950 950 950 950 950 950 950 950 950 950 950 950 950 950 950  
MESSAGE MESSAGE MESSAGE  
1011 1933 0220 6424 6245 6416 6376 4097 5595 0166 0220  
REBEAT REBEAT REBEAT  
1011 1933 0220 6424 6245 6416 6376 4097 5595 0166 0220]  
///TONE INTRO VERY WEAK. AFTER MSG, CARRIER STAYS UP-XMTR STAYS ON... STRONG QRN  
1-4 EOM EOT/EOT 0918z

AIK

WED

6140kHz 0929z 09/01

YL [333 333 333 333 333 333 333 333 333 333 333 333 333 333 333 333  
MESSAGE MESSAGE MESSAGE  
1090 0160 1182 2108 6225 5932 2293 1332 0160  
REBEAT REBEAT REBEAT  
1090 0160 1182 2108 6225 5932 2293 1332 0160]  
///TONE INTRO VERY WEAK. CARRIER/XMTR OFF@ 0936z. STRONG QRN 1 EOM EOT/EOT 0933z

AIK

WED

6140kHz 1115z 10/01 YL [880 880 880 880 880 880 880 880 880 880 880 880 880 880 880 880 880  
PROBLEM] 0 880 880 880

MESSAGE MESSAGE MESSAGE  
0250 3071 1099 7322 7251 1689 2536 8768 5586 8745 3256 1924 3997 2598 3101 8469  
0250  
REBEAT REBEAT REBEAT  
0250 3071 1099 7322 7251 1689 2536 8768 5586 8745 3256 1924 3997 2598 3101 8469

0250  
END OF MESSAGE END OF TRANSMISSION END] //CARRIER UP/XMTR ON, ALMOST STRAIGHT  
TO TONE INTRO. TONE INTRO BACK TO NORMAL LEVEL. LAST "EOM" TRUNCATED TO "END"  
THEN XMTR OFF. STRONG END OF MESSAGE END OF XMSN END 1121z

AIK

THU

6140kHz 0945z 13/01 ///XMTR ON/CARRIER UP. XMTR OFF - - 0945z AIK SUN  
6140kHz 0956z 13/01 ///XMTR ON/CARRIER UP. MAIN XMSN STARTS about 3'  
later... - - -z

6140kHz 0959z 13/01 //TONE INTRO. AUTO-RECORDING STOPPED AT 10:00z  
(ARRRGH!!!) STRONG ? ?z

AIK

SUN

6140kHz 0800z 14/01 ///XMTR ON & OFF 4 TIMES. BRIEF TEST TONES. FAIR - 0823z

6140kHz 0832z 14/01 //XMTR ON/CARRIER UP, MAIN XMSN STARTS about 5'  
later... - - -z

E25 6140kHz 0837z 14/01  
YL [185 185 185 185 185 185 185 185 185 185 185 185 185 185 185 185  
MESSAGE MESSAGE MESSAGE  
1059 4151 9402 8656 0292 8266 3240 5413 5527 8404 ????  
REBEAT REBEAT REBEAT  
1059 4151 9402 8656 0292 8266 3240 5413 5527 8404 9?4?] //TONE INTRO.  
XMTR/CARRIER OFF 0843z. WEAK NOT HEARD 0843z AIK MON



**February2013**

9450kHz1219z 22/02[song intro.. 830 .. 835.. MSG.. RBT.. EOM EOT] 1228z QSA1 QSB2 YL Fanis FRI  
MSG : 4021 8510 5346 6695 9356 1534  
0031 5940 5872 8296 8510 7375

E25a

6140kHz 0926z 27/01  
YL [353 1 353 1 353 1 353...  
END OF MESSAGE END OF TRANSMISSION] //TONE INTRO 4 MINUTES.  
STRONG END OF MESSAGE END OF XMSN 0930z

END OF MESSAGE END OF TRANSMISSION]  
///NO INTRO. WEAK END OF MESSAGE END OF XMSN 1202z

AIK TUE

**February2013**

6140kHz 0926z 14/02 ///XMTR/CARRIER ON, MAIN XMSN STARTS about 3' later... -- 0932z

AIK THU

6140kHz 0929z 14/02

YL [133 133 133 133 133 133 133 133 133 133 133 133 133 133 133 133 133 133 133 133]

MESSAGE MESSAGE MESSAGE

4153 8248 7351 7772 4775 2864 6162 9034 3095

REBEAT REBEAT REBEAT

4153 8248 7351 7772 4775 2864 6162 9034 3095

END OF MESSAGE END OF TRANSMISSION] ///NO TONE INTRO.

FAIR END OF MESSAGE END OF XMSN 0932z

AIK THU

6140kHz 0925z 15/02 ///XMTR/CARRIER ON... -- 0932z

AIK FRI

6140kHz 0925z 15/02

YL [35 32 135 32 135 32 135 32 135 32 135 32 135 32 135 32 135 32 135 32 135 32 135 32]

135 32 135 32 135 32

MESSAGE MESSAGE MESSAGE

REBEAT REBEAT REBEAT

END OF MESSAGE END OF TRANSMISSION

135 32 135]

///TONE INTRO. STRONG 135 32 135 0931z

AIK FRI

6140kHz 0837z 20/02 ///SEVERAL SUPPRESSED WINDOWS DINGS FAIR - 0837z

AIK WED

6140kHz 0839z 20/02

YL [2]

///XMTR OFF MOMENTAIRILY AFTER THE "2". FAIR 2 0840z

AIK WED

6140kHz 0913z 20/02

YL [950 950 950 950 950 950 950 950 950 950 950 950 950 950 950 950 950 950 950 950]

MESSAGE MESSAGE MESSAGE

2001 1095 0190 5856 5619 6752 2513 1719 5473 3843

REBEAT REBEAT REBEAT

2001 1095 0190 5856 5619 6752 2513 1719 5473 3843

END OF MESSAGE END OF TRANSMISSION]

///NO INTRO. WEAK END OF MESSAGE END OF XMSN 0916z

AIK WED

6140kHz 0940z 20/02 ///XMTR/CARRIER ON, MAIN XMSN STARTS about 2' later... -- 0948z

AIK WED

6140kHz 0942z 20/02

YL [30 5 350 350 350 350 350 350 350 350 350 350 350 350 350 350 350 350 350 350 350]

MESSAGE MESSAGE MESSAGE

1953 4310 2090 3581 6380 5095 9310 9573 4310

REBEAT REBEAT REBEAT

1953 4310 2090 3581 6380 5095 9310 9573 4310

END OF MESSAGE END OF TRANSMISSION]

///ENTA OMRI-UHM KHULTOM INTRO. FAIR END OF MESSAGE END OF XMSN 0948z

AIK WED

6140kHz 1027z 20/02 ///XMTR/CARRIER ON THEN OFF. -- 1027z

AIK WED

6140kHz 1028z 20/02 ///XMTR/CARRIER ON, MAIN XMSN STARTS about 1' later... -- 1032z

AIK WED

6140kHz 1029z 20/02

YL [672 672 672 672 672 672 672 672 672 672 672 672 672 672 672 672 672 672 672 672]

MESSAGE MESSAGE MESSAGE

1022 3016 4150 7656 1625 6078 9591 3860

REBEAT REBEAT REBEAT

1022 3016 4150 7656 1625 6078 9591 3860

END OF MESSAGE]

///NO INTRO. VERY WEAK AUDIO. VERY WEAK END OF MESSAGE 1032z

AIK WED

6140kHz 0732z 21/02 /// XSMT IN AM, LSB SUPPRESSED. "THEATRICAL" OR "EPIC" MUSIC. I'VE HEARD THIS JUST A FEW TIMES IN THE LAST YEAR-2012. DON'T RECOGNISE. USUAL XMTR RINGING HEARD AT END BEFORE XMTR CLOSEURE ALONG WITH THE ALL TO COMMON 10Hz WARM-UP DRIFT AT THE BEGINNING.

WEAK - 0736z

AIK THU

6140kHz 1040z 26/02 ///XMTR/CARRIER ON FOR 2 MINUTES, NO MSG. -- 1042z

AIK TUE

6140kHz 1048z 26/02

YL [128 128 128 128 128 128 128 128 128 128 128 128 128 128 128 128 128 128 128 128]

MESSAGE MESSAGE MESSAGE

1656 1021 0140 0648 8774 5493 7852 9614 9699 8782 9482 0140

REBEAT REBEAT REBEAT

1656 1021 0140 0648 8774 5493 7852 9614 9699 8782 9482 0140

END OF MESSAGE END OF TRANSMISSION]

///NO INTRO, MSG STARTS MOMENTAIRILY AFTER XMTR OPENS. FAIR END OF MESSAGE END OF XMSN 1052z

AIK TUE

9450kHz 1208z 17/02 ///XMTR/CARRIER ON, MAIN XMSN STARTS about 3' later... -- 1218z

AIK SUN

G06  
January 2013

4519kHz1830z	10/01[271 171 <u>25</u> 62819 ... 16333 175 171 15 00000(s)] Fair, XWPQRM2, Noisy freq.	(7m28s)	PLdn	THU
1830z	24/01[271 171 <u>25</u> 62819 ... 18333 171 15 00000(s)] Fair, XJTQRM2	(7m34s)	PLdn	THU
4792kHz1930z	11/01[436 827 15 72193 ... 16382 827 15 00000(s)] Strong	(7m38s)	PLdn, Spectre	FRI
1930z	25/01[436 827 15 72193 ... 16382 827 15 00000(s)] Fair, QRM2		PLdn, Spectre	FRI

5463kHz0800z	14/01[215 00000....]0804z S2	M8	MON	
G06 4792kHz 1930z 11/25/01 Transcript:				
436 827 15				
72193 27391 49332 48761 39471				
04536 26989 14250 24681 54209				
15372 05978 17327 74902 16382				
827 15 00000	Courtesy Spectre			
5363kHz0800z	07/01 [215 00000] 0804z Weak QRN4 QSB3	Spectre	MON	
5463kHz0800z	14/01[215 00000....]0804z S2	M8	MON	
<b>February 2013</b>				
3838kHz1905z	19/02[349x3 00000.....]1904z S9	M8	MON	
3673kHz1700z	04/02[564R3x 00000] 1704z Strong	ATC	MON	
1700z	11/02[564R3x/00000] 1705z Fair	ATC	MON	
4515kHz1800z	04/02[564R3x 00000] 1804z Strong	ATC	MON	
1800z	11/02[564R3x/00000] 1805z Fair	ATC	MON	
4519kHz1830z	14/02 [271 171 15 62819 ... 18333 171 15 00000] Very strong signal, QRM local interference	FR	THU	
	271 171 15 62819 47284 20471 47240 28193 46194 28501 37297 46208 17302 38103 47122 19483 63719 18333 171 15 00000      Courtesy FR			
1830z	28/02[271 171 15 62819 ... 18333 171 15 00000(s)] 1838z Strong	(8m22s)	PLdn, FR, HJH	THU
4792kHz1930z	15/02[436 841 15 73629 ... 28915 841 15 00000(s)] Fair to strong	(7m10s)	PLdn	FRI
5463kHz0800z	11/02[215R3x/00000] 0805z Very Weak	ATC	MON	

#### RNGB's G06 logs:

##### G06 log January

Mon 7th	08:00	5463	'215' 00000
	17:01	3673	'564' 00000
	18:00	4515	'564' 00000
Mon 14th	18:00	4515	'564' 00000
Mon 28th	08:00	5463	'215' 00000

##### G06 February log

Mon 4th	08:00	5463	'215' 00000
	17:00	3673	'564' 00000
	18:00	4515	'564' 00000
Mon 11th	08:00	5463	'215' 00000
	18:01	4515	'564' 00000
Thurs 14th	18:30	4519	'271' 171 15 62819 47284 20471 47240 28193.....18333

#### G11 Jan/Feb log:

4441kHz	2000z	04/01 [266/31 04509 70883 98762 06643 41644.....36757] Good	RNGB	FRI
	2000z	06/01 [266/37 22534 90743 36959 56701 08025.....02930] Ende 2011z	RNGB	SUN
	2000z	13/01 [263/30 34858 85329 83598 65966 11293.....12081] Ende 2009z	RNGB	SUN
	2000z	20/01 [262/00]	RNGB	SUN
	2000z	27/01 [262/00] 2003z Fair	Tony	SUN
	2000z	01/02 [260/36 41466 75297 30779 79653 43735.....45253] 2010z V Strong	Tony	FRI
	2000z	08/02 [262/00]	RNGB	FRI
	2000z	10/02 [266/32 19410 83678 26074 82040 16220 09793....64880] Strong	RNGB, Tony	SUN
	2000z	15/02 [262/00] 2003z Strong	Tony	FRI
	2000z	17/02 [262/00]	Paulo, Gary	SUN
	2000z	22/02 [262/00] 2003z Weak QRN4 QSB3	Spectre	FRI
6433kHz	1325z	04/01 [299/00] Ende 1328z Weak	Tony	FRI
	1755z	06/01 [270/00] Good	RNGB	SUN
	1755z	08/01 [270/00] 1758z Fair QRN2 QSB2	Spectre	TUE
	1325z	11/01 [299/00] Ende 0928z S2	Malc,	FRI
	1755z	13/01 [270/00]	RNGB	SUN
	1755z	15/01 [270/00] 1758z Fair QRN4 QSB3	Spectre	TUE
	1325z	18/01 [293/30 40191 52763 59277 60167 14813.....52844] Weak	RNGB	FRI
	1325z	19/01 [299/35 36973 91146 11411 24220 95410.....91073] Weak	RNGB	SAT
	1755z	20/01 [273/35 71478 81806 99771 12609 71473.....22437] Good	RNGB, Tony	SUN
	1755z	22/01 [276/34 39790 66356 38692 38392 96668.....21402] Strong	RNGB	TUE
	1755z	27/01 [272/30 61054 28838 26970 94541 63057.....08775]	Fox, Tony	SUN
	1325z	01/02 [299/00]	RNGB	FRI
	1325z	02/02 [299/00] Fair	RNGB	SAT
	1755z	03/02 [278/31 12639 87471 82061 53459 55968.....84993] V Strong	RNGB	SUN

1755z	05/02 [270/00] Strong	RNGB	TUE
1325z	09/02 [299/33 Achtung 38409 ... 16712 Ende] 1335z Weak QRN3 QSB3	Spectre	SAT
1755z	10/02 [270/00]	RNGB, Tony	SUN
1755z	12/02 [272/32 92152 08290 43600 85175 98275.....50984] Strong	RNGB, Fox	TUE
1325z	16/02 [299/00] 1328z Weak QRN3 QSB3	Spectre	SAT
1755z	24/02 [279/31 66108 02828 41156 09034 95251....50064]	Fox	SUN
1755z	26/02 [270/00] 1758z Very Strong	Tony	TUE

G11 6433kHz 1325z 09/02 Transcript:

299/33 Achtung  
38409 63173 24895 35371 11054 00378 00851 53481 84079 24979  
86361 65534 41925 80520 57465 68822 94648 85429 44778 00636  
27644 05640 74808 34948 32250 03308 42506 94768 83826 75417  
01551 96594 16712  
Out

*Courtesy Spectre*

## S06

Starting with RNGB's S06 report and then onto others' logs:

### **S06 log January:**

Thurs 3rd	19:00	3192	'349' 00000
Sat 5th	16:05	5943	'764' 00000
	19:35	3834	'426' 00000
	20:00	4033	'319' 00000
	20:30	4784	'857' 00000
	21:00	3563	'319' 00000
	21:30	4017	'857' 00000
Mon 7th	19:00	3192	'349' 00000
Thurs 10th	19:05	3838	'349' 00000
Mon 14th	19:00	3187	'349' 00000
	20:15	6820	'384' 00000
Thurs 17th	19:05	3843	'349' 00000
Sat 19th	16:05	5943	'764' 00000
	19:30	3172	'426' 00000
	20:00	4039	'319' 00000
	20:30	4784	'857' 00000
	21:00	3569	'319' 00000
	21:30	4017	'857' 00000
Tues 22nd	10:00	13945	'215' 907 63 15740 43732 61708 52225 85831....28527
	10:30	11128	'215' 907 63 15740 43732 61708 52225 85831....28527
Sat 26th	16:05	5943	'764' 00000
	19:30	3172	'426' 00000
Mon 28th	19:05	3838	'349' 00000
	20:15	6820	'384' 902 86 94495 79165 47160 34972 59355....14061
Tues 29th	19:15	8145	'384' 902 86 94495 79165 47160 34972 59355....14061
Thurs 31st	19:05	3838	'349' 00000

### **S06s log January report:**

ID 471 sent nulls for first 2 weeks of month on 5130/5841/6282/6778/7244 and 7615kHz and reverted to normal message sending on Weds 16th.  
ID 934 started sending nulls on Friday 18th using 6314/6788/7125/7566/8115 and 8440 at 10 minutes intervals.

### **S06s log January:**

#### **Mondays**

7th/14th	0700/10	8234/9270	'371' 920 5 98835 46186 16945 80744 21816
21st/28th	0830/40		'371' 269 5 53754 42788 64580 61384 96959
7th/14th	0900/10	14675/12830	'872' 916 5 58604 41438 03092 68362 14199
21st/28th			'872' 593 6 29256 95845 56158 53538 01903 73244
7th/14th	1300/10	8420/10635	'831' 957 6 29245 28842 82264 14255 81545 74167
21st/28th			'831' 529 6 35587 40496 16812 85564 15279 40816

#### **Tuesdays**

1st/8th	0600/10	?	'438' Not found
1st/8th	0700/15	5250/6320	'374' 289 5 89645 67312 80978 88021 34265
15th/22nd			'374' 509 6 55445 50128 99477 83574 48874 94031
1st/8th	0730/40	7410/11532	'427' 830 5 14466 39690 93856 63227 53140
15th/22nd			'427' 869 5 83981 24034 84090 09531 23521
1st/8th	0800/10	10265/9135	'352' 814 6 97298 19155 12244 15906 19546 79663
15th/22nd			'352' 811 6 57440 10597 23521 47660 92883 69901
1st/8th	1000/10	6440/5660	'893' 246 5 50767 54160 48416 11443 15700
15th/22nd			'893' 210 5 24035 48115 24151 51802 91497
1st/8th	1500/10	6845/9170	'537' 291 6 57440 10597 23521 47660 92883 62827
15th/22nd			'537' 840 6 28571 66561 32575 51285 81948 56438

#### **Wednesdays**

2nd/9th	0530/40	9435/11075	'153' Too weak to copy
16th/23rd	0820/30	6880/7840	'471' 236 5 40995 55122 14576 98045 78802
2nd/9th	0830/40	7335/11830	'745' 982 6 93872 13187 86558 52986 99393 18470

16th/23rd		'745' 283 6 99228 77544 04816 56557 50316 72237
2nd/9th	0840/50	9260/11415 '328' 516 7 82173 94404 39291 87561 50670 42183 90893
16th/23rd		'328' 410 5 88620 58069 61732 74537 57440
2nd/9th	1000/10	12365/14280 '729' 410 5 24001 88749 19970 14513 81432
16th/23rd		'729' 406 5 47665 94092 48521 63888 92060
2nd/9th	1230/40	4580/6420 '967' 482 5 34092 94546 77999 99632 12476
16th/23rd		'967' 480 5 46062 68672 97478 39685 30485

## Thursdays

<b>3rd/10 (E17z)</b>	<b>0800/10</b>	<b>11170/9820</b>	<b>'674' 218 5 01928 67844 67328 98823 78873</b>
<b>20th/27th</b>			<b>'674' 289 5 34682 17455 52122 42277 76294</b>
3rd/10th	0900/10	12952/13565	'167' 238 5 78463 72819 84756 01992 77321
17th/24th			'167' 423 5 73124 72277 76293 37538 21065
3rd/10th	0900/10	5410/6770 '624'	905 7 88620 58069 61732 74537 57440 10597 47660
17th/24th			'624' 835 7 99228 77534 04816 51269 03176 58842 55499
3rd/10th	0930/40	8812/9540 '314'	820 5 82045 36717 24042 75956 78927
17th/24th			'314' 870 5 13808 71909 83981 24035 48115
3rd/10th	1200/10	12155/10920	'425' 987 6 96111 10544 98003 68909 45279 54545
17th/24th			'425' 891 6 23247 10799 94961 35836 65906 77233

## Fridays

4th/11th	0600/0610	6085/8813	'934'	267	5	16070	48834	99477	83574	53718		
4th/11th	0700/0710	7150/8215	'196'	234	5	52343	79628	42432	56075	53281		
18th/25th			'196'	283	5	84090	09531	88430	33240	61135		
4th/11th	0800/0810	5810/6770	'278'	549	6	46062	68672	97478	39685	30485	96632	
18th/25th			'278'	519	6	33796	13577	74526	46647	79302	53516	
4th/11th	0930/0940	11780/12570	'516'	928	7	52401	63919	92699	14600	74248	48754	65125
18th/25th			'516'	804	7	11171	64385	82707	06123	22536	88280	84116

Saturday

5th 1200/1210 8680/8260 '254' 910 6 12542 97525 85532 54548 77592 80417

**Some examples of repeated message strings. This months' in BOLD**

**21st/28th** '872' 593 6 29256 95845 56158 53538 01903 73244  
8 Aug 2012 '328' 590 6 29256 95845 56158 53538 01903 73244

<b>7th/14th</b>	<b>1300/10</b>	<b>'831' 957 6 29245 28842 82264 14255 81545 74167</b>
9 Feb 2012		'624' 981 5 29245 28842 07306 84564 54146
7 May 2010		'934' 260 5 29245 28842 82264 14255 81545
1 Dec 2010		'481' 972 5 29245 28842 82264 14255 81545
16 Sep 2011		'196' 240 5 29245 28842 82264 14255 81545
19 Sep 2011		'831' 924 5 29245 28842 82264 14255 81545
18 Apr 2012		'328' 945 6 29245 28842 82264 14255 81545 74165
1 Sep 2010		'153' 487 6 29245 28842 82264 14255 81545 74167
23 Sep 2010		'425' 901 6 29245 28842 82264 14255 81545 74167
14 Jun 2011		'537' 912 6 29245 28842 82264 14255 81545 74167
23 Nov 2012		'278' 541 6 29245 28842 82264 14255 81545 74167
7 Jan 2013		'831' 957 6 29245 28842 82264 14255 81545 74167
18 Oct 2011		'438' 295 6 14255 81545 74167 85202 85141 64526
18 Jan 2012		'153' 906 7 14255 81545 74167 85202 85141 92565 43628

<b>16th/23rd 0830/40</b>	<b>'745' 283 6 99228 77544 04816 56557 50316 72237</b>
17 Jan 2013	'624' 835 7 99228 77534 04816 51269 03176 58842 55499
10 Sep 2012	'371' 268 5 99228 77544 04816 56447 03176
26 Oct 2011	'481' 270 5 99228 77544 04816 56447 51269
4 Aug 2011	'167' 950 8 99228 77544 04816 56447 51269 03176 58842 55499
15 Dec 2010	'967' 283 5 99228 77544 04816 56557 -5823?
21 Jan 2011	'934' 867 5 99228 77544 04816 56557 51269
24 Mar 2011	'167' 948 5 99228 77544 04816 56557 51269
13 Apr 2011	'371' 980 5 99228 77544 04816 56557 51269
22 Mar 2012	'167' 249 5 99228 77544 04816 56557 51269
15 May 2012	'438' 951 6 99228 77544 04816 56557 51269 03176
1 Feb 2011	'278' 415 6 99228 77544 04816 56557 51269 03176
27 Apr 2010	'352' 867 9 99228 77544 04816 56557 51269 03176 58842 55499 72223

**3rd/10th 0930/40** ‘314’ 820 5 82045 36717 24042 75956 78927  
3 Oct 2012 ‘729’ 840 5 82045 36717 24042 75956 31670

**3rd/10th 1200/10** ‘425’ 987 6 96111 10544 98003 68909 45279 54545  
3 Oct 2012 ‘471’ 830 5 96111 10544 98003 68909 45279

**4th/11th 0800/0810** ‘278’ 549 6 46062 68672 97478 39685 30485 96632  
15 Feb 2012 ‘729’ 468 5 46052 68672 97478 39685 30485  
16 Jun 2010 ‘371’ 829 5 46062 67672 97478 39685 30485  
2 Oct 2012 ‘374’ 915 6 46062 68672 94748 39685 30485 96632  
27 Mar 2010 ‘893’ 407 5 46062 68672 97478 39685 30485  
18 Jul 2012 ‘471’ 203 5 46062 68672 97478 39685 30485  
1 Nov 2012 ‘167’ 209 5 46062 68672 97478 39685 30485  
21 Nov 2012 ‘967’ 201 5 46062 68672 97478 39685 30485  
16 Jan 2013 ‘967’ 480 5 46062 68672 97478 39685 30485  
4 Jan 2013 ‘278’ 549 6 46062 68672 97478 39685 30485 96632  
17 Nov 2011 ‘167’ 945 8 46062 68672 97478 39685 30485 96632 52537 53317  
13 Dec 2011 ‘371’ 265 8 46062 68672 97478 39685 30485 96632 52537 53317

**20th/27th E17z** ‘674’ 289 5 34682 17455 52122 42277 76294  
21 Jun 2011 ‘418’ 269 5 34682 17455 55122 40995 14557  
27 Jan 2011 ‘624’ 870 5 34682 17455 55122 40995 14557  
14 Dec 2010 ‘278’ 435 6 34682 17455 55122 40995 14557 98045  
15 Dec 2010 ‘481’ 257 6 34682 17455 55122 40995 14557 98045  
4 Jan 2011 ‘537’ 496 8 34682 17455 55122 40995 14557 98045 95672 71514  
7 Sep 2012 ‘516’ 972 8 34682 17455 55122 40995 14557 98045 95672 71514  
19 Oct 2011 ‘745’ 910 6 34682 17455 55122 40995 15447 98065

**18th/25th 0930/40** ‘516’ 804 7 11171 64385 82707 06123 22536 88280 84116  
21 Nov 2012 ‘729’ 480 5 11171 64385 82707 06123 22536  
6 Nov 2012 ‘374’ 290 5 11171 64385 82707 06123 22536  
7 Dec 2011 ‘371’ 520 6 11171 64385 82707 06123 22536 78280  
13 Nov 2012 ‘374’ 290 5 11171 64385 82707 06124 22536  
18 Jul 2012 ‘153’ 268 7 11171 64385 82707 06124 22536 88280 53718

#### S06 log February:

Sat 2nd	19:30	3172	‘426’ 00000
	20:00	4048	‘319’ 00000
	20:30	4784	‘857’ 00000
	21:00	3569	‘319’ 00000
	21:30	4017	‘857’ 00000
Mon 4th	19:05	3838	‘349’ 00000
Tues 5th	18:00	3645	‘617’ 00000
Sat 9th	16:05	5943	‘764’ 00000
Mon 11th	19:15	9255	‘789’ 00000
	20:15	7630	‘789’ 00000
Tues 12th	18:00	3645	‘617’ 00000
Thurs 14th	08:30	9225	‘480’ 167 44 64950 21574 35374 12960 46909.....96901
	09:00	6810	‘480’ 167 44 64950 21574 35374 12960 46909.....96901
	19:05	3838	‘349’ 00000
Sat 16th	16:05	5943	‘764’ 00000
	19:30	3172	‘426’ 00000
	20:00	4038	‘319’ 00000
	20:30	4784	‘857’ 00000
	21:00	3549	‘319’ 00000

#### S06s log February report:

ID 934 still sending nulls on 6314/6788/7125/7566/8115 and 8440 at 10 minutes intervals.  
On Friday 8th ID 934 was not found at 0600 and at 0610 was using new frequency of 9354kHz.  
The 0650 sending was absent from 8440 and a 4 minute search failed to find it.  
Friday 15th found it on normal schedule (6085kHz) sending traffic once again.

#### S06s log February:

##### Mondays

4th/11th	0830/40	8234/9270	‘371’ 489 5 27364 58960 92744 89125 37782
18th/25th			‘371’ 962 5 88280 84116 53718 78924 34694
4th/11th	0900/10	14675/12830	‘872’ 963 5 18274 56743 09188 73826 99232
18th/25th			‘872’
4th/11th	1300/10	8420/10635	‘831’ 956 7 15289 37284 65740 91098 67549 67635 65678
18th/25th			‘831’ 524 6 57440 10597 23521 47660 92883 69901

##### Tuesdays

5th/12th	0600/10	?	‘438’ Not found
5th/12th	0700/15	5250/6320	‘374’ 908 5 45362 18927 67891 01928 51092
19th/26th			‘374’ 581 6 46186 16945 80744 65200 84706 88280
5th/12th	0730/40	7410/11532	‘427’ 901 5 11171 64385 82707 06123 22438
19th/26th			‘427’ 908 5 40613 77249 40686 17967 21816
5th/12th	0800/10	10265/9135	‘352’ 974 6 88554 82045 36717 24042 75967 31670
19th/26th			‘352’ 894 6 33796 13577 74526 46647 79302 53516
5th/12th	1000/10	6440/5660	‘893’ 206 5 48115 24151 51802 23807 15521
19th/26th			‘893’

5th/12th 1500/10 6845/9170 '537' 902 6 52401 63919 92699 14600 74248 48754  
 19th/26th '537' 984 6 67453 79806 76734 21436 78774 33101

### Wednesdays

6th/13th	0530/40	9435/11075	'153' Too weak to copy
6th	0820/30	6880/7840 '471'	823 5 58601 41438 03092 68362 01653
20th/27th	0820/30	???	'471' ???
6th/13th	0830/40	7335/11830	'745' 823 6 88569 89617 25757 77159 95225 84090
20th/27th			'745' 921 6 95225 84090 09531 88430 33240 61135
6th/13th	0840/50	9260/11415	'328' 961 5 05899 50387 45847 23013 89758
20th/27th			'328' 904 5 52436 76859 10926 87337 45458
6th/13th	1000/10	12365/14280	'729' 481 5 68672 87478 39685 30485 52537
20th/27th			'729' 486 5 78236 76548 01992 78236 23109
6th/13th	1230/40	4580/6420	'967' 408 5 71909 83981 24035 48115 52985
20th/27th			'967' ?

### Thursdays

<b>7th/14 (E17z)</b>	<b>0800/10</b>	<b>11170/9820</b>	<b>'674' 280 5 96320 36793 52038 76342 88554</b>
<b>21st/28th</b>			<b>'674' 203 5 46062 68672 97478 39865 30485</b>
7th/14th	0900/10	12952/13565	'167' 204 5 96632 52537 53317 06675 41736
21st/28th			'167' 908 5 21767 53672 11834 81022 36903
7th/14th	0900/10	5410/6770	'624' 810 5 37568 55995 54592 28665 44761
21st/28th			'624' ?
7th/14th	0930/40	8812/9540	'314' 290 5 45562 63207 21065 53450 79651
21st/28th			'314' 928 5 59496 66029 44471 88253 88653
7th/14th	1200/10	12155/10920	'425' 813 6 20613 29076 57605 45562 52562 53207
21st/28th			'425' 819 6 84431 34529 20661 64688 75832 89745

### Fridays

1st/8th	0600/0610	See above	'934' Null sendings
15th/22nd		6085/8813	'934' 521 6 16945 80744 86200 84706 42227 61736
1st/8th	0700/0710	7150/8215	'196' 820 5 10928 78645 38912 56748 38380
15th/22nd			'196' 240 5 48115 24151 51802 23807 15521
1st/8th	0800/0810	5810/6770	'278' 540 6 43278 98711 43563 98955 63546 54781
15th/22nd			'278' 531 6 88280 84116 53781 22536 78927 34681
1st/8th	0930/0940	11780/12570	'516' 924 7 46062 68672 97778 39685 30485 11171 64385
15th/22nd			'516' 894 7 52401 63919 92699 14600 74248 48754 65125

### Saturday

2nd	1200/1210	8680/8260	'254' 910 6 12542 97525 85532 54548 77592 80417
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### Some examples of repeated message strings. This months' in **BOLD**

<b>5th/12th 1000/10</b>	<b>6440/5660</b>	<b>'893' 206 5 48115 24151 51802 23807 15521</b>
19 Dec 2012	4580	'967' 214 5 24151 51802 23807 15521 98003
<b>21st/28th E17z</b>	<b>11170</b>	<b>'674' 203 5 46062 68672 97478 39865 30485</b>
<b>1st/8th 0930/0940</b>	<b>11780/12570</b>	<b>'516' 924 7 46062 68672 97778 39685 30485 11171 64385</b>
2 Oct 2012	6930	'374' 915 6 46062 68672 94748 39685 30485 96632
27 Mar 2010		7340 '893' 407 5 46062 68672 97478 39685 30485
18 Jul 2012		6755 '471' 203 5 46062 68672 97478 39685 30485
1 Nov 2012		12952 '167' 209 5 46062 68672 97478 39685 30485
21 Nov 2012		6420 '967' 201 5 46062 68672 97478 39685 30485
16 Jan 2013		6420 '967' 480 5 46062 68672 97478 39685 30485
4 Jan 2013	5810	'278' 549 6 46062 68672 97478 39685 30485 96632
17 Nov 2011	0900	'167' 945 8 46062 68672 97478 39685 30485 96632 52537 53317
13 Dec 2011	0700	'371' 265 8 46062 68672 97478 39685 30485 96632 52537 53317
<b>1st/8th 0930/0940</b>	<b>11780/12570</b>	<b>'516' 924 7 46062 68672 97778 39685 30485 11171 64385</b>
21 Nov 2012	12365	'729' 480 5 <b>11171 64385</b> 82707 06123 22536
6 Nov 2012	5250	'374' 290 5 <b>11171 64385</b> 82707 06123 22536
7 Dec 2011	1900	8,530 '371' 520 6 <b>11171 64385</b> 82707 06123 22536 78280
13 Nov 2012		5250 '374' 290 5 <b>11171 64385</b> 82707 06124 22536
18 Jul 2012	11435	'153' '268 7 <b>11171 64385</b> 82707 06124 22536 88280 53718
<b>5th/12th 0800/10</b>	<b>10265/9135</b>	<b>'352' 974 6 88554 82045 36717 24042 75967 31670</b>
3 Oct 2012	13365	'729' 840 5 82045 36717 24042 75956 31670
3 Jan 2013	8812	'314' 820 5 82045 36717 24042 75956 78927
<b>15th/22nd</b>	<b>11780</b>	<b>'516' 894 7 52401 63919 92699 14600 74248 48754 65125</b>
12 Jul 2012		12952 '167' 290 5 52401 63919 92699 14600 47248
19 Nov 2012		8234 '371' 240 5 52401 63919 92699 14600 47248
5 Dec 2012		6880 '471' 863 5 52401 63919 92699 14600 47248
18 Jul 2012		14580 '729' 403 5 52401 63919 92699 14600 72438
21 Dec 2010	1230	5810 '278' 409 5 52401 63919 92699 14600 74248
18 Nov 2011	0710	'196' 843 5 52401 63919 92699 14600 74248
22 Jun 2011	0730	7335 '745' 892 6 52401 63919 92699 14600 74248 48754
1 Oct 2012	11460	'831' 572 6 52401 63919 92699 14600 74248 48754
2 Oct 2012	7242	'537' 918 6 52401 63919 92699 14600 74248 48754
7 Dec 2012		5810 '278' 950 6 52401 63919 92699 14600 74248 48754
4 Jan 2013	11780	'516' 928 7 52401 63919 92699 14600 74248 48754 65125

Now onto others logs

### S06 January 2013

3192kHz1900z	07/01[349R3x/00000] 1904z Fair	ATC	MON
4784kHz2030z	05/01[857 00000]2034z S9+10	MP, Spectre	SAT

### February 2013

3172kHz1930z	02/02[426/00000] 1934z Strong	ATC	SAT
1930z	16/02[426R3x/00000] 1934z Strong	ATC	SAT
3838kHz1905z	04/02[349x3 00000.....]1909z S9	M8	MON
1905z	21/02[349 349 349 00000 R4m] 1909z QSA4 QRM5 QRN4 QSB4	tiNG	THU
1905z	25/02[349 349 349 00000 R4m] 1909z QSA5 QRM5 QRN5 QSB4	tiNG	MON
4017kHz2130z	02/02[857 00000] 2134z Fair QRN3 QSB3	Spectre	SAT
2130z	16/02[857 00000] 2134z Fair RTTYQRM3 QSB3	Spectre	SAT
4784kHz2030z	02/02[857 00000] 2034z Fair QRN3 QSB3	Spectre	SAT
2030z	16/02[857 00000] 2034z Fair QRN3 QSB3	Spectre	SAT
5943kHz1605z	16/02[764x3 00000.....]1609z S9+10	M8	SAT
9225kHz0840z	20/02[736 44 ?????....43347] 0840z Fair	ATC	WED
	736 44 /????? 62853 29344 45434 04714 58814 36804 26660 57154 43347 736 44 00000		
9255kHz1915z	25/02[789 789 789 00000 R4m] 1919z QSA4 QRM5 QRN4 QSB4	tiNG	MON

### S06s January 2013

5250kHz0700z	01/01[374 289 5 89645 67312 80978 88021 34365 289 5 00000(s)] 0705z Fair QRN3 QSB3	Spectre	TUE
0700z	08/01[374 289 5 89645 67312 80978 88021 34365 289 5 00000(s)] 0705z Fair QRN3 QSB3	Spectre	TUE
0700z	15/01[374 509 6 55445 50128 99477 83574 48874 94031 509 6 00000(s)] 0705z Strong QRN2 QSB2	ATC, Spectre	TUE
0700z	22/01[374 509 6 55445 50128 99477 83574 48874 94031 509 6 00000(s)] 0705z Fair QRN2 QSB2	Spectre	TUE
5410kHz0900z	24/01[624 835 7 99228 77534 04816 51269 03176 58842 55499 835 7 00000]0905z S1	M8	THU
5460kHz0600z	04/01[934 267 5 16070 48834 99477 83574 53718 267 5 00000(s)] 0605z Weak QRN3 QSB3	Spectre	FRI
0600z	11/01[934 267 5 16070 48834 99477 83574 53718 267 5 00000(s)] 0605z Weak QRN3 QSB3	Spectre	FRI
5660kHz1010z	22/01[893 210 5 24035 48115 24151 51802 91497 210 5 00000]1015z barely audible S5	MP	TUE
5810kHz0800z	11/01[278 549 6 46062 68672 97438 39685 30485 96632]	GD	FRI
6085kHz0600z	04/01[934 267 5 16070 48834 99477 83574 53718 267 5 00000] Very strong, QRM	FR	FRI
0600z	11/01[934 267 5, repeat from 04/01] Very strong signal, weak noise	FR	FRI
6320kHz0710z	01/01[374 289 5 89645 67312 80978 88021 34365 289 5 00000(s)] 0715z Fair QRN3 QSB3	Spectre	TUE
0710z	08/01[374 289 5 89645 67312 80978 88021 34365 289 5 00000(s)] 0715z Fair QRN3 QSB3	Spectre	TUE
0710z	15/01[374 509 6 55445 50128 99477 83574 48874 94031 509 6 00000(s)] 0715z Fair QRN3 QSB3	Spectre	TUE
0710z	22/01[374 509 6 55445 50128 99477 83574 48874 94031 509 6 00000(s)] 0715z Fair QRN3 QSB3	Spectre	TUE
6440kHz1000z	22/01[893 210 5 24035 48115 24151 51802 91497 210 5 00000]1005z S8 QRM2	MP	TUE
6770kHz0910z	24/01 [624 835 7 99228 77534 04816 51269 03176 58842 55499 835 7 00000]0915z S2	M8	THU
6845kHz1500z	15/01[537 ?????] 1505z Very Weak, faded out QSB5	ATC	TUE
6880kHz0820z	30/01[471/00000] 0823z Very Weak	ATC	WED
7150kHz0700z	04/01[196 234 5 52343 79628 42432 56075 56281 234 5 00000] 0705z Weak	ATC	FRI
0700z	11/01[196 234 5, repeat from 04/01] Very strong signal, weak noise	FR	FRI
0700z	18/01[196 283 5 84090 09631 88430 33240 61135 283 5 00000] Strong signal, moderate noise, bleeding	FR	FRI
7335kHz0830z	02/01[745 982 6 93872 13187 86558 52986 99393 18470 982 6 00000]0835z S2	M8	WED
0830z	16/01[745 283 6 99228 77544 04816 56557 50316 72237 283 6 00000(s)] 0835z Strong QRN4 QSB2	Spectre	WED
0830z	23/01[745 283 6 99228 77544 04816 56557 50316 72237 283 6 00000(s)] 0835z Fair QRN3 QSB2	Spectre	WED
7410kHz0730z	15/01[427869 5 83981 24034 84090 09531 23521 869 5 00000] 0735z Very Strong	ATC	TUE
	7440kHz 0740z      01/01 [NRH] Spectre TUE 0740z      08/01 [NRH] Spectre TUE 0740z      15/01 [NRH] Spectre TUE 0740z      22/01 [NRH] Spectre TUE		

(Note, I have been monitoring this time and frequency over this month, without anything more been heard of 427.)

7840kHz0830z	16/01[471 236 5 40995 55122 14576 98045 78802 236 5 00000(s)] 0835z Fair QRN4 QSB3 0830z 23/01[236 5 40995 55122 14576 98045 78802 236 5 00000] 0835z S9+10 0830z 30/01[471/00000] 0833z Weak	Spectre MP ATC	WED WED WED
8215kHz0710z	04/01[196 234 5 52343 79628 42432 56075 53281 234 5 00000] Very strong, QRM 0710z 11/01[196 234 5, repeat from 04/01] Very strong signal, weak noise 0710z 18/01[196 283 5 84090 09631 88430 33240 61135 283 5 00000] Very strong signal, weak noise	FR FR FR	FRI FRI FRI
8234kHz0830z	14/01[371 920 5 98835 46186 16945 80744 21816 920 5 00000] 0835z S2	M8	MON
8260kHz 1210z	05/01[254 910 6 12542 97525 85532 54548 77592 80417 910 6 00000] Strong, QRM	FR	SAT
8420kHz1300z	07/01[831 957 6 29245 28842 82264 14255 81545 74167 957 6 00000(s)] 1305z Weak QRN3 QSB3 1300z 14/01[831 957 6 29245 28842 82264 14255 81545 74167 957 6 00000(s)] 1305z Weak QRN3 QSB3 1300z 21/01[831 529 6 35587 40496 16812 85564 15279 40816 529 6 00000(s)] 1305z Weak QRN4 QSB3 1300z 28/01[831 529 6 35587 40496 16812 85564 15279 40816 529 6 00000(s)] 1305z Weak QRN3 QSB3	Spectre Spectre Spectre Spectre	MON MON MON MON
8680kHz 1200z	05/01[254 910 6 12542 97525 85532 54548 77592 80417 910 6 00000] Strong, QRM	FR, Spectre	SAT
8812kHz0930z	03/01[314 820 5 82045 36717 24042 75956 74927 820 5 00000] 0935z weak 0930z 24/10[314 870 5 13808 71909 83981 24035 48115 870 5 00000] 0935z S2	M8 M8	THU THU
9135kHz0810z	01/01[352 814 6 97298 19155 12244 15606 19546 79663 814 6 00000] Very strong, QRM 0810z 08/01 [352 814 6 97298 19155 12244 15906 19546 79663 814 6 00000(s)] 0815z Fair QRN3 QSB3	FR Spectre	TUE TUE
9170kHz1510z	08/01[537 291 6 58440 10597 23521 47660 92883 62827 291 6 00000] 1515z Very Weak 1510z 15/01[537 ????] 1515z Very Weak, faded out QSB5 1510z 22/01[537 840 6 28581 36561 82575 51285 ?1948 56438 840 6 00000] 1515z Very Weak QSB3	ATC ATC ATC	TUE TUE TUE
9260kHz0840z	02/01[745 982 6 93872 13187 86558 52986 99393 18470 982 6 00000] 0845z S4 0840z 23/01[410 5 88620 58069 61732 74537 57440 410 5 00000] 0845z S9+10 0840z 30/01[328/00000] 0843z Fair	M8 MP ATC	WED WED WED
9270kHz0840z	14/01[371 920 5 98835 46186 16945 80744 21816 920 5 00000] 0845z S3	M8	MON
9540kHz0940z	24/01[314 870 5 13808 71909 83981 24035 48115 870 5 00000] 0945z S2	M8	THU
10265kHz0800z	01/01[352 814 6 97298 19155 12244 15906 19546 79663 814 6 00000(s)] 0805z Fair QRN3 QSB3 0800z 08/01[352 814 6 97298 19155 12244 15906 19546 79663...]	Spectre GD	TUE TUE
10635kHz1310z	07/01[831 957 6 29245 28842 82264 14255 81545 74167 957 6 00000(s)] 1315z Fair QRN3 QSB3 1310z 14/01[831 957 6 29245 28842 82264 14255 81545 74167 957 6 00000(s)] 1315z Fair QRN3 QSB3 1310z 21/01[831 529 6 35587 40496 16812 85564 15279 40816 529 6 00000(s)] 1315z Fair QRN4 QSB3 1310z 28/01[831 529 6 35587 40496 16812 85564 15279 40816 529 6 00000(s)] 1315z Fair QRN3 QSB3	Spectre Spectre Spectre Spectre	MON MON MON MON
10920kHz1210z	17/01[425 ...] Weak sigs, little copy	CB	THU
11780kHz0930z	04/01[516 928 7 52401 63919 92699 14600 74248 48754 65125 928 7 00000] 0935z Weak 0930z 18/01[516 804 7 11171 64385 82707 06123 22536 88280 84116 804 7 00000(s)] 0936z Weak QRN4 QSB4 0930z 25/01[516 804 7 11171 64385 82707 06123 22536 88280 84116 804 7 00000(s)] 0936z Strong QRN3 QSB2	ATC Spectre Spectre	FRI FRI FRI
11830kHz0840z	02/01[328 516 7 82173 94404 39291 87561 50670 42183 90893 516 7 00000] 0845z S2 0840z 16/01[745 283 6 99228 77544 04816 56557 50316 72237 283 6 00000(s)] 0845z Fair QRN4 QSB2 0840z 23/01[745 283 6 99228 77544 04816 56557 50316 72237 283 6 00000(s)] 0845z Fair QRN3 QSB3	M8 Spectre Spectre	WED WED WED
11415kHz0850z	02/01[328 516 7 82173 94404 39291 87561 50670 42183 90893 516 7 00000] 0850z S7 0850z 23/01[410 5 88620 58069 61732 74537 57440 410 5 00000] 0855z S9+20 0850z 30/01[328/00000] 0853z Strong	M8 MP ATC	WED WED WED
12365kHz1000z	02/01[729 410 5 24001 88749 19970 14513 81432 410 5 00000] 1005z S6 1000z 09/01[729 410 5 24001 88749 19970 14513 81432 410 5 00000(s)] 1005z Fair QRN2 QSB2 1000z 16/01[729 406 5 47665 94092 48521 63888 92060 406 5 00000(s)] 1005z Fair QRN3 QSB3 1000z 23/01[729 406 5 47665 94092 48521 63888 92060 406 5 00000(s)] 1005z Fair QRN4 QSB3 1000z 30/01[729/00000] 1004z Weak	M8 Spectre Spectre Spectre ATC	WED WED WED WED
12570kHz0940z	04/01[516 928 7 52401 63919 92699 14600 74248 48754 65125 928 7 00000] 0935z Very Weak 0940z 18/01[516 804 7 11171 64385 82707 06123 22536 88280 84116 804 7 00000(s)] 0946z Weak QRN4 QSB4 0940z 25/01[516 804 7 11171 64385 82707 06123 22536 88280 84116 804 7 00000(s)] 0946z Fair QRN3 QSB2	ATC Spectre Spectre	FRI FRI FRI
12952kHz 0900z	03/01[167 238 5 78463 72819 84756 01992 77321 238 5 00000(s)] 0905z Fair QRN3 QSB3 0900z 10/01[167 238 5 78463 72819 84756 01992 77321 238 5 00000(s)] 0905z Fair QRN3 QSB3 0900z 17/01[167 423 5 73124 72277 76293 37538 21065 423 5 00000(s)] 0905z Strong QRN3 QSB2 0900z 24/01[167 423 5 73124 72277 76293 37538 21065 423 5 00000(s)] 0905z Fair QRN3 QSB3	Spectre Spectre Spectre Spectre, M8	THU THU THU THU
13565kHz 0910z	03/01[167 238 5 78463 72819 84756 01992 77321 238 5 00000(s)] 0915z Fair QRN3 QSB3 0910z 10/01[167 238 5 78463 72819 84756 01992 77321 238 5 00000(s)] 0915z Fair QRN3 QSB3 0910z 17/01[167 423 5 73124 72277 76293 37538 21065 423 5 00000(s)] 0915z Strong QRN3 QSB2 0910z 24/01[167 423 5 73124 72277 76293 37538 21065 423 5 00000(s)] 0915z Fair QRN3 QSB3	Spectre Spectre Spectre Spectre, M8	THU THU THU THU
14280kHz1010z	02/01[729 410 5 24001 88749 19970 14513 81432 410 5 00000(s)] 1015z Fair QRN2 QSB2	Spectre, M8	WED

1010z	09/01[729 410 5 24001 88749 19970 14513 81432 410 5 00000(s)] 1015z Fair HAMQRM3 QSB2	Spectre	WED
1010z	16/01[729 406 5 47665 94092 48521 63888 92060 406 5 00000(s)] 1015z Fair QRN3 QSB3	Spectre	WED
1010z	23/01[729 406 5 47665 94092 48521 63888 92060 406 5 00000(s)] 1015z Fair HAMQRM3 QSB2	Spectre, ATC	WED
(Note Ham Ops talking on 14280kHz 09/01 prior to S06s transmission, when S06s began its transmission the Ham Ops stopped talking and didn't continue their conversation until S06s had finished its broadcast. They were very considerate, it was a nice enjoyable moment.)			

### February 2013

S06s

4580kHz1230z 1230z	20/02[967 481 5 78935 65674 83920 11987 82935 481 5 00000(s)] 1235z Weak QRN3 QSB3 27/02[967 481 5 78935 65674 83920 11987 82935 481 5 00000(s)] 1235z Weak QRN3 QSB3	Spectre Spectre	WED WED
5250kHz0700z 0700z 0700z	05/02[374 908 5 ?????] 0705z Very Weak QSB5 12/02[374 908 5 45362 18927 67891 01928 51092 908 5 00000] 0705z Fair 19/02[374 581 6 46186 16945 80744 65200 84706 88280 581 6 00000] 0705z Fair	ATC ATC ATC	TUE TUE TUE
5660kHz1010z	12/02[893 206 5 48115 24151 51802 23807 ***21 206 5 00000] 1015z S5-6	MP	TUE
6420kHz1240z 1240z	20/02[967 481 5 78935 65674 83920 11987 82935 481 5 00000(s)] 1245z Weak QRN3 QSB3 27/02[967 481 5 78935 65674 83920 11987 82935 481 5 00000(s)] 1245z Weak QRN3 QSB3	Spectre Spectre	WED WED
6440kHz1000z	05/02[893 206 5 98115 ?????] Very Weak QSB5	ATC	TUE
6845kHz1500z 1500z 1500z 1500z	05/02[537 902 6 52401 63919 92699 14600 74248 48754 902 6 00000] 1505z Very Weak 12/02 heard active but barely audible with hi noise) 12/02[537 902 6 52401 63919 92699 14600 74248 48754 906 6 00000] 1505z Very Weak 19/02[537 984 6 67453 79806 76734 21436 78774 33101 984 6 00000] 1505z Very Weak	ATC CB ATC ATC	TUE TUE TUE TUE
6880kHz0820z	06/02[471 823 5 58601 41438 03092 68362 01653 823 5 00000] 0825z Fair	ATC	WED
7150kHz0700z 0700z 0700z	01/02[196 820 5 Difficult To Copy] 0705z Weak QRN3 QSB3 08/02[196 820 5 10928 78645 38912 56748 38380 820 5 00000] Very strong signal, weak/moderate noise 15/02[196 240 5 48115 24151 51802 23807 15521 240 5 00000] 0705z Very Weak QRM5 Amateurs	Spectre FR ATC	FRI FRI FRI
7335kHz0830z 0830z	20/02[745 921 6 95225 84090 09531 88430 33240 61135 921 6 00000(s)] 0835z Fair QRN2 QSB2 27/02[745 921 6 95225 84090 09531 88430 33240 61135 921 6 00000(s)] 0835z Fair QRN2 QSB2	Spectre, MP Spectre	WED WED
7410kHz0730z 0730z 0730z	05/02[427 901 5 11171 64385 82707 06123 22438 901 5 00000] 0735z Very Strong 12/02[427 901 5 11171 64385 82707 06123 22438 901 5 00000] 0735z Very Strong 19/02[427 908 5 40613 77249 40686 17967 21816 908 5 00000] 0735z Very Strong	ATC ATC ATC	TUE TUE TUE
7840kHz0830z	06/02[471 823 5 58601 41438 03092 68362 01653 823 5 00000] 0835z Strong	ATC	WED
8216kHz0710z	08/02[196 820 5 10928 78645 38912 56748 38380 820 5 00000] Very strong signal, weak noise	FR	FRI
8260kHz1210z	02/02[254 910 6 12542 97525 85532 54548 77592 80417 910 6 00000(s)] 1215z Weak QRN3 QSB3	Spectre, FR, ATC	SAT
8420kHz1300z 1300z	04/02[831 956 7 15289 37284 65740 91098 67549 67635 65678 956 7 00000] 1305z S2 19/02[831 524 6 57440 10597 23521 47660 92883 69901 524 6 00000] 1305z S1	M8, ATC M8	MON MON
8680kHz1200z	02/02[254 910 6 12542 97525 85532 54548 77592 80417 910 6 00000(s)] 1205z Weak QRN3 QSB3	Spectre, FR, ATC,	SAT
8813kHz0610z	15/02[934 521 6 16945 80744 86200 84706 ????? 61736 521 6 00000] 1615z Very Weak	ATC	FRI
9135kHz0810z 0810z 0810z 0810z	05/02[352 974 6 88554 82045 36717 24042 75967 31670 974 6 00000] 0815z Very Strong 12/02[352 974 6 88554 82045 36717 24042 75967 31670 974 6 00000] 0815z Very Weak 19/02[352 894 6 33796 13577 74526 46647 79302 53516 894 6 00000] 0815z Weak 26/02[352 894 6 33796 13577 74526 46647 79302 53516 894 6 00000(s)] 0805z Fair QRN3 QSB3	ATC ATC ATC Spectre	TUE TUE TUE TUE
9170kHz1510z 1510z 1510z	05/02[537 902 6 52401 63919 92699 14600 74248 48754 902 6 00000] 1515z Strong 12/02[537 902 6 52401 63919 92699 14600 74248 48754 906 6 00000] 1515z Very Weak 19/02[537 984 6 67453 79806 76734 21436 78774 33101 984 6 00000] 1515z Fair	ATC ATC, CB ATC	TUE TUE TUE
9260kHz0840z 0840z 0840z	06/02[328 961 5 05899 50387 45847 23013 89758 961 5 00000] 0845z Fair 20/02[328 904 5 52436 76859 10926 87337 45458 904 5 00000] 0845z S9+10 27/02[328 904 5 52436 76859 10926 87337 45458 904 5 00000] 0845z S9+10	ATC MP, ATC MP	WED WED WED
9270kHz0840z	19/02[371 962 5 88280 84116 53718 78924 34694 962 5 00000] 0845z S5	M8	MON
10265kHz0800z 0800z	19/02[352 894 6 33796 13577 74526 46647 79302 53516 894 6 00000(s)] 0805z Fair QRN3 QSB3 26/02[352 894 6 33796 13577 74526 46647 79302 53516 894 6 00000(s)] 0805z Fair QRN3 QSB3	Spectre Spectre	TUE TUE
10635kHz1310z 1310z 1310z	04/02[831 956 7 15289 37284 65740 91098 67549 67635 65678 956 7 00000] 1315z S2 11/02[831 956 7 15289 37284 65740 91098 67549 67635 65678 956 7 00000] 1315z Weak 19/02[831 524 6 57440 10597 23521 47660 92883 69901 524 6 00000] 1315z S6	M8, ATC ATC M8	MON MON MON
11415kHz0850z 0850z 0850z	06/02[328 961 5 05899 50387 45847 23013 89758 961 5 00000] 0855z Fair 20/02[328 904 5 52436 76859 10926 87337 45458 904 5 00000] 0855z Fair 27/02[328 904 5 52436 76859 10926 87337 45458 904 5 00000] 0855z S9+20	ATC ATC MP	WED WED WED
11780kHz0930z 0930z	01/02[516 928 7 46062 68672 97778 39685 30485 11171 64385 928 7 00000] 0935z S9+10 08/02[516 924 7 46062 68672 97778 39685 30485 11171 64385 924 7 00000] Strong, QRM	M8, ATC FR	FRI FRI

0930z	15/02[516 894 7 52401 63919 92699 14600 74248 48754 65125 894 7 00000] Very strong signal, QRM	FR, M8	FRI
0930z	22/02[516 894 7 52401 63919 92699 14600 74248 48754 65125 894 7 00000(s)] 0936z Strong QRN2 QSB2	Spectre	FRI
11830kHz0840z	20/02[745 921 6 95225 84090 09531 88430 33240 61135 921 6 00000(s)] 0845z Fair QRN2 QSB2	Spectre	WED
0840z	27/02[745 921 6 95225 84090 09531 88430 33240 61135 921 6 00000(s)] 0845z Fair QRN2 QSB2	Spectre	WED
12365kHz1000z	06/02[729 481 5 68672 97468 39685 30485 52537 981 5 00000] 1005z Weak	ATC	WED
1000z	20/02[729 486 5 78236 76548 01992 78236 23109 486 5 00000] 1005z S9+20	MP, ATC, Spectre	WED
1000z	27/02[729 486 5 78236 76548 01992 78236 23109 486 5 00000(s)] 1005z Fair QRN3 QSB3	Spectre	WED
12570kHz0940z	01/02[516 928 7 46062 68672 97778 39685 30485 11171 64385 928 7 00000] 0945z S9+10	M8, ATC	FRI
0940z	08/02[516 924 7 46062 68672 97778 39685 30485 11171 64385 924 7 00000] Strong, QRM	FR	FRI
0940z	15/02[516 894 7 52401 63919 92699 14600 74248 48754 65125 894 7 00000] Very strong signal, QRM	FR, M8	FRI
0940z	22/02[516 894 7 52401 63919 92699 14600 74248 48754 65125 894 7 00000(s)] 0946z Strong QRN2 QSB2	Spectre	FRI
12952kHz0900z	21/02[167 908 5 53672 11834 81022 36903 908 5 00000] 0905z S9+20	MP	THU
14280kHz1010z	06/02[729 481 5 68672 87478 39685 30485 52537 481 5 00000(s)] 1015z Fair QRN4 QSB4	Spectre, ATC	WED
1010z	13/02[729 481 5 68672 87478 39685 30485 52537 481 5 00000(s)] 1015z Fair QRN2 QSB2	Spectre	WED
1010z	20/02[729 486 5 78236 76548 01992 78236 23109 486 5 00000(s)] 1015z Fair QRN3 QSB3	Spectre, ATC	WED
1010z	27/02[729 486 5 78236 76548 01992 78236 23109 486 5 00000(s)] 1015z Fair QRN3 QSB3	Spectre	WED

PoSW's S06 logs finish the column:

#### Saturday 1600 or 1605 UTC Schedule:-

5-Jan-13:- 1605 UTC, 5,943 kHz, "764 764 764 00000", signal strength S6 to S7. Has changed call again, heard on several Saturdays in the last two months of 2012 with call "937" and in the rest of 2012 and throughout 2011 with call "134".

19-Jan-13:- 1605 UTC, 5,943 kHz, "764 764 764 00000". S9 to S9+, carrier with tone noted on 5,943 at 1552z, single spoken "764" just before 1555z, carrier QRT until start of transmission at 1605.

26-Jan-13:- 1605 UTC, 5,943 kHz, "764 764 764 00000", S7.

2-Feb-13:- 1605 UTC, 5,931 kHz, slight drop in frequency, "764 764 764 00000", S9 signal, heterodyne from carrier of broadcast station removed by using receiver in USB mode.

16-Feb-13:- 1605 UTC, 5,943 kHz, "764 764 764 00000". Strong signal, and something different here; this was transmitted in SSB, or to be more precise single sideband suppressed carrier, so the receiver needed to be in USB mode to render the speech intelligible and not just to remove the interference from the broadcast station on the LF side.

23-Feb-13:- 1600 UTC, 7,387 kHz, "764 764 764 00000". S9+, very strong, over-riding nearby broadcasters. First time this year heard "on the hour".

#### Saturday 1930 or 1935 UTC Schedule:-

5-Jan-13:- 1935 UTC, 3,834 kHz, "426 426 426 00000", S7 signal, found just after 1936z. A change of call and frequencies for 2013 for this weekly Saturday schedule, heard throughout 2012 with call "843".

19-Jan-13:- 1930 UTC, 3,172 kHz, "426 426 426 00000", peaking S8

26-Jan-13:- 1930 UTC, 3,172 kHz, "426 426 426 00000".

2-Feb-13:- 1930 UTC, 3,172 kHz, "426 426 426 00000", S9 signal.

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

5-Jan-13:- 2000 UTC, 4,033 kHz, "319 319 319 00000". S9 signal, found approx 30 seconds into the transmission. As with the other Saturday S06 schedules has changed call, ran throughout 2012 with "416".

2100 UTC, 3,563 kHz, second sending, S8 signal in the CW portion of the 80 metre amateur band.

19-Jan-13:- 2000 UTC, 4,039 kHz, not quite the same as last time, "319 319 319 00000".

2100 UTC, 3,569 kHz, second sending also slightly higher in frequency than on the 5<sup>th</sup>.

2-Feb-13:- 2000 UTC, 4,048 kHz, another slight shift in frequency, "319 319 319 00000", S9 signal.

2100 UTC, 3,569 kHz, second sending, strong amateur CW on close frequency.

#### First + Third Saturdays in the Month 2030 + 2130 UTC Schedule:-

5-Jan-13:- 2030 UTC, 4,784 kHz, "857 857 857 00000", S9+, very strong. Has changed from call "314" used in 2012. Heard on 5,118 + 4,452 kHz in November and December.

2130 UTC, 4,017 kHz, second sending, also S9+.

19-Jan-13:- 2030 UTC, 4,784 kHz, "857 857 857 00000", weaker than last time, S7 at best.

2130 UTC, 4,017 kHz, second sending, also S7 and with deep QSB.

2-Feb-13:- 2030 UTC, 4,784 kHz, "857 857 857 00000", peaking S9 with QSB.

2130 UTC, 4,017 kHz, second sending, S9+.

#### Monday + Thursday 1900 or 1905 UTC Schedule:-

Unlike the Saturday schedules above, this S06 remains unchanged in the New Year with regard to frequencies and call.  
 3-Jan-13, Thursday:- 1900 UTC, 3,192 kHz, “349 349 349 00000”.

7-Jan-13, Monday:- 1900 UTC, 3,192 kHz, “349 349 349 00000”.

10-Jan-13, Thursday:- 1905 UTC, 3,838 kHz, “349 349 349 00000”, S9 signal.

14-Jan-13, Monday:- 1900 UTC, 3,187 kHz, a bit lower in frequency just to confuse everyone, “349 349 349 00000”.

21-Jan-13, Monday:- 1905 UTC, 3,838 kHz, “349 349 349 00000”, S7 with deep QSB.

24-Jan-13, Thursday:- 1905 UTC, 3,838 kHz, “349 349 349 00000”, peaking over S9.

28-Jan-13, Monday:- 1905 UTC, 3,838 kHz, “349 349 349 00000”, S9 signal.

7-Feb-13, Thursday:- 1900 UTC, 3,192 kHz, “349 349 349 00000”, S8.

11-Feb-13, Monday:- 1905 UTC, 3,838 kHz, “349 349 349 00000”, S9 with QSB.

14-Feb-12, Thursday:- 1905 UTC, 3,838 kHz, “349 349 349 00000”, S9.

#### Second + Fourth Mondays in the Month 1915 + 2015 UTC Schedule:-

14-Jan-13:- 1915 UTC, 8,145 kHz, “384 384 384 00000”. S5 with deep QSB.

2015 UTC, 6,820 kHz, second sending, S6 to S7. No problem in finding these transmissions.

28-Jan-13:- 1915 UTC, 8,145 kHz, a very weak signal of some kind on this frequency, unreadable, only just detectable as a heterodyne with the receiver mode in USB and the tuning offset. If this was the S06 OM must have been a full message as it was still on well after the four minutes of the usual “00000” transmission, subsequently confirmed by the second sending:-

2015 UTC, 6,820 kHz, weak signal but readable, call “384”, DK/GC “902 902 86 86”.

Had improved to signal strength S5 when checked again at 2025z.

29-Jan-13, Tuesday:- 1915 UTC, 8,145 kHz, next day repeat of “full message”, much stronger signal than yesterday, “What a difference a day makes, twenty-four little hours”.

Peaking S7 with deep QSB, “384” and “902 902 86 86”.

2015 UTC, 6,820 kHz, second sending, S5 to S6.

11-Feb-13:- 1915 UTC, 9,255 kHz, “789 789 789 00000”, weak signal, S3 to S4 at best. Carrier noted on 9,255 five minutes earlier.  
 2015 UTC, 7,630 kHz, second sending, stronger signal, S7.

### S11a[III]

#### **S11a Jan/Feb log:**

6433kHz	1020z	02/01 [221/00]	RNGB	WED
	1020z	05/01 [221/00] Strong	Fox	SAT
	1020z	12/01 [221/00] Good	RNGB	SAT
	1020z	16/01 [221/00] Good	RNGB	WED
	1020z	19/01 [228/35 03588 77081 40054 00889 35147....25594] Fair	RNGB	SAT
	1020z	23/01 [221/00]	RNGB	WED
	1020z	02/02 [221/00] 1023z Fair QRN3 QSB3	Spectre	SAT
	1020z	06/02 [228/32 15944 58567 00740 45954 83654.....38630] Fair	RNGB	WED
	1020z	09/02 [227/36 23349 53395 41843 33069 28619.....72984] Weak	RNGB	SAT
	1020z	13/02 221/00] Weak	RNGB	WED
	1325z	16/02 [299/00] Ende 1328z S1	Malc	SAT
	1020z	20/02 [221/00]1023z S9	Marco, Spectre	WED
	1325z	23/02 [297/31 87391 45395 44056 56409 58947.....39939]	Fox	SAT
7504kHz	0915z	04/01 [484/00] Very strong	Fox	FRI
	0915z	08/01 [484/00] Strong	RNGB	TUE
	0915z	11/01 [484/00] 0918z Fair QRN3 QSB3	Spectre	FRI
	0915z	15/01 [484/00]	RNGB	TUE
	0915z	18/01 [486/30 23568 70010 97062 34814 79187.....98250]	RNGB	FRI
	0915z	22/01 [484/00]	RNGB	TUE
	0915z	25/01 [484/00] 0918z Very Weak QRN4 QSB4	Spectre	FRI
	0915z	29/01 [486/32 62801 31874 18699 95064 37830.....31064] Good	RNGB	TUE
	0915z	01/02 [484/00]	RNGB	FRI
	0915z	05/02 [484/30 89722 91499 48992 34528 46779.....99385] Good	RNGB	TUE
	0915z	08/02 [484/00]	Fox	FRI
	0915z	12/02 [484/00] Good	RNGB	TUE
	0915z	15/02 [485/36 89464 71505 96199 45306 86397.....40645] Good	RNGB	FRI
	0915z	22/02 [484/00] Konec 0918z QRM3 S9	Marco	FRI
9610kHz	1020z	04/01 [426/00]	RNGB	FRI
	1020z	08/01 [420/36 69669 28749 11198 49347 79007.....86251] Good	RNGB	TUE
	1020z	15/01 [426/00]	RNGB	TUE
	1020z	25/01 [420/33 89012 27855 02736 63827 84915.....06436] Fair	RNGB	FRI
	1020z	29/01 [426/00]	RNGB	TUE
	1020z	01/02 [426/00]	RNGB	FRI
	1020z	05/02 [426/00] Fair	RNGB	TUE
	1020z	08/02 [422/36 09693 60160 74484 58975 79016.....35734] Strong	Fox	FRI
	1020z	12/02 [426/00] Good	RNGB	TUE
	1020z	15/02 [426/00]	RNGB	FRI
	1020z	22/02 [426/00] Konec 1023z S9	Marco, Spectre	FRI

12530kHz 1015z	03/01 [475/00] Good	RNGB	THU
1015z	07/01 [475/00] Fair with heavy QRM	RNGB	MON
1015z	10/01 [478/30 37305 35287 41035 21592 55039.....12725]	RNGB	THU
1015z	14/01 [475/00]	RNGB	MON
1020z	17/01 [475/00] Good (late on parade)	RNGB	THU
1015z	21/01 [475/00] Good	RNGB, Malc	MON
1015z	24/01 [475/00]	RNGB	THU
1015z	28/01 [471/35 09540 11302 92434 40482 90848.....70280]	RNGB	MON
1015z	07/02 [475/00]	RNGB	THU
1015z	11/02 [475/00]	RNGB	MON
1015z	14/02 [478/33 50903 25240 34685 02761 27773.....54826]	RNGB	THU
1015z	18/02 [479/30 31226 18558 80618 39179 82782.....13023] S9	Marco, Spectre	MON

S11a 12530kHz 1015z 18/02 Transcript:

479/30  
31226 18458 80618 39179 82782 68924 27390 19331 74505 84494  
83601 54853 06819 39461 34275 00058 89022 50047 32171 16822  
66219 77060 25004 34783 52709 19218 81823 46497 89431 13023

Courtesy Spectre

### S21 January 2013

3823kHz1842	08/01[323 284 284 30 30]	GD	TUE
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### February2013

3323kHz1842z	12/02[323 ?????] Very weak Faded out at message start	ATC	THU
3823kHz1842z	14/02[323 317 317 30 30 ....]	GD	THU

### V02a January 2013

5417kHz0205z	04/01 strong	gil	FRI
5855kHz1000z	23/01[61374 ????? ?????]QSA1 QRM2	DanAR	WED
6768kHz0100z	05/01 end uk QRN5	Ggs	SAT
16180kHz2100z	29/01[?6431 ????? ????? ????? ????? QSA1 QRM1 2110z	DanAR	TUE

### V13 January 2013

### V21 January 2013

AnonUS writes, There's been quite a lot from V21 lately mostly on 6529kHz around 1400z. Today I found V21 on 6625kHz also. The format of this one is different from the regular counting heard on the normal 5637 and 6529kHz frequencies.

V21 6529kHz 1405z 24/1 In progress Count to 50 pausing at 10, 20, 30, 40.  
Count to 50 pausing at 10, 20, 30, 40. Count to 50 pausing at 10, 20, 30, 40.  
Count to 50 pausing at 10, 20, 30, 40. (Recording problem at this point).  
Recording restarts on 35 pausing at 40 stopping at 50.  
Count to 50 pausing at 10, 20, 30, 40. Count to 50 pausing at 10, 20, 30, 40.  
Count to 50 pausing at 10, 20, 30, 40.  
Count to 50 pausing at 10, 20, 30, 40.  
Count to 11 pausing at 10. (Abrupt end)

V21 6625kHz 1330z approx. 24/1 SS YL keys her mike and counts very slowly from 11 to 31 Restarts at 1 and counts to 8.  
Counts to 6 then unintelligible.

Counts to 6. Counts to 8. 90 second pause then begins with strings of numbers such as  
0044 45 93 5 31  
0433 493 11 0 0 0 0.  
0444 433 432 11 00 9 0.  
0431 495 1331 11 0 0  
0435 491 unintelligible 11 00 35

TX continued for at least 90 minutes with various length pauses between strings of numbers.

### Finally a little bit of intelligence has been gained on V21 Babbler - well possibly.

The Babbler usually an SS/OM counts upwards starting at 1 and pausing on various numbers. The number counted to varies from day to day and also within transmissions. Transmissions generally last 5-10 minutes and begin on or around 1400z in the winter months changing with US Daylight savings time to 1300z apparently to keep the transmissions around 9am Eastern Time in the United States.



Count to 30 pausing on 10, 20. Count to 10. Count to 30 pausing on 10, 20. Count to 30 pausing on 10, 20. Count to 20 pausing on 10. END

V21 6529kHz 1400z 14/1 TX lasted 8 minutes. MON

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 10. END

V21 6529kHz 1400z 15/1 TX lasted 10 minutes. TUE

Count to 30 pausing at 10, 20. Count to 20 pausing at 10. Count to 10. Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 20 pausing at 10.

Count to 10. Count to 20 pausing at 10. Count to 10. Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 10. END

V21 6529kHz 1400z 16/1 TX Lasted 22 minutes WED

Count to 40 pausing at 10, 20, 30. Count to 50 pausing at 10, 20, 30, 40. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 20 pausing at 10. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 10 END

V21 6529kHz 1400z 17/1 TX Lasted 17 minutes

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. END

V21 6529kHz 1400z 18/1 Extremely weak, some counts to 20 pausing at 10. TX lasted at least 7 minutes.

V21 6529kHz 1400z 19/1 Count to 30 pausing at 10, 20. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 30 pausing at 10, 20.

Count to 40 pausing at 10, 20, 30.

Unintelligible for about 2 minutes. Count to 40 pausing at 10, 20, 30. END

V21 5637kHz 1400z 20/1 Barely audible, one pause on 11 heard and at least two counts to 20. TX continued but I switched to 6529kHz after 3 minutes as another V21 came up on that freq.

V21 6529kHz 1400z 20/1 Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 10. Count to 20 pausing at 10.

Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 10. Count to 20 pausing at 10.

Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 10. END

V21 6529kHz 1400z 21/1 Recording failure but at least one count to 40 heard live.

V21 6529kHz 1400z 22/1 Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 20 pausing at 10. END

V21 6529kHz 1400z 23/1 TX Lasted 8 minutes.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 20 pausing at 10. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 50 pausing at 10, 20, 30, 40.

Count to 40 pausing at 10, 20, 30.

Count to 50 pausing at 10, 20, 30, 40.

V21 6529kHz 1405z 24/1 In progress Count to 50 pasusing at 10, 20, 30, 40. Count to 50 pasusing at 10, 20, 30, 40. Count to 50 pasusing at 10, 20, 30, 40.

Count to 50 pasusing at 10, 20, 30, 40. (Recording problem at this point)

Recording restarts on 35 pausing at 40 stopping at 50. Count to 50 pasusing at 10, 20, 30, 40. Count to 50 pasusing at 10, 20, 30, 40. Count to 50 pasusing at 10, 20, 30, 40.

Count to 50 pasusing at 10, 20, 30, 40. Count to 11 pausing at 10. (Abrupt end)

V21 6625kHz 1330z approx. 24/1 SS YL keys her mike and counts very slowly from 11 to 31. Restarts at 1 and counts to 8. Counts to 6 then unintelligible.

Counts to 6. Counts to 8. 90 second pause then begins with strings of numbers such as

0044 45 93 5 31

0433 493 11 0 0 0 0.

0444 433 432 11 00 9 0.

0431 495 1331 11 0 0  
0435 491 unintelligible 11 00 35

V21 6529kHz 1400z 25/1

Count to 50 pausing at 10, 20, 30, 40. Count to 50 pausing at 10, 20, 30, 40. Count to 20 pausing at 10. Count to 30 pausing at 10, 20. Count to 50 pausing at 10, 20, 30, 40. Count to 50 pausing at 10, 20, 30, 40.

Count to 60 pausing at 10, 20, 30, 40, 50. Count to 50 pausing at 10, 20, 30, 40. Count to 30 pausing at 10, 20. END

V21 6529kHz 1400z 26/1 Transmission lasted 10 minutes.

Count to 50 pausing at 10, 20, 30, 40. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 50 pausing at 10, 20, 30, 40. Count to 50 pausing at 10, 20, 30, 40. Count to 50 pausing at 10, 20, 30, 40.

Count to 50 pausing at 10, 20, 30, 40. Count to 50 pausing at 10, 20, 30, 40. Count to 40 pausing at 10, 20, 30. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50.

Count to 30 pausing at 10, 20. END

V21 6529kHz 1400z 27/1 TX Lasted 17 minutes.

Count to 20 pausing at 10. Count to 10. Count to 20 pausing at 10. Count to 20 pausing at 10.

Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 20 pausing at 10.

Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 18 pausing at 10 Start at 9 counting to 11 then says 11 END

V21 6529kHz 1400z 28/1 TX Lasted 25 minutes.

Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 20 pausing at 10. Count to 30 pausing at 10, 20. Start at 20 counting to 50 pausing at 30, 40. Count to 60 pausing at 10, 20, 30, 40, 50.

Count to 30 pausing at 10, 20. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 50 pausing at 10, 20, 30, 40. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 50 pausing at 10, 20, 30, 40.

Count to 60 pausing at 10, 20, 30, 40, 50. Count to 50 pausing at 10, 20, 30, 40. Count to 50 pausing at 10, 20, 30, 40. Count to 60 pausing at 10, 20, 30, 40, 50.

Count to 60 pausing at 10, 20, 30, 40, 50. Count to 20 pausing at 10.

Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50.

Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 40 pausing at 10, 20, 30. Count to 50 pausing at 10, 20, 30, 40. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50.

Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.

Count to 30 pausing at 10, 20. END

V21 6529kHz 1400z 29/1 TX Lasted 3 minutes

Count to 10. Count to 50 pausing at 10, 20, 30, 40. Count to 50 pausing at 10, 20, 30, 40, 44.

V21 6529kHz 1420z 29/1 TX Lasted 20 Minutes

Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50.

Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50.

Count to 40 pausing at 10, 20, 30. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 60 pausing at 10, 20, 30, 40, 50.

Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50.

Count to 70 pausing at 10, 20, 30, 40, 50, 60.

Count to 50 pausing at 10, 20, 30, 40. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 50 pausing at 10, 20, 30, 40. Count to 60 pausing at 10, 20, 30, 40, 50.

Count to 60 pausing at 10, 20, 30, 40, 50. END

V21 6625kHz 1358z 30/1 SS/YL [1,2,3] End of transmission. Possibly the shortest Babbler TX ever! It may have restarted after 1400z but I had switched to 6529kHz on the hour.

V21 6529kHz 1400z 30/1 TX Lasted 7 minutes.

Count to 20 pausing at 10. Start at 11 counting to 30 pausing at 20. Count to 30 pausing at 10, 20. Count to 30 pausing at 10, 20.

Count to 10. END

V21 6529kHz 1400z 31/1 TX Lasted 24 minutes.

Unintelligible for first 3 minutes. Count to 30 pausing at 10, 20. Count to 20 pausing at 10. Count to 10. Count to 20 pausing at 10.

Count to 40 pausing at 10, 20, 30. Count to 30 pausing at 10, 20. Count to 30 pausing at 10, 20. Count to 20 pausing at 10. Count to 30 pausing at 10, 20. Count to 4. Count to 30 pausing at 10, 20.

Count to 30 pausing at 10, 20. Count to 30 pausing at 10, 20. (Counts 11 to 13 twice). Count to 30 pausing at 10, 20. (counts 11 twice). Count to 30 pausing at 10, 20. Count to 30 pausing at 10, 20.

Count to 30 pausing at 10, 20. Count to 30 pausing at 10, 20. Count to 30 pausing at 10, 20. (Slurs 15 through 19 then, 21, 22, 23, 24, 25, 27, 30.) Count to 30 pausing at 10, 20. (skips 28).

Count to 30 pausing at 10, 20. (skips 29). Count to 20 pausing at 10. Count to 30 starting at 11 and pausing at 20) Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 20 pausing at 10.

Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 20 pausing at 10. END

V21 6529kHz 1400z 1/2

Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30,

40, 50. Count to 60 pausing at 10, 20, 30, 40, 50.

Count to 20 pausing at 10. END

V21 6529kHz 1400z 2/2 TX lasted 10 minutes.  
Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 30 pausing at 10, 20. Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 10. Count to 20 pausing at 10, 15. Count to 20 pausing at 10.  
Count to 30 pausing at 10, 20. Count to 10. Count to 30 pausing at 10, 20. Count to 20 pausing at 10. Count to 30 pausing at 10, 20. Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30.  
Count to 40 pausing at 10, 20, 30, 35. Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 10. END

V21 6529kHz 1400z 3/2 TX lasted 7 minutes.  
Count to 20 pausing at 10. Count to 30 pausing at 10, 20. Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 30 pausing at 10, 20. Count to 20 pausing at 10. Count to 30 pausing at 10, 20.  
A few seconds of unintelligible chatter. Count to 20 pausing at 10. A few seconds of unintelligible chatter. Count to 20 pausing at 10. Count to 30 pausing at 10, 20. Count to 20 pausing at 10. Count to 10  
Count to 20 pausing at 10. Count to 10. END

V21 6529kHz 1400z 4/2 TX lasted 3 minutes.  
Count to 20 pausing at 10. Count to 30 pausing at 10, 20. Count to 24 pausing at 10, 20. Count to 40 pausing at 10, 20, 30. Count to 17 pausing at 10.

V21 6529kHz 1400z 5/2  
Count to 10. Count to 50 pausing at 10, 20, 30, 40. Count to 50 pausing at 10, 20, 30, 40. Count to 50 pausing at 10, 20, 30, 40. Count to 50 pausing at 10, 20, 30, 40.  
Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 40 pausing at 10, 20, 30. Count to 60 pausing at 10, 20, 30, 40, 50.  
Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 40 pausing at 10, 20, 30.

V21 6529kHz 1357z 6/2 Found in progress counting to 40. TX lasted at least 11 minutes and was almost buried in the noise.  
Count to 40. Count to 60. Count to 60. Count to at least 50 (barely audible). Count to 60. Count to 50. Count to 60.

V21 6529kHz 1400z 7/2 One count to 40 barely audible due to high noise levels today. TX continued for longer but was unreadable.

V21 6529kHz 1400z 8/2 TX Lasted 4 minutes  
Count to 50 pausing at 10, 20 30, 40. Count to 50 pausing at 10, 20 30, 40. Count to 50 pausing at 10, 20 30, 40. Begins counting very fast. Count to 50 pausing at 10, 20 30, 40.  
Count to 50 pausing at 10, 20 30, 40. Count to 50 pausing at 10, 20 30, 40. END

V21 6529kHz 1400z 10/2  
Count to 50 pausing at 10, 20, 30, 40. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50.  
Count to 20 pausing at 10. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50.  
Count to 60 pausing at 10, 20, 30, 40, 50. Count to 50 pausing at 10, 20, 30, 40. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 50 pausing at 10, 20, 30, 40.  
Count to 50 pausing at 10, 20, 30, 40. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 30 pausing at 10, 20. Start at 20 and count to 30. Count to 30 pausing at 10, 20.  
Count to 50 pausing at 10, 20, 30, 40. Count to 20 pausing at 10. Count to 20 pausing at 10. END.

V21 6529kHz 1400z 11/2 Present but too weak to copy.

V21 6529kHz 1400z 12/2 TX lasted 14 minutes.  
Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50.  
Count to 70 pausing at 10, 20, 30, 40, 50, 60. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 70 pausing at 10, 20, 30, 40, 50, 60. Count to 70 pausing at 10, 20, 30, 40, 50, 60.  
Count to 70 pausing at 10, 20, 30, 40, 50, 60. Count to 70 pausing at 10, 20, 30, 40, 50, 60. Count to 60 pausing at 10, 20, 30, 40, 50.  
TX ends abruptly at 36 after pausing at 10, 20, 30.

V21 6529kHz 1400z 14/2  
Count to 20 pausing at 10. Count to 10. Count to 10. Count to 30 pausing at 10, 20. Count to 20 pausing at 10 END

V21 6529kHz 1400z 15/2 TX lasted 9 minutes.  
Count to 30 then RX problems caused loss of signal for 4 minutes. In progress at 30 counting to 60. Count to 60 pausing at 10, 20, 30, 40, 50.  
Count to 60 pausing at 10, 20, 30, 40, 50. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 20 pausing at 10 END

V21 6529kHz 1400z 22/2 TX  
Count to 20 pausing at 10. END

V21 6529kHz 1400z 23/3 TX Lasted 4 minutes.  
Count to 50 pausing at 10, 20, 30, 40. Count to 60 pausing at 10, 20, 30, 40, 50. Count to 50 pausing at 10, 20, 30, 40. Count to 20 pausing at 10. END 1030 104:45

V21 6529kHz 1400z 23/2 TX lasted 15 minutes  
Count to 30 starting at 21. Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 10 Count to 20 pausing at 10. Count to 20 pausing at 10. Count to 30 pausing at 10, 20. Count to 20 pausing at 10.  
Count to 20 pausing at 10. (Becomes very weak) Count to 20 pausing at 10. Count to 30 pausing at 10, 20. Count to 30 pausing at 10, 20, 20. Count to 20 pausing at 10. Count to 30 pausing at 10, 20. Count to 30 pausing at 10, 20.  
(Signal becomes stronger) Count to 30 pausing at 10, 20. Count to 30 pausing at 10, 20. END

V21 6529kHz 1400z 24/2 TX lasted 4 minutes.  
Count to 50 pausing at 10, 20, 30, 40. Count to 50 pausing at 10, 20, 30, 40. Count to 50 pausing at 10, 20, 30, 40. Count to 46 pausing on 10, 20, 30, 40. Abrupt End.

V21 6529kHz 1440z 25/2 Unusual in that the numbers were spoken rather than the usual singing voice.  
Count to 40 pausing at 10, 20, 30. Count to 40 pausing at 10, 20, 30. Count to 30 pausing at 10, 20. Count to 40 pausing at 10, 20, 30. Count to 20 pausing at 10.  
Count to 30 pausing at 10, 20.  
Count to 40 pausing at 10, 20, 30.

V21 6625kHz 1350z 27/2

Count to 14 Count to 40 Count to 30 Count 15, Unintelligible.

V21 6529kHz 1400z 27/2 TX lasted approximately 10 minutes but a tuning error made the voice unintelligible.

Thanks Anon!

**V22**  
January 2013

**V30**  
January 2013

**Polystones:**

XPA by schedule; with the diminishing number of XPA schedules now being intercepted we have decided to report on these as schedule/date rather than a single report within the Charts Section.

**XPA**  
January 2013

**XPA c**  
Wed/Sat

9108kHz0700z	02/01[192 000 04829 00001 00000 10140]	(2m26s)	PLdn	WED
10908kHz0720z	02/01[192 000 04829 00001 00000 10140] Strong	(2m26s)	PLdn	WED
12208kHz0740z	02/01[192 000 04829 00001 00000 10140] Strong	(2m26s)	PLdn	WED
9108kHz0700z	05/01[192 000 03924 00001 00000 10140] Fair	(2m26s)	PLdn	SAT
10908kHz0720z	05/01[192 000 03924 00001 00000 10140] Fair	(2m26s)	PLdn	SAT
12208kHz0740z	05/01[192 000 03924 00001 00000 10140] Fair	(2m26s)	PLdn	SAT
9108kHz0700z	09/01[192 1 00453 00223 31084 36574] Very strong	(4m44s)	PLdn	WED
10908kHz0720z	09/01[192 1 00453 00223 31084 36574] Very strong	(4m44s)	PLdn	WED
12208kHz0740z	09/01[192 1 00453 00223 31084 36574] Very strong	(4m44s)	PLdn, RNGB	WED
9108kHz0700z	12/01[192 2 00679 00117 85216 66151 00000 00000 00453 00223 31084 36574] Fair	(5m58s)	PLdn	SAT
10908kHz0720z	12/01[192 2 00679 00117 85216 66151 00000 00000 00453 00223 31084 36574] Fair	(5m58s)	PLdn	SAT
12208kHz0740z	12/01[192 2 00679 00117 85216 66151 00000 00000 00453 00223 31084 36574] Fair	(5m58s)	PLdn	SAT
9108kHz0700z	16/01[1921 00679 00117 85216 66151] Very strong	(3m36s)	PLdn	WED
10908kHz0720z	16/01[1921 00679 00117 85216 66151] Very strong	(3m36s)	PLdn	WED
12208kHz0740z	16/01[1921 00679 00117 85216 66151] Very strong	(3m36s)	PLdn	WED
9108kHz0700z	19/01[192 1 00301 00158 68556 23635] Very strong	(4m26s)	PLdn	SAT
10908kHz0720z	19/01[192 1 00301 00158 68556 23635] Very strong	(4m26s)	PLdn	SAT
12208kHz0740z	19/01[192 1 00301 00158 68556 23635] Very strong	(4m26s)	PLdn	SAT
9108kHz0700z	23/01[192 000 09882 00001 00000 10140] Very strong	(2m36s)	PLdn	WED
10908kHz0720z	23/01[192 000 09882 00001 00000 10140] Very strong	(2m36s)	PLdn	WED
12208kHz0740z	23/01[192 000 09882 00001 00000 10140] Very strong	(2m36s)	PLdn	WED
9108kHz0700z	26/01[192 1 01727 00261 19746 42625] Very strong	(5m06s)	PLdn	SAT
10908kHz0720z	26/01[192 1 01727 00261 19746 42625] Very strong	(5m06s)	PLdn	SAT
12208kHz0740z	26/01[192 1 01727 00261 19746 42625] Very strong	(5m06s)	PLdn	SAT
9108kHz0700z	30/01[192 1 01727 00261 19746 42625] Very strong	(5m06s)	PLdn	WED
10908kHz0720z	30/01[192 1 01727 00261 19746 42625] Very strong	(5m06s)	PLdn	WED
12208kHz0740z	30/01[192 1 01727 00261 19746 42625] Very strong	(5m06s)	PLdn, RNGB	WED

**XPA e**  
Tue/Thu

7891kHz1900z	01/01 Very weak, unuseable	PLdn	TUE
6791kHz1920z	01/01[873 000 08244 00001 00000 10140] Weak	(2m26s)	PLdn
5391kHz1940z	01/01[873 000 08244 00001 00000 10140] Weak, noisy	(2m26s)	PLdn
7891kHz1900z	03/01 NRH	PLdn	THU
6791kHz1920z	03/01[873 000 08244 00001 00000 10140] Weak	(2m26s)	PLdn
5391kHz1940z	03/01[873 000 08244 00001 00000 10140] Weak, noisy (Fair at IC)	(2m26s)	PLdn
7891kHz1900z	08/01[873 1 00414 00239 60501 56255] Weak	(4m52s)	PLdn
6791kHz1920z	08/01[873 1 00414 00239 60501 56255] Fair	(4m52s)	PLdn
5391kHz1940z	08/01[873 1 00414 00239 60501 56255] Fair	(4m52s)	PLdn
7891kHz1900z	10/01[873 1 00414 00239 60501 56255] Very weak	(4m52s)	PLdn
6791kHz1920z	10/01[873 1 00414 00239 60501 56255] Weak	(4m52s)	PLdn
5391kHz1940z	10/01[873 1 00414 00239 60501 56255] Weak	(4m52s)	PLdn

7891kHz1900z	15/01 NRH		PLdn	TUE
6791kHz1920z	15/01[873 000 08044 00001 00000 10140] Weak and noisy	(2m26s)	PLdn	TUE
5391kHz1940z	15/01[873 000 08044 00001 00000 10140] Fair	(2m26s)	PLdn	TUE
7891kHz1900z	17/01[873 000 08244 00001 00000 10140] Weak	(2m26s)	PLdn, PP	THU
6791kHz1920z	17/01[873 000 08244 00001 00000 10140] Weak	(2m26s)	PLdn	THU
5391kHz1940z	17/01[873 000 08244 00001 00000 10140] Weak	(2m26s)	PLdn	THU
7891kHz1900z	22/01 Very weak		PLdn	TUE
6791kHz1920z	22/01 Very weak		PLdn	TUE
5391kHz1940z	22/01[873 000 06534 00001 00000 10140] Weak	(2m26s)	PLdn	TUE
7891kHz1900z	24/01[873 000 03006 00001 00000 10140] Weak	(2m26s)	PLdn	THU
6791kHz1920z	24/01[873 000 03006 00001 00000 10140] Weak	(2m26s)	PLdn	THU
5391kHz1940z	24/01[873 000 03006 00001 00000 10140] Weak	(2m26s)	PLdn	THU
7891kHz1900z	29/01[873 000 02121 00001 00000 10140] Very weak	(2m26s)	PLdn	TUE
6791kHz1920z	29/01[873 000 02121 00001 00000 10140] Weak	(2m26s)	PLdn	TUE
5391kHz1940z	29/01[873 000 02121 00001 00000 10140] Weak	(2m26s)	PLdn	TUE
7891kHz1900z	31/01 NRH		PLdn	THU
6791kHz1920z	31/01[873 000 01200 00001 00000 10140] Very weak	(2m26s)	PLdn	THU
5391kHz1940z	31/01 Extremely weak, just audible		PLdn	THU

## XPA2

Sun/Tue

16138kHz1300z	01/01[03750 00001 00000 10140] Fair	(2m11s)	PLdn	TUE
14438kHz1320z	01/01[03750 00001 00000 10140] Fair	(2m11s)	PLdn	TUE
13438kHz1340z	01/01[03750 00001 00000 10140] Fair	(2m11s)	PLdn	TUE
16138kHz1300z	06/01[00441 00075 45375 33251] Very strong	(3m10s)	PLdn	SUN
14438kHz1320z	06/01[00441 00075 45375 33251] Very strong	(3m10s)	PLdn	SUN
13438kHz1340z	06/01[00441 00075 45375 33251] Very strong	(3m10s)	PLdn	SUN
16138kHz1300z	08/01[00441 00075 45375 33251] Very strong	(3m10s)	PLdn	TUE
14438kHz1320z	08/01[00441 00075 45375 33251] Very strong	(3m10s)	PLdn	TUE
13438kHz1340z	08/01[00441 00075 45375 33251] Very strong	(3m10s)	PLdn	TUE
16138kHz1300z	13/01[00752 00053 77185 00064]		IW	SUN
14438kHz1320z	13/01[00752 00053 77185 00064]		IW	SUN
13438kHz1340z	13/01[00752 00053 77185 00064]		IW	SUN

00752 00053 77185 25887 32729 67217 98043 23451 34779 17970  
88517 52598 62983 17824 89683 03957 35562 13100 55463 07815  
34769 35028 69108 88198 69337 82104 29383 38834 31504 43378  
15679 25641 05906 01332 11785 38681 90280 04460 21595 98009  
74050 49083 41926 42367 57539 78661 49096 80119 36549 86198  
53095 22688 13052 24944 82179 00064

Courtesy IW

16138kHz1300z	15/01[00752 00053 77185 00064] Very strong	(2m51s)	PLdn	TUE
14438kHz1320z	15/01[00752 00053 77185 00064] Very strong	(2m51s)	PLdn	TUE
13438kHz1340z	15/01[00752 00053 77185 00064] Very strong	(2m51s)	PLdn	TUE
16138kHz1300z	20/01[03284 00001 00000 10140] Very strong	(2m12s)	BR	SUN
14438kHz1320z	20/01[03284 00001 00000 10140] Very strong	(2m12s)	BR	SUN
13438kHz1340z	20/01[03284 00001 00000 10140] Very strong	(2m12s)	BR	SUN
16138kHz1300z	22/01[01671 00001 00000 10140] Very strong	(2m11s)	PLdn	TUE
14438kHz1320z	22/01[01671 00001 00000 10140] Very strong	(2m11s)	PLdn	TUE
13438kHz1340z	22/01[01671 00001 00000 10140] Very strong	(2m11s)	PLdn	TUE
16138kHz1300z	27/01[04776 00001 00000 10140] Very strong	(2m11s)	PLdn	SUN
14438kHz1320z	27/01[04776 00001 00000 10140] Very strong	(2m11s)	PLdn	SUN
13438kHz1340z	27/01[04776 00001 00000 10140] Very strong	(2m11s)	PLdn	SUN
16138kHz1300z	29/01[03089 00001 00000 10140] Very strong	(2m11s)	PLdn	MON
14438kHz1320z	29/01[03089 00001 00000 10140] Very strong	(2m11s)	PLdn	MON
13438kHz1340z	29/01[03089 00001 00000 10140] Very strong	(2m11s)	PLdn	MON

Mon/Wed

15978kHz0800z	02/01 Strong, break in transmission, no message sent		PLdn	WED
14978kHz0820z	02/01[06478 00001 00000 10140] Very strong	(2m11s)	PLdn	WED
14378kHz0840z	02/01[06478 00001 00000 10140] Strong, XJTQRM2	(2m11s)	PLdn	WED
15978kHz0800z	07/01[00492 00117 56776 27562] Very strong	(3m42s)	PLdn	MON
14978kHz0820z	07/01[00492 00117 56776 27562] Very strong	(3m42s)	PLdn	MON
14378kHz0840z	07/01[00492 00117 56776 27562] Very strong	(3m42s)	PLdn	MON
15978kHz0800z	09/01[00492 00117 56776 27562] Very strong	(3m42s)	PLdn	WED
14978kHz0820z	09/01[00492 00117 56776 27562] Very strong	(3m42s)	PLdn	WED
14378kHz0840z	09/01[00492 00117 56776 27562] Very strong	(3m42s)	PLdn	WED

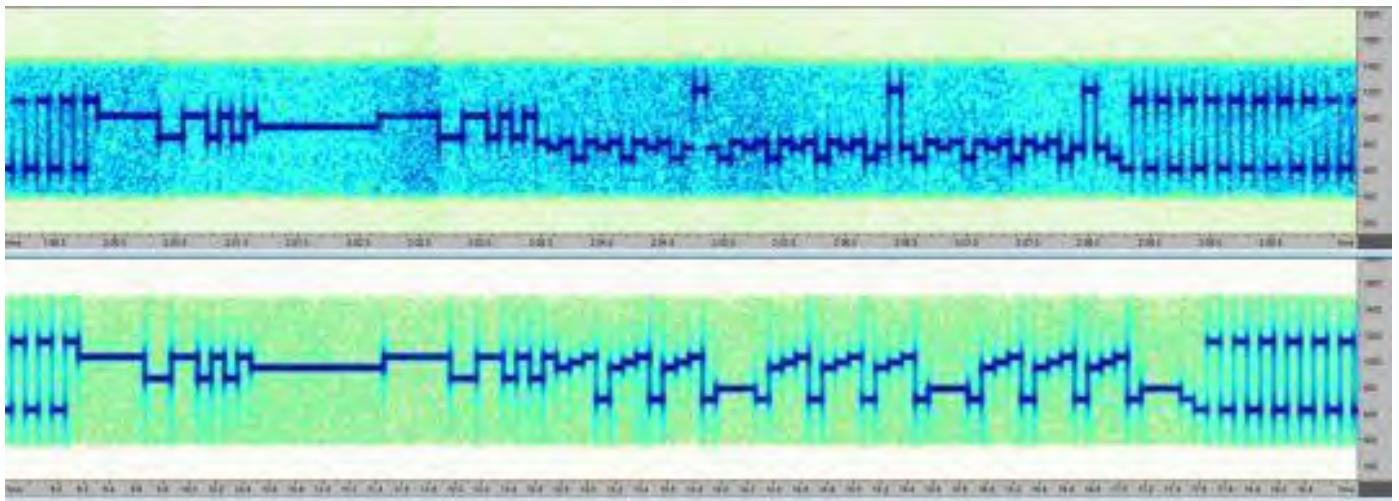
15978kHz0800z	14/01[09098 00001 00000 10140] Strong	(2m11s)	PLdn	MON
14978kHz0820z	14/01[09098 00001 00000 10140] Very strong	(2m11s)	PLdn	MON
14378kHz0840z	14/01[09098 00001 00000 10140] Very strong	(2m11s)	PLdn	MON
15978kHz0800z	16/01 Very weak, unreadable		PLdn	WED
14978kHz0820z	16/01[09098 00001 00000 10140] Very strong	(2m11s)	PLdn	WED
14378kHz0840z	16/01[09098 00001 00000 10140] Very strong	(2m11s)	PLdn	WED
15978kHz0800z	21/01[05740 00001 00000 10140] Fair	(2m11s)	PLdn	MON
14978kHz0820z	21/01[05740 00001 00000 10140] Very strong	(2m11s)	PLdn	MON
14378kHz0840z	21/01[05740 00001 00000 10140] Very strong	(2m11s)	PLdn	MON
15978kHz0800z	23/01[04921 00001 00000 10140] Strong	(2m11s)	PLdn	WED
14978kHz0820z	23/01[04921 00001 00000 10140] Very strong	(2m11s)	PLdn	WED
14378kHz0840z	23/01[04921 00001 00000 10140] Very strong	(2m11s)	PLdn	WED
15978kHz0800z	28/01[09098 00001 00000 10140] Very strong	(2m11s)	PLdn	MON
14978kHz0820z	28/01[09098 00001 00000 10140] Very strong	(2m11s)	PLdn	MON
14378kHz0840z	28/01[09098 00001 00000 10140] Very strong	(2m11s)	PLdn	MON
15978kHz0800z	30/01[05508 00001 00000 10140] Strong	(2m11s)	PLdn, RNGB	WED
14978kHz0820z	30/01[05508 00001 00000 10140] Very strong	(2m11s)	PLdn	WED
14378kHz0840z	30/01[05508 00001 00000 10140] Very strong	(2m11s)	PLdn	WED
Fri/Sat				
16167kHz1400z	04/01[01279 00001 00000 10140] Strong with sl. QSB	(2m12s)	BR	FRI
14663kHz1420z	04/01[01279 00001 00000 10140] Strong with QSB	(2m12s)	BR	FRI
13923kHz1440z	04/01[01279 00001 00000 10140] Strong		DoK	FRI
16167kHz1400z	05/01[01279 00001 00000 10140] Strong with sl. QSB	(2m12s)	BR	SAT
14663kHz1420z	05/01[01279 00001 00000 10140] Strong with QSB	(2m12s)	BR	SAT
13923kHz1440z	05/01[01279 00001 00000 10140] Strong		DoK	SAT
16167kHz1400z	11/01[00786 00087 31800 26276] Fair, QSB2	(3m19s)	PLdn	FRI
14663kHz1420z	11/01[00786 00087 31800 26276] Strong	(3m19s)	PLdn	FRI
13923kHz1440z	11/01[00786 00087 31800 26276] Fair	(3m19s)	PLdn	FRI
16167kHz1400z	12/01[00786 00087 31800 26276]		IW, BR	SAT
14663kHz1420z	12/01[00786 00087 31800 26276]		IW, BR	SAT
13923kHz1440z	12/01[00786 00087 31800 26276]		IW, RNGB, BR	SAT
16167kHz1400z	18/01[06139 00001 00000 10140] Very strong	(2m11s)	PLdn	FRI
14663kHz1420z	18/01[06139 00001 00000 10140] Very strong	(2m11s)	PLdn	FRI
13923kHz1440z	18/01[06139 00001 00000 10140] Very strong	(2m11s)	PLdn	FRI
16167kHz1400z	19/01[06139 00001 00000 10140] Very strong	(2m 12s)	BR	SAT
14663kHz1420z	19/01[06139 00001 00000 10140] Strong CW QRM	(2m 12s)	BR	SAT
13923kHz1440z	19/01[06139 00001 00000 10140] Strong	(2m 12s)	BR	SAT
16167kHz1400z	25/01[05451 00065 22637 64515] Very strong	(3m01s)	PLdn	FRI
14663kHz1420z	25/01[05451 00065 22637 64515] Very strong	(3m01s)	PLdn	FRI
13923kHz1440z	25/01[05451 00065 22637 64515] Very strong	(3m01s)	PLdn	FRI
16167kHz1400z	26/01[05451 00065 22637 64515] Very strong	(3m01s)	PLdn	SAT
14663kHz1420z	26/01[05451 00065 22637 64515] Very strong	(3m01s)	PLdn	SAT
13923kHz1440z	26/01[05451 00065 22637 64515] Very strong	(3m01s)	PLdn	SAT

February2013

### XPA c

Wed/Sat

11409kHz0700z	02/02[456 1 01727 00261 19746 42652 ] Strong	(5m 06s) BR	SAT
13509kHz0720z	02/02[456 1 01727 00261 19746 42652 ] V.Strong	(5m 06s) BR	SAT
14609kHz0740z	02/02[456 1 01727 00261 19746 42652 ] V.Strong	(5m 06s) BR	SAT
11409kHz0700z	06/02[456 1 01727 00261 19746 42652] Good, QSB	(5m06s) BR, RRGB	WED
13509kHz0720z	06/02[456 1 01727 00261 19746 42652] Strong, QSB	(5m06s) BR, RRGB	WED
14609kHz0740z	06/02[456 1 01727 00261 19746 42652] Strong, QSB	(5m06s) BR, RRGB	WED



Compare top archived XPA b 000 indicator, with the lower XPA c 000 indicator. Note change as 760, 1200, 760Hz ~100ms tones to 760Hz ~300ms.

11409kHz0700z	09/02[456 000 04103 00001 00000 10140] Very strong	Msg tone modified?	(2m26s) PLdn	SAT
13509kHz0720z	09/02[456 000 04103 00001 00000 10140] Very strong	Msg tone modified?	(2m26s) PLdn	SAT
14609kHz0740z	09/02[456 000 04103 00001 00000 10140] Very strong	Msg tone modified?	(2m26s) PLdn	SAT

Reads via RIVET as:

10:32:36 Loading file C:\Users\Paul\Documents\WiNRADiO\G31DDC\XPA c-14.609MHz\_2013-02-09\_07'40'00.wav

10:32:36 XPA Start Tones Found (correcting by -29 Hz)

10:32:37 High sync tone found

10:32:37 Symbol timing found

Block Sync

4444444444

Block Sync

**456 456 456 000 456 456 000 456 456 456 000**

Block Sync

4444444444

Block Sync

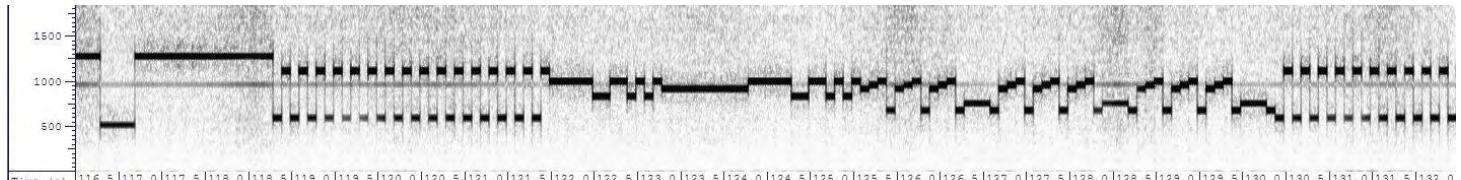
6

Message Start

**04103 00001 00000 10140**

10:32:43 WAV file loaded and analysis complete (351270 samples read)

Next Null XPA c proves modification ; also seen on XPA e



11409kHz0700z	13/02[456 000 06722 00001 00000 10140] Very strong	Msg indicator tone modified	(2m26s) PLdn	WED
13509kHz0720z	13/02[456 000 06722 00001 00000 10140] Strong	Msg indicator tone modified	(2m26s) PLdn	WED
14609kHz0740z	13/02[456 000 06722 00001 00000 10140] Strong	Msg indicator tone modified	(2m26s) PLdn	WED
11409kHz0700z	16/02[456 000 04103 00001 00000 10140] Very strong		(2m26s) PLdn	SAT
13509kHz0720z	16/02[456 000 04103 00001 00000 10140] Very strong		(2m26s) PLdn	SAT
14609kHz0740z	16/02[456 000 04103 00001 00000 10140] Very strong		(2m26s) PLdn	SAT
11409kHz0700z	20/02[456 000 08538 00001 00000 10140] Very strong		(2m26s) PLdn	WED
13509kHz0720z	20/02[456 000 08538 00001 00000 10140] Very strong		(2m26s) PLdn	WED
14609kHz0740z	20/02[456 000 08538 00001 00000 10140] Very strong		(2m26s) PLdn	WED

11409kHz0700z	23/02[456 000 04180 00001 00000 10140] Very strong	(2m26s)	PLdn	SAT
13509kHz0720z	23/02[456 000 04180 00001 00000 10140] Very strong	(2m26s)	PLdn	SAT
14609kHz0740z	23/02[456 000 04180 00001 00000 10140] Very strong	(2m26s)	PLdn	SAT
11409kHz0700z	27/02[456 000 05064 00001 00000 10140] Very strong	(2m26s)	PLdn	WED
13509kHz0720z	27/02[456 000 05064 00001 00000 10140] Very strong	(2m26s)	PLdn	WED
14609kHz0740z	27/02[456 000 05064 00001 00000 10140] Very strong	(2m26s)	PLdn	WED

### XPA e

8123kHz1900z	05/02 Very weak, unprocessable	(4m31s)	PLdn	TUE
7523kHz1920z	05/02[158 1 08137 00203 56599 47145] Very weak	(4m31s)	PLdn	TUE
6823kHz1940z	05/02[158 1 08137 00203 56599 47145] Weak	(4m31s)	PLdn	TUE
8123kHz1900z	07/02 Very weak, unprocessable	(4m31s)	PLdn	THU
7523kHz1920z	07/02[158 1 08137 00203 56599 47145] Weak	(4m31s)	PLdn	THU
6823kHz1940z	07/02[158 1 08137 00203 56599 47145] Weak	(4m31s)	PLdn	THU
8123kHz1900z	12/02[158 000 rest too weak] 000 modified to one 300ms tone.		PLdn	TUE
7523kHz1920z	12/02 Very weak, unprocessable		PLdn	TUE
6823kHz1940z	12/02 Very weak, unprocessable		PLdn	TUE
8123kHz1900z	14/02 XJTQRM5		PLdn	THU
7523kHz1920z	14/02[158 1 04919 00001 00000 10140] Weak, BCQRM4	(2m26s)	PLdn	THU
6823kHz1940z	14/02[158 1 04919 00001 00000 10140] Weak	(2m26s)	PLdn	THU
8123kHz1900z	19/02 XJTQRM4		PLdn	TUE
7523kHz1920z	19/02[158 1 06954 00277 97921 54060] Fair, BCQRM3	(5m16s)	PLdn	TUE
6823kHz1940z	19/02[158 1 06954 00277 97921 54060] Fair	(5m16s)	PLdn	TUE
8123kHz1900z	21/02 XJTQRM5		PLdn	THU
7523kHz1920z	21/02[158 1 06954 00277 97921 54060] Fair, BCQRM3	(5m16s)	PLdn	THU
6823kHz1940z	21/02[158 1 06954 00277 97921 54060] Fair	(5m16s)	PLdn	THU
8123kHz1900z	26/02 Very weak, unprocessable		PLdn	TUE
7523kHz1920z	26/02 Very weak, unprocessable		PLdn	TUE
6823kHz1940z	26/02[158 000 03612 00001 00000 10140] Fair	(2m26s)	PLdn	TUE
8123kHz1900z	28/02 Very weak, unprocessable		PLdn	THU
7523kHz1920z	28/02 Very weak, unprocessable		PLdn	THU
6823kHz1940z	28/02[158 000 01801 00001 00000 10140] Fair	(2m26s)	PLdn	THU

### XPA2

Sun/Tue

16338kHz1500z	03/03[07842 00091 19589 73722 67270] Strong with QSB	(3m20s)	BR	SUN
14538kHz1520z	03/03[07842 00091 19589 73722 67270] Strong with QSB	(3m20s)	BR	SUN
13538kHz1540z	03/03[07842 00091 19589 73722 67270] Strong with QSB	(3m20s)	BR	SUN
16338kHz1500z	05/02[07842 00091 19589 73722 67270] Very strong	(3m20s)	BR	TUE
14538kHz1520z	05/02[07842 00091 19589 73722 67270] Strong, QSB	(3m20s)	BR	TUE
13538kHz1540z	05/02[07842 00091 19589 73722 67270] Strong, QSB	(3m20s)	BR	TUE
16338kHz1500z	10/02[02923 00001 00000 10140] Strong	(2m11s)	PLdn	SUN
14538kHz1520z	10/02[02923 00001 00000 10140]		IW	SUN
13538kHz1540z	10/02[02923 00001 00000 10140] Strong	(2m11s)	PLdn	SUN
16338kHz1500z	12/02[01638 00001 00000 10140] Strong	(2m11s)	PLdn	TUE
14538kHz1520z	12/02[01638 00001 00000 10140] Strong	(2m11s)	PLdn	TUE
13538kHz1540z	12/02[01638 00001 00000 10140] Strong	(2m11s)	PLdn	TUE
16338kHz1500z	17/02[09000 00069 30483 44600] Very strong	(3m03s)	PLdn	SUN
14538kHz1520z	17/02[09000 00069 30483 44600] Very strong	(3m03s)	PLdn	SUN
13538kHz1540z	17/02[09000 00069 30483 44600] Very strong	(3m03s)	PLdn	SUN
16338kHz1500z	19/02[09000 00069 30483 44600] Strong	(3m03s)	PLdn	TUE
14538kHz1520z	19/02[09000 00069 30483 44600] Strong	(3m03s)	PLdn	TUE
13538kHz1540z	19/02[09000 00069 30483 44600] Fair	(3m03s)	PLdn	TUE
16338kHz1500z	24/02[01945 00001 00000 10140] Very strong	(2m11s)	PLdn	SUN
14538kHz1520z	24/02[01945 00001 00000 10140] Very strong	(2m11s)	PLdn	SUN
13538kHz1540z	24/02[01945 00001 00000 10140] Fair	(2m11s)	PLdn	SUN
16338kHz1500z	26/02 Weak, stopped 31s into tuning signal.	(2m11s)	PLdn	TUE
14538kHz1520z	26/02[08846 00001 00000 10140] Very strong	(2m11s)	PLdn	TUE
13538kHz1540z	26/02[08846 00001 00000 10140] Very strong	(2m11s)	PLdn	TUE

## Mon/Wed

15983kHz0800z	04/02[06456 00209 38679 15254] Strong	(4m50s)	RNGB, BR	MON
14783kHz0800z	04/02[06456 00209 38679 15254] Strong	(4m50s)	RNGB	MON
13883kHz0800z	04/02[06456 00209 38679 15254] Strong	(4m50s)	RNGB	MON
15983kHz0800z	06/02[06456 00209 38679 15254] Good, QSB	(4m50s)	BR, RNGB	WED
14783kHz0820z	06/02[06456 00209 38679 15254] Strong, QSB	(4m50s)	BR, RNGB	WED
13883kHz0840z	06/02[06456 00209 38679 15254] Strong, QSB	(4m50s)	BR, RNGB	WED
15983kHz0800z	11/02[05150 00001 00000 10140] Strong, QRM2	(2m11s)	PLdn	MON
14983kHz0820z	11/02[05150 00001 00000 10140] Very strong	(2m11s)	PLdn	MON
14383kHz0840z	11/02[05150 00001 00000 10140] Very strong	(2m11s)	PLdn	MON
15983kHz0800z	18/02[09910 00261 30810 36077] Very strong	(5m32s)	PLdn	MON
14783kHz0820z	18/02[09910 00261 30810 36077] Very strong	(5m32s)	PLdn	MON
13883kHz0840z	18/02[09910 00261 30810 36077] Very strong	(5m32s)	PLdn	MON
15983kHz0800z	20/02[09910 00261 30810 36077] Fair, QSB3	(5m32s)	PLdn	WED
14783kHz0820z	20/02[09910 00261 30810 36077] Fair, QSB3	(5m32s)	PLdn	WED
13883kHz0840z	20/02[09910 00261 30810 36077] Very weak	(5m32s)	PLdn	WED
15983kHz0800z	25/02[04957 00165 24408 47226] Fair, local QRM3	(4m18s)	PLdn	MON
14783kHz0820z	25/02[04957 00165 24408 47226] Very strong	(4m18s)	PLdn	MON
13883kHz0840z	25/02[04957 00165 24408 47226] Very strong	(4m18s)	PLdn	MON
15983kHz0800z	27/02[04957 00165 24408 47226] Very strong	(4m18s)	PLdn	WED
14783kHz0820z	27/02[04957 00165 24408 47226] Very strong	(4m18s)	PLdn	WED
13883kHz0840z	27/02[04957 00165 24408 47226] Very strong	(4m18s)	PLdn	WED

## Tue/Fri [XPA2... was E07]

20258kHz0800z	12/02[00316 00127 98763 31680]	RNGB, GD	TUE
18058kHz0820z	12/02[00316 00127 98763 31680]	RNGB	TUE
15858kHz0840z	12/02[00316 00127 98763 31680]	RNGB	TUE
20258kHz0800z	15/02[00109 00093 92573 15233]	RNGB	FRI
18058kHz0820z	15/02[00109 00093 92573 15233]	RNGB	FRI
15858kHz0840z	15/02[00109 00093 92573 15233]	RNGB	FRI
20258kHz0800z	19/02 NRH	PLdn	TUE
18058kHz0820z	19/02 Too weak to process	(3m33s)	PLdn
15858kHz0840z	19/02 NRH	PLdn	TUE
20258kHz0800z	22/02 Too weak to process	(4m03s)	PLdn, FR
18058kHz0820z	22/02 Too weak to process	(4m03s)	PLdn, FR
15858kHz0840z	22/02 Too weak to process	(4m03s)	PLdn, FR

## Fri/Sat

18667kHz1400z	01/02 NRH	PLdn	FRI
17419kHz1420z	01/02 NRH	PLdn	FRI
16212kHz1440z	01/02 NRH	PLdn	FRI
18667kHz1400z	02/02[00463 00093 39300 16654]	RNGB	SAT
17419kHz1420z	02/02[00463 00093 39300 16654]	RNGB	SAT
16212kHz1440z	02/02[00463 00093 39300 16654]	RNGB	SAT
18667kHz1400z	08/02[09358 00075 67351 06570] Strong	(3m08s)	PLdn
17419kHz1420z	08/02[09358 00075 67351 06570] Fair	(3m08s)	PLdn
16212kHz1440z	08/02[09358 00075 67351 06570] Strong	(3m08s)	PLdn
18667kHz1400z	09/02[09358 00075 67351 06570] Weak	(3m08s)	PLdn
17419kHz1420z	09/02[09358 00075 67351 06570] Weak	(3m08s)	PLdn
16212kHz1440z	09/02[09358 00075 67351 06570] Weak	(3m08s)	PLdn
Transmitter problems for 09/02 detected for this schedule by IW			
18667kHz1400z	15/02[03441 00001 00000 10140]Fair	(2m11s)	PLdn
17419kHz1420z	15/02[03441 00001 00000 10140]Fair, QSB2	(2m11s)	PLdn
16212kHz1440z	15/02[03441 00001 00000 10140]Fair	(2m11s)	PLdn
18667kHz1400z	16/02[03781 00001 00000 10140] Very strong	(2m11s)	PLdn
17419kHz1420z	16/02[03781 00001 00000 10140] Strong	(2m11s)	PLdn
16212kHz1440z	16/02[03781 00001 00000 10140] Very strong	(2m11s)	PLdn
18667kHz1400z	22/02[02632 00135 77733 53156] Verystrong	(3m52s)	PLdn
17419kHz1420z	22/02[02632 00135 77733 53156] Verystrong	(3m52s)	PLdn
16212kHz1440z	22/02[02632 00135 77733 53156] Verystrong	(3m52s)	PLdn

18667kHz1400z	23/02[02632 00135 77733 53156] Verystrong	(3m52s)	PLdn	SAT
17419kHz1420z	23/02[02632 00135 77733 53156] Verystrong	(3m52s)	PLdn	SAT
16212kHz1440z	23/02[02632 00135 77733 53156] Weak	(3m52s)	PLdn	SAT

Finally, before Ian's Digital Column we include PoSW's logs for HM01, as a reminder of the intercepts that have produced the up to date schedule that can be seen in the Charts section.

2-Jan-13, Wednesday:- 0706 UTC, 9,330 kHz, the Spanish language YL voice formerly known as "V02a" in progress, up with one 5F group followed by data noise.

6-Jan-13, Sunday:- 0717 UTC, 9,330 kHz, transmission in progress, 5F group followed by data noise. Stopped approx 0755z, last 5F group "73361". 0759 UTC, 9,065 kHz, in progress when tuned in just before the hour, managed to get just three 5Fs, "66871 73361 38501" before the noise started. 0901 UTC, 9,240 kHz, another transmission, call-up with 5Fs, data started after 0902z.

13-Jan-13, Sunday:- 0758 UTC, 9,065 kHz, repeating six 5F groups in Spanish, "88716 17384 72856 81157 21735 72143" 0910 UTC, 9,240 kHz, transmission in progress, weak signal.

20-Jan-13, Sunday:- 0728 UTC, transmission in progress, very weak signal. 0759 UTC, 9,065 kHz, "66111 65613 16116 21515 36135 64444", went into data mode just before 0802z. 0913 UTC, 9,240 kHz, transmission in progress, very weak signal.

26-Jan-13, Saturday:- 0918 UTC, 12,120 kHz, HM01 on a new frequency, only found by chance after tuning up to 12,123 kHz in readiness for the 0920 UTC E07a SSB on 12,123.

On the same frequency as a weaker broadcast station. Heard Spanish 5F "88454" at 0924z.

27-Jan-13, Sunday:- 0800 UTC, 9,065 kHz, "88455 03803 53382 78504 33756 46851".

Opening shot of the data mode at 0802 and 35 seconds UTC. 0900 UTC, 9,240 kHz, same 5F groups as above, weak signal.

2-Feb-13, Saturday:- 0858 UTC, 12,120 kHz, starting up with "36411 66434 72266 36762 33334 87404". Very strong signal, S9+, by far the strongest HM01 so far.

1001 UTC, 12,180 kHz, another new frequency, last part of the call-up routine, 5Fs same as earlier, went into data mode just before 1002z, S7 to S8.

3-Feb-13, Sunday:- 0900 UTC, 9,240 kHz, call-up in progress when tuned in on the hour, "36412 66435 72267 36763 33335 87405".

9-Feb-13, Saturday:- 0900 UTC, 12,120 kHz, "34234 53643 27524 08251 44504 68668 (?)", much weaker than last Saturday, S6, the broadcast station on the same frequency plus an FSK signal on a close frequency making copy difficult.

10-Feb-13, Sunday:- 0800 UTC, 9,065 kHz, "34235 53644 27525 08252 44505 56231", S7, data started shortly after 0802z. 0900 UTC, 9,240 kHz, 5Fs as earlier.

13-Feb-13, Wednesday:- unusually I had some time on a weekday this morning. Checked 9,330 kHz at 0700 UTC but no sign of HM01; but checking the frequency again at 0735 UTC surprised to find an S9 transmission in progress. "81552" after 0736z, "53647" a minute or so later. 0758 UTC, 9,065 kHz, starting up with, "81552 53647 07861 08255 54301 56234". Data noise started 0801 and 20s UTC. Very strong, peaking S9+.

17-Feb-13, Sunday:- 0658 UTC, 9,330 kHz, "81556 38514 07865 32563 54305 30073".

Data started 0701 and 15s UTC. Strength S7, when checked again at 0735 was a good S9.

### **Digital, Incursions and Unexplained Signals**

Hello once again and welcome to the first column of 2013. The big news this month is that there are two new digital modes which I believe will interest the groups members , one of these modes is like nothing we have seen before.News of these modes came in an email from long term friend of the group and expert data monitor Leif D in January. Both modes are being transmitted by Polish Intelligence the organisation responsible for the Family III group of stations.

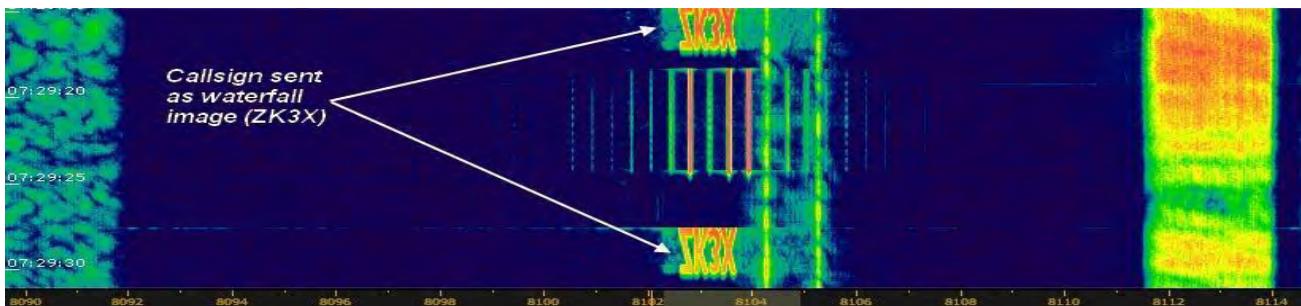
The first of these stations is using an amateur mode called WinDRM to transmit picture files. Now it is believed these picture files contain encrypted messages using a technique called Steganography. Without going into complex detail this techniques hides a message with in a picture (or sound) file by embedding the hidden message within the digital "noise" of the message. Leif tells me that most of the images sent by this station are of arid or semi arid landscapes such as the one below which was sent on 18th December 2012 at 07:30 ..



Things changed on 14th January 2013 when at 07:30 they sent this picture ..



Leif is sure that this station is Polish due to their strength at his location , that they have transmitter noise similar to E11 and the fact that transmissions are about 60-100 Hz higher than the designated channel, a behaviour he has seen on E11/G11/S11 transmissions as well. Another oddity is that these transmissions send fake amateur style callsigns which can be seen with a waterfall display as seen below ..



Callsigns seen so far include ZK3X , KH4M and TT7OP. If you wish to decode these transmissions then you may want to try using the WinDRM and EasyPal software packages which were originally designed for amateur radio use. Most transmissions so far have been received at 07:30 and 07:35 on 8102 KHz. While searching for other frequencies used by this mode beware of other users of WinDRM. Radio amateurs are easy to detect since they should only use the amateur bands but another user (believed to be the British military or a British governmental organisation) use a modified version of WinDRM. These British variants can operate all over the HF bands but have a habit of operating between 5 MHz and 5.5 MHz during the early hours of the evening with transmissions which last for many hours. In addition the British variant of this mode doesn't have the three pilot tones that the amateur (and Polish) mode do which means it can be decoded by the amateur software packages. The different variants can be easily differentiated with a audio spectrum analyser type program. But if a transmission lasts longer than five minutes then it is unlikely to be the Polish station.

The other mode Leif told us about is a Polish FSK data mode which sends data at 100 baud with a 625 Hz shift. Now I had read about this mode previously on Leif's encyclopedic data modes website ..

[http://signals.taunus.de/DIG\\_intro.htm](http://signals.taunus.de/DIG_intro.htm)

but had been unable to find any transmissions. Leif was kind enough to give me some of the frequencies and times used by this station which has enabled me to listen to it for the first time. Having heard the transmissions I'm not surprised I hadn't found it before. Each broadcast lasts just under 30 seconds or slightly less than a minute and is then repeated five minutes later. Unlike the various Russian data modes which transmit a carrier for ten minutes or longer before the transmission this mode turns on the carrier just a few seconds before and turns it off immediately afterwards. If you want to hear this mode I have uploaded a sample to this URL ..

<http://borg.shef.ac.uk/rivet/polfsk.wav>

Thanks to Leif I have found two schedules for this station so far ..

Frequency (KHz)	Day	Times (UTC)
6837.5	Monday	08:00 + 08:05
8103.5	Tuesday	10:30 + 10:35

Due to shortage of time I haven't had chance to analyse the content of these transmissions or add special support for this mode to Rivet. However if you want to investigate this mode Rivet will demodulate the broadcasts into binary data for analysis. To do this put Rivet into "FSK (Raw)" mode then click on the "Baudot & FSK Options" item in the "Options" menu. In the selection box that appears select "100 Baud" and "625 Hz" shift. Once you have done that you could try loading the sample wav file of this station I linked to above (if you want more recordings please get in touch with me via email).

In other data news I don't have any further FSK200/1000 decoding discoveries to announce but more FSK200/1000 schedules have been found. The first was found by regular group member DanielAR who discovered a daily weekdays schedule at 02:00 , 02:10 and 02:20 which has the link ID 0xaa. Messages change daily and unusually for this mode are dated the same as the transmission date. During February DanielAR found this schedule using 16320 KHz for the 02:00 broadcast so it was possibly intended for the Americas. I found a similar schedule which again transmits every weekday at 07:00 , 07:10 and 07:20 with the link ID 0xb0. This same link ID was used during January for another weekday FSK200/1000 schedule transmitting at 12:00 , 12:10 and 12:20. Initially I thought the 12:00/10/20 schedule must be a repeat of the 07:00/10/20 schedule but on a few days holiday from work during February I was unable to find the frequencies used by the mid day schedule. My suspicion is that the 12:00 January schedule moved to 07:00 during February. Both the 0xaa and 0xb0 schedules are similar in that the daily changing messages are remarkably constant being between 30 and 40 blocks in size. This is in sharp contrast to the weekend only schedules which I usually monitor which can send a message of 9 blocks one week and 80 blocks the next.

So the start of a new year brings us two new digital modes and plenty to listen out for. I would appreciate any reports of the WinDRM mode outside of the amateur bands even if you can't decode it. Likewise I am fairly sure that there are more Pol FSK schedules out there but they are going to be challenging to find.

Just a reminder that there are several new builds of Rivet released monthly and its always worth checking that you have the very latest version. The latest build can always be found at .. <http://borg.shef.ac.uk/rivet/>

Ian

#### Gizza Job [if you're a graduate or likely to become one]

#### A reply!!!! Readers will remember this exchange from NL74

"Whilst I was photographing this on a railway station I was joined by an official wearing a Hi-Vis jacket and carrying a radio.

"You can't take photographs!"

"Why not?"

"Because I said not!"

"Who are you?" *No answer, obviously a jobsworth....*

"If you continue I'll call the police."

"Go on then; In fact F..k Off whilst you're at it, will you?"

"You'll regret that."

"Do one mate, go on, hoppit...."

I slowly finished what I was doing and got on my train ten minutes later. Next day I saw the official: A Ticket Collector! I said 'Good Evening' but he didn't seem interested.

Britain is now full of officious pricks with Hi Vis Jackets and radios and I'm mightily fed up with the idiots who assume an authority they're not fit to carry trying to tell others what to do."

Well, it seems I'm not the only disgruntled member of British society that has an axe to grind as a reader wrote in to me:



"I did notice your comment and dialogue regarding the Hi Vis Jacket & Radio Gentleman at the train station. It is really annoying to say the least, I remember I got told off for taking a photo of a train at the Metro Centre station in Newcastle. I just ignored him and he jumped back on his train a few moments later, I didn't think he had any authority to tell people what to do either. It is getting a bit of a problem through out England these days, and it is totally killing The Trainspotting Hobby as a whole. The thing is there is a bit of money to be made by photographing Locomotives, as some Train magazines would be interested in paying for photographs of trains. As far as I can tell the whole Train Enthusiast Hobby is still alive and kicking, with Privatisation Of Train Companies means there is a large variety of rolling stock in many different colours. There is still quite a few old British Rail class 37's and 55's still working daily, usually these are used for freight instead of passenger use. There is a bit of irony when comparing the two hobbies, no one seems to care about listening to secret spy transmissions, but walk onto a train station with a camera then you will be treated as if you are a terrorist or a criminal" [Thanks!]

Or not a graduate.....

### Our work is important. All of it.

Excellent stuff here.

Administrators inputting data and some retrieval but you could be arranging flights or dealing with budgetary information.

Once selected for employment and PV completed satisfactorily on your first day you'll be trained on how to absail into the office, to use effectively and clean and reassemble a Glock 17 whilst dealing with the bothersome 'Office Assistant paperclip thingy that pops up in microshaft orifice when you least need it.'

Transport Supervisor managing vehicle movements and garage bookings. A driving licence is a must C1 [medium sized goods vehicles] and D1 [Passenger Carrying Vehicle, PCV] groups.

Applicants must be able to use Excel and Word whilst driving and simultaneously engage rogue vehicles with a Carl Gustav 84mm recoilless rifle at a range of 150M or a Glock 17 pistol at a range of 25M aiming to slot the driver twice through the head; the tap shot being a requirement.

Facilities Assistants. An interesting one this; you need to be fitter than a butcher's dog. This one's a physical job with mail room duties, cleaning and office moves. Building maintenance is also a possibility.

The ability to covertly use a satellite phone from the middle of the Magreb whilst wall papering or artexing an al-Qaeda tent as you simultaneously take down Arab to English translations on a modified computer integral to the forklift you'll have there is a paramount required skill.

There's medical and drugs test to be done [try meow meow for a real high if its offered] and we don't want you to say anything to anyone either.



### **Our work is important. All of it.**

At MI6, our work is vital. We gather intelligence from around the world to help protect the UK against a range of threats, from terrorism to regional instability. Behind this work you'll find our support teams. It's thanks to their high standards and professionalism that we can concentrate on the security and prosperity of the UK. All these roles are based in central London. Some paid overtime may occasionally be required.

**Administrators** £24,313 including local pay additions

Much of this work involves data inputting and retrieval, but it could also include booking flights, arranging meetings or dealing with information on budgets. You will need at least five GCSEs (grade A-E or equivalent), computer literacy and preferably some administration experience.

**Transport Supervisor** £24,347 including local pay additions

You'll be managing vehicle movements and garage bookings. For our London operations, occasionally driving yourself. You'll also need a clean driving licence with C1 and D1 entitlement and a comprehensive knowledge of London's streets. An understanding of digital tachographs, knowledge of regulations regarding drivers' hours, and a basic knowledge of Excel and Word are essential.

**Facilities Assistant** £27,231 including local pay additions

You could be doing anything from mail room duties to cleaning, office moves, painting, gardening and building maintenance. It's a physical job.

so you should be fit and ideally already working as a Facilities or Estates Assistant or similar. As well as a full, clean driving licence - basic IT skills are also important, ideally you'll have a forklift licence and a CSCS, scaffolding certificates, or you'll be willing to achieve them.

#### **Before you apply**

MI6 offers an excellent working environment, with great benefits including 25 days' holiday and a good pension. However, applying to us is a complex process that may take up to six months. We need to carry out in-depth background and security checks before we recruit anyone - an extremely important task which can take some time. Before applying, please make sure that you have checked that you have the skills and experience required. It's also essential that you feel strongly about helping to protect your country and are committed to being discrete about your work. Remember, you must be a British national aged 21 or over and you will be required to undergo advanced security checks, including medical and drug tests.

To apply, visit [www.mi6.gov.uk](http://www.mi6.gov.uk) and search our current vacancies. We recommend spending a little time gathering more information about us there. Closing date for all these roles is:

25 January 2013.

Please do not tell anyone about your application.



From E:

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## Going behind the scenes with MI5's Intelligence Analysts

### **inspire**



**MI5 Intelligence Analysts play a vital role at the heart of British Intelligence. To learn more about what the role involves, we spoke to some of the analysts at the organisation's HQ in London.**

#### **What does the role involve?**

Simon: The fundamental thing is understanding how you can use your analytical skills to add value to an investigation. There are so many opportunities - the chance to work alongside counter-terrorism, counter-espionage, surveillance and agent running teams, among others. Ajay: Analysts have to be excellent problem-solvers with a creative mindset. It's about getting under the skin of the data and making a judgement call. You can't use pure

stats to back up a decision, you need to be objective and apply logic to reach a conclusion.

#### **What impact can your work have?**

Nicola: What we do helps to inform key decisions. The stakes are high - our work often changes the course of an investigation, and ultimately our assessments help protect people and places.

#### **What's the environment like?**

Simon: Our analysts are very motivated and find data genuinely exciting. They enjoy work, it can be very fast paced and exciting and the organisation really values expertise. There is a good work-life balance here, and the vast majority of work can be done in a normal day.

**"We're working to the same end goal and are happy to help each other"**

and software. It gave me confidence. The vast majority of the time I was involved in real investigations, which was daunting, but exciting.

#### **What happens at the end of those six months?**

Ajay: The first day I began working independently of my mentor was a big deal. I'd learned so much and it was great to have the freedom to put it to good use. But the best things is you never stop learning. You can never know it all. That's exciting and humbling.

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### **Israeli-Yemeni Charged With Espionage in Yemen**

By AHMED AL-HAJ Associated Press

SANA'A, Yemen January 3, 2013 (AP)

<http://abcnews.go.com/International/wireStory/israeli-yemeni-charged-espionage-yemen-18123339#.UOaXJawZy6U>

Yemeni security officials say an Israeli who holds Yemeni citizenship will face trial on charges of espionage.

There were few details of the case. The officials said Thursday the man, in his 30s, was arrested in the southern city of Taiz in late December and accused of spying for Israel. He was transferred to a prison to the port city of Aden this week before his trial. No date has been set.

One official said the man, identified as Ali Abdul-Mohsen al-Himi al-Siqhi as well as Abraham al-Deri, had contacts with Israeli security agencies and communications were found on his laptop. He didn't elaborate.

The officials spoke on condition of anonymity because they were not authorized to speak to reporters.

Israeli officials had no comment on the case.

<http://abcnews.go.com/International/wireStory/israeli-yemeni-charged-espionage-yemen-18123339#.UOaXJawZy6U>

## **India Arrests Man Accused Of Spying For Pakistan; Sumar Khan Allegedly Gave Info On Military Exercise**

By Howard Koplowitz | February 25 2013 12:39 PM

<http://www.ibtimes.com/india-arrests-man-accused-spying-pakistan-sumar-khan-allegedly-gave-info-military-exercise-1102886>

Indian authorities have arrested a man they claim spied for rival Pakistan, accusing the Indian citizen of passing on information about military exercises and communicating with suspected spies.

The accused spy, Sumar Khan, 35, was arrested by police in Rajasthan and charged with sending Pakistan's Financial Monitoring Unit information about Indian Air Force exercises that took place Friday, The Hindu reported. Khan was detained near the Chandhan field firing range, where the exercises were taking place.

"Sumar Khan was providing Pakistani intelligence with information about military activities going on at the Chandhan field firing range, Lathi and Pokharan," said Additional Director General of Police Intelligence Dalpat Singh Dinkar.

The exercise, known as "Iron Fist," was observed by top Indian officials, including Prime Minister Manmohan Singh, President Pranab Mukherjee and Defense Minister A.K. Antony, the Indian English-language newspaper reported.

Dinkar said Indian authorities have evidence linking Khan to spy activities.

"He used several different mobile phone numbers and used to share strategically important information related to the country's security with his Pakistani handling officer via coded text messages," Dinkar said. [*Note method of delivery*]

The Indian official said authorities had been keeping an eye on Khan during the "Iron Fist" exercise.

The BBC reported Khan called a relative in Pakistan whom India claimed works for Pakistan's powerful Inter-Service Intelligence agency.

Khan received spy training from Pakistani intelligence when he traveled to India's rival for two months in October, according to The Hindu.

The 35-year-old, who lives in Karmon ki Dhani, appeared in court in Jaipur on Monday and was remanded into custody, the BBC reported.

The spy accusations came days after a pair of bombs exploded in a congested area of Hyderabad in what were the deadliest terror attacks on Indian soil since 2011.

"This is a dastardly attack. The guilty will not go unpunished," Singh vowed following the Thursday night blasts.

<http://www.ibtimes.com/india-arrests-man-accused-spying-pakistan-sumar-khan-allegedly-gave-info-military-exercise-1102886>

## **MI5: We need more Net terror evidence**

Nicholas Cecil  
05 February 2013

<http://www.standard.co.uk/news/politics/mi5-we-need-more-net-terror-evidence-8481859.html>

The director general of MI5 has warned of growing difficulties securing communication data to target terror suspects.

Sir Jonathan Evans's warning was highlighted in a report by MPs on the Government's draft Communications Data Bill. The Intelligence and Security Committee raised the prospect of a "serious impact" on MI5 and MI6 unless they are able to access more pieces of evidence.

Critics of the draft Bill claim it is a snoopers' charter. It would require internet service providers to store for a year all details of online communication in the UK. This would include the time, duration, originator and recipient of a communication but not its content.

Sir Jonathan told the MPs: "In general, it is becoming more difficult to be confident that you are getting communication data coverage of the targets that we need to look at."

The committee urged the Government to make improvements to the Bill.

<http://www.standard.co.uk/news/politics/mi5-we-need-more-net-terror-evidence-8481859.html>

## **UK government plans to track ALL web use: MI5 to install 'black box' spy devices to monitor British internet traffic**

MPs' report outlines spooks' take on the draft Communications Data Bill  
It shows they are keen to implement nationwide surveillance regime  
They want ISPs to install 'black boxes' that can inspect all internet traffic  
Spies claim they are only interested in 'communications data'

By Damien Gayle

PUBLISHED: 13:06, 6 February 2013 | UPDATED: 13:51, 6 February 2013

<http://www.dailymail.co.uk/sciencetech/article-2274388/MI5-install-black-box-spy-devices-monitor-UK-internet-traffic.html#axzz2K838mKe9>

UK spy agencies want to install 'black box' surveillance devices along the country's communications networks to monitor internet use, it emerged today.

A report by an influential committee of MPs tells how spooks are keen to implement a nationwide surveillance regime aimed at logging nearly everything Britons do and say online.

The spy network will rely on a technology known as Deep Packet Inspection to log data from communications ranging from online services like Facebook and Twitter, Skype calls with family members to visits to pornographic websites.

The report by Parliament's Intelligence and Security Committee, published yesterday, gives UK intelligence agencies' perspective on the government's draft Communications Data Bill, which is intended to update surveillance powers.

The government argues that swift access to communications data is critical to the fight against terrorism and other high-level crime, but it has been delayed after the Liberal Democrats dropped support for the bill.

MI5 chief Jonathan Evans told the committee: 'Access to communications data of one sort or another is very important indeed. It's part of the backbone of the way in which we would approach investigations.'

'I think I would be accurate in saying there are no significant investigations that we undertake across the service that don't use communications data because of its ability to tell you the who and the when and the where of your target's activities.'

The Bill has encountered stiff opposition, but authorities have been at pains to stress that they're not seeking unfettered access to the content of emails or recordings of phone calls.

Instead, they claim, what they are after is what many have described as 'outside of the envelope' information: Who sends a message, where and how it is sent, and who receives it.

For example, while the email addresses of senders and recipients would be available to agencies, they would still need to obtain a court order for access to the contents of the emails.

A similar situation would apply in the case of mobile phone calls, with the callers identities and locations available to agencies, along with the time of the call and its duration, but agents would be restricted from listening without authorisation from the courts.

The Government Communication Headquarters (GCHQ) on the west of Cheltenham: UK spy agencies want internet service providers to install devices that will give them access to citizens' online communications

The Government Communication Headquarters (GCHQ) on the west of Cheltenham: Spooks say swift access to communications data is critical to the fight against terrorism and other high-level crimes

A key challenge for the government has been extracting that information from overseas service providers - companies based in Silicon Valley or elsewhere that might not feel obliged to comply with a British spy agency's request.

#### FOIL THE LISTENERS: HOW TO ENCRYPT YOUR COMMUNICATIONS

While the government has insisted that it will not invade the privacy of citizens' communications without a court order, there are fears that installing deep packet inspection across the UK will nevertheless give them the capability.

Luckily, there is a range of software for both computers and mobile devices, much of it free, that can encrypt communications to keep it secure.

1) iSafeguard Freeware 6.2: This program will secure emails and files using strong encryption and syncs with most popular email clients.

2) HushMail: This web-based email service uses a Java applet to encode emails with 1024bit public key encryption.

3) GnuPG: This Linux-only application is an open-source replacement for PGP (Pretty Good Privacy). PGP was one of the first military-grade encryption products available to the general public.

It was in those cases, the committee's lawmakers said, that the surveillance devices would come in handy.

'It is important for the agencies that there is some means of accessing communications data from uncooperative overseas communications service providers,' the report said.

The lawmakers said the probes would work using 'deep packet inspection,' so-called because it allows those intercepting packets of data to comb through their content.

The services that might be targeted by the probes weren't identified, although Facebook, Twitter, Hotmail, and Google Chat are all popular in Britain and were among the services named elsewhere in the report.

Britain's surveillance plans remain in draft form, and the report carried several critiques of the government's proposals.

But in general it rejected opponents' claims that the surveillance regime was unworkable or oppressive, warning that the pace of technological change would soon have a serious impact on the intelligence and security agencies' unless the new surveillance powers were introduced.

The report also appeared to reject suggestions that encryption might allow those trying to maintain the privacy of their communications to baffle government monitoring.

'We have heard that the government has (redacted) options in dealing with the challenge encryption poses,' the report said.

The next two paragraphs were completely blanked out.

<http://www.dailymail.co.uk/sciencetech/article-2274388/MI5-install-black-box-spy-devices-monitor-UK-internet-traffic.html#axzz2K838mKe9>

#### **British housewife accused by the US of spying for Iran 'to save her brother-in-law's life'**

By Robert Verkaik

PUBLISHED: 01:35, 17 February 2013 | UPDATED: 01:36, 17 February 2013

<http://www.dailymail.co.uk/news/article-2279898/British-housewife-accused-US-spying-Iran-save-brother-laws-life.html>

British housewife and her husband have been accused of spying for Iran in a leaked US government report.

Anne Singleton, 53, is alleged to have been blackmailed into training with the Iranian secret service during a visit to Tehran in 2002.

The Pentagon-commissioned report claims that Mrs Singleton and her Iranian husband, Massoud Khodabandeh, 56, agreed to work for the regime in return for saving the life of his jailed brother.

The entrance to Camp Ashraf, the Iraq-based Iranian opposition group People's Mujahedeen (MEK) where Anne Singleton says she once trained to fire weapons. Iranian agents are also said to have threatened to confiscate his mother's extensive property in the Iranian capital. Mrs Singleton strenuously denies the allegations. The report, written by the Federal Research Division of the Library of Congress and privately circulated in Washington, says the couple agreed to spy on opponents of the Iranian regime, including the People's Mujahideen of Iran (MEK), of which Mrs Singleton and her husband were once members.

The report alleges that: 'In 2002 Singleton met in Tehran with Ministry of Intelligence and National Security of the Islamic Republic of Iran [MOIS] agents who were interested in her background. She agreed to co-operate with them to save her brother-in-law's life.'

It adds: 'During her stay in Tehran, she received training from MOIS. After her return to England, she launched the [iran-interlink.org](#) website in the winter of 2002. 'Afterwards, she made many trips to Iran and Singapore – the country where the agency contacts its foreign agents.'

Iran sponsors terrorism all over the world and last year was behind a bus bombing in Bulgaria. As tension between the West and Iran increases over Tehran's nuclear programme, British security agencies are keeping a watch on MOIS activities.

Last year Iran was forced to downgrade its diplomatic presence in the UK after the British Embassy in Tehran was attacked. Since then it has struggled to secure intelligence on dissident groups.

Security sources said last night that the Iranian regime relies on agents in the West to spy on dissidents and conduct propaganda operations to discredit opponents.

Last night the couple, who run a Middle East communications company from their Victorian semi-detached home in Leeds, threatened to take legal action over the claims.

Lord Alex Carlile QC, an expert on Iran, has said the People's Mujahideen of Iran is a 'credible opposition' party and should be removed from a list of banned terrorist organisations

Mrs Singleton, a mother of one, said: 'The report was withdrawn. It wasn't published anyway. It was leaked deliberately by a journalist in America.' She added: 'The MEK just made all that up. Yes, I have been to Iran, but they have concocted a picture which is entirely false.'

David Osborne, chief of the Federal Research Division which compiled the report, told *The Mail on Sunday*: 'The report was revised on the Division's own initiative and resubmitted to the Pentagon. I do not know when it will be reposted to the US government site.'

By her own admission, Mrs Singleton once belonged to the MEK and was trained at its camp in Iraq to fire weapons. She later fell out with the group, describing it as a cult.

The couple were also named in a 2007 report by the British Parliamentary Committee for Iran Freedom called *Spying For The Mullahs: Iran's Agents In The UK*. The report said: 'Khodabandeh and Singleton appear to lead a small number of individuals in an aggressive demonisation campaign against the MEK.'

Lord Carlile QC, a former independent reviewer of terrorism legislation and a member of the Parliamentary Committee for Iran Freedom, has lobbied to have the People's Mujahideen of Iran removed from a list of banned terrorist organisations.

'They are a credible opposition to the regime,' he said. 'To call them a cult is like saying that any political party is a cult.'

<http://www.dailymail.co.uk/news/article-2279898/British-housewife-accused-US-spying-Iran-save-brother-laws-life.html>

The Times and The Sunday Times (Times Newspapers Limited.)  
- Clipping Loc. 2243-64 | Added on Thursday, February 21, 2013, 09:53 PM

### **Mugabe thugs snatch 'hate speech' radios**

Police silence independent voices before poll

Credit: Aaron Ufumeli/EPA

President Mugabe fears foreign radio stations broadcasting to his rural supporters Zimbabwe | Jan Raath | Harare | 373 words

President Mugabe's attempt to control Zimbabwe's media extended to a new extreme yesterday when he banned the use of radios. Charity Charamba, a police spokeswoman, said that officers were hunting "communication devices" which she said were "meant to sow seeds of discontent within the country" and to communicate "hate speech".

She added that distribution and possession of radios was illegal and perpetrators would be arrested.

Hundreds of radios have been seized in searches of homes in scenes last seen before the collapse of the Soviet bloc.

The Mugabe regime's crackdown on free speech comes 23 days before a key referendum on a new and supposedly democratic draft constitution and — more importantly — before an election expected in the middle of the year.

Mr Mugabe, who turns 89 today, is determined to hang on after 33 years as President but he and his overwhelmingly rural supporters are struggling to keep up with the technological advances of the opposition Movement for Democratic Change (MDC).

For the past eight years, Morgan Tsvangirai's party and various pro-democracy organisations have been distributing tiny short-wave radios in the country's impoverished rural areas. Mr Mugabe fears that the solar/wind-up radios, manufactured in South Africa, are enabling otherwise unconnected residents to hear broadcasts from overseas, including the BBC and other international stations.

Before the radios, the only source of news and comment for rural Zimbabweans was the propaganda of state radio and its praise for Mr Mugabe, who is described as "the liberator".

The state station is Zimbabwe's only legal one and it reaches less than 30 per cent of the country. The short-wave radios are popular, and informal "radio clubs" have developed in villages, where people congregate nightly at the home of a neighbour who owns one. Webster Shamu, the Information Minister, said that the short-wave broadcasts were coming from pirate stations "operated by enemies of the country". Ms Charamba added: "We have information that people or political parties are engaging in illegal activities and distributing illegal communicating devices to the public." Nhlanhla Ngwenya, director of the Zimbabwe branch of the Media Institute of Southern Africa, said that the government claims of law-breaking were baseless because the law prohibited the possession only of broadcasting equipment. "It is within our rights to enjoy freedom of expression," he added.

The Times and The Sunday Times (Times Newspapers Limited.)  
- Clipping Loc. 748-62 | Added on Friday, January 25, 2013, 10:49 AM

### **Gadgets that led way to great escapes**

Ben Macintyre | 301 words

An extraordinary catalogue of secret gadgets used by escaping prisoners of war is to go on sale in London next week, offering a glimpse into the fertile minds of Britain's wartime inventors. The catalogue was drawn up in 1942 by MI9, the subsection of British intelligence dedicated to helping PoWs and downed airmen escape to Britain and supplying resistance groups.

It includes such ingenious designs as a compass hidden inside a button, maps printed on clothing, a radio receiver disguised as a cigar box and a secret camera inside a cigarette lighter.

The equipment was principally designed by Christopher Clayton Hutton, known as "Clutty", a brilliant inventor who built himself a large underground bunker in the middle of a field, to be able to work undisturbed. Among his most important inventions was a cloth map, printed on silk with non-running ink, that could be folded into a tiny space and hidden inside a chess piece, record, or pack of cards. These would be smuggled to PoWs using charitable relief organisations, many of which were fictitious.

About 400,000 such escape maps were printed during the war, and of the 35,000 Allied troops who escaped and made their way to safety, about half were carrying one of Hutton's maps.

When it came to designing buttons to conceal compasses, there was a piece of inspiration. The buttons had reversed screw threads, based on the theory that the rigorously logical German mind would never imagine that something might unscrew the wrong way. Hutton also invented a compass from a magnetised razor blade.

When the blade was hung on a thread, the “G” in Gillette pointed north. The 76-page catalogue, which goes under the hammer at Bonhams on Wednesday, was drawn up for a group of visiting American intelligence officers. Fewer than 100 booklets were printed, and only a handful survive.

The Times and The Sunday Times (Times Newspapers Limited.)  
- Clipping Loc. 216-66 | Added on Sunday, February 03, 2013, 08:07 PM

### **Iran ‘faked British chemical weapons plot’**

A cyberattack on a UK security firm aimed to portray the West as planning dirty tricks in Syria, writes Dipesh Gadher Credit: ARTEM KOROTAYEV A plot was faked about the deployment of chemical weapons in Syria 1009 words

INVESTIGATORS suspect that Iran may be involved in an attempt to smear the West by hacking a British security company and faking a plot in which the firm was asked to deploy chemical weapons in Syria. False emails created as part of the sophisticated cyberattack claimed the plot had been sanctioned by Washington and indicated a desire to frame Bashar al-Assad, the Syrian president. If Assad used chemical weapons against his own people, it would potentially trigger military retaliation by America and Britain.

The hacking of Britam Defence, a company run by former SAS chiefs with many Middle Eastern clients, is being investigated by cybercrime and counterterrorism specialists at Scotland Yard. The security services are also believed to be studying the breach.

Those familiar with the hack say it bears similarities to a cyberattack last year on Saudi Arabia’s biggest oil company, which US intelligence officials have blamed on Iran. Hackers in that case launched a virus that erased swathes of data from the company’s computers and replaced it with an image of a burning American flag.

The perpetrator of the Britam hack posted internal documents from the firm on the internet on January 22. Calling himself “JAsIrX”, the hacker added inflammatory and libellous comments about Britam’s activities in Iraq and claimed the company “plans to invade Iran and Syria”. Among the leaked documents were two provocative emails purportedly written by one of Britam’s directors. One, headlined “Iranian Issue” and apparently sent last October, sought to link the company to a military training exercise in Saudi Arabia aimed at responding to a possible attack by Iran. The other email, called “Syrian Issue” and purportedly sent on Christmas Eve, referred to the alleged chemical weapons plot.

Addressed to Phillip Doughty, an SAS veteran who founded Britam in 1997, it stated: “We’ve got a new offer. It’s about Syria again. Qataris propose an attractive deal and swear that the idea is approved by Washington. “We’ll have to deliver a CW [chemical weapon] to Homs, a Soviet origin g-shell [gas shell] from Libya similar to those that Assad should have. They want us to deploy our Ukrainian personnel that should speak Russian and make a video record. “Frankly, I don’t think it’s a good idea but the sums proposed are enormous.”

The timing of the email is significant because President Barack Obama warned Assad in December that he would face “consequences” if he unleashed chemical weapons in Syria, where more than 60,000 people have already died in a bloody civil war. Qatar, mentioned in the email, supports the arming of Syrian rebels. Russia, conversely, has been Assad’s principal arms supplier and is said to have had some of its own troops on the ground in the country. Iran is Syria’s main regional ally. When details of the so-called “false flag” plot began to trickle out last week, Press TV, Iran’s state-run broadcaster, took a hard anti-western line. An online report said: “In light of recent and continuous attempts by the Israelis and Nato to justify a military intervention in Syria based on fears of ‘chemical weapons’, and considering how a nearly decade-long war and occupation was fought in neighbouring Iraq under similar and patently false pretences, every potential piece of evidence should be taken seriously.”

The report admitted, however, that there was “most likely no way” the email could be authenticated. Computer security experts called in by Britam have proved that the emails relating to Syria and Iran were fabricated. Although they appeared to have been sent on different dates — more than two months apart — they both share the same message identity number, which is supposed to be unique to an email, and were sent at exactly the same time of day. “They are 100% false,” said Simon Lalor, Britam’s chief executive. “From a technical point of view, the emails are fabricated. Who wrote the content is another question.” Lalor believes the company, whose chairman is General Sir Michael Wilkes, a former director of special forces and army adjutant-general, has been “used as a vehicle to create tension and embarrassment for those with a political motivation”.

He said Britam worked only in the commercial sector, mainly providing risk management services. Its work in Iraq involves protecting oil fields close to Basra. Investigations have so far revealed that the hacking involved a breach of a computer server in Singapore and may have taken place as long ago as last November. Genuine data from Britam, including passport details of some of its employees, has been leaked online. A series of “dummy trails” were used to cover the hacker’s tracks. “Looking at the logs, there is an element of planning, sophistication and manipulation,” said an informed source. Most hacks have their own “fingerprint”, which analysts try to compare with previous cases. “There are similarities in the planning phase between this hack and another, as well as similarities in the way the information was put out,” said the source.

The other incident is understood to be a cyberattack last August on Saudi Aramco, an oil giant described as the world’s most valuable company. A virus wiped out data from 75% of Aramco’s corporate PCs. Hackers calling themselves the Cutting Sword of Justice claimed responsibility, but, based on analysis of the code used, US intelligence officials believe the attack was masterminded by Iran. Asked whether a state sponsor was involved in the Britam hacking, Lalor said: “I have heard speculation that it’s exactly that.” A network of pro-Assad hackers and online activists called the Syrian Electronic Army (SEA) have also been named on technology websites as possible suspects. The group claims to be independent of the Syrian government, but the domain name of its website was reportedly registered by the Syrian Computer Society, which was once headed by Assad. The SEA has previously targeted Al Jazeera, the Qatar-based broadcaster, the BBC News website and even Oprah Winfrey’s Facebook page.

On Thursday, the group said it had disabled 50 websites in Israel after reports that the country had bombed a military research facility near Damascus. A Scotland Yard spokesman said: “An investigation has been launched after an allegation of computer misuse was reported to police.” See Case by case, EU judges help Iran go nuclear, Think Tank, in this section

We are unable to include PoSW's popular 'Items of Interest in the Media' this time due to matters beyond our control. We expect it to return with the next issue, all being well.

As ex ENIGMA readers are aware we receive logs from our secretive intercept operator 'E'

Whilst we are not always able to include all of his logs or the other information he sends this piece, from an intercept made 18<sup>th</sup> November, 2012 is worthy of inclusion in its original form:

6960	1703	CW. CS 246 CONT. OFF 1713 LONG BEEP NO MESSAGE	TUE	14/11
6215	1551	SWED RHAPSODY! PIRATE STATION SUN 18/11 WITH IRDIAL DISK? 19999 22227 81871 54198. END 1553. UTILITY STAT AFTER. THINK IT WAS A HOAX! BLAST FROM THE COLD WAR! CREEPY!		
7840	0646	E11. 517/00	THU	20/12

Thanks 'E' an absolute cracker!

Look forwards receiving your next report via the same box!

**A quick question:** Are there any other SWL'ing members who have received a calendar and other goodies from IRIB [Islamic Republic of Iran Broadcasting] and who have found the envelope in a Royal Mail plastic bag bearing the message 'Item Damaged Before Arrival in UK' and further on reads, 'was received damaged by Royal Mail at the point of entry into the UK.'

Makes you think, that!

# Chart Section Index

1. Logging Abbreviations Explained
2. European Number Systems
3. Prediction Chart
4. M01, M01b and M45 Schedules
5. M12
6. Family III
7. G06
8. HM01 Cuban Mixed Mode

### Logging Abbreviations explained.

The ENIGMA 2000 Standard logging should take this form without any personalised abbreviations:

E07 10436kHz 1740z 07/06[414 1 563 102 92632 ... 09526 0 0 0 0 0 0] 1753z Fair QRM2 QSB2 PLdn SUN

Station:	E07	[Traits of stations in ENIGMA Control List]
Freq:	kHz	[As above 10436kHz]
Time:	z	[Always 24hour clock, 'z' states GMT/UTC]
Date:	day/month	[As above 7 <sup>th</sup> June]
Msg detail:	<u>Varies with station</u>	
ID taken from 100kHz fig in freqs:	414	[freqs used in this schedule were 13468, 12141 and 10436kHz]
Msg count	1	
Dk [decode key]:	563	
Gc [group count]:	102	
First group of msg:	92632	
Text between grp's:	...	
Last group:	09526	[where more than one group is stated the use of LG ahead group indicates 'Last Group.']}
Ending:	0 0 0 0 0 0	
Time msg ends:	1753z	
Received signal strength assessment:	Fair	
Noise	QRM2	
Fading to signal	QSB2	
Monitor:	PLdn	
Day heard:	SUN	
Unknown:	unk	
Repeat:	R	[which can be expanded to mean]:
Repeated :	R5m	[repeated 5 mins]; R5s[repeated 5seconds], R5x [Repeated 5 times]

### Received signal strength assessment.

Some receivers possess 'S' meters that give a derived indication of signal strength caused by changes within that receiver. Calibration may, or may not be accurate and the scale, may or may not, be the same as that on other receivers. Some receivers have no meter yet produce acceptable results.

Therefore we prefer the quality of the signal to be assessed by the particular monitor.

Guidance for this can be sought from the Q code:

**QSA** What is the strength of my signals (or those of...)?

The strength of your signals (or those of...) is...

- 1) scarcely perceptible.
- 2) weak.
- 3) fairly good.
- 4) good.
- 5) very good.

[QSA1 S0 to S1; QSA2 S1 to S3; QSA3 S3 to S6; QSA4 S6 to S9; QSA4 S9 and above]

Sooner than put a numerical value we state: Very Weak, Weak, Fair, Strong or Very Strong.

### Noise, Static and Fading.

Again guidance from the Q code:

**Noise:**

**QRM** Are you being interfered with?

I am being interfered with

- 1) nil
- 2) slightly
- 3) moderately
- 4) severely
- 5) extremely.

Note: in the sample the monitor has stated QRM2 which means 'slight noise'; had the interference been from a broadcast station you might have read 'BC QRM2' and so on.

**Static** [Lightning and other atmospheric disturbance]:

**QRN** Are you troubled by static?

I am troubled by static

- 1) nil
- 2) slightly
- 3) moderately
- 4) severely
- 5) extremely.

**Fading** [Propagational disturbance]

**QSB** Are my signals fading?

Your signals are fading

- 1) nil
- 2) slightly
- 3) moderately
- 4) severely
- 5) extremely.

Note: in the sample the monitor has stated QSB2 which means 'slight fading' where the received signal obviously fades but the message is still intelligible.

The use of QRM1, QRN1 and QSB1 is not expected; if there is no such aberration to the signal it need not be stated.

#### **Day Abbreviation**

Self explanatory: SUN, MON, TUE, WED, THU, FRI, SAT

#### **Mode used in transmission**

Generally the mode of transmission is not stated, being available in the ENIGMA Control List. Should the expected mode change then this can be stated as: CW [Carrier Wave] MCW[Modulated Carrier Wave] ICW [Interrupted Carrier Wave] generally associated with Morse transmission; AM [Amplitude Modulation], LSB [Lower Sideband], USB[Upper Sideband] generally associated with Voice transmission.

#### **Languages used**

The ident of a station generally states the language in use, E [English], G[German] S [Slavic], V[All other languages].

#### **Non voice stations**

M [Morse and TTY] SK [Digital modes] X [Other modes]

Ideally we would like to see logs offered in our standard format allowing the editorial staff to process the results quickly rather than having to manually re-format. Anyone submitting logs should refrain from using their own abbreviations or shortening our abbreviations eg. Su Mo Tu etc.

See a correct example below which is now self explanatory:

V02a 5883kHz 0700z 06/06[A63752 57781 31521] Fair QRN2 end uk PLdn SAT

And the incorrect version:

V2a 5883k 07:00 06/06/2009 A/63752- 57781- 31521 S3 PLdn SA

#### **Additional Info:**

Own station idents should not be used.

When an unidentifiable station is submitted please supply the obvious details:

Freq, Time start and end, Date, Message content, particularly preamble and message content and ending. Language details are helpful, particularly any strange pronunciations.

Other details about stations can be found in the ENIGMA Control List available from Group files or sent when you joined.

## **NUMBER SYSTEMS**

## European Numbers systems:

<b>English</b>	<b>zero</b>	<b>one</b>	<b>two</b>	<b>three</b>	<b>four</b>	<b>five</b>	<b>six</b>	<b>seven</b>	<b>eight</b>	<b>nine</b>
<b>Bulgarian</b>	nul	edin	dva	tri	chétiri	pet	shest	sédem	ósem	dévet
<b>French</b>	zero	un	deux	trois	quatre	cinq	six	sept	huit	neuf
<b>German^</b>	null	eins	zwei	drei	vier	fünf	sechs	sieben	acht	neun
<b>Spanish</b>	cero	uno	dos	tres	cuatro	cinco	seis	siete	ocho	nueve
<b>Czech</b>	nula	jeden	dva	tr <i>í</i>	chtýr <i>i</i>	p <small>ě</small> t	shest	sedm	osm	devět
<b>Polish</b>	zero	jeden	dwa	trzy	cztery	pie,c'	szes'c'	siedem	osiem	dziewie,c'
<b>Romanian</b>	zero	unu	doi	trei	patru	cinci	s,ase	s,apte	opt	nouă
<b>Slovak*</b>	nula	jeden	dva	tri	shtyri	päť	shest'	sedem	osem	deväť
* West	nula	jeden	dva	try	shtyry	pet	shest	sedem	ossem	devat
* East	nula	jeden	dva	tri	shtyri	pejc	shesc	shedzem	osem	dzevec
<b>Serbo-Croat</b>	nula	jèdan	dvâ	trî	chètiri	p <small>ě</small> t	sh�st	s�dam	�sam	d�ve:t
<b>Slovene</b>	nula	ena	dva	tri	shtiri	pet	shest	sedem	osem	devet
<b>Russian</b>	null	odín	dva	tri	chet'ye	pyat'	shest'	sem'	v�sem'	d�vyat'

<sup>8</sup> Some German numerals have a radio accent and totally in keeping with German armed forces The numbers in question are:

2 ZWEI pronounced as TSWO

5 FUNF pronounced as FUNUF, poss hrd as a fast TUNIS

9 NEUN pronounced by some as NEUGEN

A peculiar pronunciation of three DREI, has crept into G11 transmissions, heard as 'ZYNGE' the 'Y' as in eye.

### **Numeral Systems used on selected Slavic Stations** [*those discontinued in italics*]

<b>Actual Polish[S11]</b>	<b>S11a Cherta</b>	<b>S11 Kreska</b>	<b>S10d</b>	<b>S17c</b>	
<b>0</b> zero	nul	zero	Nula*	Nula*	
<b>1</b> jedynka	adinka	yezinka	Jeden^	Jeden^	<u>Notes on Numeral Systems used on selected Slavic Stations:</u>
<b>2</b> dwójką	dvojka	dvonta	dva	dva	* Nula heard as ‘nul’
<b>3</b> trójka	troyka	troika	tri ‘	tri ‘	^ Jeden heard as ‘Yedinar’
<b>4</b> cztery	chetyorka	chidiri	shytri	shytri	‘ Tri heard as ‘she’
<b>5</b> pi'tka	petyorka	peyonta	pyet	pyet	
<b>6</b> szeceæ	shest	shes	shest	shest	~ Osoom often heard as ‘bossoom’ or ‘Vossoom.’
<b>7</b> siedem	syem	sedm	sedoom	sedoom	
<b>8</b> osiem	vosyem	osem	Osoom~	Osoom~	
<b>9</b> dziewie,c'	dyevyet	prunka	devyet	devyet	

## **Arabic Numerals [E25 and V08]**

<b>English</b>	zero	one	two	three	four	five	six	seven	eight	nine
	0	1	2	3	4	5	6	7	8	9
<b>Arabic</b>	sifr	wahid	itnien	talata	arba	khamsa	sitta	saba	tamanya	tissa
	٠	١	٢	٣	٤	٥	٦	٧	٨	٩

## Chinese Number System:

[Particular attn to Yi/Yao pse].

0	Ling	Zero
1	Yi/Yao	One (It appears there is a radio version of Yao. On the telephone it is pronounced Yi; also heard in V16)
2	Er	Two
3	San	Three
4	Si	Four (The number four in Chinese is always unlucky, because it sounds the same as the word for death which is also pronounced 'Si' but with a different tone).
5	Wu	Five
6	Liu	Six
7	Qi	Seven
8	Ba	Eight
9	Jiu	Nine
Shi	Ten	
	Ba	One Hundred
	Wan	One Thousand

## Chinese numeral construction:

For example:

San	Three
San Shi	Thirty. In English they are saying Three and Ten.
San Shi Jiu	Thirty Nine. In English they are saying Three, Ten and Nine.
San Bai	Three Hundred. In English they are saying Three and One Hundred.
San Wan	Three Thousand. In English they are saying Three and One Thousand.

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Mar kHz, ID, ...	Apr kHz, ID, ...
			x				0430/0450/0510		E07A	01B		7437/ 8137/ 9137 411
x							0430/0450/0510		M12	01B	5792/ 6992 796, search	
x							0450		E11	03	6304 416/00	6304 416/00
		x	x				0500/0600		E06	01A		13530/14910 951
	x						0530/0540		S06S	01A	10835/12170 153	10835/12170 153
x							0530/0550/0610		M12	01B		5792/ 6992 796, search
		x					0530/0550/0610		E07A	01B	5146/ 5846/ 6846 188	
x							0600/0610		S06S	01A	14080/12355 438	14080/12355 438
			x				0600/0610		S06S	01A	6340/ 5470 934, search	6340/ 5470 934, search
			x				0600/0610		S06S	01A		7795/ 8695 196
		x	x				0600/0700		E06	01A	13890/15850 864	
		x					0630/0650/0710		M12	01B		7484/ 8084/ 402, search
x	x						0645		E11	03	10800 517/00	10800 517/00
				x			0700		M01	14	6508 463	6508 463
x							0700/0800	2	M14	01A	8120/ 7395 362	8120/ 7395 362
			x				0700/0710		S06S	01A	7795/ 8695 196	
x							0700/0710(15)		S06S	01A	5760/ 6930 374	5760/ 6930 374
			x				0700/0720/0740		M12	01B	9338/10638/12138 338	
x			x				0710		E11	03	10221 633/00	10221 633/00
	x						0730/0740		S06S	01A	7120/ 6415 481, search	7120/ 6415 481, search
		x					0730/0750/0810		M12	01B	6784/7684/8184 761	
x	x						0745		E11	03	14575 335/00	14575 335/00
	x						0800/0810		E17Z	01A	14260/12930 674	14260/12930 674
x							0800		G06	01A	6774 215	6774 215
x							0800/0810		S06S	01A	11635/10420 352	11635/10420 352
			x				0800/0820/0840		E07A	01B		12218/13418/14418 255
x	x		x				0820		E11	03	6814 438/00	6814 438/00
	x						0820/0830		S06S	01A	7605/ 9255 471	7605/ 9255 471
x		x					0830		E11	03	10690 649/00	10690 649/00
	x						0830/0840		S06S	01A	7335/11830 745	7335/11830 745
	x						0840/0850		S06S	01A	9480/11040 328	9480/11040 328
x	x						0900		E11	03	9399 534/00	9399 534/00

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Mar kHz, ID, ...	Apr kHz, ID, ...
			x		x		0900		E11	03	4909 248/00	4909 248/00
			x				0900/0910		S06S	01A	12952/13565 167	12952/13565 167
			x				0900/0910		S06S	01A	5410/ 6770 624	5410/ 6770 624
				x			0900/0920/0940		E07A	01B	11133/12133/13433 114	
x			x				0915		S11A	03	7317 484/00	7317 484/00
			x				0930/0940		S06S	01A	8650/ 7385 314	8650/ 7385 314
				x			0930/0940		S06S	01A	12140/13515 516, search	12140/13515 516, search
x							1000/1010		S06S	01A	6410/ 7340 893	6410/ 7340 893
		x					1000/1010		S06S	01A	13365/14505 729	13365/14505 729
x			x				1015		S11A	03	16112 475/00	16112 475/00
x			x				1020		S11A	03	9960 426/00	9960 426/00
	x			x			1020		S11A	03	5815 221/00	5815 221/00
x							1045		E11	03	13424 576/00	13424 576/00
x	x						1045		E11	03	7449 469/00	7449 469/00
x			x				1110		E11	03	13375 95#/00	13375 95#/00
x	x	x					1115		M03	03	9150 272/00 (Tue) & 650/00 (Wed/Thu)	9150 272/00 (Tue) & 650/00 (Wed/Thu)
				x			1120/1220	2	E06	01A	214, search	214, search
	x	x			x		1155		E11	03	15915 718/00	15915 718/00
x							1200/1210		S06S	01A	9145/11460 831	9145/11460 831
		x					1200/1210		S06S	01A	12415/14212 425	12415/14212 425
			x				1200/1210	1	S06S	01A	10350/ 8520 254	10350/ 8520 254
	x						1230/1240		S06S	01A	7620/ 8105 967	7620/ 8105 967
x	?						1300/1320/1340		M12	01B	11524/10424) 9324 543	14964/13972/12164 991
		x			x		1320		M03	03	9150 437/00	9150 437/00
		x	x				1325		G11	03	5815 299/00	5815 299/00
x			x		x		1400		E11A	03	13375 98#/00	13375 98#/00
		x		x		x	1420		M03	03	13911 879/00	13911 879/00
	x			x		x	1445		E11	03	4909 287/00	4909 287/00
			x		x		1500		M01	14	6261 463	6261 463
	x						1500/1520/1540		M12	01B	10968/10168/ 9128 543	13918/12218/10748 991
x							1500/1510		S06S	01A	6464/ 7245 537, search	6464/ 7245 537, search

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Mar kHz, ID, ...	Apr kHz, ID, ...
			x				1515		M01B	14		5810 158
			x				1505		M01B	14		5938 159
	x			x			1535		M03	03	6977 798/00	6977 798/00
x					x		1540		E11	03	15915 228/00	15915 228/00
				x			1600 (1605)		S06	01A	764, search	764, search
x							1600/1610		S06S	01A	8040/ 6830 176	8040/ 6830 176
	x						1600/1620/1640		M12	01B	12162/11561/10711 546	12162/11561/10711 546
			x				1600/1620/1640		M12	01B	10343/ 9264/ 8116 124	10343/ 9264/ 8116 124
		x					1605		M01B	14	5938 159	
			x				1615		M01B	14	5810 158	
x							1700	1/2	G06	01A	564, search	564, search
x		x					1700/1720/1740		M12	01B	9176/ 7931/ 6904 257	9176/ 7931/ 6904 257
	x						1700/1720/1740		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
	x			x			1700/1720/1740		E07	01B		12123/10703/ 8123 search alt: 14866/13571/12194
		x					1700/1720/1740		M12	01B	10343/ 9264/ 8116 124	10343/ 9264/ 8116 124
x			x				1710		E11	03	5194 95#/00	5194 95#/00
		x					1730		E11	03	9371 416/00	9371 416/00
x				x			1755		G11	03	5815 270/00	5815 270/00
x							1800	1/2	G06	01A	564, search	564, search
x	x	x					1800		M01	14	5474 463	5474 463
x							1800		S06	01A		5890 286
x							1800/1820/1840		M12	01B	9176/ 7931/ 6904 257	9176/ 7931/ 6904 257
	x			x			1800/1820/1840		E07	01B	9923/ 9068/ 7697 906	
	x	x	x				1800/1820/1840		M12	01B	10343/ 9264/ 8116 124	10343/ 9264/ 8116 124
x		x					1802		M45	14	4555, 4955 555	4555, 4955 555
x			x				1810		E11A	03	13455 98#	13455 98#
x							1810		M01B	14		3535, 4590 420
x							1815/1915	2/4	S06	01A		13440/11105 116
x							1820		M14	01A	5945 346	5945 346
		x					1830	2/4	G06	01A	5935 579	5935 579
x							1830/1850/1910		M12	01B	10343/ 9264/ 8116 124	10343/ 9264/ 8116 124

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Mar kHz, ID, ...	Apr kHz, ID, ...
		x					1830/1850/1910		M12	01B	11435/10598/ 9327 938	11435/10598/ 9327 938
		x			x		1830/1850/1910		M12	01B	new sked, search ex 10623/ 9323/ 8123 631	new sked, search ex 14879/13479/11579 845
		x					1832		M01B	14		3510, 4605 201
x	x						1842		S21	14	4454, 4854 454	4454, 4854 454
x		x					1900 (1905)		S06	01A	5784 (5127) 349	5784 (5127) 349
x	x						1900/1920/1940		E07	01B		12108/10708/ 9208 172
x		x					1900/1920/1940		M12	01B	9176/ 7931/ 6904 257	9176/ 7931/ 6904 257
x	x						1900/1920/1940		XPA	01B	9362/ 8062/ 7462	10943/10243/ 9243
			x	x			1900/2000	1/3	M14	01A		9060/ 8180 724
			x				1900/2000	1/3	S06	01A		5317/ 4492 416
			x				1900/2000	1/3	S06	01A		6942/ 5923 314
			x				1902		M01B	14		3625, 4440 153
x							1910		M01B	14	3535, 4590 420	
x							1915		M01B	14		3644, 4454 771
x							1915/2015	2/4	S06	01A	search	
	x						1920/2020	2	E06	01A	4615/ 3704 154, search	4615/ 3704 154, search
x							1920	2/4	M14	01A	5464 537	5464 537
x	x						1925		E11C	03	7863 758/####/00	7863 758/####/00
		x					1930	2/4	G06	01A	5442 947	5442 947
			x				1930 (1935)		S06	01A	426, search	426, search
	x						1932		M01B	14	3510, 4605 201	
	x						1942		M01B	14		3715, 4570 477
x	x						2000		E11C	03	7867 757/####/00	7867 757/####/00
		x					2000		E11	03	6869 576/00	6869 576/00
		x		x			2000		G11	03	6433 262/00	6433 262/00
x	x	x					2000		M01	14	5020 463	5020 463
x	x						2000/2020/2040		E07	01B	9273/ 7873/ 6873 288	
	x						2000/2020/2040		E07A	01A		8173/ 7473/ 5773 147
		x	x				2000/2100	1/3	M14	01A	5810/ 5240 724	
		x					2000/2100	1/3	S06	01A	5317/ 4492 416	
		x					2002		M01B	14	3625, 4440 153	

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Mar kHz, ID, ...	Apr kHz, ID, ...
			x				2010		M01B	14		3520, 4585 582
		x					2010/2030/2050		E07	01B		9387/ 7526/ 5884 358
x							2015		M01B	14	3644, 4454 771	
		x					2030	1/3	E06	01A	5186 891	5186 891
			x				2030/2130	1/3	S06	01A	6942/ 5923 314	
		x					2042		M01B	14	3715, 4570 477	
	x						2100/2120/2140		E07A	01A	5864/ 5164/ 4564 815	
	x						2100/2120/2140		M12	01B		6793/ 5893/ 4593 785
		x					2110		M01B	14	3520, 4585 582	
	x		x				2110/2130/2150		M12	01B		11469/10469/ 9169 441
	x						2110/2130/2150		E07	01B	7516/ 5836/ 4497 584	
		x					2130		E06	01A	5197 634	5197 634
	x						2200/2220/2240		M12	01B	5763/ 5163/ 4463 714	

## M01 M01b M45 Frequency Schedule

Compare with current logs

### M01 Sunday

	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jly</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>ID</b>	<b>197</b>	<b>197</b>	<b>463</b>	<b>463</b>	<b>025</b>	<b>025</b>	<b>025</b>	<b>025</b>	<b>463</b>	<b>463</b>	<b>197</b>	<b>197</b>
<b>0700</b>	5464	5464	6508	6508	6780	6780	6780	6780	6508	6508	5464	5464

### M01b Monday

	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jly</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>ID</b>				<b>420</b>	<b>364</b>	<b>364</b>	<b>364</b>	<b>364</b>	<b>420</b>	<b>420</b>		
<b>1810</b>				3535	5125	5125	5125	5125	3535	3535		
//				4590	5735	5735	5735	5735	4590	4590		
<b>ID</b>	<b>853</b>	<b>853</b>	<b>420</b>								<b>853</b>	<b>853</b>
<b>1910</b>	2435	2435	3535								2435	2435
//	3520	3520	4590								3520	3520
<b>ID</b>				<b>771</b>	<b>858</b>	<b>858</b>	<b>858</b>	<b>858</b>	<b>771</b>	<b>771</b>		
<b>1915</b>				3644	5150	5150	5150	5150	3644	3644		
//				4454	5475	5475	5475	5475	4454	4454		
<b>ID</b>				<b>298</b>	<b>729</b>	<b>729</b>	<b>729</b>	<b>729</b>	<b>298</b>	<b>298</b>		
<b>2010</b>				4991	5815	5815	5815	5815	4991	4991		
//				5336	6769	6769	6769	6769	5336	5336		
<b>ID</b>	<b>375</b>	<b>375</b>	<b>771</b>								<b>375</b>	<b>375</b>
<b>2015</b>	2427	2427	3644								2427	2427
//	3205	3205	4454								3205	3205
<b>ID</b>	<b>136</b>	<b>136</b>	<b>298</b>								<b>136</b>	<b>136</b>
<b>2110</b>	4615	4615	4991								4615	4615
//	5065	5065	5336								5065	5065

### M01 Tuesday/Thursday

	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jly</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>ID</b>	<b>197</b>	<b>197</b>	<b>463</b>	<b>463</b>	<b>025</b>	<b>025</b>	<b>025</b>	<b>025</b>	<b>463</b>	<b>463</b>	<b>197</b>	<b>197</b>
<b>1800</b>	5320	5320	5474	5474	5280	5280	5280	5280	5474	5474	5320	5320
<b>2000</b>	4490	4490	5017	5017	4905	4905	4905	4905	5017	5017	4490	4490

### M01b Thursday

	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jly</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>ID</b>	<b>159</b>	<b>159</b>	<b>159</b>	<b>159</b>								
<b>1505</b>				5938	5938	5938	5938	5938	5938	5938		
<b>1605</b>	5938	5938	5938								5938	5938
<b>ID</b>				<b>201</b>	<b>815</b>	<b>815</b>	<b>815</b>	<b>815</b>	<b>201</b>	<b>201</b>		
<b>1832</b>				3510	5095	5095	5095	5095	3510	3510		
//				4605	5760	5760	5760	5760	4605	4605		
<b>ID</b>	<b>910</b>	<b>910</b>	<b>201</b>								<b>910</b>	<b>910</b>
<b>1932</b>	2466	2466	3510								2466	2466
//	3545	3545	4605								3545	3545
<b>ID</b>				<b>477</b>	<b>936</b>	<b>936</b>	<b>936</b>	<b>936</b>	<b>477</b>	<b>477</b>		
<b>1942</b>				3715	5064	5064	5064	5064	3715	3715		
//				4570	5805	5805	5805	5805	4570	4570		
<b>ID</b>				<b>302</b>	<b>931</b>	<b>931</b>	<b>931</b>	<b>931</b>	<b>302</b>	<b>302</b>		
<b>2032</b>				4905	5763	5763	5763	5763	4905	<b>4905</b>		
//				5736	5941	5941	5941	5941	5736	<b>5736</b>		
<b>ID</b>	<b>382</b>	<b>382</b>	<b>477</b>								<b>382</b>	<b>382</b>
<b>2042</b>	2485	2485	3715								2485	2485
//	3160	3160	4570								3160	3160
<b>ID</b>	<b>514</b>	<b>514</b>	<b>302</b>								<b>514</b>	<b>514</b>
<b>2132</b>	4603	4603	4905								<b>4603</b>	<b>4603</b>
//	4991	4991	5736								<b>4991</b>	<b>4991</b>

### M01b Friday

	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jly</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>ID</b>	<b>158</b>	<b>158</b>	<b>158</b>	<b>158</b>								
<b>1515</b>	xxxx	xxxx	xxxx	5810	5810	5810	5810	5810	5810	5810	xxxx	xxxx
<b>1615</b>	5810	5810	5810								5810	5810
<b>ID</b>										<b>365</b>	<b>444</b>	
<b>1708</b>										6365		
<b>1808</b>											6444	
<b>ID</b>				<b>153</b>	<b>336</b>	<b>336</b>	<b>336</b>	<b>815</b>	<b>153</b>	<b>153</b>		
<b>1902</b>				3625	5075	5075	5075	5075	3625	3625		
//				4440	5465	5465	5465	5465	4440	4440		
<b>ID</b>	<b>866</b>	<b>866</b>	<b>153</b>								<b>866</b>	<b>866</b>
<b>2002</b>	2653	2653	3625								2653	2653
//	3197	3197	4440								3197	3197
<b>ID</b>				<b>582</b>	<b>467</b>	<b>467</b>	<b>467</b>	<b>467</b>	<b>582</b>	<b>582</b>		
<b>2010</b>				3520	4895	4895	4895	4895	3520	3520		
//				4585	5340	5340	5340	5340	4585	4585		
<b>ID</b>				<b>271</b>	<b>871</b>	<b>871</b>	<b>871</b>	<b>871</b>	<b>271</b>	<b>271</b>		
<b>2102</b>				4766	5329	5329	5329	5329	4766	4766		
//				5443	5752	5752	5752	5752	5443	5433		
<b>ID</b>	<b>610</b>	<b>610</b>	<b>582</b>								<b>610</b>	<b>610</b>
<b>2110</b>	2405	2405	3520								2405	2405
//	3180	3180	4585								3180	3180
<b>ID</b>	<b>419</b>	<b>419</b>	<b>271</b>								<b>419</b>	<b>419</b>
<b>2202</b>	4508	4508	4766								4508	4508
//	4706	4706	5443								4706	4706

### M01 Saturday

	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jly</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>ID</b>	<b>197</b>	<b>197</b>	<b>463</b>	<b>463</b>	<b>025</b>	<b>025</b>	<b>025</b>	<b>025</b>	<b>463</b>	<b>463</b>	<b>197</b>	<b>197</b>
<b>1500</b>	5810	5810	6261	6261	6434	6434	6434	6434	6261	6261	5810	5810

### M45 Tuesday/Thursday

	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jly</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>
<b>ID</b>	<b>525</b>	<b>525</b>	<b>555</b>	<b>555</b>	<b>074</b>	<b>074</b>	<b>074</b>	<b>074</b>	<b>555</b>	<b>555</b>	<b>525</b>	<b>525</b>
<b>1702</b>					5074	5074	5074	5074				
//					5474	5474	5474	5474				
<b>1802</b>	3525	3525	4555	4555					4555	4555	3525	3525
//	4025	4025	4955	4955					4955	4955	4025	4025

With a receiver set to CW mode you will hear two tones. The table above shows the lower tone. Add 2kHz for other tone. These tones are modulated allowing you to hear this in AM mode.

M01b is undergoing some changes and not all those listed are active. Frequencies not heard are in *italics* and shaded whilst the frequencies of those not heard for rest of year are also *italicised*

M12 Log1 Jan 2013

Brian - S.E. England

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Decod Key	Grp No.
Tue 8	None	Found						
Wed 9	1500	7697	1520	6797	1540	5397	157	323 167
	1700	8047	1720	6802	1740	5788	463	2379 54
	2200	5361	2220	4461	2240	- - -	340	0 0 0
Thu 10	0730	5284	0750	5784	0810	- - -	277	0 0 0
	1010	13369	1030	14669	1050	15969	369	282 107
	1700	9176^	1720	7931	1740	6904	257	9791 59
	1700	10343	1720	9264	1740	8116	124	9249 78
	1800	10343	1820	9264	1840	8116	124	1639 86
	1900	9176^	1920	7931	1940	6904	257	4458 62
Fri 11	1800	10343	1820	9264	1840	8116	124	4653 81
Sat 12	Not	Moni	-tored					
Sun 13	1010	13369	1030	14669	1050	- - -	369	0 0 0
Mon 14	0530	4457	0550	5157	0610	- - -	417	0 0 0
	1300	8112^	1320	7552^	1340	6792^	157	
	1600	12162	1620	11566	1640	10711	546	696 49
	1700	9176	1720	7931^	1740	6904	257	6477 60
	1800	9176	1820	7931	1840	6904	257	8502 45
	1900	9176^	1920	7931	1940	6904	257	7158 65

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Tue 1	None	Found							
Wed 2	1500	7697^	1520	6797	1540	- - -	157	0 0 0	
	<b>1830</b>	9168^	<b>1850</b>	7968	<b>1910</b>	- - -	194	0 0 0	
	2200	5361	2220	4461	2240	- - -	340	0 0 0	
Thu 3	<b>0730</b>	5284	<b>0750</b>	5784	<b>0810</b>	- - -	277	0 0 0	
	<b>1010</b>	13369	<b>1030</b>	14669	<b>1050</b>	- - -	369	0 0 0	
Fri 4	None	Found							
Sat 5	Not	Moni	-tored						
Sun 6	<b>1010</b>	13369	<b>1030</b>	14669	<b>1050</b>	- - -	369	0 0 0	
Mon 7	<b>0530</b>	4457	<b>0550</b>	5157	<b>0610</b>	- - -	417	0 0 0	
	1300	81112^	1320	7552^	1340	6792^	157	323	167

Highlighted cell indicates new or changed loggings

- - - Indicates no  $3^{\text{rd}}$  transmission sent as message 0 0 0

Λ Weak reception

NF Not Found

M12 Log2 Jan 2013

Brian - S.E. England

Day / Date	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.						
Tue 22	1830	10343	1850	9264	1910	8116	124	1372	69		
Wed 23	1500	7697	1520	6797	1540	---	157	0 0 0			
	1700	8047	1720	6802	1740	5788	463	8544	56		
	1830	9168^	1850	7968	1910	---	194	0 0 0			
	1830	NH	1850	10598^	1910	9327^	938	???	???		
	2200	5361	2220	4461	2240	---	340	0 0 0			
Thu 24	0730	5284	0750	5784	0810	---	277	0 0 0			
	1010	13369	1030	14669	1050	---	369	0 0 0			
	1700	9176^	1720	7931	1740	6904	257	8832	81		
	1700	10343	1720	9264	1740	8116	124	9701	77		
	1800	10343^	1820	9264^	1840	8116	124	7456	87		
	1900	9176^	1920	7931^	1940	6904	257	9394	43		
Fri 25	1800	10343	1820	9264	1840	8116	124	8299	74		
Sat 26	Not	Moni	-tored								
Sun 27	1010	13369	1030	14669	1050	---	369	0 0 0			
	1830	9168	1850	7968	1910	---	194	0 0 0			
Mon 28	0530	4457	0550	5157	0610	---	417	0 0 0			
	1300	8112^	1320	7552^	1340	6792^	157	148	195		
	1600	12162	1620	11566	1640	10711	546	2862	87		
	1700	9176	1720	7931	1740	6904	257	5322	71		
	1800	9176	1820	7931	1840	6904	257	8011	62		
	1900	9176^	1920	7931^	1940	6904	257	1647	48		

Highlighted cell indicates new or changed loggings

----- Indicates no 3<sup>rd</sup> transmission sent as message 0 0 0

M12 Log1 Feb 2013

Brian - S.E. England

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Fri 8	1800	10343	1820	9264	1840	8116	124	9183	94
Sat 9	Not Mon	-itored							
Sun 10	1010	13569	1030	14869	1050	16269	582	496	61
	1830	12217	1850	10617	1910	9317	263	214	153
Mon 11	0530	4617	0550	5317	0610	---	638	0 0 0	
	1300	92223	1320	8193	1340	7463	214	713	141
	1600	12162	1620	11566	1640	10711	546	7639	77
	1700	9176	1720	7931	1740	6904	257	1521	71
	1800	9176	1820	7931	1840	6904	257	1910	59
	1900	9176	1920	7931	1940	6904	257	4136	63
Tue 12	1830	10343	1850	9264	1910	8116	124	9946	56
Wed 13	1500	7697	1520	6797	1540	5397	214	713	141
	1700	8047	1720	6802	1740	5788	463	1222	57
	1830	11435	1850	10598	1910	9327	938	7461	53
	1830	12217\	1850	10617	1910	9317	263	631	137
	2200	5429	2220	4629	2240	---	460	0 0 0	
Thu 14	0730	5884	0750	6884	0810	---	888	0 0 0	
	1010	13569	1030	14869	1050	---	582	0 0 0	
	1700	9176	1720	7931	1740	6904	257	4619	76
	1700	10343	1720	9264	1740	8116	124	5945	79
	1800	10343	1820	9264	1840	8116	124	8985	91
	1900	9176	1920	7931	1940	6904	257	8181	59

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Fri 1	1800	10343	1820	9264	1840	8116	124	8352	74
Sat 2	Not Mon	-itored							
Sun 3	1010	13569	1030	14869	1050	16269	582	316	75
	1830	12217	1850	10617	1910	9317	263	899	93
Mon 4	0530	4617	0550	5317	0610	---	638	000	
	1300	9223	1320	8193	1340	7463	214	908	167
	1600	12162	1620	11566	1640	10711	546	5993	88
	1700	9176	1720	7931	1740	6904	257	6289	79
	1800	9176	1820	7931	1840	6904	257	9406	47
	1900	9176	1920	7931	1940	6904	257	2259	78
Tue 5	1830	10343	1850	9264	1910	8116	124	5219	61
Wed 6	1500	7697	1520	6797	1540	5397	214	908	167
	1700	8047	1720	6802	1740	5788	463	2052	59
	1830	11435	1850	10598	1910	9327	938	1179	53
	1830	12217^	1850	10617	1910	9317	263	214	153
	2200	5429	2220	4629	2240	---	460	000	
Thu 7	0730	5884	0750	6884	0810	---	888	000	
	1010	13569	1030	14869	1050	16269	582	496	61
	1700	9176	1720	7931	1740	6904	257	9197	85
	1700	10343	1720	9264	1740	8116	124	4051	70
	1800	10343	1820	9264	1840	8116	124	4105	79
	1900	9176	1920	7931	1940	6904	257	2573	68

Highlighted cell indicates new or changed loggings  
---- Indicates no 3<sup>rd</sup> transmission sent as message 0

Weak reception NH Not Heard NF Not Found

M12 Log2 Jan 2013 (Residue)

Highlighted cell indicates new or changed loggings

----- Indicates no 3<sup>rd</sup> transmission sent as message 0 0 0

Λ Weak reception

NF Not Found

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jan kHz, ID, ...	Feb kHz, ID, ...	Mar kHz, ID, ...	Apr kHz, ID, ...	General Remarks
x							0450		E11	03	5082 416/00	5082 416/00	6304 416/00	6304 416/00	since 02/10, <b>last log 01/13</b>
x	x						0645		E11	03	7840 517/00	7840 517/00	10800 517/00	10800 517/00	since 07/09, <b>last log 02/13</b>
x		x					0710		E11	03	10800 633/00	10800 633/00	10221 633/00	10221 633/00	since 02/11, <b>last log 01/13</b>
x	x						0745		E11	03	16112 335/00	16112 335/00	14575 335/00	14575 335/00	since 10/11, <b>last log 02/13</b>
x	x						0820		E11	03	7317 438/00	7317 438/00	6814 438/00	6814 438/00	since 10/09, <b>last log 02/13</b>
x	x						0830		E11	03	9446 649/00	9446 649/00	10690 649/00	10690 649/00	since 01/10, <b>last log 01/13</b>
x	x						0900		E11	03	9446 534/00	9446 534/00	9399 534/00	9399 534/00	since 10/09, <b>last log 02/13</b>
	x	x					0900		E11	03	4441 248/00	4441 248/00	4909 248/00	4909 248/00	since 02/10, <b>last log 01/13</b>
x		x					0915		S11A	03	7504 484/00	7504 484/00	7317 484/00	7317 484/00	since 01/10, <b>last log 02/13</b>
x	x						1015		S11A	03	12530 475/00	12530 475/00	16112 475/00	16112 475/00	since 04/10, <b>last log 02/13</b>
x	x						1020		S11A	03	9610 426/00	9610 426/00	9960 426/00	9960 426/00	since 02/10, <b>last log 02/13</b>
x	x	x					1020		S11A	03	6433 221/00	6433 221/00	5815 221/00	5815 221/00	since 01/09, <b>last log 02/13</b>
x							1045		E11	03	10800 576/00	10800 576/00	13424 576/00	13424 576/00	since 01/12, <b>last log 12/12</b>
x	x						1045		E11	03	8091 469/00	8091 469/00	7449 469/00	7449 469/00	since 03/10, <b>last log 02/13</b>
x	x						1110		E11	03	14410 95#/00	14410 95#/00	13375 95#/00	13375 95#/00	since 12/11, <b>last log 02/13</b>
x	x	x					1115		M03	03	4828 272/00 (Tue) & 650/00 (Wed/Thu)	4828 272/00 (Tue) & 650/00 (Wed/Thu)	9150 272/00 (Tue) & 650/00 (Wed/Thu)	9150 272/00 (Tue) & 650/00 (Wed/Thu)	since 10/09, <b>last log 12/12</b>
x	x	x					1155		E11	03	15632 718/00	15632 718/00	15915 718/00	15915 718/00	since 04/11, <b>last log 01/13</b>
	x	x	x				1320		M03	03	4828 437/00	4828 437/00	9150 437/00	9150 437/00	since 02/11, <b>last log 12/12</b>
	x	x					1325		G11	03	6433 299/00	6433 299/00	5815 299/00	5815 299/00	since 03/10, <b>last log 01/13</b>
x		x					1400		E11A	03	10690 98#/00	10690 98#/00	13375 98#/00	13375 98#/00	since 10/11, <b>last log 02/13</b>
	x	x	x				1420		M03	03	13911 879/00	13911 879/00	13911 879/00	13911 879/00	since 01/12, <b>last log 02/13</b>
x	x	x					1445		E11	03	4441 287/00	4441 287/00	4909 287/00	4909 287/00	since 11/10, <b>last log 01/13</b>
x		x					1535		M03	03	5358 798/00	5358 798/00	6977 798/00	6977 798/00	since 11/10, <b>last log 02/13</b>
x		x	x				1540		E11	03	15632 228/00	15632 228/00	15915 228/00	15915 228/00	since 03/11, <b>last log 01/13</b>
x		x					1710		E11	03	6924 95#/00	6924 95#/00	5194 95#/00	5194 95#/00	since 11/11, <b>last log 02/13</b>
	x						1730		E11	03	5082 416/00	5082 416/00	9371 416/00	9371 416/00	since 03/10, <b>last log 02/13</b>
x		x					1755		G11	03	6433 270/00	6433 270/00	5815 270/00	5815 270/00	since 02/10, <b>last log 02/13</b>
x		x					1810		E11A	03	10213 98#	10213 98#	13455 98#	13455 98#	since 08/12, <b>last log 02/13</b>
x	x						1925		E11C	03	6923 758/####/00	6923 758/####/00	7863 758/####/00	7863 758/####/00	since 08/12, <b>last log 02/13</b>
x	x						2000		E11C	03	4909 757/####/00	4909 757/####/00	7867 757/####/00	7867 757/####/00	since 12/11, <b>last log 02/13</b>
	x		x				2000		E11	03	4536 576/00	4536 576/00	6869 576/00	6869 576/00	since 03/12, <b>last log 12/12</b>
	x	x	x				2000		G11	03	4441 262/00	4441 262/00	6433 262/00	6433 262/00	since 01/11, <b>last log 02/13</b>

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jan kHz, ID, ...	Feb kHz, ID, ...	Mar kHz, ID, ...	Apr kHz, ID, ...	General Remarks
x						0800			G06	01A	5363 215	5363 215	6774 215	6774 215	since 07/10, <b>last log 01/13</b>
x						1700		1/2	G06	01A	3673 <b>564</b>	3673 <b>564</b>	<b>564, search</b>	<b>564, search</b>	since 04/10, <b>last log 02/13</b> yearly changing frequencies + id
x						1800		1/2	G06	01A	4515 <b>564</b>	4515 <b>564</b>	<b>564, search</b>	<b>564, search</b>	since 05/09, <b>last log 02/13</b> yearly changing frequencies + id
		x				1830		2/4	G06	01A	4519 271	4519 271	5935 579	5935 579	since 05/01, <b>last log 01/13</b>
		x				1930		2/4	G06	01A	4792 434	4792 434	5442 947	5442 947	since 04/01, <b>last log 01/13</b> rpt of Thu 1830Z



**SPECIAL MATTERS:**

**Operation Jalla:** 0



**MESSAGES:**

D many thanks for your offering, nice copy on 6216kHz

**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>

2013											
Source: Vertex42.com											
<b>January</b>						<b>February</b>					
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th
1	2	3	4	5		1	2	3	4	5	6
6	7	8	9	10	11	12	3	4	5	6	7
13	14	15	16	17	18	19	10	11	12	13	14
20	21	22	23	24	25	26	17	18	19	20	21
27	28	29	30	31			24	25	26	27	28
<b>March</b>						<b>April</b>					
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th
1	2	3	4	5	6	7	1	2	3	4	5
10	11	12	13	14	15	16	10	11	12	13	14
17	18	19	20	21	22	23	17	18	19	20	21
24	25	26	27	28			24	25	26	27	28
31							30				
<b>May</b>						<b>June</b>					
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th
1	2	3	4	5	6	7	1	2	3	4	5
8	9	10	11	12	13	14	8	9	10	11	12
15	16	17	18	19	20	21	15	16	17	18	19
22	23	24	25	26	27	28	22	23	24	25	26
29	30						29	30			
<b>July</b>						<b>August</b>					
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th
1	2	3	4	5	6	7	1	2	3	4	5
7	8	9	10	11	12	13	4	5	6	7	8
14	15	16	17	18	19	20	11	12	13	14	15
21	22	23	24	25	26	27	18	19	20	21	22
28	29	30	31				25	26	27	28	29
<b>September</b>						<b>October</b>					
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th
1	2	3	4	5	6	7	1	2	3	4	5
8	9	10	11	12	13	14	8	9	10	11	12
15	16	17	18	19	20	21	15	16	17	18	19
22	23	24	25	26	27	28	22	23	24	25	26
29	30	31					29	30			
<b>November</b>						<b>December</b>					
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th
1	2	3	4	5	6	7	1	2	3	4	5
8	9	10	11	12	13	14	8	9	10	11	12
15	16	17	18	19	20	21	15	16	17	18	19
22	23	24	25	26	27	28	22	23	24	25	26
29	30	31					29	30	31		

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