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A HAPPY CHRISTMAS 2015
to all our subscribers

Issue 99

Those of us who regularly listen to or communicate on the Shortwave cannot be anything but aware of the problematic propagation at the moment. Yours truly is amazed that 40m has been mostly useless and noisy with occasional openings. This trait being seen on other bands which might be open or mostly somewhat attenuated by the troublesome sun. If you are licensed and you feel the need to have a QSO turning at the weekend means two things; probably duff propagation but if lucky you find yourselves splattered off the band by contestors. For me its about as enjoyable as collecting car registration and you hear some splattering over compressed signal proclaim "Just 1kW here, 599 062 ... please repeat your call sign as its down in the noise."

There is another problem that we face; that of cheapo [or not so cheapo in the shops] electronic rubbish with Switch Mode PSU's, produced to a price driven design, no filtering and certainly no regulation by the authorities.

You can purchase or build devices to stop the noise working on phase cancellation; I successfully built my own and they work, not so well with SDR units but with my 'generic' receivers well enough.

It appears we've seen the back of modulated mains in favour of fast dongles and the like but once again a statement of exactly what rubbish is allowed into Britain.

In his opening lines to me [yes, we use the postal service] Peter, PoSw, wisely addressed this and I take great pleasure including his thoughts which aren't so different from my own:

"My problem at the moment is a radio-related one, namely a sudden increase in local interference on the lower part of the short wave bands, a loud hiss which becomes noticeable towards the HF end of the medium wave band around 1,500 kHz making the S-meter swing up to over S9, and is bad enough to wipe out everything up to about 3 MHz, not that there is all that much of interest in this part of the spectrum but it will prevent me from monitoring the Dutch music pirate stations which come up around 1,650 kHz in the late winter evenings. I guess this must be coming from some piece of entertainment electronic gadgetry in one of the neighbouring properties, and I bet whatever it is it will have “Made in China” marked on it somewhere. At one time the RSGB took the line that anyone interested in the radio hobby ought to join them because they had the ear of government and were able to liaise with them and advise them on radio frequency interference related issues.
I guess the fact that all this interference producing Chinese made crap is allowed to be sold in the UK shows what the government thinks of the radio hobby in general and the RSGB in particular.

As regards the number station scene over the past couple of months, HM01 from Cuba rather weak throughout most of September, but became much better as we progressed through October.

A couple of S06 Russian OM schedules did a “time shift” in October, the first + third Fridays in the month “392” advanced to 2000 + 2100 UTC, and the first + third Saturdays “738” did the same.

“The “Russian Woodpecker”, or perhaps that should be “Son of Russian Woodpecker” - I first noticed it and started to make notes in the log in the early weeks of 2014, nearly two years ago, back again after an absence of many years - still noticeable in the UK afternoons, generally can be found tap-tap-tapping away somewhere around 13, 14 or 15 MHz, vanishes shortly after being tuned in and can then be found a hundred or two hundred kHz higher in frequency, and if one has nothing better to do with one's time it can be tracked up the band. Moves lower in frequency in the evenings, for example on 16-October at 2020 UTC noted a strong M12 CW “463” starting up on 6,802 kHz; this ended after 2029 UTC and shortly afterwards the Woodpecker showed up with a strong signal, vanished at 2030:25s UTC.

Mystery signal:- I don't know what this was, or if it has been mentioned in the Newsletter before, a strong signal on 7,735 kHz which at first I thought was a fixed frequency version of the Woodpecker:-

22-Sept-15, Tuesday:- 2118 UTC, 7,735 kHz, an extremely strong carrier, S9+ and then some. There are very few signals which push the 'S'-meters on my Lowe HF125 and HF225 radios past the “+50” mark, but this one did, and a lot of the time the pointer was right up against the end-stop - “Full Scale Deflection”. I assumed this must be a broadcast station warming up because no other kind of transmitter would be this strong. The carrier was lightly modulated by a high pitched audio tone, I'm guessing somewhere between 3 and 3.5kHz, much higher than the usual four hundred or one thousand cycle tone which might be used to check out audio stages. The carrier was still on when checked just before 2130Z but went off about a minute after that, was back on when monitored at 2146Z. Since it was getting late in the evening I didn't pursue it further.

23-Sept-15, Wednesday:- 1542 UTC, 7,735 kHz, late afternoon, S9+ carrier on again at an earlier time, but no high-pitched tone. When checked again just after 1620 UTC the carrier had been replaced by pulse type signal, perhaps eight, nine or ten pulses per second, at first seemed to be a bit like the “Woodpecker”, but perhaps more like the pulses heard at times on the standard frequency transmissions on 15 MHz. Still on at 1655 UTC but had gone when checked just after the hour.

24-Sept-15, Thursday:- 1548 UTC, S9+ plain carrier up on 7,735, went off just before 1600,
came up again around 1613Z for a few seconds then went off, started up with the pulse signal approx 1615Z. Was on apparently continuously until just before 1700 UTC, 6 PM BST.

25-Sept-15, Friday:- 1526 UTC, carrier up on 7,735 kHz, S9+, went off approx 40 seconds after 1600Z, up again for a few seconds at 1613Z, pulses at 1615Z, went off just before 1700 UTZ.

It occurred to me that I had heard something like this before earlier in the year on a frequency inside the 25 metre broadcast band; a quick leaf through the log showed a reference to a signal of this type on 12,105 kHz on several occasions in the morning time in the early summer and it turned out that this frequency was active this evening:-
1841 UTC, 12,105 kHz, pulse signal similar to that heard earlier on 7,735, S9+, went off 1859:15s UTC.
2103 UTC, 7,735 kHz, on again in the late evening, very strong carrier, checked several times, sometimes had the high pitched tone modulation, sometimes plain carrier, went off 2200 UTC, came back after 2213 for a short while, pulse signal started 2215 UTC, 11.15 PM BST, too late in the evening to pursue any further!

I did not have time to play radio over the weekend but these transmissions appeared on each day, Monday 28-September to Friday 2-October with the same timing and routines as described above. No activity observed on Saturday the 3rd and Sunday the 4th of October,
Was back on Monday but with weaker signals and the late evening transmission had moved forwards by two hours:-

5-Oct-15, Monday:- 1526 UTC, 7,735 kHz, carrier up, S9, not quite as strong as in the past week, went off just before 1600Z, came up again at 1614Z for about 30 seconds, pulse noise started after 1616Z, went off just after 1701Z.
1716 UTC, 12,105 kHz, carrier up when checked at 1716Z, pulse signal when checked at 1827Z.
2021 UTC, 7,735 kHz, surprised to find the pulse signal on 7,735, a couple of hours earlier than in the past two weeks, no activity found later in the evening.

6-Oct-15, Tuesday:- 1531 UTC, 7,735 kHz, carrier up, pulses when checked at 1617 UTC.
1729 UTC, 12,105 kHz, S9+ carrier up, pulses when checked at 1819 UTC. Went off about 15 seconds before 1900 UTC.
1924 UTC, 7,735 kHz, carrier up, pulse noise started around 2015 UTC. Nothing on later on
in the evening.
This routine of activity noted on the following days of the 7th, 8th and 9th of October; no activity found over the weekend of the 10th and 11th, and that was the end of it in general, not heard since."

APOLOGIES for the late production of this issue; matters of health intervening. Thanks for your patience and wishes from those who took time to email.

Thanks to all those who have contributed logs and to those inadvertently left out:

AnonUS, Ary, BR, CB, DC, DoK, E, Edd, GD, Gert, HFD, HRT,IW, Jochen, JkC, JPL, KW, M8, Mike of Kent, PLdn, PoSW, RNGB,Schorshi, Spectre, T!, tiNG.

Morse Station Roundup

Morse - Number Stations

UNID Brian (BR) reports on a 10 group message sent several times over two days on 8030kHz - Was this M23 or something else?

M01 Better signal strengths on the September/October frequencies helped with the logging of the regular M01 transmissions, which proved to be the usual mixed-bag of messages & errors.

As well as reusing content from several previous M01 messages, Jim (JkC) once again found that old M01b messages are being recycled too - from messages sent in 2014.

We have a couple of great M01a intercepts from Tony (Topol) & Jean-Paul (JPL) & a full selection of M01b logs, once again.

M03 The 13911kHz schedule heard at 1420z on Friday & Sunday ceased on the 20 September. Activity from the remaining schedules remains the same.

M08a Our Man in America reports on a strong hum on the M08a transmitters.

M12 After a period of stability we see some changes to the schedules again as winter approaches. There are gains & losses. A new daily 2000z schedule has appeared from ID 463 & we see a return of transmissions to Fridays. On the losses, we lose a couple of regular schedules.

M14 Once again an excellent selection of logs thanks to our monitors with many frequencies in use. Jim (JkC) notes new activity at 1300/1320z on 10755/9080kHz. Could these be training schedules?.

M23 Following the July activity we were treated to another period of high activity from M23 from 07 - 16 October. The format varied from that heard in July & appeared to be more military in nature, with possibly more than one station involved. Although, towards the end of the active period the more familiar 10 minute transmissions were resumed.

M24 One report from Jim (JkC) who caught a transmission at 2000z on 20 October, followed by the repeat at 2030z using the call 381.

M97 No logs have been received for this station, last heard in early May, when the, now old, SD84 message was aired once again for two days.

Morse Stations - Not Number related

M51 The daily Morse lessons from M51a continue as usual daily at 1130z with 5 fig grps & plain text, using the slightly changed format.

Peter (PoSW) reports on his monitoring of M51/M51a in October, including some interesting observations on relative signal strengths.

M95 Following on from Jean-Paul's (JPL) article on XSV85, we have moved the XSV stations to this new entry in the column. Previously we had been including these with the M89 listings - however, JPL pointed out that these matched the M95 designation & we are pleased to confirm that this is indeed the case. We include a brief introduction with a repeat of JPL's article & a set of message logs from JPL.

M89 Much activity from these Chinese stations including a number of new call signs, some only making a single appearance. This is possibly the result of exercises which have been taking palace & would also account for the increase in Op' 'chatter' too.

Also of note is the use of three or four frequencies in parallel, using both the night & day frequency pairs together. Was this to overcome the poor conditions experienced over this period?

Beacons & Oddities

Under 'Oddities' we have the latest on the new Russian markers with another new one on 3850kHz, reported by Schorschi on 06 September.

The Buzzer (S28) has appeared on a new frequency of 6998kHz, active at the time of writing running parallel with 4625kHz. Schorschi monitored both frequencies & logged a number of voice transmissions over two days monitoring on 19 & 21 October.

Morse Stations

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

Morse - Number Stations

UNID CW

UNID 8028 - 8030kHz Mon 05 - Tue 06 October Possibly related to M23

Brian (BR) sends this report of the same 10 group message heard several times over two days;

I had been monitoring 8030kHz for several days in the hope of catching some M23 activity, leaving the radio on in the background while carrying out other tasks.

On Monday 05 Oct, I caught a Morse sequence in progress which was actually on 8028kHz ending at 1802z sending single grps & using the long zero.
.... 77291 82461 80553 28714 73946 27247

The following day, Tuesday 06 October I caught the very end of another transmission, this time on 8030kHz, at 1202z but I only heard the ...67 - Ending at 1202z. This was then followed at 1205z by a full sending of the same message;

VVV 46167 38931 74809 82528 77291 82461 80553 28714 73946 27247 (Pause approx 1 minute) Followed by repeat of the same message, including the VVV opening. There was no ending, just the last group then silence.

So the same 10 grps sent over two days... This seems to ring a bell with me somewhere, but I can't find any reference to it anywhere. Has anyone come across this before?

I'm unsure of the origin of these transmissions. It could be connected with M23 but it is not in the usual format expected from the station.

Although the message failed to reappear on Wednesday 07 October, a series of number strings were sent between 1250 - 1520z which heralded the start of a series of transmissions heard over the following days. I think we have seen activity like this once before, if I remember correctly.

(Logs of these transmissions can be found under the M23 section below).

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

September 2015:

5020	2000z	01 Sep	'463' 123 30 = =	71675...	...LG 65018 = =	Fair. Ends 2008z	HFD/JkC	TUE
	2000z	03 Sep	'463' 131 30 = =	56046...	...LG 44371 = =	Strong. Ends 2007z	JkC	THU
	2000z	08 Sep	'463' 109 30 = =	57900...	...LG 82413 = =	Fair, med-fast. Numerous errors noted	BR	TUE
	2000z	10 Sep	'463' 739 30 = =	59535...	...LG 52472 = =	Fair. Ends 2010z. Using old M01b msgs	JkC	THU
	2000z	15 Sep	'463' 993 30 = =	59535...	...LG 52472 = =	Strong. Ends 2009z *	JKC	TUE
	2000z	17 Sep	'463' 611 30 = =	17218...	...LG 59743 = =	Good, fast. Error in grp15	BR	THU
	2000z	22 Sep	'463' 011 30 VA	84888...	...LG 82490 VA	Strong, med-fast. Errors in msg & format	BR/JkC	TUE
	20**09**z	24 Sep	'463' 497 30 = =	07157...	...LG 02626 = =	Fast. Late start. Excellent CW. No errors	BR	THU
	2000z	29 Sep	'463' 147 30 = =	69587...	...LG 45232	Good, fast. Chaotic with numerous errors	BR	TUE

*Repeat of 10 Sep15 msg with different DK

5475	1800z	01 Sep	'463' 218 30 = =	03521...	...LG 35048 = =	Fair. Ends 1808z	HFD/JkC	TUE
	1800z	03 Sep	'463' 961 30 = =	87373...	...LG 36305= =	Strong. Ends 1807z. Errors noted from grp24	JkC	THU
	18**04**z	08 Sep	'463' 774 30 = =	57900...	...LG 036559 = =	Late start. Numerous errors. DK 744 at EOM	BR	TUE
	1800z	10 Sep	'463' 127 30 = =	86391...	...LG 71193 = =	Fair. Ends 1910z. **Using old M01b msgs**	JkC	THU
	1800z	15 Sep	'463' 339 30 = =	86391...	...LG 71193 = =	Good, fast . Excellent CW. Two errors	BR	TUE
	1800z	17 Sep	NRH				BR	THU
	1800z	22 Sep	'463' 950 30 = =	43279...	...LG 01165 = =	Strong, med-fast. Errors in msg & format	BR	TUE
	18**05**z	24 Sep	'463' 387 30 = =	21523...	...LG 88053 = =	Fast. Late start. Excellent CW. No errors	BR	THU
	1800z	29 Sep	'463' 903 30 = =	33968...	...LG 54734 = =	Good, fast. Numerous errors noted	BR	TUE
6260	1505z(IP)	12 Sep	In progress ... 17036 13459 82903 87586 LG 43641 = 641 30 000*			Fair. Ends 1508z	JkC	SAT
	1500z	19 Sep	'463' 555 30 = =	36264...	...LG 26631 = =	Fair, fast. Excellent CW. With noted errors	BR	SAT
	1500z	26 Sep	'463' 136 30 = =	62114...	...LG 57496 = =	Strong. Ends 1508z	JkC	SAT
6510	0700z	06 Sep	'463' 373 30 = =	08330...	...LG 21643 = =	Weak, fast. Excellent CW. Two errors in msg	BR	SUN
	0700z	13 Sep	'463' 146 30 = =	27771...	...LG 63160 = =	Weak, fast. Poor copy. LG 53160 on repeat?	BR	SUN
	0700z	20 Sep	'463' 718 30 = =	03521...	...LG 35048 = =	Good, fast. Excellent CW. Error grp20	BR	SUN
	0700z	27 Sep	'463' 019 30 = =	65742...	...LG 30865 = =	Good, v.fast. Excellent CW. Error in grp30	BR/HFD	SUN

*Appears to be repeat of 22 Aug15 msg with different DK

October 2015:

5020	2000z	01 Oct	'463' 947 30 = =	01150...	...LG 02691 = =	Fair. Ends 2009z	JkC	THU
	2000z	06 Oct	'463' 164 30 = =	20690...	...LG 17385 = =	Fair, fast. Errors. DK at end sent as 364	BR	TUE
	2000z	08 Oct	'463' 357 30 = =	52851...	...LG 74972 = =	Good, fast. Excellent CW. No errors	BR	THU
	2000z	13 Oct	'463' 258 30 = =	22405...	...LG 60284 = =	Fair, fast. Numerous errors	BR	TUE
	2000z	15 Oct	'463' 903 30 = =	88672...	...LG 17833 = =	Strong. Ends 2009z. **Using old M01b msgs**	JkC	THU
	2000z	20 Oct	'463' 883 30 = =	32560...	...LG 80390 = =	Strong. Ends 2012z	JkC	TUE
	2000z	27 Oct	'463' 421 30 = =	51635...	...LG 20209 = =	Fair. Ends 2009z	JkC	TUE
	2000z	29 Oct	'463' 310 30 = =	44900...	...LG 26178 = =	Good, slow. Fair sig by EOT. Errors noted	BR	THU
5475	1800z	01 Oct	'463' 303 30 = =	99135...	...LG 11 .99 = =	Fair. fast. Numerous errors. See note*	JkC	THU
	1800z	06 Oct	'463' 451 30	56673...	...LG 02681 = =	Fair, fast. Errors noted. No starting DK GC	BR	TUE
	1800z	08 Oct	'463' 621 30 = =	50110...	...LG 75870 = =	Good, fast. Excellent CW. Two errors noted	BR	THU
	1800z	13 Oct	'463' 073 30 = =	17019...	...LG 79855 = =	Strong. Ends 1809z	JkC	TUE
	1800z	15 Oct	'463' 507 30 = =	31581...	...LG 06657 = =	Fair. Ends 1809z	JkC	THU
	1800z	20 Oct	'463' 406 30 = =	10440...	...LG 88465 = =	Strong. Ends 1810z	JkC	TUE
	1800z	22 Oct	'463' 907 30 = =	20442...	...LG 20407 = =	Fair, v.fast. Error in grps13-14	BR	THU
	1800z	27 Oct	'463' 617 30 = =	37658...	...LG 43242 = =	Fair. Ended 1809z	JkC	TUE
6260	1500z	03 Oct	'463' 158 30	55391...	...LG 27715 = =	Good, fast. Several errors noted	BR/HFD	SAT
	1500z	17 Oct	'463' 741 30 = =	96587...	...LG 94521 = =	Fair. Ends 1509z See Note***	JkC	SAT
	1500z	24 Oct	'463' 615 30 = =	23207...	...LG 60245 = =	Fair, fast. Excellent CW. Error in grp28	BR	SAT
	1500z	30 Oct	'463' 332 30 = =	47160...	...LG 35570 = =	Strong. Ends 1509z	JkC	SAT
6510	0700z	04 Oct	'463' 526 30 = =	28543...	...LG 46350 = =	Weak, fast. Copy difficult at times	BR	SUN
	07**05**z	11 Oct	'463' 789 30 / /	01150...	...LG 40780 = =	Fair, fast. Late start one '463' call. See note **	BR	SUN
	0700z	18 Oct	'463' 937 30 = =	33989...	...LG 54743 = =	Good, fast. Several repeat errors noted.	BR	SUN
	0700z	25 Oct	'463' 736 30 = =	66388...	...LG 14815 = =	Good, fast. Excellent CW	BR	SUN

* GR1-10 are the same as GR 1-10 M01 2000z 26 Jun14, GR 21-29 are very similar to GR1-9 M01 1500z 15 Mar14.
** First 10 grps as 2000z transmission on 01 Oct with a couple of changed numbers.
*** This message, with different DKs, has been used a number of times by M01. e,g, 16 Dec14, 12 Mar15, 21 Apr15.

M01 re-using old M01b messages again

On Thu 10 September, Jim (JkC) logged the two regular M01 transmissions & noted that the content had been taken from previously sent M01b messages. Jim first spotted this behaviour in August 2015 & this can be found in Newsletter 90 (Sept 2015).

The 1800z M01 transmission on 10 September: Groups 11-30 are almost exactly the same as M01b groups 1-20 from 02 Jan 2015

The 2000z M01 transmission on 10 September: Groups **01-10** are almost exactly the same as groups **21-30** of the same 02 Jan 2015 message, while groups 11-30 correspond to groups 01-20 of M01b 05 February 2015. Apart from a few digits different and transposed digits, the groups are the same.

M01 5475kHz 1800z 10 Sep 2015

463 127 30 =
86391 39517 25681 11846 73465 47790 91779 01749 35035 89835
11815 40362 12892 33507 15515 51383 42702 26208 47896 28866
65903 65992 37545 80868 74361 26865 89980 61085 97519 71193
= 127 30 000

M01b 2405kHz//3180kHz 2110z 02 Jan 2015

610 734 30 =
11815 40362 12892 33507 15515 51383 42702 26208 47896 28866
65903 65992 37545 80868 74361 26865 89980 61085 97519 71193
59535 18439 00070 66065 88120 94197 55224 94861 39610 98467
734 30 000

Courtesy JkC

M01 5020kHz 2000z 10 Sep 2015

463 739 30 =
59535 18439 00270 66065 88120 94197 22455 94861 39610 98467
88538 52708 50301 35450 90262 91554 75475 61483 94997 44371
25175 30437 34767 13790 11565 04149 97060 52658 56961 52472
= 739 30 000

M01b 2485kHz 2042z 05 Feb 2015

382 385 30 =
88538 58208 50301 53450 90262 91554 75475 614.3 94996 44371
25175 30437 34767 13790 11566 04149 97060 52658 56961 52472
96469 59730 16669 73683 04195 46992 88400 13377 40668 14316
= 385 30 000

Courtesy JkC

In October too, some exceptional comparisons by Jim (JkC) found M01 repeating parts of old M01b messages again. On 15 October the 2000z message contained parts of messages used by M01b in April 2014. Grp1-20 equal to M01b grp11-30 of 04 April 2014, and grp21-30 equal to M01b grp1-10 of 18/ April 2014. Both M01b messages are reproduced for reference below;-

M01 5020kHz 2000z 15 Oct 2015

463 903 30 =
88672 12264 39112 68257 02410 75866 53119 14200 68046 88395
94831 45333 75004 26279 72157 27854 50174 70357 52557 14722
72460 36423 32426 77998 15246 69535 69667 35075 38256 17833
= 903 30 000

Courtesy JkC

M01b 4940kHz//3625kHz 1902z 04 Apr 2014

153 189 30 =
65700 11586 94080 45862 93426 82090 38329 59702 82031 06657
88672 12264 39112 68257 02410 75866 53119 14200 68046 88395
94831 45333 75004 26279 72157 27854 50174 70357 52557 14722
= 189 30 000 *Courtesy JkC*

M01b 4858kHz 20102z 18 Apr 2014

582 386 33 =
72460 36423 32426 77998 15246 69535 69667 35075 38256 17833
62755 00176 04400 70128 94996 20857 05559 42197 60990 05023
54820 28965 32781 49521 80450 65627 91718 53961 87454 96084
23629 95143 44299
= 386 33 000 *Courtesy JkC*

M01a

These intercepts caught by Tony (Topol) on Thu 24 September. First heard on 4598kHz at 0008z, moved to 4906kHz at 0031z with a further transmission at 0041z.. Both strong signals, hand sent.

Possibly two or more operators - Good catch Tony!

M01a 4598kHz 0008z 24 Sept 2015

0008z [i/p].... 68281 [repeated x 2]
[18sec gap]
501 [x 3] 69189 69189 [repeated for 3min 17secs]
[58sec gap]
111 000

Changed to 4906kHz 0031z

0031z [i/p] ....?1264
[1min 4sec gap]
333 11783 11783 [repeated for 1min 23secs]
[1min 25sec gap]
333 12883 12883 [repeated for 2min 7secs]
[1min 50sec gap]
333 12683 12683 [repeated for 1min 21secs]
[1min 4sec gap]

Continued...

....Continued

4906kHz 0041z

0041z [new operator?]
[2min 2sec gap]
224 x 2
224 x 3
333 11483 11483 [repeated for 54secs]
333
[2min 9 sec gap]
333 12783 12783 [repeated for 52 secs]
[29 sec gap]
333 12783 12783 [repeated for 1min 26 secs]
[35 sec gap]
333 12783 12783 [no repeat]
[1min 3 sec gap]
224 [x 3] 333 11563 11563 [repeated for 1min 24secs]
[1min 53sec gap]
333 12473 12473 [repeated for 2min 22secs]
12473
[39 sec gap]
224 [x 3] 333 12673 12673 [repeated for 1min 14secs]
[1min 46 sec gap]
111 000

Courtesy Topol

... And Jean-Paul (JPL), with another good catch, heard this transmission on Thursday 15 October via remote tuner in Siberia

M01a 8819kHz 1116z 15 Oct 2015

51 444 51 444 51 (IP – Machine sent – 1116z)
444 3693 3693 69
51 444 51 444 51 444
111 (1117z)
111 000 (1117z - Silent)
000

753 753 753 753 (1120z)
000 101 000 15
48081 44780 54321 98123 45910 81437 89219 (Lost remote tuner for a short while)
753 753 00101 00010
48081 44780 54321 98123 45910 81487 89219 12345 05439 98183 00101
(1123z - Silent)

Courtesy JPL

M01b

September 2015:

3510//4605	1831 - 1846z	03 Sep	'201' 707 30 = = 03016 27233 ... 97222 Up early. Repeat of Aug msg	HFD/JkC/tiNG	THU
	1832 - 1848z	10 Sep	'201' 707 30 = = 03016 ... 97222 000 Weak//Fair	JkC	THU
	1832 - 1848z	24 Sep	'201' 707 30 = = 03016 ... 97222 000 Weak//Fair Repeat of 06 Aug15	JkC	THU
3520	2008 - 2024z	04 Sep	'582' 707 30 = = 03016 27233 . . . same msg as 10 Aug 1810z Good	tiNG	FRI
3520//4585	2010z	25 Sep	'582' 707 30 = = 03016	HFD	FRI
3535//4590	1810 - 1824z	14 Sep	'420' 707 30 = = 03016 ... 97222 000 Weak//Fair Repeat of 06 Aug msg	JkC	MON
4590	1810 - 1837z	21 Sep	'420' 707 30 = = 03016 ... 97222 000 Fair//3535kHz NRH	JkC	MON
	Tx stopped abruptly at 1813z and resumed at 1820z with call-up for 4 minutes.				
3625//4940	1902z	25 Sep	'153' 707 30 = = 03016	HFD	FRI
3645/4455	1915 - 1933z	07 Sep	'771' 707 30 = = 03016 27233 96271 Fair	HFD/tiNG	MON
	19**16** - 1933z	14 Sep	'771' 707 30 = = 03016 ... 97222 000 Fair//Fair Up late	HFD/JkC/Schorschi	MON
	1915 - 1933z	21 Sep	'771' 707 30 = = 03016 ... 97222 000 Fair//Fair	JkC/Schorschi	MON
3715//4570	1941 - 1956z	03 Sep	'477' 707 30 = = 03016 27233 ... 97222 Weak//Fair Up early	HFD/JkC//tiNG	THU
	1942 - 1958z	10 Sep	'477' 707 30 = = 03016 ... 97222 000 Very Weak//Fair	JkC	THU
	1942 - 1958z	24 Sep	'477' 707 30 = = 03016 ... 97222 000 Weak//Fair Repeat of 06 Aug15 msg	JkC	THU
4605	1832z	17 Sep	'201' 707 30 = = 03016 27233 96271 . . .	tiNG	THU
	Same message as of 10 Aug15 at 1810z on 5735kHz. This msg on air over a month.				

October 2015:

3510//4605	1832 - 1848z	01 Oct	'201' 707 30 = = 03016 ... 97222 000 Fair//Strong	JkC	THU
	1832 - 1850z	15 Oct	'201' 531 33 = = 96379 ... 60228 000 Fair//Fair	JkC	THU
3520//4585	1902 - 1927z	02 Oct	'582' 707 30 = = 03016 ... 97222 000 Fair//Strong	JkC	FRI
	2010 - 2028z	09 Oct	'582' 531 33 = = 96379 ... 60228 000 Fair//V.weak	JkC	FRI
	2010 - 2029z	16 Oct	'582' 531 33 = = 96379 ... 60228 000 Fair//Strong	JkC	FRI
3535//4590	1810 - 1828z	05 Oct	'420' 531 33 = = 96379 ... 60228 000 Fair//Strong	JkC	MON
	1810 - 1828z	12 Oct	'420' 531 33 = = 96379 ... 60228 000 Fair//Strong	JkC	MON
	1810 - 1828z	19 Oct	'420' 531 33 = = 96379 ... 60228 000 Fair//Strong	JkC	MON
3625//4940	1902 - 1918z	02 Oct	'153' 707 30 = = 03016 ... 97222 000 Fair//Strong	JkC	FRI
	1902 - 1920z	09 Oct	'153' 531 33 = = 96379 ... 60228 000 Fair//Fair	JkC	FRI
	1902 - 1921z	16 Oct	'153' 531 33 = = 96379 ... 60228 000 Fair//Strong	JkC	FRI
3645//4455	1915 - 1934z	05 Oct	'771' 531 33 = = 96379 ... 60228 000 Fair//Strong	JkC	MON
	1915 - 1934z	12 Oct	'771' 531 33 = = 96379 ... 60228 000 Fair//Strong	JkC	MON
	1915 - 1933z	19 Oct	'771' 531 33 = = 96379 ... 60228 000 Fair//Strong	JkC	MON
3715//4570	1942 - 1958z	01 Oct	'477' 707 30 = = 03016 ... 97222 000 Fair//Strong	JkC	THU
	1940 - 1958z	10 Oct	'477' 531 33 = = 96379 ... 60228 000 Fair//Strong	JkC	THU

M03 III ICW, some CW

The 13911kHz Friday & Sunday schedule was last heard on 20 September & has failed to appear since, as did the associated POL FSK transmission. We feature a comparison between the Morse & POL FSK transmissions monitored by Jim (JkC), shortly before this schedule ceased.

Activity from the remaining schedules remains the same.

September 2015:

5463	1320 - 1323z	02 Sep	543/00 = = 000 Strong (JkC log via Zielona Góra remote SDR)	HFD/JkC	WED
	1320 - 1323z	21 Sep	543/00 = = 000 Strong	Schorschi	MON
9150	1325z(IP)	03 Sep	In progress	HFD	THU
	1320 - 1323z	17 Sep	437/00 = = 000 Fair	JkC	THU
	1320 - 1323z	20 Sep	437/00 = = 000 Fair	tiNG	SUN
13911	1420 - 1437z	04 Sep	873/33 = = 70463 90199 ..... 94644 06011 = = 000 Fair	HFD/JkC	FRI
	1420 - 1423z	18 Sep	879/00 = = 000 Fair	JkC	FRI
	1420 - 1423z	20 Sep	879/00 = = 000 Weak	tiNG	SUN
	1420z	25 Sep	NRH Associated FSK POL also NRH	JkC	THU

Comparison between POL FSK & M03 messages 1405z / 1410z & 1420z 04 September

POL FSK

13575kHz 1405z/1410z 04Sep15

0877 0877 0877 0877 0877
88888 88888
70463 90199 12339 70706 99016
98360 85612 26122 13236 10090
59797 21224 67236 61186 15889
18699 47808 72144 63544 61340
30413 17118 82455 27388 61462
29388 27662 63290 97414 94311
29166 94644 06011
88888 88888
00036 00036

Courtesy JkC

MORSE M03

13911kHz 1420z 04 Sep15

873/33 (R3m) = =

70463 90199 12339 70706 99016
98360 85612 26122 13236 10090
59797 21224 67236 61186 15889
18699 47808 72144 63544 61340
30413 17118 82455 27388 61462
29388 27662 63290 97414 94311
29166 94644 06011

= 873/33 (R5) =
(single group repeat)
= 000

Courtesy JkC

Another example of the two associated transmissions from Jim (JkC). Again, each transmission 10 minutes apart, & the message is the same with the same additional stutter groups - both before & at the end of the message.

In the last newsletter we suggested that the final two groups could be GC (Msg length + 4 x stutter grps). If this is the case then the figure in this example should be 00037, not 00036.

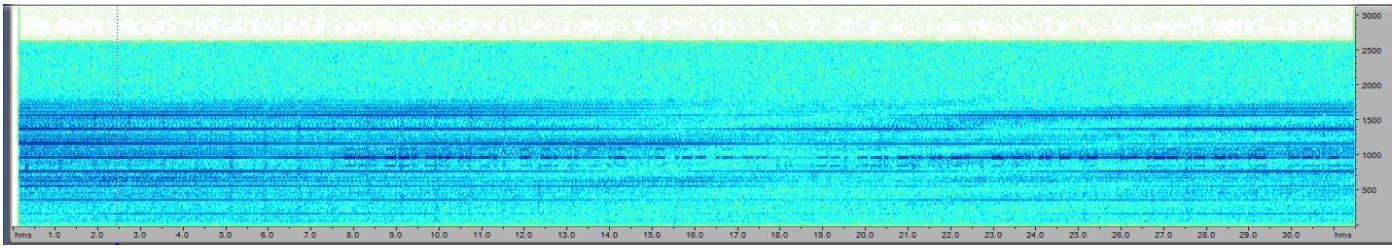
October 2015:

5463	1320 - 1323z	07 Oct	543/00 = = 000 Good	BR	WED
	1320 - 1338z	21 Oct	540/37 = = 44826 01888....62993 = = 000 Fair with QSB	BR	WED
	1320 - 1323z	26 Oct	543/00 = = 000 Fair	BR	MON
	1320 - 1323z	28 Oct	543/00 = = 000 Fair	JkC	WED
9150	1320 - 1323z	08 Oct	437/00 = = 000 Strong	JkC	THU
	1320 - 1323z	11 Oct	437/00 = = 000 Fair	BR	SUN
	13**22** - 1323z	15 Oct	437/00 = = 000 Good Started up mid-call. Technical problem or Op. error?	AB/BR	THU
	1320 - 1323z	18 Oct	437/00 = = 000 Good	tiNG	SUN
	1320 - 1323z	22 Oct	437/00 = = 000 Strong	JkC	THU
13911	1420z	02 Oct	NRH Associated FSK POL also NRH	JkC	FRI
	1420z	11 Oct	NRH	BR	SUN

M08a XVIII ICW / CW, some MCW

Our Man in America, AnonUS contacted us in early October with a sound sample of the output from the Cuban transmitter. The CW was readable, but was underneath a constant, strong hum. Older members may recall when hum was a regular feature on the Cuban transmitters.

Has hurricane / storm Joaquin caused some power problems, we wonder.



M08a Thu 08 Oct 2015 Weak CW signal visible under a sea of hum from the Cuban Transmitter *Courtesy AnonUS / PLdn*

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

To be read in conjunction with Brian's monthly logs available in the charts section. 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.

After a period of stability we see the M12 schedules changing again as winter approaches. These changes are continuing at the time of writing.

ID 463, which with IDs 124 & 257 form the trio of 'core' transmissions increased its output significantly in September with the addition of a daily 2000z schedule, discovered by Jim (JkC). These 'core' IDs seem to take turns as which is the most used of the three, with the ID often changing to one of the others after several years in use.

It is good to see schedules once again appearing on Fridays. From 2008 – 2011 it was as busy as any other day with various schedules. This reduced to just an 1800z ID 124 sched in 2012, ending in May 2013, since which time it has been quiet. (2008 are the earliest logs available at the time of writing- so it may have been earlier). Apart from the 2000z daily schedule from ID 463, we have a 1500z addition from ID 417 - an old ID which has not been heard for some time & appearing with a much higher frequency set & new times from those used previously.

The new early sched Wednesday discovered by Richard (RNGB) at the end of July continues with a new monthly ID & frequency set.

On the losses side, we have lost the Monday ID 257, 1900z schedule - not heard since 28 September & the Thursday ID 124, 1900z schedule - not heard since 08 October. Both of these are from the 'core' trio of IDs. We did think we had lost the Wednesday ID 938, 1930z transmission as this was not logged from 30 September but reappeared on 21 October. This may have been inaudible due to conditions, but it wasn't heard on any of its frequencies during this time.

Finally, it was noticed that in late October that the ID 124 schedule on 10343kHz had a close neighbour as the Israeli naval station 4XZ can be heard when listening on the frequency. 4XZ is on 10341kHz, which seems to be a recent addition or change to the previously used frequencies, although Peter (PoSW) has noted 4XZ on 6607kHz in October, which is one of the longer established frequencies in use.

Asiatic M12 Scheds

18576/17436/15826	0020/40/0100z	17 Oct	548 1 (297 125) 37684 68818... 79655 96761 000	Fair via Hong Kong	JkC	SAT

European M12 Logs

September 2015: **New scheds in bold type**

5792/6992/---	0430/0450/0510z	21 Sep	796 000		HFD/JkC	MON
	0430//0450/0501z	28 Sep	796 000 Strong		JkC	MON
7684	0650z	17 Sep	761 000		HFD	THU
6793/5893/4593	2100/20/40z	02 Sep	785 1 (8478 111) 75842 85290 ... 02239 70790 000	Strong	JkC	WED
	2100/20/40z	16 Sep	785 000 Strong		JkC	WED
	2100/20/40z	23 Sep	785 1 (9261 125) 20184 66343 ... 92456 21783 000	Strong	JkC/Topol	WED
	2100/20/40z	30 Sep	785 000 Strong		JkC	WED
8047/6802/5788	1900/20/40z	02 Sep	463 1 (7637 138) 37730 32582 ... 67011 34163 000	Strong	HFD/JkC	WED
	1800/20/40z	14 Sep	463 1 (2072 153) 25041 59135 ... 29648 57764 000	Strong	JkC	MON
	2000/20/40z	**14 Sep**	**463 1 (4396 56) 46921 11846 ... 51556 80549 000**	**Strong**	JkC	MON
	2000/20/40z	**15 Sep**	**463 1 (5927 63) 44998 59380 ... 73669 03157 000**	**Strong**	JkC	TUE
	1900/20/40z	16 Sep	463 1 (1071 155) 39653 40469 ... 61903 54946 000	Strong	JkC	WED
	2000/20/40z	**16 Sep**	**463 1 (5618 63) 64942 63217 ... 42540 14714 000**	**Strong**	JkC	WED
	2000/20/40z	**18 Sep**	**463 1 (8975 57) 27514 78942 ... 12688 94565 000**	**Fair/Fair/Strong**	JkC	FRI
	1800/20/40z	21 Sep	463 1 (1354 150) 60647 11231 ... 23304 68191 000	Fair/Fair/Strong	JkC	MON
	2000/20/40z	21 Sep	463 1 (8458 50) 16873 96648 ... 00976 94535 000	Strong	JkC	MON
	2000/20/40z	22 Sep	463 1 (4089 54) 11025 58194 ... 64512 51593 000	Strong	JkC	TUE
	1900/20/40z	23 Sep	463 1 (5477 132) 25482 35707 ... 63831 29466 000	Strong	JkC	WED
	2000/20/40z	23 Sep	463 1 (4483 58) 38545 37634 ... 63034 80474 000	Strong	JkC	WED
	2000/20/40z	**24 Sep**	**463 1 (6693 60) 58891 55062 ... 50422 68752 000**	**Strong**	JkC	THU
8047	2000z	25 Sep	463 1 (9574 62) 62902 99153 ... 86187 83422 000	Fair	JkC	FRI
	2000/20/40z	**27 Sep**	**463 1 (1169 60) 78218 76590 ... 51061 10090 000**	**Strong**	JkC	SUN
	1900/20/40z	30 Sep	463 1 (1698 142) 64673 74268 ... 76765 68256 000	Strong	JkC	WED
	2000/20/40z	30 Sep	463 1 (522 71) 60888 76219 ... 48471 68214 000	Strong	JkC	WED

Jim (JkC) notes the new daily ID 463 sked at 2000/20/40, is slower than other 463 skeds - 22wpm rather than 25wpm.

8176/9376/10476	0500/20/40z	19 Sep	134 000		HFD	SAT
	0500/20/40z	26 Sep	134 1 (9261 125) 20184 66343 ... 92456 21783 000	Strong	JkC	SAT
9176/7931/6904	1800/20/40z	02 Sep	257 1 (4021 135) 33494 01567 ... 62028 30290 000	Strong	HFD/JkC	WED
	1900/20/40z	14 Sep	257 1 (1847 109) 68830 60672 ... 55111 30729 000	Strong	JkC	MON
	1800/20/40z	16 Sep	257 1 (9911 132) 51323 01015 ... 25824 27674 000	Strong	JkC	WED
	1900/20/40z	21 Sep	257 1 (5066 107) 49828 99336 ... 72437 67491 000	Strong	JkC	MON
	1800/20/40z	23 Sep	257 1 (5160 136) 40685 30676 ... 25987 52858 000	Strong	JkC	WED
	1800/20/40z	30 Sep	257 1 (1523 140) 35166 03137 ... 35679 50498 000	Strong	JkC	WED
10343/9264/8116	1930/1950/2010z	01 Sep	124 1 (9444 57) 79213 74959 ... 09674 38267 000	Strong	HFD/JkC	TUE
	1800/20/40z	03 Sep	124 1 (4791 149) 69880 17001 ... 07797 21766 000	Strong	HFD/JkC	THU
	1900/20/40z	03 Sep	124 1 (6963 115) 87867 70552 ... 57991 13826 000	Strong	JkC	THU
	1800/20/40z	10 Sep	124 1 (3822 151) 09095 95527 ... 80754 60712 000	Strong	JkC	THU
	1900/20/40z	10 Sep	124 1 (6694 101) 18794 69288 ... 64414 67174 000	Fair	JkC	THU
	1930/1950/2010z	15 Sep	124 1 (9199 68) 32626 37401 ... 49826 65370 000	Strong	JkC	TUE
	1930/1950/2010z	22 Sep	124 1 (7041 58) 73633 68513 ... 39830 97149 000	Strong	JkC	TUE
	1800/20/40z	24 Sep	124 1 (9011 147) 61527 82852 ... 98482 49894 000	Strong	JkC	THU
	1900/20/40z	24 Sep	124 1 (4563 116) 36109 10879 ... 95162 00808 000	Strong	JkC	THU

11435/10598/9327	1930/1950/2010z	02 Sep	938	1	(1396 51)	21575	42320	...	13376	70933	000	Strong		HFD/JkC	WED
	1700/20/40z	14 Sep	938	1	(8027 100)	16113	64631	...	25468	36988	000	Strong		JkC	MON
	1930/1950/2010z	16 Sep	938	1	(5810 70)	94050	08799	...	59243	56892	000	Strong		JkC	WED
	1700/20/40z	21 Sep	938	1	(1701 109)	42237	32287	...	37387	63287	000	Strong		JkC	MON
	1930/1950/2010z	23 Sep	938	1	(1918 69)	14215	87227	...	04304	36638	000	Strong		JkC	WED
	1930/1950/2010z	30 Sep	938	1	(9476 57)	12459	88103	...	11025	83506	000	Strong		JkC	WED
11469/10469/---	2110/30/50z	02 Sep	441	000	Strong									HFD/JkC	WED
	2110/30/50z	16 Sep	441	000	Strong									JkC	WED
	2110/30/50z	23 Sep	441	000	Strong									JkC	WED
	2110/30/50z	30 Sep	441	1	[rest unworkable]	Weak								JkC	WED
12205/13559/17428	1100/20/40z	21 Sep	973	1	Strong									Schorschi	MON
13386/12189/11491	1500/20/40z	03 Sep	725	1	(8414 110)	46541	04040	...	20342	18387	000	Strong		JkC	THU
	1700/20/40z	03 Sep	725	1	(5363 117)	16002	10456	...	85462	60160	000	Strong		HFD/JkC	THU
	1500/20/40z	10 Sep	725	1										HFD	THU
	1500/20/40z	17 Sep	725	1	(1481 121)	56550	74718	...	87132	24423	000	Strong		JkC	THU
	1500/20/40z	24 Sep	725	1	(2751 112)	06540	93697	...	43655	36874	000	Strong		JkC	THU
	1700/20/40z	24 Sep	725	1	(7403 104)	83218	57516	...	70355	68778	000	Strong		JkC	THU
13873/13373/---	1310/30/50z	03 Sep	834	000										HFD	THU
	1310/30/50z	17 Sep	834	000	Strong									JkC	THU
13373	1330z	19 Sep	834	000	Good									tiNG	SAT
13873	1310z	24 Sep	834	000	Strong									Schorschi	THU
14575/16075/----	**0710/30/50z**	**16 Sep**	**504**	**000**	**Fair/Weak**									BR	WED
17417/16117/14717	**1500/20/40z**	**18 Sep**	**417**	**000**	**Fair**									JkC	FRI
	1500/20/40z	25 Sep	417	1	(8312 79)	83029	43946	...	64225	63722	000	Weak/Fair/Fair		JkC	FRI

October 2015:

4617/5317/---	0430/0450/0510z	05 Oct	638	000	Strong									HFD/JkC	MON
5814/5214/4614	2100/20/40z	07 Oct	826	1										HFD	WED
	2100/20/40z	21 Oct	826	1	(5617 131)	02121	81897	...	27154	20371	000	Fair		JkC	WED
	2100/20/40z	28 Oct	826	000	Strong									JkC	WED
6784/7684/---	0630/0650/0710z	15 Oct	761	000										HFD	THU
6832/7932/---	0500/20/40z	24 Oct	892	1										HFD	SAT
8047/6802/5788	2000/20/40z	01 Oct	463	1	(8059 66)	91160	86294	...	10212	99406	000	Strong		JkC	THU
	2000/20/40z	02 Oct	463	1	(6353 68)	96766	96568	...	47141	26481	000	Fair		JkC	FRI
	1800/20/40z	05 Oct	463	1	(5261 146)	60653	08490	...	23438	39697	000	Strong		HFD/JkC	MON
	2000/20/40z	05 Oct	463	1	(5582 70)	18888	24370	...	35360	93044	000	Fair		JkC	MON
	1800/20/40z	07 Oct	463	1	(8357 148)	13090	00109	...	00878	81900	000	Fair		JkC	WED
	2000/20/40z	08 Oct	463	1	(299 101)	08366	50025	...	36586	62983	000	Strong/Fair/Strong		JkC	THU
	2000/20/40z	09 Oct	463	1	(982 83)	76732	54852	...	48537	80663	000	Fair		JkC	FRI
	1800/20/40z	12 Oct	463	1	(7007 150)	06179	73141	...	00746	57423	000	Weak/Fair/Fair		JkC	MON
	2000/20/40z	15 Oct	463	1	(3100 68)	59862	14757	...	77946	97198	000	Fair		JkC	THU
	2000/20/40z	16 Oct	463	1	**(863 114)**	**41340**	92587	...	35004	**17668**	000	Strong		JkC	FRI
	2000/20/40z	17 Oct	463	1	**(863 114)**	**41340**	92587	...	35004	**17668**	000	Fair	(Rpt of 16 Oct)	JkC	SAT
	1800/20/40z	19 Oct	463	1	(4804 142)	62909	06809	...	51847	01388	000	Fair		JkC	MON
	2000/20/40z	19 Oct	463	1	(8315 73)	35096	99598	...	67116	47741	000	Fair		JkC	MON
	1900/20/40z	21 Oct	463	1	(7294 155)	72559	55093....		51691	70755	000	Fair		JkC	WED
	2000/20/40z	21 Oct	463	1	(6558 73)	81310	80823	...	04149	72792	000	Fair		JkC	WED
	2000/20/40z	27 Oct	463	1	(191 128)	05374	75586....		65860	87993	000	Fair		JkC	TUE
	1900/20/40z	28 Oct	463	1	(6137 136)	93411	00245....		65925	94533	000	Strong		JkC	WED
	2000/20/40z	28 Oct	463	1	(191 128)	05374	75586	...	65860	87993	000	Strong		JkC	WED
	2000/20/40z	30 Oct	463	1	(7613 68)	19515	59378....		39388	80236	000	Strong		JkC	FRI
9176/7931/6904	1800/20/40z	07 Oct	257	1	(116 117)	04545	60448	...	34774	89252	000	Fair		JkC	WED
	1900/20/40z	19 Oct	[NRH]											JkC	MON
	1800/20/40z	21 Oct	257	1	(566 135)	54611	11749	...	31140	28260	000	Fair		JkC/JPL	WED
	1900/20/40z	26 Oct	257	1										HFD	MON
	1800/20/40z	28 Oct	257	1	(845 84)	42918	01484	...	56838	22534	000	Strong		JkC	WED
10269/9269/7969	2110/30/50z	03 Oct	229	000										HFD	SAT
	2110/30/50z	17 Oct	229	1	(4024 89)	11726	40699	...	93854	22257	000	Weak/Strong/Strong		JkC	SAT
	2110/30/50z	21 Oct	229	000	Weak									JkC	WED
	2110/30/50z	28 Oct	229	000	Weak									JkC	WED
10343/9264/8116	1800/20/40z	01 Oct	124	1	(6376 141)	01407	63674	...	16733	94491	000	Strong		JkC	THU
	1900/20/40z	01 Oct	124	1	(3516 100)	06587	64743	...	49813	69194	000	Strong		HFD/JkC	THU
	1900/20/40z	08 Oct	124	1	(2148 105)	53358	50076	...	04777	74884	000	Strong		JkC	THU
	1800/20/40z	15 Oct	124	1	(6049 145)	49002	07394	...	81867	86086	000	Strong		JkC	THU
	1900/20/40z	15 Oct	[NRH]											BR/JkC	THU
	1930/1950/2010z	20 Oct	124	1	(9677 69)	35296	37362	...	14567	50500	000	Fair		JkC	TUE
	1930/1950/2010z	27 Oct	124	1	(5538 59)	40254	50270	...	01211	43439	000	Weak/Fair/Fair		JkC	TUE

11435/10598/9327	1700/20/40z	05 Oct	938 1	(8577 107)	23726	10395 ...	33610	73963	000	Strong	HFD/JkC	MON
	1700/20/40z	12 Oct	938 1	(9212 110)	66948	26746 ...	95554	28627	000	Fair	JkC	MON
	1700/20/40z	19 Oct	938 1	(3974 113)	19929	57505 ...	40076	83698	000	Fair	JkC	MON
	1930/1950/2010z	21 Oct	938 1	(8417 57)	69045	14811 ...	31221	77919	000	Weak/Fair/Weak	JkC	WED
	1930/1950/2010z	28 Oct	938 1	(5728 61)	44392	90267 ...	099 .6	38923	000	V.weak/Weak	JkC	WED
12205/13559/14728	1100/20/40z	973 1									HFD	MON
12214/108149214	1310/30/50z	03 Oct	282	000							HFD/tiNG	SAT
	1310/30/50z	08 Oct	282 1	(9180 163)	48026	63846 ...	74385	57951	000	Strong/Strong/Fair	JkC	THU
	1310/30/50z	22 Oct	282	000	Strong						JkC	THU
	1310/30/50z	30 Oct	282	000	Strong						JkC	SAT
13386/12189/11491	1500/20/40z	01 Oct	725 1	(6173 123)	02029	14803 ...	65599	99572	000	Strong	JkC	THU
	1700/20/40z	01 Oct	725 1	(6834 113)	36108	43130 ...	51772	45548	000	Strong	JkC	THU
	1500/20/40z	08 Oct	725 1	(787 121)	82108	56401 ...	82893	99827	000	Strong	JkC	THU
	1700/20/40z	08 Oct	725 1	(6571 116)	47631	05635 ...	19510	77901	000	Strong	JkC	THU
	1500/20/40z	15 Oct	725 1	(886 138)	57275	94844 ...	32718	16519	000	Strong *	JkC/Schorschi	THU
	1700/20/40z	15 Oct	725 1	(7882 103)	46588	32615....	09880	52381	000	Weak/Fair/Fair	JkC	THU
	1500/20/40z	22 Oct	725 1	(8937 146)	40657	46037 ...	20188	06075	000	Strong	JkC	THU
16354/18254/---	**0710/30/50z**	**28 Oct**	**324**	**000**							**BR**	**WED**
20036/18636/17436	**1500/20/40z**	**02 Oct**	**064 1**	**(2278 55)**	**54960**	**47900 ...**	**27496**	**36211**	**000**	**Weak/Fair/Fair**	JkC	FRI
	1500/20/40z	09 Oct	064 1	(760 69)	06937	06534 ...	90849	74505	000	Fair	JkC	FRI
	1500/20/40z	16 Oct	064 1	(5539 114)	80921	34566 ...	73646	18449	000	Fair	JkC	FRI
	1500/20/40z	30 Oct	064	000	Strong						JkC	FRI

* Schorschi reports a problem with this transmission sounding like a speed or generator problem ? Maybe be a dot before each dash. This was also logged by Brian (BR) sounding like a double feed, slightly out of synch. This effect has been observed before from time to time.

M14 IA MCW / ICW / MCWCC, short 0

Thanks to all monitors who have sent in logs of M14 - an excellent effort! Jim (JkC) notes new October activity at 1300z/1330z on 10755/9080kHz. These transmissions appear to suffer many more problems than the rest of the schedules put together. Jim wonders if these could be training schedules.

September 2015:

5464	1920z	09 Sep	537 (592 020) = 27856	HFD	WED
5463	1920 - 1929z	23 Sep	537 (592 020) = 27856 ... 72878 = 00000 Fair Repeat of 26 Aug15	JkC	WED
5477	1800 - 1804z	04 Sep	382 00000 Fair	HFD/tiNG	FRI
5944	1700z	04 Sep	382 000	HFD/tiNG	FRI
	1700 - 1704z	18 Sep	382 00000 Fair	JkC/tiNG	FRI
5947	1820 - 1829z	22 Sep	346 (972 020) = 43765 ... 93711 = 00000 Fair Repeat of 11 Aug15	JkC	TUE
6824	0600 - 0604z	27 Sep	382 00000 Weak	JkC	SUN
18041	0500 - 0511z	21 Sep	952 (868 50) = 53543 ... 04944 = 00000 Fair	JkC	MON
	0500 - 0514z	22 Sep	952 (713 60) = 29880 ... 90229 = 00000 Fair Via Hong Kong remote	JkC	TUE

October 2015:

4787	1600 - 1604z	07 Oct	475 00000 Fair No repeat found	JkC	WED
	1600 - 1604z	21 Oct	475 00000 Fair No repeat found	JkC	WED
5430	0800z	03 Oct	171 Weak MCW	HFD	SAT
	0800z	10 Oct	171 (823 020) = 35091 ... 95438 = 0000/ *(Note1)	AB	SAT
5463	1920 - 1919z	28 Oct	537 (592 020) = 27856 ... 72878 = 00000 Strong Repeat of 26 Aug15	JkC	WED
5477	1800 - 1804z	02 Oct	382 00000 Strong	JkC	FRI
5560	0900z	10 Oct	171 (823 020) = 35091 ... 95438 = 0000/ *(Note1)	AB	SAT
5944	1700 - 1704z	02 Oct	382 00000 Fair	JkC	FRI
5947	1820 - 1829z	13 Oct	346 (972 020) = 43765 19832...93711 = 00000 Strong/Fair	HFD/JkC/JO	TUE
	1820 - 1829z	27 Oct	346 (972 020) ..765 [Rest unworkable] Weak	JkC	TUE
9073	1330 - 1347z	22 Oct	975 (418 59) = 21960 ... 22908 00000 Fair	JkC	THU
9080	1343 (IP) - 1346z	08 Oct	(348 57) [I/P ... LG 91951 = 348 57 00000 Strong	JkC	THU
	1330 - 1349z	27 Oct	975 (306 54) = 71295 ... 97103 0000 Strong *(Note2)	JkC	TUE
10755	1300 - 1319z	13 Oct	975 (125 53) = 17019 ... . = 00000 *(Note3) Strong	JkC	TUE
	1300 - 1319z	27 Oct	975 (306 54) = 71295 ... 97103 00000 *(Note 4) Strong	JkC	TUE
18041	0500 - 0513z	09 Oct	952 (610 54) = 18471 ... 35525 00000 = Fair Via Hong Kong remote	JkC	FRI
	0500z	22 Oct	952 (746 50) = 82652 ... Fades to nil Weak Via Broome remote	JkC	THU

* Note1: Following the 0800z transmission the following was logged at 0812z
E 00 0000E 0 0 000 E 0000 0 000 00 000 000 02546 99242 00731 38812 738 stops in the middle of the next figure

Final group sent as 0000/ instead of 00000. The / was heard in both the 0800 and 0900 transmissions (AB)

*Note2: Tx broke at GR40, returned to call-up and resumed from GR36 (JkC)

*Note 3: (simulated?) failure after GR14, returned to call-up for 2 minutes, then continued from GR 10 (JkC)

* Note 4: Tx broke at GR20, returned to call-up and resumed from GR16 (JkC)

M14 18041kHz 0500z 21 Sep 15

952 (R4m) 868 868 50 50 = =

53543 17045 23790 35456 67322 38377 97617 65328 44859 89492
83145 06674 39940 05801 64811 93674 58421 66266 60863 09626
52096 81495 57500 26424 59925 18626 27110 64481 51315 36481
97767 08970 51136 29409 66194 43368 51168 03256 71355 86219
37655 31899 70901 42054 89667 67792 87617 02407 27947 04944
= =
868 868 50 50 00000

Courtesy JkC

M14 5430kHz 0800z 10 Oct15

171 (R4m) 823 823 020 020 = =

35091 47919 71061 47137 49053 91535 76828 32502 58546 23102
10871 68236 65764 90152 17615 80721 38962 04169 25634 95438
= =
823 823 020 020 0000/

(Note: Ending of 0000/ sent on both 0800z & 0900z repeat)

Courtesy AB

M14a (two message variant)
No reports

M23 O ICW

A burst of activity again from M23 between Wednesday 07 October & Friday 16 October - but not active over the weekend. Signals were weak to fair into South East England, sometimes dropping below audibility for a short while.

Times are to the nearest minute and were not measured precisely. Long zeros were used. No // freq was found.

As Tony (Topol) comments, this seems to be military & with more than one station involved & possibly exercise related. Certainly the first few days, with the short transmissions of changing calls seemed much more military in style than the more usual M23 format of automated 10 minute calls that reappeared on Tuesday 13 October.

Also of note was the 1346z call of '111' sent on Thursday 08 October. The strength of this call was far stronger than the '553' call that followed it only one minute later & stronger too than previous calls heard that day. This would suggest that more than one station was involved here, although the possibilities of switching antennas or using higher power cannot be ruled out, either.

Note too, the repeated 10 group message heard by Brian (BR) several times on Monday 05 & Tuesday 06 October on the same frequency as the M23. Were these transmissions related to the following M23 activity - or just a coincidence. (See UNID entry at head of Morse section).

Logs of M23 from Wed 07 to Fri 16 October - 8030kHz

Wed 07 October	**Thu 08 October**	**Mon 12 October**	**Tue 13 October**	**Thu 15 October**
1250z 00000 (R12m) *(Without pause into..)* 1302z 55555 (R6m) 1320z 66666 (R8m) 1336z 88888 (R10) 1346z 55555 (x3) 1348z 66666 (x3) 1410z 55555 (R12m) 1425z 66666 (R6m) 1436z 66666 (R8m) 1452z QQQ (x3) 1456z 66666 (R2m) 1501z 66666 (R10m) 1520z 55555 (R8m) Using long Zero All signals Fair / Weak	1200z 00000 (R1m) 1201z 552 (R1m) 1202z 553 (R1m) 1203z 999 (R1m) 1207z 552 (R3m) 1229z 553 (R1m) 1231z 553 (x3) 1346z 111 (R1m) 1348z 553 (R1m) 1350z 553 (x2) Signals were Fair / Weak with QSB with the exception of the1346z transmission which was strong. Strange that the 111 should be a good signal – Is there more than one station here?	1200z 00000 (R10m) 1245z 66666 (R1m) 1321z 11111 (x3) 1322z = (x12) 1330z VVV 1332z VV 1505z BT 1700z 66666 (R10m) 1730z 66666 (R8m) Signal Strengths:- 1200z - 1245z Weak 1321z - 1505z Good 1700z Strong	1700z 00000 (R10m) 1730z 00000 (R10m) 1900z 22222 (R10m) 1930z 22222 (R10m) All signals Good / Strong These transmissions were obviously on a timer and with 10 min transmissions are more like the standard M23 output we are used to. **Wed 14 October** Apart from a short tuning tone at 1454z - NRH	1331z 773 (x10) 1333z 882 (x10) 1346z 111 (x10) All Signals Good / Strong **Fri 16 October** 1237z 55555 (R10m) 1304z 00000 (R4m) 1351z 00000 (R10m) All Signals Fair / Good
Monitoring by AB, BR, JkC, PoSW, Topol				
Signal best received in S.E. England. Weaker via Twente & weaker still at AB's Netherlands QTH 150Km from Twente with nothing at Topol's QTH in Scotland				

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

6841	2030 - 2034z	20 Sep	381	00000	Strong	Fast - 25+wpm, with spaced 0's	JkC	SUN
8144	2000 - 2004z	20 Sep	381	00000	Strong	Fast - 25+wpm, with spaced 0's	JkC	SUN

M24a (two message variant)
No reports

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

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

No logs received. Last heard with the SD84 message on 06 & 07 May 2015.

Morse Stations - Not Number Related

M51 XlX

Peter (PoSW) made some observations of his monitoring of both M51 & M51a transmissions in October. Here are his logs;

M51 "FAV22" variant, noted on several days starting up at around 1129 UTC with a leisurely "VVV DE FAV22 QLH 3881/6825 kHz " routine, 6,825 usually a good signal, 3,881 much weaker. Also noted at various other times, sometimes the signal on 6,825 is much weaker than when logged a short time beforehand, not sure if this is down to changing propagation or if the transmitter power is being varied. A few observations in the month of October:-

9-Oct-15, Friday:- 1130 UTC, starting up with the "FAV22" call, was still on with fast CW when checked at 1410, 1600 and 1725 UTC. At 1915 UTC still on, 6,825 was very weak, 3,881 much stronger peaking S9.

10-Oct-15, Saturday:- 0645 UTC, 6,825 very weak, 3,881 S8.
1240 UTC:- 1240 UTC, fast CW in progress, 6,825 much weaker than when heard during the week at around 1130z, 3,881 weak as expected during daylight hours.

11-Oct-15, Sunday:- 0745 UTC, 6,825 kHz very weak, only just detectable, 3,881 S7 to S8.
1510 UTC, 6,825 S9, 3,881 weak.
1614 UTC, heard with the "FAV22" start-up, 6,825 kHz S9, 3,881 S7.

12-Oct-15, Monday:- 0740 UTC, still on, 6,825 very weak, 3,881 S7.
1129 UTC, just after, starting up routine, nice and slow, 6,825 S8 to S9, 3,881 weak but readable.

19-Oct-15, Monday:- 1707 UTC, not much activity observed in the evening time over the past few days but noted in progress with fast CW at seven minutes past six local time, S7 on both frequencies. When checked at around 1745z 6,825 was very weak with 3,881 peaking S9 but at 1805z 6,825 was back up to S8 - which made me wonder if the transmitter power is reduced sometimes since I would not have expected propagation to vary that much in such a short space of time.

20-Oct-15, Tuesday:- 0620 UTC, fast CW, 6,825 very weak, only just detectable, 3,881 S8.

21-Oct-15, Wednesday:- 1532 UTC, fast CW, 6,825 peaking S9 with a much weaker FSK type signal on a close frequency, not noted before, 3,881 S7, not too bad for just after half past four in the afternoon.

Thanks Peter. Excellent logs & observations. The comments you make about the signal strength are very valid. Often the test tones before a transmission will be far stronger than the signal once the transmission begins. It has also been noted that although the 6825kHz signal is usually the stronger of the two during the M51a 1130z Morse lessons, there are occasions where the reverse is true - even from one day to the next. Propagation may be the reason Certainly the 6825kHz can deteriorate markedly over the 30 minute transmissions, but there does seem to be much higher variations than would be expected which could well be due to changes in transmitter power of perhaps the switching of antennas..

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

3881//6825

1130 - 1201z	06 Oct	Mardi-Leçon	12-2/1 Codé	12-2/2 Clair,	12-2/3 Codé,	12-2/4 Clair (600 grps/hr)	BR	TUE
1130 - 1206z	07 Oct	Mercredi- Leçon	13-2/1 Codé,	13-2/2 Clair,	13-2/3 Codé,	13-2/4 Clair (720 grps/hr)	BR	WED
1130 - 1156z	08 Oct	Jeudi- Leçon	14-2/1 Codé,	14-2/2 Clair,	14-2/3 Codé,	14-2/4 Clair (840 grps/hr)	BR	THU
1130 - 1204z	09 Oct	Vendredi- Leçon	15-2/1 Codé,	15-2/2 Clair,	15-2/3 Codé,	15-2/4 Clair (960 grps/hr)	BR	FRI
1130 - 1213z	12 Oct	Lundi-Leçon	21-1/1 Codé	21-1/2 Clair,	21-1/3 Codé,	21-1/4 Clair (420 grps/hr)	BR	MON

M89 O

This is a summary of activity from the M89 stations. To be read in conjunction with JPL's logs which can now be found in the charts section.

XSV85 - Now confirmed as M95

In the last newsletter (EN90) we featured a brief discussion & analysis of the output from the station on 8073kHz that uses the call sign XSV85. We can now confirm that this station belongs to M95. Logs & further details of this station can be found under this heading, further down the page.

Temporary Calls

A number of new call signs were logged by Jean-Paul (JPL) over this period. Although short-term calls are not unknown, several of these were sent as Round Slips, which normally indicates a long-term station. Two stations in particular are of interest. Firstly on 4137kHz on 19 October 'V 6LUA (x3) DE 3QWG (x2)' was logged - but has not been heard since. The second example is more curious in that the station was already well established on 5644kHz using the call sign 'V MW3D (x3) DE 2SLC (x2)'. On 15 October this was changed to 'V QDKC (x3) DE XLDF (x2), was heard once only & on 18 October was back using the regular call sign. Was this an error or possibly a change for exercise purposes.

Operator Chat from M89

Op. chat & traffic reported on the following freqs. (See JPL's full logs for details).

3333 3340 3406 3435 3553 3676 3742 3744 3818 3870 3871	4047 4111 4136 4285 4385 4444 4664 4737 4757 4853 4860 4883 4952	5171 5176 5197 5260 5288 5323 5324 5335 5340 5380 5388 5415 5462 5500 5511 5533 5555 5566 5708 5742	6565 6566 6636 6666 6709 6760 6775 6792 6818 6819 6825 6858 6871 6936 6937 6976	7354 7531 7553 7554 7609 7754 7788 7810	8006 8031 8036 8048 8065 8088 8096 8110 8123 8124 8175 8188 8747 8826 8888 8945	9153 9245 12210

New Scheds for Sep/Oct 2015: **From logs submitted from JPL**

3797/4532	New // for this Round Slip	First heard 24 Sep	V M8JF (x3) DE RIS9 (x2)
3757//3777//4532	All three frequencies in use	First heard 20 Sep	V M8JF (x3) DE RIS9 (x2)
3777//4532//6793	All three frequencies in use	First heard 01 Oct	V M8JF (x3) DE RIS9 (x2)
3777//4532//8060	All three frequencies in use	First heard 24 Oct	V M8JF (x3) DE RIS9 (x2)
3777//4532//6793/8060	All four frequencies in use	First heard 05 Oct	V M8JF (x3) DE RIS9 (x2)
3818//4476	New Round Slip & freq pair	First heard 01 Oct	V U2MD (x3) DE 3PWG (x2)
3821//5644	New Round slip & Call sign	First heard 15 Oct	V QDKC (x3) DE XLDF (x2)
4137//NRH	New Round Slip & frequency	(Heard on 19 Oct only)	V 6LUA (x3) DE 3QWG (x2)
4532//6793	New pairing of these freqs	First heard 28 Sep	V M8JF (x3) DE RIS9 (x2)
4532//6793//8060	All three frequencies in use	First heard 16 Sep	V M8JF (x3) DE RIS9 (x2)
5644//NRH	New Round Slip & Call sign	(Heard on 15 Oct only)	V QDKC (x3) DE XLDF (x2
6760//NRH	New freq for this Round Slip	First heard 07 Oct	V U2MD (x3) DE 3PWG (x2)
6775//NRH	New Round Slip & Call Sign	First heard 20 Oct	V SD2Y (x3) DE CV6K (x2)
6761//NRH	New freq for this Round Slip	First heard 04 Oct	V U2MD (x3) DE 3PWG (x2)

4720kHz Hand- Sent sched

4720//NRH VVV **WNF (x3) DE FXM (x2)** (Cont'd – Hand sent – 1829z) QSA ? QSV K

These 4720kHz five-minute schedules continue as previously reported & are heard at various times of the day. Start times appear to have been adjusted slightly now from H+29z to H+30z.

Chart of M89 Freq & Call signs heard in Sep/Oct 2015 **New Scheds shown in Bold Type**

Freq in KHz	Call Slip
3300//NRH	V MW3D (x3) DE 2SLC (x2)
3642//NRH	V DKG6 (x3) DE 3A7D (x2)
3642//7602	V DKG6 (x3) DE 3A7D (x2)
3757//4532	V M8JF (x3) DE RIS9 (x2)
3777//NRH	V M8JF (x3) DE RIS9 (x2)
3777//4532	V M8JF (x3) DE RIS9 (x2)
3797/4532	V M8JF (x3) DE RIS9 (x2)
3818//4476	**V U2MD (x3) DE 3PWG (x2)**
3821//5644	V DKSL (x3) DE ALSK V (x2)
4131//NRH	V JKDJ (x3) DE SLBC (x2)
4131//10145	V JKDJ (x3) DE SLBC (x2)
4137//NRH	V 6LUA (x3) DE 3QWG (x2)
4532//NRH	V M8JF (x3) DE RIS9 (x2)
4532//6793	**V M8JF (x3) DE RIS9 (x2)**
4532//8060	V M8JF (x3) DE RIS9 (x2)
4860// 6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?
5177//NRH	V JKDJ (x3) DE SLBC (x2)
5500//NRH	V 7NPE (x3) DE QV5B (x2)
5588//NRH	V MW3D (x3) DE 2SLC (x2)
5644//NRH	V DKSL (x3) DE ALSK V (x2)

Freq in kHz	Call Slip
5801//NRH	V DKG6 (x3) DE 3A7D (x2)
5801//7602	V DKG6 (x3) DE 3A7D (x2)
5801//10180	V DKG6 (x3) DE 3A7D (x2)
6421//9131	V DKSL (x3) DE ALSK (x2)
6760//NRH	V U2MD (x3) DE 3PWG (x2)
6761//NRH	V U2MD (x3) DE 3PWG (x2)
6775//NRH	**V SD2Y (x3) DE CV6K (x2)**
6793//NRH	V M8JF (x3) DE RIS9 (x2)
6793//8060	V M8JF (x3) DE RIS9 (x2)
6840//NRH	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
6840//10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
7582//NRH	V 7NPE (x3) DE QV5B (x2)
7602//NRH	V DKG6 (x3) DE 3A7D (x2)
8060//NRH	V M8JF (x3) DE RIS9 (x2)
8110//NRH	V 7NPE (x3) DE QV5B (x2)
9131//NRH	V DKSL (x3) DE ALSK (x2) V
9131//10947	V DKSL (x3) DE ALSK (x2) V
10180//NRH	V DKG6 (x3) DE 3A7D (x2)

Courtesy JPL

M95 O XSV85

This allocation was first introduced in September 2010, when it was assigned the M95 designation. Owing to the physical location of the station very little attention has been given to this station, which is not usually receivable in Europe where the majority of our monitors are based.

The call sign XSV used by this station is an internationally allocated maritime call, registered to Tianjin Radio, in north-eastern China, which supplies radio, communications & weather services for international shipping in Chinese waters. Maritime coast stations of this type operate worldwide to provide services for both passenger & merchant vessels.

Many of these services, once government controlled are now operated by private corporations, at least in the western world. In China however, the government still has control of this service. All of the stations publish details of their services & the radio channels in use & Tianjin is no exception.

The WT (Morse) frequencies in use by XSV - Tianjin Radio are as follows:-

Transmitting	4283	8600	12969
Receiving	4184	8368	12552

Looking at a more extensive document, (Coast & Special Service Stations - List IV Updated Nov 2012), lists a more extensive list of frequencies used by XSV for various services, which include the above as the station's working frequencies.

What is interesting, is that there is no mention of the use of 8073kHz by XSV on any of the official lists issued by the station or the Chinese authorities, which leads us to the conclusion that Tianjin Radio, as well as supplying the mandatory international maritime services, also uses the station to send government &/or naval communications via its transmitters.

Thanks to Jean-Paul (JPL), who has put a tremendous amount of time into logging & studying the Chinese CW stations, not only do we have numerous recent logs of this station, but it was his sharp eyes that spotted that the output, which was until now thought to be M89, was in fact M95.

The output of the station is quite distinctive, consisting of sequences of 3 character codes of cut numbers using the AU34567DNT format & can be easily recognised by the '773' code that precedes every line.

JP's initial analysis of this station from ENIGMA 90 is reproduced below;

BNGC DE XSV85

My first logging of XSV85 was on the 22nd of January 2014 at 0910z on 5555 kHz. What is different about XSV85 is the use of an ITU allocated call-sign of the Republic of China. Over time, and with additional loggings, it became apparent that XSV85 had a number of regular schedules. A complete breakdown of XSV85 logs are contained in Annex A. As can be seen, XSV85 was logged on a number of frequencies, but the main frequency turned out to be 8073. (See P19 ENIGMA Newsletter 90). When I looked at the message number of the messages being sent, it became obvious that XSV85 had two schedules per day. The first schedule found was the one at 1130z on 8073. Eventually, the second schedule was found to also be on 8073, but at 0001z.

What started off as a CW transmission, ended up consisting of three different modes. The schedule starts off with a brief voice transmission in Upper Sideband (USB). This is followed by a digital data transmission in Lower Sideband (LSB). Next is the Morse code (CW) transmission, which is followed by a repeat of the CW message using voice in USB.

With the help of Ary Boender, the digital mode being used by XSV85 has been identified as a Chinese 4+4 Parallel Tone 8 channels (4+4) X 75 Baud QPSK, commonly referred to as "4+4". This digital mode was in use by Chinese diplomatic stations in the past (replaced by MIL-STD 188-110A/B serial tone) and is now used by Chinese military stations. Traffic usually consists of 4 figure Dianbaoma groups. Dianbaoma is a way to enter Chinese characters by using the number assigned each character. Refer to Ary's Morse document for Chinese Telegraph Code character numbers at: http://www.udxf.nl/Morse%20document.pdf These numbers are also used for Morse traffic.

A number of video examples of Chinese 4+4 digital decoding can be found on the Hoka Electronic website: http://www.hoka.com/Blog%20Posts/new-mode.html Note that the message format used in these digital transmission examples are the same as used by M89 CW stations.

XSV85 sends mostly 3 figure cut numbers using the AU34567DNT cut number format. An example of the two main types of messages being sent by XSV85 can be found in Annex B. The formatting in the first message example is mine. This message is the one sent the most often, while the second message example type is only sent occasionally. XSV is also known to occasionally send the usual 4 figure cut number message format used by M89 stations. Message numbers are incremented by one until the end of the year, when the count reverts to 0001.

On three occasions, prior to the start of the XSV85 schedule, 05 was repeated. 05 (uses long zero) is often heard on known M89 frequencies, but without any further identification like a call-sign. At this time, it's still unsure if 05 is some sort of collective call or some sort of priority. But we now know that 05 is associated with XSV85.

More analysis is required to get the full picture of XSV85 activity and hopefully further loggings will greatly assist in this regard.

M95 - The Story So Far...

This station is still under investigation & examination, as JP points out in his article. But thanks to Jean-Paul & Ary (AB) we now know that the Voice, data & Morse components all send the same message.

The station consists of three components, the voice component - V26, the Morse component - M95 & a data component. The data transmissions are: 4+4 QPSK 75/3000 in LSB mode.

There are several different call signs in use. M95 uses the XSV85 or XSV70 & the data uses VSV85, whilst the voice component may use tactical call signs & these is an indication that several stations are involves, some of whom may be airborne or mobile.

M95 Morse Logs

4285	1345 (IP) - 1356z	06 Sep	NR 0011 CK 135 35 0000 0009 0000 1600 (Remote tuner Siberia) (Operator slowed down and sent message header very slow)	JPL	SUN
5555	1129z	16 Oct	**DE XSV85** (x2) (IP 1129z) **V BNGC** (x3) **DE** (Silent – 1129z)	JPL	FRI
7553	1354 (IP) - 1415z	06 Oct	NR 918 CK 86 35 1006 1601 (Msg header sent very slow) (Remote Hong Kong)	JPL	TUE
	0901 - 0928z	29 Oct	NR 999 CK 94 35 1029 1547 (Remote tuner Hong Kong)	JPL	THU
7554	1258 - 1322z	09 Oct	NR 927 CK 115 35 1009 1515 **(Call XSV70)** (Remote tuner Siberia)	JPL	FRI
	1017 - 1024z	14 Oct	NR 941 CK 75 35 1014 0648 (Remote tuner Hong Kong)	JPL	WED

8073 Usual format is Initial call-up in voice USB, then to digital 4+4 mode LSB, finally, switching to CW
CW call-up is **V BNGC (x3) DE XSV85 (x2)** All logged via Remote tuner Hong Kong unless stated.

0013 - 0014z	01 Sep	NR 0727 CK 132 35 0901 0706 BT	JPL	TUE
1137 - 1149z	01 Sep	NR 0728 CK 131 35 0901 1615 BT	JPL	TUE
0001 - 0022z	02 Sep	NR 0729 CK 114 35 0902 0704 BT	JPL	WED
1129 - 1140zz	05 Sep	NR 0736 CK 163 35 0905 1618 BT	JPL	SAT
1130 - 1203z	07 Sep	NR 0740 CK 243 35 0907 1545 BT	JPL	MON
0001 - 0030z	08 Sep	NR 0741 CK 118 35 0908 0706 BT	JPL	TUE
1136 - 1145z	10 Sep	NR 0747 CK 262 35 0910 1656 BT	JPL	THU
1130 - 1212z	11 Sep	NR 0748 CK 352 35 0911 1622 BT	JPL	FRI
		NR 0749 CK 42 35 0911 1630 BT	JPL	FRI
0001 - 0030z	17 Sep	NR 0779 CK 119 35 0917 0702 BT	JPL	THU
0001 - 0022z	20 Sep	NR 0785 CK 86 35 0920 0707 BT	JPL	SUN
0001 - 0018z	21 Sep	NR 0787 CK 122 35 0921 0717 BT	JPL	MON
1129 - 1148z	22 Sep	NR 0790 CK 139 35 0922 1607 BT	JPL	TUE
1130 - 1137z	24 Sep	NR 0794 CK 192 35 0924 1600 BT	JPL	THU
0001 - 0015z	25 Sep	NR 0795 CK 98 35 0925 0714 BT	JPL	FRI
1130 - 1147z	26 Sep	NR 0799 CK 283 35 0926 1631 BT	JPL	SAT
0001 - 0022z	27 Sep	NR 0801 CK 123 35 0927 0716 BT	JPL	SUN
		NR 0802 CK 50 35 0927 0721 BT	JPL	SUN
1129 - 1200z	28 Sep	NR 0808 CK 208 35 0928 1625 BT	JPL	MON
		NR 0809 CK 55 35 0928 1627 BT	JPL	MON
0001 - 0022z	29 Sep	NR 0810 CK 135 35 0929 0729 BT	JPL	TUE
1129 - 1145z	30 Sep	NR 0815 CK 328 35 0930 1623 BT	JPL	WED
0018 (IP) - 0028z	01 Oct	(IP - Probably XSV85) No msg number logged	JPL	THU
0001 - 0039z	03 Oct	NR 0827 CK 198 35 1003 0737 BT	JPL	SAT
		NR 0828 CK 45 35 1003 0738 BT	JPL	SAT
1152 - 1159z	05 Oct	[IP - Probably XSV85] No msg number logged	JPL	MON
0001 - 0017z	06 Oct	NR 0842 CK 75 35 1006 0707 BT	JPL	TUE
1130 - 1148z	06 Oct	NR 0843 CK 120 35 1006 1607 BT	JPL	TUE
0001 - 0015z	07 Oct	NR 0844 CK 70 35 1007 0701 BT (Msg sent once only - usually repeated)	JPL	WED
1129 - 1146z	07 Oct	NR 0845 CK 151 35 1007 1621 BT	JPL	WED
0016 - 0021z	08 Oct	(No msg number logged)	JPL	THU
1139 - 1148z	08 Oct	NR 0847 CK 235 35 1008 1618 BT	JPL	WED
1128 - 1201z	09 Oct	NR 0850 CK 277 35 1009 1635 BT	JPL	FRI
0001 - 0021z	10 Oct	NR 0852 CK 127 35 1010 0747 BT	JPL	SAT
		NR 0853 CK 41 35 1010 0748 BT	JPL	SAT
1134 - 1209z	10 Oct	NR 0854 CK 259 35 1010 0550 BT	JPL	SAT
		NR 0855 CK 42 35 1010 1552 BT	JPL	SAT
1131 - 1156z	11 Oct	NR 0858 CK 167 35 1011 1615 BT	JPL	SUN
		NR 0859 CK 34 35 1011 1619 BT	JPL	SUN
0023 - 0037z	12 Oct	(IP) BT (IP - Probably message NR 0860)	JPL	MON
		NR 0861 CK 34 35 1012 0707 BT	JPL	MON
1132 - 1152z	12 Oct	NR 0862 CK 246 35 1012 1622 BT	JPL	MON
		NR 0861 CK 34 35 1012 0707 BT	JPL	MON
0001 - 1148z	13 Oct	NR 0863 CK 88 35 1013 0708 BT	JPL	TUE
1129 - 1148z	13 Oct	NR 0865 CK 188 35 1013 1624 BT	JPL	TUE
1129 - 1142z	14 Oct	NR 0869 CK 270 35 1014 1606 BT	JPL	WED
0001 - 0023z	15 Oct	NR 0871 CK 108 35 1015 0708 BT		
1131 - 1141z	15 Oct	NR 0872 CK 237 35 1015 1656 BT (Remote tuner Siberia)	JPL	THU
0001 - 0011z	16 Oct	NR 0873 CK 130 35 1016 0718 BT	JPL	FRI
1129 - 1152z	16 Oct	NR 0875 CK 28 35 1016 1632 BT (Each individual msg segment sent twice)	JPL	FRI
1129 - 1152z	17 Oct	NR 0879 CK 59 35 1017 1655 BT	JPL	SAT
		NR 0880 CK 28 35 0117 1656 BT	JPL	SAT
		NR 0881 CK 356 35 1017 1701 BT (First time I've seen 3 messages sent)	JPL	SAT
1135 - 1136z	22 Oct	NR 0897 CK 14. 35 1022 15 .9 BT Weak	JPL	THU
1130 - 1157z	23 Oct	NR 0909 CK 188 35 1023 1540 BT	JPL	FRI
0001 - 0018z	25 Oct	NR 0912 CK 125 35 1025 0702 BT	JPL	SUN
1130 - 1154z	25 Oct	NR 0913 CK 193 35 1025 1615 BT	JPL	SUN
0014 (IP) - 0021z	27 Oct	NR 0916 CK 142 35 1027 0701 BT (In progress)	JPL	TUE
1129 - 1140z	27 Oct	NR 0917 CK 219 35 1027 1611 BT	JPL	TUE
0001 - 0020z	28 Oct	NR 0918 CK 98 35 1028 0710 BT (Each individual msg segment sent twice)	JPL	WED
1129 - 1139z	28 Oct	NR 0919 CK 208 35 1028 1543 BT	JPL	WED
1130 - 1219z	29 Oct	NR 0922 CK 276 35 1029 1620 BT	JPL	THU
		NR 0923 CK 44 35 1029 1623 BT	JPL	THU
0001 - 0023z	30 Oct	NR 0924 CK 169 35 1030 0705 BT	JPL	FRI
		NR 0925 CK 42 35 1030 0715 BT	JPL	FRI
1130 - 1223z	30 Oct	NR 0926 CK 251 35 1030 1603 BT	JPL	FRI
		NR 0927 CK 42 35 1030 1605 BT	JPL	FRI

9153	(Same format as XSV85 - Different message number format)					
	0919 (IP) - 0947z	10 Sep	NR 44 CK 28 49 0910 1700	(Remote tuner Hong Kong)	JPL	THU
	0928 - 0949z	11 Sep	NR 00026 CK 221 35 0000 0009 111	(Remote tuner Hong Kong)	JPL	FRI
			NR 00024 CK 56 35 0000 0009 110653	(Sends message header extremely slow)	JPL	FRI
	0953 - 1002z	30 Sep	NR 002.. CK .22 35 0930	(Remote tuner Hong Kong)	JPL	WED

M95 8073kHz 0001z 06 Oct 2015

Initial call-up in voice USB 0001z Male operator.
Chinese digital 4+4 mode LSB (0001z)
V BNGC (x3) DE XSV85 (x2)
Switched to CW - Cont'd – Hand sent - 0004z

HR MSG GA PSE CY (0006z)

NR 0842 CK 75 35 1006 0707 BT BT
TT6 3U4 3A4 TAU
773 TU4
773 TU5
773 353 4T3 NN3 435 466 3DT TTU 4DT 4D6 TA7
773 TAD
773 354 373 4T7 NN3 435 3DT TTU 4DT 4D6 TAN
773 TUA
773 TU3
773 357 373 4T7 NN3 445 466 3DT TTU 4DT 4D6 TUT
773 TUU
773 353 37U 4T7 NN3 445 3DU 4DT 4D6 TU6
773 TU7
773 TUN N34 T33
773 353 373 4T3 NN3 445 3DU 4DT 4D6 AR AR (0011z)

7G AGN **NR 0842 CK 75 35 1006 0707** BT
TT6 3U4 3A4 TAU (Cont'd repeat message – 0012z)

AR AR AR (0017z)

(Switched to voice USB - Male operator - 0017z)

Courtesy JPL

M95 7554kHz 1258z 09 Oct 2015

Chinese digital 4+4 mode LSB (1258z)
(Switched to CW - 1319z)

DE XSV70

HR MSG .. PSE CY (1320z)

NR 927 CK 115 35 1009 1515

46AU TU3 TTN 3U6 3A4 TT4
773 353 4A4 446 467 N3D 447 4D6 33D 4D3 3DU TT5
773 353 4A4 446 N3D 447 4D6 3D3 TT6
773 (Cont'd – 1307z)

Courtesy JPL

M95 8073kHz 0001z 16 Oct 2015

Initial call up in voice USB 0001z Male operator
Chinese digital 4+4 QPSK 75/3000 LSB mode 0001z
V BNGC (x3) DE XSV85 (x2)
Switched to CW - Cont'd – Hand sent - 0005z

HR 7G GA PSE CY (0009z)

NR 0873 CK 130 35 1016 0718 BT

TA6 3U4 3A4 TAU 773 356 4T3 NN3 447 46D 3D5
4DT 4D6 TA7 773 TU4 773 356 4T3 NN3 436 467
4D6 TAD 773 356 4T4 NN3 (Cont'd – 0011z)

Courtesy JPL

Oddities

Marker on 3850kHz

A new marker has appeared on 3850kHz, discovered & reported on Sun 06 Sept, by Schorschi who had heard the marker for three days. Schorschi notes that the marker is similar to other new Russian markers recently activated, sending a long dash repeatedly, & has several closely spaced harmonics showing on the SDR waterfall trace.

3850		04 -06 Sep	UNID channel marker (Long dash)	Schorschi	SUN
3850	2025z	09 Sep	UNID channel marker (long dash)	BR	WED

Marker on 4524kHz

Schorschi wants to point out that the exact frequency for this new marker is 4524kHz and not 4525! The two voice messages heard were broadcast on that exact frequency. PS: today Sun 06 Sep at 1805z this marker is off air or not to hear.

4524	2025z	09 Sep	UNID channel marker (long dash) Faster than that on 3850kHz	BR	WED
	1659 - 1700z	12 Sep	Tone pulse Marker. Repeated	chpa	SAT

5292kHz Marker

5292	0830 - 0831z	06 Sep	UNID channel Marker [D -.. -.. -..] R Strong	chpa	SUN
	1710 - 1711z	12 Sep	'D' Marker Repeated	chpa	SAT

Ary (AB) comments: That is a Russian military station, sister of S28, S30, S32 and the new one on 4525 kHz. Its marker is unstable. It usually sends "B" but often it has a hiccup and sends "D" or a dash and a lot of dots, like a couple of days ago. It sent a dash and 11 dots, the into B's and D's and then B for the rest of the night.

S28 **'The Buzzer'**

4625	1705 - 1706z	12 Sep	S28	'The Buzzer'		chpa	SAT

Schorschi monitored some activity from S28 both on 4625kHz & also on a new frequency of 6998kHz. Here are his logs:-

Monday 19 October 2015 **All signals Weak - Fair**

6998	0958z	'…. MDZhB … priyom'
	1222z	'MDZhB MDZhB 08 … ADURISh … priyom' [5x buzzing]
	1224z	'MD 000 MDShB W?R??NIK 22 05 98 01 MDZhB MDZhB 24 ???? W?R??NIK 22 05 59 01 … priyom'
	1259z	'… MDZhB 40 606 VZRAShchYeNIYe 38 19 65 25 priyom'
4625//6998	1442z	'MDZhB MDZhB 11 0 60 OZORA 42 78 59 08 priyom'
4625	1453z	'MDZhB MDZhB 89 954 OZONID 76 50 28 87 MDZhB MDZhB 89 90 54 OYeONID 76 50 28 87 priyom'
	1457z	'MDZhB MDZhB 67 903 IZOZOMA 40 13 17 23 priyom'

Schorschi MON

Wednesday 21 October 2015 **All signals Strong**

6998	1522z	'MDZhB MDZhB 98 639 EZhUMUExA 84 50 72 72 MDZhB MDZhB 98 639 EZhUMUExA 84 50 72 72 priyom'
	1543z	'MDZhB MDZhB 87 602 DZhEMPER 12 48 33 24 MDZhB MDZhB 87 602 DZhEMPER 12 48 33 24 priyom'
	1544z	'MDZhB MDZhB 52 598 DzhAWE? 53 12 50 59 MDZhB MDZhB 52 598 DzhAWE? 53 12 50 59 priyom'
	1605z	'MDZhB MDZhB 45 203 WESchNIIk 52 38 86 98 MDZhB MDZhB 45 203 WESchNIIk 52 38 86 98 priyom'
	1630z	'MDZhB MDZhB 98 385 NE?OTKOSchD "mjaki snak" 86 92 98 78 priyom'

Schorschi WED

Excellent monitoring Schorschi - Many thanks for the detailed logs.

Ary (AB) followed this up with the following observations. The buzzer started on the 15 October on 6998 kHz. It is too early to say if they will stay on that freq. Let's wait and see. For now it is // with 4625 kHz (23 October).

Hans-Friedrich (HFD) also logged S28 on Saturday 17 October at 1605kHz buzzing away on 6998//4625kHz.

At the time of editing this column. (Oct 24), the buzzer was still active on both 4625//6998kHz. Observation on the Twente SDR shows some incursion up to 7001kHz which is likely to cause some problems for the 40m CW amateur operators, & I notice that the signal has already been reported in the IARU Monitoring intruder logs.

S32 **'Squeaky Wheel'**

3828	1858z	18 Oct	'.. pantam 43… djla! … kak slushna kak schlushna? priyom'	Fair	Pip heard in the background	Schorschi	MON

Contributors: AB, AnonUS, BR, chpa, GD, HFD, JkC, JO, JPL, PLdn, PoSW, Schorschi, tiNG, Topol *Thank you all for your contributions & logs.*

Voice Stations

Most staions as expected with poor conditions taking its toll across the upper frequencies and some attenuation south of 8MHz; we start with E06

E06 September/October log:

First/Third Thursday of month 2030z 5186kHz

03/09	'891' 613 20 14259……..12250 613 20 00000	2037z			
17/09	'891' 613 20 14259……..12250 613 20 00000	2037z			
01/10	'891' 613 20 14259……etc				
15/10	'891' 613 20 14259……..12250 613 20 00000	2037z Strong QRM1 QSB1	JkC	Repeat of this old message	

Friday following First / Third Thursday 2130z 5197kHz

04/09	'634' 728 20 14259 22676……. (same old message)			
18/09	'634' 728 20 14259……..12250 728 20 00000			
02/10	'634' 728 20 14259……..12250 728 20 00000	2137z		
16/10	'634' 728 20 14259 .....12250 728 20 00000	2136z Strong	JkC	Old repeat

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

03/09 & 16/09 '354' 726 103 65298 85172 60807 75621 34363 83892 97862 60497 68364 60093 00372 33187 95734 32476 19525 13102 05793 83936 26321 12824 24421 33703 41001 29046 87495 98244 06337 52743 10511 33135 65696 03274 77831 73059 31839 16092 00008 12158 57369 38765 12602 91881 42785 14973 14947 88563 43067 61187 72292 17879 58732 65716 29762 98388 22306 64793 11565 41351 16137 75409 03903 58997 82496 89569 44998 08438 11908 59662 70701 13420 20626 29633 89083 31082 53219 91638 82490 55938 71188 72884 60462 78237 13556 82322 11972 38921 40363 71900 30421 48334 95023 92046 09829 60910 46446 46086 35636 22985 96901 73263 18599 35956 66527 726 103 00000

0600z 18425kHz 0700z 20230kHz

01/10 & 15/10 '186' 735 102 68031 41312 08123 61523 16737 65996…….etc

Non scheduled: 1630z 17482kHz 1730z 14943kHz

19/10 '826' 947 50 31538 23637 23230 82040 32112 46460 82737 34565 09800 10922 88561 98351 87527 20778 80161 49096 10737 13078 66972 29948 50041 90185 82283 89645 35623 10501 30566 87923 28047 61301 45452 54151 55198 62158 00545 10134 70009 72346 40249 92997 08688 00707 22803 39129 54109 41378 92710 15071 34080 83854 947 50 00000

Repeated next day

Thanks: RNGB, Malc, JkC

E07

PoSW opens the E07 logs and sets the flavour for other's logs:

Much the same as always, frequencies as in the same month for the past several years.
Expected to move by one hour in November when the UK goes back onto UTC so as to appear at the same local time as in the summer months.

Sunday + Wednesday Schedule, 1700 UTC Start:-
2-Sept-15, Wednesday:- 1700 UTC, 13,527 kHz, "526 526 526 000", weak signal, Single Letter Transmission cluster on close frequency, "S" the strongest.

1720 UTC, 12,227 kHz, second sending, much stronger signal.

6-Sept-15, Sunday:- 1700 UTC, 13,527 kHz, "526 526 526 000", much stronger signal than on Wednesday, over S9. "C" the strongest from the nearby SLT cluster this evening.
1720 UTC, 12,227 kHz, second sending, also S9.

9-Sept-15, Wednesday:- 1700 UTC, 13,527 kHz, "526 526 526 000", weak signal again, down in the local noise.
1720 UTC, 12,227 kHz, second sending, much stronger, over S9.

13-Sept-15, Sunday:- 1700 UTC, 13,527 kHz, "526 526 526 000", strong signal, over S9,
slight interference from a swept carrier that sits here, both "S" and "C" strong signals from the nearby SLT cluster.
1720 UTC, 12,227 kHz, second sending, over S9.

20-Sept-15, Sunday:- 1700 UTC, 13,527 kHz, a "full message" for a change, "526 526 526 1", DK/GC "715 118" x 2, S9 signal, swept carrier interference, SLT "C" very prominent.
1720 UTC, 12,227 kHz, second sending, S9 with QSB.
1740 UTC, 10,627 kHz, third sending, also S9 with QSB.

4-Oct-17, Sunday:- 1700 UTC, 13,376 kHz, "317 317 317 000", over S9.
1720 UTC, 12,176 kHz, second sending, also over S9.

7-Oct-15, Wednesday:- 1700 UTC, 13,376 kHz, very weak signal, way down in the noise, unreadable, carrier went off just before 1702:30s UTC which says, "No message".
1720 UTC, 12,176 kHz, second sending also very weak, what a change from the S9 signals of Sunday.

11-Oct-15. Sunday:- 1700 UTC, 13,376 kHz, “317 317 317 000”, weak but readable.

18-Oct-15, Sunday:- 1700 UTC, 13,376 kHz, and 1720 UTC, 12,176 kHz, “317 317 317 000”, both transmissions well over S9, much improved signals compared with the last two
loggings of this schedule.

Monday + Wednesday Schedule, 1900 UTC Start:-
2-Sept-15, Wednesday:- 1900 UTC, 12,108 kHz, “172 172 172 1”, DK/GC “826 36” x 2. Over S9 with good audio. Same message as in the last week of August.
1920 UTC, 10,708 kHz, second sending, S8 to S9.
1940 UTC, 9,208 kHz, third sending flattened by a wide-band buzz extending from approx
9,190 to 9,225 kHz.

14-Sept-15, Monday:- 1900 UTC, 12,108 kHz, “172 172 172 1”, DK/GC “691 89” x 2. Very strong signal, S9+ with good audio.
1920 UTC, 10,708 kHz, second sending.
1940 UTC, 9,208 kHz, third sending, S7 to S8, weakest of the three transmissions.

23-Sept-15, Wednesday:- 1900 UTC, 12,108 kHz, and 1920 UTC, 10,708 kHz, “172 172 172 000”.

28-Sept-15, Monday:- 1900 UTC, 12,108 kHz, “172 172 172 1”, DK/GC “445 57” x 2, S9+
with good audio.
1920 UTC, 10,708 kHz, second sending, S9.
1940 UTC, 9,208 kHz, third sending, again the weakest of the three, S8 to S9.

5-Oct-15, Monday:- 1900 UTC, 10,243 kHz, weak signal way down in the noise, unreadable, only able to determine that it was a “full message” because the carrier not go QRT after two and a half minutes.
1920 UTC, 9,243 kHz, second sending, also too weak to hear.
1940 UTC, 7,943 kHz, third sending - and what a contrast to the first two! S9+ with good audio. Must be some strange propagation this evening. “229 229 229 1”, DK/GC “854 37” x 2.

7-Oct-15, Wednesday:- all three transmissions on frequencies as above were too weak to give any copy this evening.

Thursday Schedule, 2010 UTC Start:-
3-Sept-15:- 2010 UTC, 9,387 kHz, “358 358 358 000”, very strong broadcast station on 9,390 making copy difficult, best reception with receiver in LSB mode.
2030 UTC, 7,526 kHz, second sending on a clear frequency.

10-Sept-15:- 2010 UTC, 9,387 kHz, unreadable due to low audio and broadcast interference, E07 carrier went off just before 2012:30s UTC.
2030 UTC, 7,526 kHz, much better copy, “358 358 358 000”, over S9.

17-Sept-15:- 2010 UTC, 9,387 kHz, flattened by the broadcaster three kHz up; I stayed with this after E07 had finished, identified just before 2014 UTC with sound of gongs interval signal followed by announcement “.....HSK9 Radio Thailand World Service” and went off air.

1-Oct-15:- 2010 UTC, 7,516 kHz, “584 584 584 000”, peaking S9 with rapid QSB.
2030 UTC, 5,836 kHz, second sending, also over S9.

8-Oct-15:- 2010 UTC, 7,516 kHz, and 2030 UTC, 5,836 kHz both S7 to S8, “584 584 584 000”.

Other’s Logs:

Sunday/Wednesday

September 2015

1700z	**13537kHz**	**1720z**	**12227kHz**	**1740z**	**10627kHz**	
02/09	526 000					Strong
06/09	526 000					Fair and noisy
09/09	526 000					Strong
13/09	526 000					Very strong
16/09	526 1 715 118 69442 ... 17604 000 000					Strong

526 1 715 118
69442 80117 57447 79141 53426 34772 23951 12986 11857 35206
19917 57552 62983 92920 68453 13722 26584 41041 92927 21990
73557 72073 37390 41750 65661 94197 76738 73428 00267 46518
92780 37492 00988 90440 42357 53523 24243 79274 93981 02715
76746 05254 18970 78217 30734 41287 07665 96154 33230 16128
50720 15900 57795 52420 71547 61167 63210 65204 81656 24522
55045 76159 59673 46679 15321 75961 67605 23539 59679 75437
03404 98259 51863 89999 90999 69242 90948 53058 78716 81899
50585 09369 13986 38353 61781 69753 70711 03666 51854 72163
89695 28406 48672 04755 90223 40634 65127 58673 67739 31922
95635 26740 57604 43552 14841 78925 19820 99297 13719 62927
75103 39457 28727 79827 6581 09708 58701 17604
000 000 *Courtesy JkC*

20/09	526 1 715 118 69442 ... 17604 000 000	Strong

23/09 526 1 536 66 88586 ... 46757 000 000 Very strong

526 1 536 66
88586 11395 02960 47819 58006 73631 53452 05223 99723 89813
93761 12341 81625 68121 73930 88329 67707 29426 16104 04072
89164 71655 83843 47376 93106 72595 76563 99813 39733 93189
43035 72139 70744 21763 35689 75094 99921 40112 98938 68341
38725 33944 15407 53036 06069 51683 51183 89707 99067 15604
12674 87222 49040 02175 46370 07146 95505 13237 98580 56539
09199 34824 02650 19642 66929 46757
000 000 *Courtesy JkC*

27/09 526 1 536 66 88586 ... 46757 000 000 Strong

30/09 526 000 Very strong

October 2015

1700z	**13376kHz**	**1720z**	**12176kHz**	**1740z**	**10776kHz**	
04/10	317 000					Stron
07/10	317 000					Fair with low audio
11/10	317 000				[1700z Too wesk for copy]	Weak
14/10	317 000					Fair
18/10	317 000					Weak, readable
21/10	317 000					Strong
25/10	317 000					Strong, QSB3
28/10	317 000					Strong

Monday/Wednesday

September 2015

1900z	**12108kHz**	**1920z**	**10708kHz**	**1940z**	**9208kHz**	
02/09	172 1 826 36 73972 ... 25779 000 000					Strong
07/09	172 1 826 36 73972 ... 25779 000 000				[1900z started mid text]	Strong
14/09	172 1 691 89 56409 ... 88602 000 000					Fair, QRN3, QSB2
16/09	172 1 691 89 56409 ... 88602 000 000					Strong
21/09	172 000					Strong
23/09	172 000					Strong
28/09	172 1 445 57 60797 ... 03050 000 000					Very strong
30/09	172 1 445 57 60797 ... 03050 000 000					Very strong

October 2015

1900z	**10243kHz**	**1920z**	**9243kHz**	**1940z**	**7943kHz**	
05/10	229 1 854 37 27807 ... 17916 000 000					Very strong

229 1 854 37
27807 27379 91891 88931 10271 48902 42313 31569 69684 94813
87397 78679 33477 86386 33753 39086 29667 53637 71522 94729
63125 05541 24971 58668 73811 10114 66488 05669 91738 99234
27770 39112 94584 73633 23717 84627 17916
000 000 *Courtesy JkC*

12/10 229 1 rest unworkable [1920z] Unworkable

19/10 229 1 671 28 13050 ... .48746 000 000 Strong

229 1 671 28
13050 26919 00483 79207 77648 60443 05322 41779 32750 55988
38093 94491 96379 89850 15102 38808 54284 75142 75068 78042
85116 27001 16246 51097 54709 34112 16321 48746
000 000 *Courtesy JkC*

21/10 229 1 671 28 13050 ... 48746 000 000 Strong

26/10 229 000 Strong

28/10 229 000 Very weak

Wednesday/Saturday

September 2015

0600z	**9064kHz**	**0620z**	**10264kHz**	**0640z**	**11464kHz**	
26/09		024 1 452 77 11564 ... 86728 000				Strong

024 1 452 77
11564 21284 98191 08247 39680 63644 19627 19591 29702 05677
02207 86912 96970 77506 08319 16029 06648 22622 53707 57919
21392 57003 82822 00118 60635 48634 81674 17938 55230 10044
74443 14738 02742 40446 14348 18877 95223 05400 51597 54644
11166 91027 13940 33155 12811 12826 75849 29567 85731 36138
17637 87047 47459 07792 67851 65500 61755 09223 35084 42336
80546 77293 66402 92182 45330 98655 46462 83100 91362 45761
24643 55905 67830 50214 01745 58630 86728
000 000 *Courtesy JkC*

30/09 024 1 452 77 11564 ... 86728 000 000

October 2015

03/10 024 1 452 77 11564 ... 86728 000 000

Thursday

September 2015

2010z	**9387kHz**	**2030z**	**7526kHz**	**2050z**	**5884kHz**	
03/09		358 000				Strong
10/09		358 000				Weak
17/09		358 000				Weak, QSB3
24/09		358 000				Weak

October 2015

2010z	**7516kHz**	**2030z**	**5836kHz**	**2050z**	**4497kHz**	
01/10		584 000				Strong
08/10		584 000				Strong
22/10		584 000				Strong
29/10		584 000				Fair

E07a

Wednesday

September 2015

2000z	**8144kHz**	**2020z**	**6944kHz**	**2040z**	**5744kHz**	
02/09		197 1 39299 7441 77 72395 ... 33102 000 000 [Rpts msg of 26/08]				Extremely strong
09/09		197 000				Extremely strong
16/09		197 000				Very strong
23/09		197 1 14834 8054 31 14908 ... 40093 000 000				Extremely strong

197 1 14834 8054 31
14908 55751 98840 03487 27911 95409 94193 31027 73342 38142
43159 99780 60285 23842 29454 67491 45091 99059 24851 51545
56579 21323 28678 77399 30839 47284 75840 90550 68945 25370
40093
000 000 *Courtesy JkC*

30/09 197 000 Weak

October 2015

07/10	197 000 [2000z NRH]		Strong
14/10	197 1 14834 8054 31 14908 ... 40093 000 000 [Repeats message from 23/09]	[2000z very weak]	Weak
21/10	197 1 19389 5649 65 06592 ... 17521 000 000		Strong

197 1 19389 5649 65
06592 85671 64437 20325 67066 09546 79525 01336 96247 87708
62159 16822 78749 24845 96046 41860 97669 32127 16304 81179
49897 58654 64310 20585 66619 77690 38974 24030 61998 48526
11894 24391 43584 87837 29413 24464 54929 81959 15712 67614
68667 98766 12343 84877 85651 05956 78309 63367 90060 38631
82263 82694 42153 01069 01425 76740 68920 66912 18350 84716
44038 36591 91700 49806 17521
000 000 *Courtesy JkC*

28/10	197 000	Very strong

Thursday

September 2015

0430z	**6788kHz**	**0450z**	**7488kHz**	**0510z**	**8188kHz**	
03/09	741 1 39299 7441 77 72395 ... 33102 000 000			[Rpts msg of 27/08]		Very strong
10/09	741 000					Fair to strong
17/09	741 000					Strong
23/09	741 1 14834 8054 31 14908 ... 40093 000 000			[0430z Weak, QRM3]		Fair

October 2015

01/10	741 000		Fair
08/10	741 000		Strong
15/10	741 1 14834 8054 31 14908 ... 40093 000 000 [Repeats message from 24/09]	[0450z QRN3]	Extremely strong
22/10	741 1 19389 5649 65 06592 ... 17521 000 000		Strong

Friday

September 2015

1510z	**10583kHz**	**1530z**	**9383kHz**	**1550z**	**8183kHz**	
04/09	531 000					Very strong
18/09	531 000					Strong
25/09	531 000					Strong

October 2015

1510z	**11424kHz**	**1530z**	**10124kHz**	**1550kHz**	
02/10	411 000				Strong
09/10	411 000				Strong and noisy
16/10	411 1 16753 302 97 55394 ...98382 000 000				Strong

411 1 16753 302 97
55394 25477 64649 31452 69933 93594 32034 30939 48853 50764
54821 25630 36515 82467 26732 21200 20296 23495 48252 59267
26666 65667 34798 23889 93515 92258 28235 54560 23410 69846
30040 74587 33476 94562 26778 95709 53905 97466 52110 57148
42675 63933 32068 30784 29984 07337 04156 71807 28055 14577
66510 70070 83582 18563 90656 43061 24901 59246 20499 70887
77803 01855 11458 54868 27243 16339 63950 15749 66984 45629
15900 75709 34905 13331 91340 86538 50716 07159 88370 72784
22611 22019 67837 42604 37823 72702 06131 05772 36037 82573
44999 20078 79431 24007 98662 45931 98382
000 000 *Courtesy JkC*

23/10	411 000	Fair

This was followed by QRR EE EE QRL IMI E QRR IMI E U EEE
CQ CQ CQ DE F6AJM F6AJM
CQ CQ DE F6AJM F6AJM
CQ CQ CQ DE F6AJM F6AJM AR PSE K so we can be assured someone else heard this and thought he'd make his point before putting out a CQ that wasn't answered – not within the next ten minutes anyway!

30/10	411 000					Strong

Saturday

September 2015

0800z	**11153kHz**	**0820z**	**12153kHz**	**0840z**	**13453kHz**	
05/09	114 000					Extremely weak
19/09	114 000				[0800z NRH, poor condx]	Extremely weak
26/09	114 000					Strong

October 2015

0800z	**11484kHz**	**0820z**	**12184kHz**	**0840z**	**13384kHz**	
03/10	413 000					Strong
10/10	413 000					Fair
17/10	413 1 16753 302 97 55394 ... 98382 000 000					Strong
24/10	413 000				[0800z distorted, corrected and ran overtine]	Fair
31/10	413 000					Fair

PoSW reports on the Wednesday and Saturday schedules:

Saturday Schedule, 0800 UTC Start:-
5-Sept-15:- 0800 UTC, 11,153 kHz, "114 114 114 000", very weak signal, only just detectable.
0820 UTC, 12,153 kHz, second sending, stronger at S6.

12-Sept-15:- 0800 UTC, 11,153 kHz, a "full message" this morning, "114 114 114 1", 18683", DK/GC "8110 81" x 2, S6 to S7.
0820 UTC, 12,153 kHz, second sending, also S7.
0840 UTC, 13,453 kHz, third sending, much weaker than the first two transmissions, way down in the noise.

3-Oct-15:- 0800 UTC, 11,484 kHz, "413 413 413 000", S8 signal.
0820 UTC, 12,184 kHz, second sending, also S8.

10-Oct-15:- 0800 UTC, 11,484 kHz, "413 413 413 000", weak signal.
0820 UTC, 12,184 kHz, second sending, much stronger, S8.

17-Oct-15:- 0800 UTC, 11,484 kHz, "413 413 413 1 16753", a full message this morning, DK/GC "302 97" x 2, S8.
0820 UTC, 12,184 kHz, second sending, also S8.
0840 UTC, 13,384 kHz, third sending, the weakest, S6 to S7.

Wednesday Schedule, 2000 UTC Start:-
This schedule did a change of frequencies in September, 12,166 + 10,766 + 9,266 kHz had been used in May, June, July and August but the trio of frequencies used in April of this year were fired up again in September:-
2-Sept-15:- 2000 UTC, 8,144 kHz, "197 197 197 1 39299", DK/GC "7441 77" x 2, S9+ SSB signal.
2020 UTC, 6,944 kHz, second sending, also S9+.
2040 UTC, 5,744 kHz, third sending, S9+ as with the first two.

9-Sept-15:- 2000 UTC, 8,144 kHz, and 2020 UTC, 6,944 kHz, both S9+, "197 197 197 000".

23-Sept-15:- 2000 UTC, 8,144 kHz, a "full message", "197 197 197 1 14834", DK/GC "8054 31" x 2, S9+ SSB signal. All done soon after 2005 UTC.
2020 UTC, 6,944 kHz, and 2040 UTC, 5,744 kHz, the repeats, both S9+.

7-Oct-15:- 2020 UTC, 6,944 kHz, missed 2000Z sending, "197 197 197 000", no change of frequencies in October, then.

14-Oct-15:- 2000 UTC, 8,144 kHz, "197 197 197 1 14834", DK/GC "8054 31" x 2. It would appear that the message transmitted on 23-September has come back. Signal strength weaker than usual this evening, not the usual S9+, barely making an indicated S8 to S9.
2020 UTC, 6,944 kHz, and 2040 UTC, 5,744 kHz, repeat transmissions also weaker signals than usual.

E11

The crazy world of 121 was found by Malcolm (M8) on 8803kHz at 0905z on Weds 28th of October. The transmission sounded tinny and distorted and some of the numbers were clipped so that not all 5 figure groups could be copied. A training net?
The 0930 schedule on 8803kHz went out as usual. ID 121 has previously been noted on 8803kHz immediately before the 0930 slot of ID 270

E11 log Sept/Oct

6304kHz	0450z	28/09 [416/00] Out 0453z Strong QRM1 QSB1	JkC	MON
	0450z	05/10 [416/00] Out 0453z Fair QRM1 QSB1	JkC	MON
7377kHz	2000z	04/09 [576/00] Good	RNGB	FRI
	2000z	11/09 [576/00] Out 2003z S4	Malc	FRI
	2000z	25/09 [576/00] Out 2003z S7	Malc	FRI
	2000z	02/10 [576/00]	RNGB	FRI
	2000z	30/10 [576/00] Out 2003z S6 QRM5	Malc, Gary H, JkC	FRI
7850kHz	0315z	03/09 [253/00] Out 0318z Weak QRM2 QSB1	JkC	THU
	0315z	23/09 [253/00] Out 0535z Fair QRM1 QSB1	JkC	WED
	0315z	01/10 [253/00] Out 0318z Weak QRM2 QSB1	JkC	THU
8102kHz	1045z	01/09 [469/00] Out 1048z S2	Malc	TUE
	1045z	08/09 [469/00] out 1048z S2	Malc	TUE
	1045z	22/09 [576/00] Out 1048z S4	Malc	TUE
	1045z	20/10 [576/00]	RNGB	TUE
	1045z	27/10 [576/00] Out 1048z S3	Malc, RNGB	TUE
8186kHz	2000z	06/09 [363/00] Out 2008z S9	Malc	SUN
	2005z	12/09 [363/00] Out 2008z S5	Malc	SAT
	2005z	20/09 [363/00] Out 2008z S7	Malc, Gary H	SUN
	2005z	11/10 [363/00] Out 2008z S2 QSB1	Malc	SUN
	2005z	17/10 [363/00] Out 2008z Strong QRM1 QSB1	JkC	SAT
	2005z	25/10 [363/00]	Gary H	SUN
	2005z	31/10 [363/00]	Malc	SAT
8803kHz	0930z	02/09 [270/00] Good	RNGB	WED
	0930z	16/09 [270/00] Out 0933z S2	Malc	WED
	0930z	17/09 [270/00] Out 0933z S2	Malc	THU
	0930z	23/09 [270/00] Out 0933z S4	Malc	WED
	0930z	01/10 [270/00] Out 0933z S2	Malc	THU
	0930z	14/10 [270/00] Out 0933z S4	Malc	WED
	0930z	07/10 [270/00] Weak	RNGB	WED
	0930z	15/10 [270/00]	RNGB	WED
	0930z	21/10 [270/00] Out 0933z S3	Malc	WED
9371kHz	1730z	03/09 [416/00] Good	RNGB, Thomas	THU
	1730z	10/09 [416/00] Out 1733z S6	Malc	THU
	1730z	24/09 [416/00] Out 1733z Strong QRM1 QSB1	JkC	THU
	1730z	01/10 [416/00] Out 1733z S8	Malc	THU
	1730z	08/10 [416/00] Strong	RNGB	THU
9399kHz	0900z	02/09 [534/00] Fair	RNGB	WED
	0900z	07/09 [534/00] Out 0903z S3	Malc	MON
	0900z	09/09 [534/00] S2	Malc	WED
	0900z	12/10 [534/00] Fair with QRM	RNGB	MON
	0900z	14/09 [534/00] Weak	RNGB	MON
	0900z	19/10 [534/00] Out 0903z S5	Malc	MON
	0900z	21/10 [534/00]	RNGB	WED
	0900z	26/10 [534/00]	RNGB	MON
	0900z	28/10 [534/00] Out 0903z S5	Malc	WED
9443khz	1205z	20/10 [469/00] Out 1208z S3	Malc	TUE
	1205z	27/10 [469/00] Out 1208z S3	Malc	TUE
	1205z	28/10 [469/00] Out 1208z S5	Malc	WED
9960kHz	0820z	21/09 [438/00] Out 0823z S3	Malc	MON
	0820z	24/09 [438/00} Out 0823z S2	Malc	THU
	0820z	28/09 [438/00]	RNGB	MON
	0820z	01/10 [438/00] 0823z S3	Malc	THU
	0820z	12/10 [438/00] Out 0823z S6	Malc	MON
	0820z	19/10 [438/00] Out 0823z S5	Malc	MON
	0820z	29/10 [438/00] Out 0823z S5	Malc	THU

10213kHz	0745z	07/09 [262/00] Out 0748z S3	Malc	MON
	1705z	09/09 [392/00] Out 1708z S9	Malc	WED
	1705z	12/09 [392/00] Out 1708z S9+10	Malc, RNGB, JkC	SAT
	1705z	16/09 [392/00] Out 1708z Strong QRM1 QSB1	JkC	WED
	1705z	19/09 [392/00]	Thomas	SAT
	1705z	23/09 [392/00] Out 1708z S5	Malc	WED
	0745z	28/09 [262/00] Out 0748z S2	Malc	MON
	1705z	30/09 [392/00] Out 1708z Strong QRM1 QSB1	JkC	WED
	1705z	03/10 [392/00] Out 1708z QSA4 QRM1 QRN1 QSB1	Thomas	SAT
	0745z	05/10 [262/00] Out 0748z S3	Malc	MON
	0745z	12/10 [262/00] Good	RNGB	MON
	1705z	14/10 [392/00] Out 1708z S4	Malc	WED
	1705z	17/10 [392/00] Out 1708z S7	Malc	SAT
	1705z	21/10 [392/00] Out 1708z Strong QRM1 QSB1	JkC	WED
	0710z	23/10 [633/00] Out 0713z S3	Malc	FRI
	1705z	24/10 [392/00]	Gary H	SAT
10221kHz	0710z	01/09 [633/00] Out 0713z S4	Malc	TUE
	0710z	04/09 [633/00] Out 0713z S2	Malc	FRI
	0710z	25/09 [633/00]	RNGB	FRI
	0710z	29/09 [633/00] Out 0713z S4	Malc	TUE
	0710z	02/10 [633/00] Out 0713z S7	Malc	FRI
	0710z	05/10 [633/00] Fair	RNGB	TUE
	0710z	13/10 [633/10] Out 0713z S7	Malc	TUE
	0710z	16/10 [633/00] Fair	RNGB	FRI
	0710z	20/10 [633/00] Out 0713z S5	Malc	TUE
10330kHz	1530z	03/09 [262/00] Out 1533z QSA2 QRM4 QRN1 QSB3	Thomas	THU
	1530z	10/09 [262/00] Out 1533z S6	Malc	THU
	1530z	17/09 [262/00] Out 1533z S5	Malc	THU
	1530z	01/10 [262/00] Out 1533z S7	Malc	THU
	1530z	15/10 [262/00] Out 1533z Strong QRM1 QSB1	JkC	THU
	1530z	29/10 [262/00] Out 1533z S7	Malc	THU
10448kHz	1625z	09/09 [972/00] Out 1628z S3	Malc	WED
	1625z	16/09 [972/00] Out 1628z Fair QRM1 QSB1	JkC	WED
	1625z	20/09 [972/00] Out 1628z S4	Malc	SUN
	1625z	23/09 [972/00] Out 1628z S6	Malc	WED
	1625z	30/09 [972/00] Out 1628z Strong QRM1 QSB1	JkC	WED
	1625z	04/10 [972/00] Out 1628z Fair QRM1 QSB1	JkC	SUN
	1625z	07/10 [972/00] Out 1628z Fair QRM1 QSB1	JkC	WED
	1625z	11/10 [972/00] out 1628z S4	Malc	SUN
	1625z	18/10 [972/00] Out 1628z	Thomas	SUN
	1625z	28/10 [972/00] Out 1628z S5	Malc	WED
10620kHz	1925z	01/09 [551/00]	RNGB	TUE
	1925z	03/09 [551/00] Out 1928z Weak QRM4 QSB1	JkC	THU
	1925z	10/09 [551/00] Out 1928z QSA2 QRM3 QRN1 QSB1	Thomas	THU
	1925z	15/09 [551/00] Out 1928z S2	Malc	TUE
	1925z	01/10 [551/00] Out 1928z S9	Malc	THU
	1925z	20/10 [551/00] Out 1928z S9	Malc	TUE
	1925z	29/10 [551/00] Out 1928z S2 QRM1	Malc	THU
10690kHz	0830z	04/09 [633/00] Out 0833z S6	Malc	FRI
	0830z	18/09 [633/00] Out 0833z S5	Malc	FRI
	0830z	21/09 [649/00] Out 0833z S5	Malc	MON
	0830z	28/09 [649/00] Out 0833z S7	Malc	MON
	0830z	02/10 [649/00] Out 0833z S5	Malc	FRI
	0830z	05/10 [649/00] Fair	RNGB	MON
	0830z	19/10 [649/00] Fair	RNGB	MON
10800kHz	0645z	01/09 [517/00] Out 0648z S4	Malc	TUE
	0645z	10/09 [517/00] Out 0648z S4	Malc	THU
	0645z	24/09 [517/00] Out 0648z S9	Malc	THU
	0645z	29/09 [517/00] Out 0648z S4	Malc	TUE
	0645z	06/10 [517/00] Out 0648z S2	Malc	TUE
	0645z	13/10 [517/00] Out 0648z S2	Malc	TUE
11450kHz	0805z	02/09 [311/00] Good	RNGB	WED
	0805z	06/09 [311/00] Out 0808z S5	Malc	SUN
	0805z	23/09 [311/00] Out 0808z S9+10	Malc	WED

	0805z	27/09 [311/00] Out 0808z Strong QRM1 QSB1	JkC , RNGB	SUN
	0805z	07/10 [311/00] Weak	RNGB	WED
	0805z	28/10 [311/00]	Malc	WED
13046kHz	1345z	31/10 [911/00] Good	RNGB	SAT
14575kHz	0745z	01/10 [335/00] Weak	RNGB	THU
	0745z	20/10 [335/00] Weak	RNGB	TUE
	0745z	22/10 [335/00]	Malc	THU
	0745z	27/10 [335/00]	RNGB	TUE
14769kHz	0710z	22/10 [491/00] Weak	RNGB	THU
	0710z	29/10 [491/00]	RNGB	THU
15632kHz	1300z	01/09 [133/00] Out 1303z S2	Malc	TUE
	1300z	22/09 [133/00] Weak	RNGB	TUE
	1300z	23/09 [133/00] Out 1303z S4	Malc	WED
	1300z	13/10 [133/00] Out 1303z S2	Malc	TUE
	1300z	20/10 [133/00] Good	RNGB	TUE
	1300z	27/10 [133/00] Out 1303z S9	Malc	TUE
	1300z	28/10 [133/00] Out 1303z S8	Malc	WED
15825kHz	0730z	04/09 [352/00] Out 0733z S2	Malc	FRI
	0730z	06/09 [352/00] Out 0733z S5	Malc	SUN
	0730z	18/09 [352/00] Out 0833z S3	Malc	FRI
	0730z	20/09 [352/00] Out 0733z S7	Malc	SUN
	0730z	25/09 [352/00] Out 0733z S2	Malc	FRI
	0730z	27/09 [352/00] Out 0733z Fair QRM1 QSB1	JkC	SUN
	0730z	18/10 [352/00] Out 0733z S2	Malc	SUN
	0730z	23/10 [352/00] Out 0733z S5	Malc	FRI
	0730z	30/10 [352/00] Out 0733z S6	Malc	FRI
15915kHz	0545z	02/09 [348/00]	RNGB	WED
	0545z	04/09 [348/00] Out 0548z Very weak QRM1 QSB3	JkC	FRI
	1540z	06/09 [228/00] Out 1543z S2	Malc	SUN
	1540z	21/09 [228/00] Out 1543z Strong QRM1 QSB1	JkC	MON
	1540z	28/09 [228/00] Out 1543z S2	Malc	MON
	0545z	30/09 [348/00] Out 0548z Fair QRM1 QSB1	JkC	WED
	1540z	04/10 [228/00] Out 1543z Fair QRM1 QSB1	JkC	SUN
	1540z	12/10 [228/00]	Gary H	MON
	1540z	19/10 [228/00]	Gary H	MON
	1540z	25/10 [228/00] Out 1543z S9	Malc	SUN

E11a log Sept/Oct

5194kHz	1710z	04/09 [955/30 34130……58496] Out 1719z S8	Malc	FRI
	1710z	07/09 [953/20 73334……25936] Out 1719z S7	Malc	MON
7377kHz	2000z	18/09 [575/36 44468 86023 05982 61020 76625 08906 36217……47252 66292] Out 2009z S7	JkC, Malc	FRI
8102kHz	1045z	15/09 [575/34 too weak to copy]	Malc	TUE
	1045z	13/10 [574/31 48271……50204] Out 1054z S2	Malc	TUE
8186kHz	2005z	27/09 [369/34 58201 59615 92752 98572 67825 24279 08248 22080……54904 11708] Out 2014z	JkC, Malc	SUN
8803kHz	0930z	09/09 [278/31 67450……Faded too weak to copy]	Malc	WED
	0930z	10/09 [278/31 87450……..81905]	Malc	THU
	0905z	28/10 [121/25 11746 84538 85770 59814 96941 28017 34350 93753 41777 6_461 12032 4086_ 76235 36947 75184 016_2 14424 97210 51651 57352 72723 12556 07211 11193 90700] Out 0913z S5 poor audio with some missing numbers (underscore indicates the missing numbers)	Malc, RNGB	WED
	0930z	28/10 [277/33 08790 80055 22805 53332 02079 66158 09009 34680……16121 58781]	RNGB, Malc	WED
	0906z	29/10 [121/25 Broken preamble no further TX] 0907z S5	Malc	THU
9371kHz	1730z	15/10 [410/38 10047 22363 94612 71595 49068 41617 20481…...72425 62637] Out 1740z Fair	JkC	THU
9399kHz	0900z	28/09 [536/35 57209 52135 22631 54834 86055 24038 89809 78364……23567 11555]	RNGB	MON
	0900z	30/09 [536/35 57209…..etc] Repeat of Monday	Ary	WED
	0900z	05/10 [533/30 54595……57443]	Malc	MON
9443kHz	1205z	13/10 [465/30 08724 55940 58855 80658 76975 37307 11030……77478 45388]	Gert	TUE
	1205z	14/10 [465/30 08724……etc] Repeat of Tuesday	RNGB, Malc	WED

9960kHz	0820z	07/09 [438/33 23134……51733]	Malc	MON
	0820z	10/09 [438/33 20559……....84332] Out 0829z S2	Malc	THU
	0820z	05/10 [435/33 73438 63234 41478 29390 47964 83306 93075……51765 11344]	RNGB, Malc	MON
10213kHz	1705z	02/09 [391/38 83030 04691 71694 31823 21973 52621 55924 73763……27998 66369]	JkC	WED
	1705z	05/09 [391/38 83030 04691 . . . 27996 66369] Repeat of Wednesday	Thomas	SAT
	0745z	21/09 [266/34 36672……..35879] Out 0754z S6	Malc	MON
	0530z	22/09 [986/10 23552 49994 66390 34340 60792 73652 19655 13889 55181 43511] Out 0535z Fair	JkC	TUE
	0530z	26/09 [986/10 03137 81901 35117 81579 26540 40159 56977 30250 58504 59161]	JkC	SAT
	0530z	03/10 [981/10 99744 42526 10624 42771 94240 84219 55568 48158 06720 41231]	Ary	SAT
	0745z	19/10 [264/37 88983 26150 14916 39796 05774 60797 48866 14637……53623 21419]	RNGB, Malc	MON
	1705z	28/10 [399/35 66558 21064 60371 13129 22988 35720 91597..…..96238 75047] Out 1714z S9+10	JkC, Malc	WED
10221kHz	0710z	08/09 [631/24 86413……97641] Out 0720z S2	Malc	TUE
	0710z	27/10 [633/32 37661……52285]	Malc	TUE
10330kHz	1530z	24/09 [266/34 36672 87442 46065 43102 58032 30443 59188……69247 35879] Out 1534z S5	JkC, Malc	THU
	1530z	22/10 [264/37 88983 26150 14916 39796 05774 60797 48866……53623 21419]	JkC, Malc	THU
10448kHz	1625z	02/09 [976/34 93152 77469 81532 57097 73225 34481 49385 50420……49030 73568]	RNGB, JkC	WED
	1625z	06/09 [976/34 92152……73568] repeat of Wednesday	Malc	SUN
	1625z	21/10 [976/37 34479 92891 33942 24533 81818 78863 70042 13446……15182 03446]	Gary H	WED
	1625z	25/10 [976/37 34479…..] Repeat of Weds	Malc	SUN
10620kHz	1925z	22/09 [553/30 29136 34571 16181 50803 06702 58304 76906……23605 98216] Out 1934z S5	JkC, Malc	TUE
	1925z	24/09 [553/30 29136 ... 98216] Out 1934z Weak QRM1 QSB2 Repeat of Tuesday	JkC	THU
10690kHz	0830z	26/10 [640/31 58659 67920 12099 19749 27756 56549 66829 94831……62883 26303]	RNGB	MON
	0830z	30/10 [640/31 58695…..etc] Repeat of Monday	Malc	FRI
10800kHz	0645z	15/09 [512/35 44023……87791] Out 0654z S5	Malc	TUE
	0645z	20/10 [512/32 97804 42162 16087 23470 55237 21937 25926……86098 52428] Fair	RNGB, Malc	TUE
11450kHz	0805z	16/09 [319/32 46209……..31430] Out 0814z S5	Malc	WED
	0805z	20/09 [319/32 46209…….] Repeat of Wednesday	Malc	SUN
	0805z	14/10 [315/32 36316 81624 84378 19184 30861 32299 55858……91517 40260] Fair	RNGB	WED
	0805z	18/10 [315/32 36316…….] Repeat of Wednesday	Malc	SUN
13375kHz	1400z	01/09 [988/10 97990……..55528] Out 1305z S9	Malc	TUE
	1110z	04/09 [952/40 30003…….] Very weak start, then faded out	RNGB	FRI
	1400z	15/09 [980/10 50132 46248 12649 30235 05580 65267 43926 19183 01783 60853] Out 1405z S6	Malc	TUE
	1400z	26/09 [982/10 17688 05151 25417 72884 58282 79828 93709 76068 03123 08223]	RNGB, JkC	SAT
	1400z	06/10 [982/10 51730 28867 60581 78017 73489 92200 51310 44494 21677 81754] Out 1400z S9	JkC, Malc	TUE
	1400z	13/10 [982/10 92382 73535 70307 70013 56261 65943 25975 99785 08788 39049] Out 1305z Fair	JkC	TUE
	1400z	20/10 [982/10 90508 69307 06602 23829 48860 67258 34519 43508 13988 06749]	Gary H, Malc, JkC	TUE
	1400z	27/10 [982/10 97800……94662]	Malc	TUE
13455kHz	1810z	01/09 [980/10 20680 66610 43965 79628 73962 06837 74144 78385 02832 80794] Out 1815z S9	JkC, Malc, RNGB	TUE
	1810z	05/09 [982/10 21825 15729 38205 23123 55581 35798 82316 34156 95215 57606]	Thomas	SAT
	1810z	12/09 [986/10 28552 49994 66390 34340 60792 73652 19655 13889 55181 43511] Out 1815z S5	Gary H, Malc	SAT
	1810z	15/09 [981/10 37076……...93571] Out 1815z S2	Malc	TUE
	1810z	22/09 [981/10 37076 40089 28390 04322 65837 60650 86423 66560 73680 93571]	Gary H	TUE
	1810z	29/09 [981/10 30692……...50190] Out 1815z S9+10	Malc	TUE
	1810z	03/10 [983/10 48518 23553 90330 41536 64325 65280 82049 01093 13013 05356]	Thomas, Malc	SAT
	1810z	06/10 [980/10 46717……82124] Out 1815z S3	Malc	TUE
	1810z	13/10 [983/10 40966 18657 61301 43964 70460 84646 80685 56440 11924 12908]	JkC	TUE
	1810z	20/10 [983/10 88251 71906 07380 97771 42963 56224 69372 18059 69086 70941]	Gary H, RNGB, Malc, JkC	TUE
14575kHz	0745z	01/09 [330/35 35714 44122 72142 79326 00951 99403 03358……54559 13063] Out 0754z S6	Malc	TUE
	0745z	03/09 [330/35 35714…..etc] repeat of Tuesday	RNGB	THU
14769kHz	0710z	01/10 [495/33 96423 13636 58946 01077 82529 25389 70047 92114……93206 79401]	RNGB	THU
		03/10 [495/33 too weak to copy……] Out 0720z S1	Malc	SAT
15632kHz	1300z	29/09 [130/32 27828 56995 50942 27496 22445 69524 65210…..32140]	RNGB	TUE
	1300z	06/10 [134/30……too weak to copy]	Malc	TUE
15825kHz	0710z	11/09 [355/36 44978 02613 27845…….52178 80947] Extremely weak	RNGB	FRI
15915kHz	0545z	18/09 [343/31 41602 39130 19203 96009 28995 78431 57846……17649 86468]	JkC	FRI
	1540z	05/10 [227/33 61356 33547 75925 32532 25524 49465 22367……01753 79028] Out 1549z Fair	JkC	MON

E17z

Thursday

September 2015

0800z	**14260kHz**	**0820z**	**12930kHz**	
03/09	674 819 5 51772 38664 48339 91339 99825 819 5 000000			Weak
10/09	674 819 5 55772 28664 48339 91339 99825 819 5 00000			Weak
24/09	674 813 5 11171 64385 82707 06123 22536 813 5 00000			Strong

October 2015

01/10	674 293 5 44345 32469 37983 33984 23929 293 5 00000	Weak	
22/10	674 253 8 53?401 63959 93699 54600 74248 faded out	Weak	
29/10	674 00000	Weak	

Others .....

5140kHz1810z	**10/09**	i/p	TR	THU

39203 82605 37436 33134 358?8
38013 44024 21373 35876 35436
33024 87540 39368 42352 38713
805 805 15 15 00000 *Courtesy TR*

6325kHz 1825z 27/10[I/P ... 274 ... .. FG .... LG 57440 274 15 00000]1833z Fair QSB3 Zielona Góra WebSDR	JkC	TUE

6325kHz 1825z 27/10
274 (Fades, preamble not heard - GR 1-2 uncertain)
(33796 13577) 74526 46647 79302 53516 25616 56069 96813 14199
88620 58769 61732 74537 57440
274 15 00000 (no DK, or DK same as callup?)
(all groups sent only once)

6325kHz 1925z 27/10[274 863 15 92342 ... 84455 863 15 00000]1928z Weak QSB3 Zielona Góra WebSDR	JkC	TUE

6325kHz 1925z 27/10
274 863 15
92342 19208 89048 91458 96180 1.024 00178 98..8 54014 92142
22025 48513 82447 43382 84455
863 15 00000

G06

PoSW opens with his reports on the usual well-established schedules:-

Second + Fourth Thursdays in the Month 1830 UTC Schedule:-
10-Sept-15:- 5,934 kHz, calling "579", DK/GC "317 317 20 20", as is the case with the related E06 schedules continues to transmit twenty 5F groups which have been heard on many previous occasions, "37839 35787 98273.....", inside 49 metre band, strong broadcast station on 5,930 removed by using the receiver in USB mode.

24-Sept-15:- 5,934 kHz, "579" and "317 317 20 20" again, weak signal, difficult copy at times.

8-Oct-15:- 5,934 kHz, started well before the half-hour, "579" and "317 317 20 20", same as in September.

Friday 1930 UTC Schedule Following Second + Fourth Thursdays in the Month:-
11-Sept-15:- 5,442 kHz, calling "947", DK/GC "394 394 20 20", followed by another well-used twenty 5Fs, starting off "06132 75514 79681...."

25-Sept-15:- 5,442 kHz, "947" and "394 394 20 20", S9 carrier but audio seemed to be low.

9-Oct-15:- 5,442 kHz, call-up in progress when tuned in just after 1927 UTC, "947" and "394 394 20 20" again, very strong S9+ signal.

23-Oct-15:- 5,442 kHz, "947" and "394 394 20 20", over S9 on a clear frequency.

First + Second Mondays in the Month 1700 + 1800 UTC Schedule:-
14-Sept-15:- 1700 UTC, 4,632 kHz, weak signal, difficult copy, calling "248" for a full message, everything else unreadable.
1806 UTC, 5,380 kHz, transmission in progress, carrier indicated S6 to S7 but audio low,
difficult to hear. Ended before 1819 UTC with, "125 125 65 65" (?) and 5 x "Null".

5-Oct-15:- 1700 UTC, 4,632 kHz, no voice at all heard, just a carrier peaking over S9. At around 1709 UTC noted Morse 5F groups, appeared to be keyed audio tone on the G06 carrier, read the last three groups as, "....31185 77532 31627", carrier went off with no finishing routine after the Morse 5Fs stopped.
1803 UTC, 5,380 kHz, tuned in late after loosing track of the time while watching an episode of "The Professionals" 1980's TV series now being repeated on ITV4, no problems here, S9+ signal with good audio, "248 248 248 00000". May have started late, voice did not stop until after 1805 UTC, carrier went off 1807

Moving on to other's logs:

Monday

September 2015

0800z 6810kHz

07/09	329 00000	Weak
21/09	329 00000	Weak

October 2015

19/10	329 00000	Weak

1700z 4632kHz 1800z 5380kHz

07/09	248 125 65 07051 ... 50519 125 65 00000	Weak

248 125 65
07051 19689 02294 82915 66920
88189 01393 88666 13498 83780*
74307 35394 05745 77038 28540
05333 86883 60397 80209 30335*
23491 40681 80748 15639 47356
19182 36659 19854 78170 88452*
73963 46750 02323 28889 08387
71341 47052 23121 17823 23734*
90013 13020 01047 62587 03843
19511 68505 18792 05302 33746*
04132 10639 65076 99828 69100
18693 93817 34271 65602 49009*
57493 37154 36402 15807 50519*
125 65 00000 Courtesy tiNG
Note: Each group marked * was only sent once with the following group sent without a break.
Repeats 14/09 with same behavior.

14/09	248 125 65 27251 ... 52519 125 65 00000	Fair

October 2015

0510 [1700z]	Carrier, but no traffic 1630 to 1711z	Strong
05/10 [1800z]	248 00000	Strong
12/10	248 00000	Strong

Wednesday

October 2015

1200z 5915kHz

14/10	248 00000	Weak

Thursday

September 2015

1830z 5934kHz

10/09	579 317 20 37839 ... 04594 317 20 00000 [Another repeat of this old E06/G06 message]	Fair
24/09	579 317 20 37839 ... 04594 317 20 00000 [Another repeat of this old E06/G06 message]	Strong

October 2915

08/10	579 317 20 37839 ... 04594 579 20 00000	Very strong

1300z 4598kHz

22/10	329 00000	Strong

Friday

September 2015

1930z 5442kHz

25/09	947 394 20 26132 ... 24884 394 20 00000	Strong

October 2015

09/10	947 394 20 06132 ... 04884 394 20 00000	Fair

S06

We open with PoSW's remarks concerning S06 schedules and his schedule examples then moving on the RNGB's comprehensive reports for September and October 2015:

The expected seasonal changes to S06 schedules noted in September, in general frequencies moving lower to much the same as those used in the springtime.

Weekly Saturday 1600 or 1605 UTC Schedule:-
5-Sept-15:- 1600 UTC, 7,643 kHz, "419 419 419 00000", as expected has moved to the frequency used in March and April of this year. 1605 UTC transmission expected to be on 6,819 kHz, plus or minus. Carrier was up on 7,643 at 1540Z today, tone heard at 1549Z and a single "491" at 1551Z.

12-Sept-15:- 1605 UTC, 6,809 kHz, "491 491 491 00000".

19-Sept-15:- 1600 UTC, 7,643 kHz, "491 491 491 00000", S9 signal.

3-Oct-15:- 1600 UTC, 7,643 kHz, "491 491 491 00000", S9.

10-Oct-15:- 1605 UTC, 6,809 kHz, "491 491 491 00000", S9+ this afternoon.

First + Third Saturdays in the Month 1900 + 2000 UTC Schedule:-
5-Sept-15:- 1900 UTC, 5,124 kHz, calling "738" for a full message. DK/GC "690 690 45 45", peaking over S9. Ended after 1913 UTC with the usual DKDK GCGC and "00000".
2000 UTC, 4,443 kHz, second sending. Strong "XJT" churning away very close by. Same frequencies, give or take a few kHz, as used for this schedule in March and April.
Repeated on the following day:-

6-Sept-15, Sunday:- 1900 UTC, 5,124 kHz, and 2000 UTC, 4,443 kHz, the "XJT" very strong this evening, S06 reasonable copy in USB mode.

This schedule moved forward by one hour in October:-
3-Oct-15:- 2000 UTC, 5,124 kHz - nothing found at 1900 UTC but found one hour later, same frequency, "738 738 738 00000".
2100 UTC, 4,443 kHz, second sending, still competing with the "XJT", copy not too bad with the receiver in USB mode. 2100 UTC is 10 PM British Summer Time which still has a few more weeks to run.

First + Third Fridays in the Month 1900 + 2000 UTC Schedule:-
4-Sept-15:- 1900 UTC, 9,906 kHz, "392 392 392 00000", S7 to S8. Similar frequency used in March and April, second sending was on 7,507 kHz with the usual small variations.
2000 UTC, 7,512 kHz, second sending, S9 signal. A Single Letter Transmission marker on 7,508 point something sending the letter "D" making a high-pitched beat-note with the S06 carrier with the receiver in wide AM mode.

18-Sept-15:- 1900 UTC, 9,906 kHz, calling "392" for a full message, weak signal, difficult to hear DK/GC and 5Fs.
2000 UTC, 7,512 kHz, second sending, much stronger, peaking S9, DK/GC "481 481 36 36", ended after 2011 UTC. Two Single Letter Transmissions on close frequency sending "D" and "S" very noticeable.

This schedule moved forwards by one hour in October to appear at 2000 + 2100 UTC.
2-Oct-15:- 2000 UTC, 9,906 kHz, nothing found at 1900Z but this schedule has the habit of moving forwards or back by an hour for no apparent reason, although this evening's time-
shift is probably linked to the seasonal changing of the clocks somewhere. "392" and "481 481 36 36", same as on September the 18th. Peaking S9 with a weak FSK/RTTY type signal on the LF side, removed by using the receiver in USB mode.
2100 UTC, 7,512 kHz, second sending, weaker signal than the first sending. On at 9 PM and 10 PM.

And there was a repeat on the following day for those of us who were in on a Saturday night to hear it:-
3-Oct-15, Saturday:- 2000 UTC, 9,906 kHz, and 2100 UTC, 7,512 kHz, the "Next Day Repeats" on the same frequencies.

16-Oct-15:- 2100 UTC, 7,512 kHz, "392 392 392 00000", signal strength S4 to S5 at best, missed the 2000Z transmission.

RNGB's Comprehensive report:

S06 log September

Daily Mon- Fri 0400z 15721kHz
22/09 '480' 979 50 01487 65093 45036 43494 00430 87934 62677 62840.....98522 90229 979 50 00000] 0411z Strong JkC TUE HK remote

Thursdays (Repeats following day) 0830z 19035kHz 0930z 17256kHz
03/09 '842' 670 43 63490 86340 03600 32351 05311 99863……01190 33630 670 43 00000
17/09 '842' 976 45 70853 02612 22925 30094 18616 35888 68243 71908 81821 66053 07002 71724 10081 56743 55094 78506 48926 69743
89170 25537 22399 49953 64652 90068 58215 78443 81231 03077 43350 85485 68676 31572 1523? 74662 35713 83135
67023 06719 09368 17055 39837 17624 83475 59908 56213 976 45 00000 Fair HK Remote
24/09 '842' 150 46 47855 29526 63209 71801……88596 43?50 150 46 00000 Weak HK Remote

Fridays (1st & 3rd) 1900z 9906kHz 2000z 7512kHz (frequencies may vary slightly)
04/09 '392' 00000
18/09 '392' 481 36 69829 30309 42543 55436 00204 59619 25762 22773 86798 83561 63124 69842 67036 27175 05940 33145 68609 17292
03012 24077 90657 49821 00780 31104 98559 96300 75295 06200 88192 51414 38667 85831 60028 37856 09305 36019
481 36 00000 1909z

Saturdays (1st/2nd/3rd and 4th) 1600z 7643kHz or 1605z 6809kHz
05/09 1600z '491' 00000
12/09 1605z '491' 00000
19/09 1600z '491' 00000
26/09 1600z '491' 00000

Saturdays (1st/3rd) 1900z 5124kHz 2000z
05/09 '738' 690 45 96330…….91160 690 45 00000 '

S06 et al

S06 log September

Daily Mon- Fri 0400z 15721kHz
22/09 '480' 979 50 01487 65093 45036 43494 00430 87934 62677 62840.....98522 90229 979 50 00000] 0411z Strong JkC TUE HK remote

Thursdays (Repeats following day) 0830z 19035kHz 0930z 17256kHz
03/09 '842' 670 43 63490 86340 03600 32351 05311 99863……01190 33630 670 43 00000
17/09 '842' 976 45 70853 02612 22925 30094 18616 35888 68243 71908 81821 66053 07002 71724 10081 56743 55094 78506 48926 69743
89170 25537 22399 49953 64652 90068 58215 78443 81231 03077 43350 85485 68676 31572 1523? 74662 35713 83135
67023 06719 09368 17055 39837 17624 83475 59908 56213 976 45 00000 Fair HK Remote
24/09 '842' 150 46 47855 29526 63209 71801……88596 43?50 150 46 00000 Weak HK Remote

Fridays (1st & 3rd) 1900z 9906kHz 2000z 7512kHz (frequencies may vary slightly)
04/09 '392' 00000
18/09 '392' 481 36 69829 30309 42543 55436 00204 59619 25762 22773 86798 83561 63124 69842 67036 27175 05940 33145 68609 17292
03012 24077 90657 49821 00780 31104 98559 96300 75295 06200 88192 51414 38667 85831 60028 37856 09305 36019
481 36 00000 1909z

Saturdays (1st/2nd/3rd and 4th) 1600z 7643kHz or 1605z 6809kHz
05/09 1600z '491' 00000
12/09 1605z '491' 00000
19/09 1600z '491' 00000
26/09 1600z '491' 00000

Saturdays (1st/3rd) 1900z 5124kHz 2000z
05/09 '738' 690 45 96330…….91160 690 45 00000 '

S06s September log:

Sunday

6th/13th	0630/40	22185/20050	'524' No reports
20th/27th			'524' 971 6 88785 30340 30193 33584 84446 36342

Monday

7th/14th	0830/40	9220/8270	'371' 824 5 38424 31664 36303 37823 32460
21st/28th			'371' 285 6 83270 96798 34469 37144 44980 44405
7th/14th	0900/10	14580/13165	'872' 439 5 31542 38747 33534 36213 37580
21st/28th			'872' 409 5 88785 30340 30193 33584 84446
7th/14th	1200/10	9145/11460	'831' 907 5 39746 37407 42648 82321 40945
21st/28th			'831' 240 5 49844 37752 85347 48817 38439

Tuesday

1st/8th	0600/10	15855/16485	'438' No reports
15th/22nd			'438' 506 7 14600 74248 48754 65125 41879 84648 42036
1st/8th	0700/15	5760/6930	'374' 890 5 83086 62060 83138 39760 18969
15th/22nd			'374' 291 5 too weak to copy
1st/8th	0730/40	7425/11560	'427' 935 6 48093 83240 37119 43169 99825 42483
15th/22nd			'427' 839 5 31746 36304 38135 35783 31823
1st/8th	0800/10	11635/10420	'352' 948 6 46399 33972 30172 94302 50111 39250
15th/22nd			'352' 418 6 31139 37392 42978 37931 35610 39783
1st/8th	1000/10	6410/7340	'893' No reports
15th/22nd			'893' 521 6 38054 35856 45354 37887 36510 32382
1st/8th	1100/10	6190/7230	'754' 821 6 31542 38747 33534 36213 37580 39209?
15th/22nd			'754' 291 6 52401 63919 92699 14600 74248 48754
1st/8th	1500/10	6464/7242	'537' 269 8 32131 38175 35647 36545 3452. 39182 37447 81456
15th/22nd			'537' 918 6 88620 58069 61732 74537 57440 10597

Wednesday

2nd/9th	0530/40	9296/10365	'464' 230 5 32939 43631 32939 31096 35264
16th/23rd			'464' 210 5 46062 68672 97478 39685 30485
2nd/9th	0730/40	11854/12140	'745' 239 6 34528 39182 37447 46393 42747 34194
16th/23rd			'745' 936 8 32396 81853 39840 38244 38381 45807 33078 43012
2nd/9th	0820/30	8630/9255	'471' 293 5 35011 32356 37823 30383 31420
16th/23rd			'471' 508 6 43686 41225 40696 81942 34293 43952
2nd/9th	1000/10	13365/14505	'729' 806 5 39250 85837 32062 33461 98237
16th/23rd			'729' 530 6 44801 47085 83464 88174 35298 80987

Thursday

3rd/10th (E17z)	0800/10	14260/12930	'674' 819 5 51772 38664 48339 91339 99825
17th/24th			'674' 813 5 11171 64385 82707 06123 22536
3rd/10th	0900/10	12952/13565	'167' 490 5 91308 84062 43661 49504 96005
17th/24th			'167' 820 5 40614 77249 70678 17976 21816
3rd/10th	0900/10	5744/6524	'624' 895 7 37498 36058 37383 93382 46452 59194 31911
17th/24th			'624' 817 5 39534 17228 15636 47891 23247
3rd/10th	0930/40	9081/10514	'314' 508 6 31542 38747 33534 36213 37580 39209
17th/24th			'314' 509 6 88620 58069 61732 74537 57440 10597
3rd/10th	1200/10	12415/14212	'425' 908 6 32939 43631 82989 31096 35264 29240
17th/24th			'425' 807 6 33796 13577 47526 46647 79302 53516

Friday

4th/11th	0930/40	12140/13515	'516' 832 7 49336 34530 37336 83340 91195 43639 37368
18th/25th			

Saturday

5th	1200/10	10350/8520	'254' 901 6 38783 19163 49945 39845 35007 33276

Thanks to RNGB, JkC, Malc

S06 log October

Daily Mon- Fri 0400z 15721kHz

09/10 '480' 931 50
86637 68540 13428 54705 70114 41416 39941 21246 89794 57207 23332 47812 07302 54185 80709 23616 63218 79857 47641 91638
72801 88328 58681 19854 26888 63534 53312 19680 27647 16792 77446 22283 13899 32112 63714 48740 55657 57691 22703 34988
22612 67041 22338 97483 56209 38183 81599 50538 00051 24339 931 50 00000 JkC HK Remote

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

22/10 '842' 917 50 ….04878 86057 37297 54038 34533 66263……705674 03977 RNGB (Siberian remote)
29/10 '842' 561 30 60249 24900 89605 96773 57771 48320 52852 79171 77842 75325 52250 53807 18048 05523 19319 20630 64918 80538
81981 93253 31530 65719 41855 29157 27218 92489 54764 75987 07868 03533 RNGB (Siberian remote)

Fridays (1st & 3rd) 2000z 9906kHz 2100z 7512kHz (frequencies may vary slightly)

17/10 '738' 00000

Saturdays (1st/2nd/3rd and 4th) 1600z 7643kHz or 1605z 6809kHz

03/10 1600z '491' 00000
17/10 1605z '491' 00000
24/10 1605z '491' 00000

Saturdays (1st/3rd) 1900z 5124kHz 2000z 4428kHz

17/10 '738' 00000

Unscheduled:
S06/S25 variant 5783kHz 1532z 07/10[936 (R3) 42095 (R2) + message]1540z Strong QRM2 QSB1 JkC WED See transcript. USB, S06 OM voice

Transcript
S06/S25 variant 5783kHz 1532z 07/10
(1532z) 936 (R3) 42095 (R2) (continues)
(1539z) 11111 55555 48315 49335 45454 43388 42102 00000 (all R2, including ending 00000)
(1540z) (Silent)

S06s October log:

Sunday			
4th/11th	0630/40	22185/20050	'524' 803 6 67393 ????? ????? 22330 20118 46343 ? (extremely weak)
18th/25th			'524'
Monday			
5th/12th	0830/40	9220/8270	'371' 469 5 34888 33661 37167 37671 43391
19th/26th			'371' 408 5 93531 42191 30821 33725 37661
5th/12th	0900/10	14580/13165	'872' 901 5 83270 96798 34469 37144 48980
19th/26th			'872' 405 6 37532 34023 33430 41152 34559 45369
5th/12th	1200/10	9145/11460	'831' 467 5 93357 42191 30821 33725 37661
19th/26th			'831' 402 5 15009 34140 78386 91497 82963
Tuesday			
6th/13th	0600/10	15855/16485	'438' 921 6 44755 16330 88448 604?0 88??0 88650
20th/27th			'438' 560 7 ????? 15003 24357 60583 54545 50128 99477
6th/13th	0700/15	5760/6930	'374' 251 6 46062 68672 97478 39685 30485 96632
20th/27th			'374' 821 5 31514 23800 35288 85892 44243
6th/13th	0730/40	7425/11560	'427' 519 6 21767 53672 11834 81022 36903 41412
20th/27th			'427' 815 6 41347 85557 43311 88222 47840 14987
6th/13th	0800/10	11635/10420	'352' 871 6 52401 63919 92699 14600 74248 48754
20th/27th			'352' 978 6 36073 46044 86219 36221 48443 83529
6th/13th	1000/10	6410/7340	'893' 240 5 88620 58069 61732 74537 57440
20th/27th			'893' 416 5 80454 42729 32175 49754 90974
6th/13th	1100/10	6190/7230	'754' 916 8 44780 44837 30694 39984 43478 33420 94754 33762
20th/27th			'754' 913 6 34559 45369 43003 52322 36541 46543
6th/13th	1500/10	6464/7242	'537' 406 8 31514 23800 35288 85892 44243 45599 39495 43234
20th/27th			'537' 981 6 40493 33635 36147 43625 49461 39716
Wednesday			
7th/14th	0530/40	9296/10365	'464' 287 5 93351 42191 30821 33725 37661
21st/28th			'464' 918 5 73821 20912 31854 83654 09298
7th/14th	0730/40	11854/12140	'745' 906 8 09394 76911 75155 92918 97067 58604 41438 03092
21st/28th			'745' 806 9 96320 36793 53038 76342 15009 34140 78386 91497 82963
14th/21st	0820/30	8630/9255	'471' 803 5 01405 15003 24357 60583 54545
28th			'471' 00000
7th/14th	1000/10	13365/14505	'729' 514 6 88620 58069 61732 74537 57440 10594
21st/28th			'729' 506 8 40614 77249 40678 17976 21816 42997 94184 47374
Thursday			
1st/8th (E17z)	0800/10	14260/12930	'674' 293 5 44345 32469 37983 32984 33129
15th/22nd			'674' 253 8 52401 63919 92699 14600 74248 48754 65125 41879
1st/8th	0900/10	12952/13565	'167' 428 5 33760 46632 80233 36973 38084
15th/22nd			'167' 235 8 39534 17228 15636 47891 23247 17099 94961 35826
1st/8th	0900/10	5744/6524	'624' 891 5 38021 33619 32714 35329 93102
15th/22nd			'624' 813 5 11161 54375 72696 95123 22535
1st/8th	0930/40	9081/10514	'314' 267 5 93351 42191 30821 33725 37661
15th/22nd			'314' 805 6 96111 10544 98003 68909 45279 43828
1st/8th	1200/10	12415/14212	'425' 903 6 44755 16330 88418 30480 88650 34303
15th/22nd			'425' 809 6 39534 17228 15636 47891 23247 17099
Friday			
2nd/9th	0930/40	12140/13515	'516' 802 7 37805 33322 36248 32802 53623 31331 30314
16th/23rd			'516' 280 7 52819 41638 63770 41234 62856 84023 52619
Saturday			
3rd	1200/10	10350/8520	'254' 809 6 88785 30340 30193 33584 84446 43403

Thanks to RNGB, JkC, Malc, HFD

S11a log Sept/Oct

4016kHz	1955z	02/09 [371/00]	RNGB, Malc, JkC	WED
	1955z	04/09 [371/00] Strong	RNGB	FRI
	1955z	09/09 [371/00] S9	Malc	WED
	1955z	16/09 [371/00] Konyetz 1958z S8	Malc, JkC	WED
	1955z	18/09 [371/00]	Malc	FRI
	1955z	23/09 [377/30 19603 30306 17268 00508 58533 36759 53921……17328 32301] 2004z S9+10	JkC, Malc, Schorschi	WED
	1955z	25/09[371/00] Strong QRM1 QSB1	JkC	FRI
	1955z	30/09[371/00] КОНЕЦ 1958z Strong QRM1 QSB1	JkC	WED
	1955z	02/10 [371/00] Good	RNGB	FRI
	1955z	09/10 [371/00] Konyetz 1958z S9+10	Malc	WED
	1955z	09/10 [371/00] КОНЕЦ 1958z Strong QRM1 QSB1	JkC	FRI
	1955z	16/10 [371/00]	RNGB	FRI
	1955z	21/10 [370/37 ВНИМАНИЕ 35464 79953 62090 77347 93963 21971……60681 79381] Good	RNGB, JkC	WED
	1955z	28/10 [371/00] Konyetz 1958z S8	Malc	WED
	1955z	30/10 [371/00] КОНЕЦ 1958z Strong QRM1 QSB1	JkC	FRI
5358kHz	0455z	04/09 [320/37 50520 85058 13929 41210 46528 99769 87046.....00822 20232] Strong	JkC	FRI
	0455z	22/09 [321/00] КОНЕЦ 0458z Strong QRM1 QSB1	JkC	TUE
	0455z	09/10 [321/00] КОНЕЦ 0458z Strong QRM1 QSB2	JkC	FRI
7317kHz	0915z	08/09 [484/00] Konyetz 0918z S2	Malc	TUE
	0915z	11/09 [484/00] S2	Malc	FRI
	0915z	22/09 [484/00]	RNGB	TUE
	0915z	02/10 [484/00] Konyetz 0918z S3	Malc	FRI
	0915z	06/10 [484/00] S3	Malc	TUE
	0915z	13/10 [484/00] S3	Malc	TUE
	0915z	20/10 [486/34 51805 11075 41545 39996 09389 15736 70099……27231 25291]	RNGB	TUE
	0915z	27/10 [484/00] S3	Malc	TUE
	0915z	30/10 [484/00] S2 M8 FRI		
9960kHz	1020z	01/09 [426/00] КОНЕЦ 1023z Strong QRM1 QSB1	JkC	TUE
	1020z	08/09 [426/00]	Malc	TUE
	1020z	11/09 [426/00] S2	Malc	FRI
	1020z	15/09 [426/00] S2	Malc	TUE
	1020z	18/09 [426/00] S2	Malc	FRI
	1020z	22/09 [421/32……..too weak to copy]	Malc	TUE
	1020z	06/10 [426/37 71936 05317 88127 38287 38845 76991 41299……84631 05589]	Ary, RNGB	TUE
	1020z	13/10 [426/00]	RNGB	TUE
	1020z	20/10 [426/00]	Malc	TUE
	1020z	27/10 [426/00]	RNGB	TUE
	1020z	30/10 [426/00] S3	Malc	FRI
16112kHz	1015z	03/09 [475/00] Weak	RNGB	THU
	1015z	28/09 [475/00] Fair	RNGB	MON
	1015z	19/10 [475/00] Fair	RNGB	MON
	1015z	29/10 [465/32 69647 37508 84493 86720 57630 57339 36905 36627……86800 68676]	RNGB	THU

Credits: RNGB, Thomas, Malc, Ary, JkC

V02a

V02a put in three welcome appearances, once in September and twice in October. This was always in place of M08a at 2000z as is usual.
We took the opportunity to practice our Spanish and copied down the first 30-40 groups for two of the messages at which point the recordings ended.

V02a 7554kHz 2000z 24/9 [A86022 00351 13672]
?6022 53326 53854 28410 00107 22617 52638 15454 34503 71847
57610 81717 40728 88866 48715 22000 34065 13715 87652 17267
32815 30174 21523 37551 48143 02258 14782 54017 21680 22151
07051 51754 40483 74718 87246 84102 ..... THU

V02a 7554kHz 2000z 8/10 SS/YL barely audible but managed to hear "8" and "Attencion" THU

V02A 7554kHz 2000z 29/10 [A85022 08351 12672]
Message ????? ????? ????? ????? ????? ????? ????? 37157 46504 50410
14284 15453 81878 53876 28500 45116 14215 12811 66443 04605
40851 67815 75444 78746 55447 26854 64776 35206 26005 75440
47215 63203 88677 78188 88674 86514 57255 60167 21644 23752
28734 76831 ….. THU

V07
Sunday
September 2015

0300z 16037kHz 0320z 14637kHz 0340z 12137kHz

27/09 661 1 789 75 25905 ... 33587 000 000 Weak

October 2015

0100z 18074kHz 0120z 15874kHz 0140z 14374kHz

04/10 883 000 Weak

11/10 883 1 478 63 47485 ... 44581 000 000 Weak

18/10 883 000 Weak

25/10 883 1 511 77 44849 ... 21950 000 000 Weak

V21

The Babbler has been active on his two main frequencies during the past two months although, unfortunately signals have been weak. There were some very long transmissions on 12/9 and 3/10 both of which consisted of counting only rather than the strings of numbers. The only oddities of note were on 7/9 and 25/10 when he began counting at numbers other than 1 one a few occasions.
As always at this time of year expect a switch to approximately 1400z on 1/11 when the clocks fall back. This will keep him at 0900 Eastern Time.

Logs.

V21 6529kHz 1300z 3/9 Present but intefered with by a TX on a nearby frequency. THU
V21 6529kHz 1300z 4/9 Weak, one count to 20 was heard. FRI
V21 6529kHz 1300z 6/9 [60, 50, 60, 60, 60, 60, 50, 60, becomes too weak to copy. SUN
V21 6529kHz 1300z 7/9 [In progress, 40, 40, 30, 40, ??, 30, starts at 11 counting to 30, 80, 40, 30, 30, 30 END] TUE
V21 6529kHz 1300z 7/9 very weak, two counts to 40 heard. TUE
V21 6529kHz 1300z 12/9 [In progress, 20, 30, 40, 30, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 10, 40, 40, 40, 40, 40, 40, 50 (skips 31-40), 40 END] SAT
V21 6529kHz 1300z 15/9 [60, 50, 60, 60, 20, 60, 60, 60, 50, 60, 20, 60, 10...continues....] TUE
V21 6529kHz 1300z 17/9 Weak, one count to 30 heard. THU
V21 5637kHz 1320z 26/9 [23 (repeats 22 twice) END] SAT
V21 6529kHz 1300z 27/9 [60, 60....continues.] SUN
V21 5637kHz 1320z 27/9 [32, 32, 32, 32..continues] SUN
V21 5637kHz 1320z 30/9 Present but too weak to copy. WED
V21 6529kHz 1300z 3/10 [40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 20, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 30, 40, 20, 40, 40, 30, 40, 40, 40, 40, 40, 40, 40, 40, 40, 40, 30 END
V21 6529kHz 1300z 24/10 [60, 30, 60, 60, 60, 60, 20, 60, 60, 10 END] SAT
V21 5637kHz 1310z 24/10 [In progress, 46, 50, 32 END] SAT
V21 5637kHz 1310z 25/10 [22, 31, 3, 20, 18, 22, 22, 22, 4, 4, 22, 2, 22 start at 18 counting to 22, start at 15 counting to 22, 22, 22, 22 END] SUN
V21 6529kHz 1300z 25/10 [60, 20, 60....continues] SUN
V21 5637kHz, 1300z 31/10 [82, 66, 62, 82 then 62 to 82, 92, 62, 72, 92, 62, 42, 32, stops for 1 minute then 2, 2, 32 END] SAT

V26

9153kHz0943z 02/10/15[(IP - YL Chinese - Silent 1004z) (// 7553) (Remote tuner Hong Kong)] JPL FRI

Found while searching for M89. At first thought it might be another M89 station using voice like the XSV85 skeds, but this one was different.
After looking at the E2K Control list (see below), it became apparent that this was V26.

V26 YL Strange Chinese / English mixture. Poss Mil M95 Callsigns XSA or XSE23 (Eks-Es-Ee Lian San) Preamble unid,. TX is AM, LSB or USB (2010), unid sked, 3f gps Heard at 06.30z & 15.33/15.53z Update –Aug 2010. 07.30, 09.00 – 10.00 & 13.00 – 14.00z Simultrans on multiple freqs. Freqs heard 4283, 5922, 6446, 7553, 8619, 8621, 9101, 9054, 9153, 13030, 16665kHz Format :- nr 030 15 35 0927 0600 Where 030=mssg nr/recipient, 15=gc, 35=unid (stays constant) 0927=date, 0600=appears to be time of origination, but can be later ?? than the TX time !! All figs in synth Chinese however inter mssg announcements and callsign letters are in “broken” English, ie “em-es-eeg ai-gee-en, while the numbers are in Chinese !!!

7553kHz0859z 07/10[(IP) (Remote tuner Hong Kong)] JPL WED
(Into Chinese digital 4+4 mode – 0859z) (Silent – 0908z)
(Voice USB – Mechanical female – 0910z – Much weaker than digital mode)
END (0939z) (Monitored until 1003z for M95 sked but N/H)

9054kHz0005z 08/10[(IP) (Remote tuner Hong Kong)] JPL THU
(Voice USB – Mechanical female – 0005z – Cont'd)

7553kHz0908z 10/10[(IP) (Remote tuner Hong Kong)] JPL SAT
(In Chinese digital 4+4 mode LSB (0908z) (Switched to voice USB - Female - 0913z)

7553kHz1002z 13/10[(IP) (Remote tuner Hong Kong)] JPL TUE
(In voice USB - Female - 1002z)

7553kHz0948z 16/10[(IP) (Remote tuner Hong Kong)] JPL FRI
(IP - In voice USB - Female - // 9153 - 0948z)

9153kHz0948z 16/10[(IP) (Remote tuner Hong Kong)] JPL FRI
(IP - In voice USB - Female - // 7553 - 0948z)

7553kHz0903z 26/10[Remote tuner Hong Kong] JPL MON
(Into Chinese digital 4+4 QPSK 75/3000 LSB mode - 0903z - Silent 0914z)
(Into Chinese voice - Female - USB - 0920z - Silent 1013z)

POLYTONES

XPA c
Wednesday/Saturday

September 2015

0600z	**10359kHz**	**0620z**	**11559kHz**	**0640z**	**13559kHz**	
02/09	355 000 09003 00001 00000 10140					Extremely strong
05/09	355 000 03964 00001 00000 10140					Fair
09/09	355 000 08597 00001 00000 10140					Fair
12/09	355 000 02346 00001 00000 10140					Very strong
16/09	355 1 09269 00187 79456 13132			[0600z v.weak, QSB3]		Fair
19/09	355 1 09269 00187 79456 13132					Fair
23/09	355 000 02046 00001 00000 10140					Fair
26/09	355 000 04263 00001 00000 10140					Very strong
30/09	355 1 03050 00229 13340 27704					Very strong

October 2015

0600z	**10868kHz**	**0620z**	**12168kHz**	**0640z**	**13368kHz**	
03/10	813 000 01424 00001 00000 10140					Very strong
07/10	NRH … poor condx?					
10/10	813 000 02647 00001 00000 10140			[0640z NRH]		Weak, QSB3
14/10	813 1 04521 00175 12055 51416					Very strong
17/10	813 1 04521 00175 12055 51416					Extremely strong
21/10	813 000 04183 00001 00000 10140					Extremely strong
24/10	813 000 05415 00001 00000 10140					Extremely strong
28/10	813 000 01542 00001 00000 10140					Very strong
31/10	813 000 04214 00001 00000 10140					Very strong

XPA e
Tuesday/Thursday

September 2015

1900z	**11576kHz**	**1920z**	**10476kHz**	**1940z**	**9276kHz**	
01/09	542 1 08587 00319 30852 76540					Fair, QSB2
03/09	542 1 08587 00319 30852 76540					Fair
08/09	542 1 07977 00319 30852 76540					Fair
10/09	542 1 02815 00169 40076 70737					Very weak
15/09	542 1 02815 00166 40076 70737			[V.poor condx, QRN4]		Very weak
17/09	542 000 04993 00001 00000 10140					Weak, noisy
22/09	542 000 04998 00001 00000 10140					Fair
24/09	Too weak to process; 2m26s long: Null Msg					Very weak
29/09	542 000 07833 00001 00000 10140					Weak

XPA e
Tuesday/Thursday continued:

October 2015

1900z	**9362kHz**	**1920z**	**8062kHz**	**1940z**	**7462kHz**	
01/10	304 000 05739 00001 00000 10140					Strong
06/10	304 1 00767 00267 22170 17437				[1940z in sidebands of BC stn, useless]	Strong, QRN2
08/10	304 1 00767 00267 22170 17437					Weak
13/10	305 000 01885 00001 00000 10140				[1920/1940z very weak]	Very strong
15/10	304 000 03970 00001 00000 10140					Fair
20/10	304 1 07735 00211 81051 17005					Strong
22/10	304 1 07735 00211 81081 17005					Only 1900 Workable, fair
27/10	304 000 02338 00001 00000 10140					Fair
29/10	304 000 01318 00001 00000 10140					Weak

XPA2 m

Sunday/Tuesday

September 2015

1800z	**14538kHz**	**1820z**	**13538kHz**	**1840z**	**12138kHz**	
01/09	01464 00001 00000 10140					Fair, QSB2
06/09	02776 00001 00000 10140					Extremely strong
08/09	NRH					Conditions poor
13/09	02062 00079 71299 45157					Fair to strong
15/09	02062 00079 71299 45157					Strong, QSB
20/09	08630 00001 00000 10140					Extremely strong
22/09	08053 00091 90355 34267					Very strong
27/09	08053 00091 90355 34267					Very strong
29/09	04826 00001 00000 10140					Very strong

October 2015

1500z	**16338kHz**	**1520z**	**14538kHz**	**1540z**	**13538kHz**	
04/10	05599 00001 00000 10140		[1500z Extremely weak]			Strong
06/10	00962 00093 24053 22106					Very strong
11/10	00962 00093 24053 22106					Strong
13/10	Unprocessable					Very weak
18/10	05436 00001 00000 10140					Fair
20/10	08167 00069 97215 15614					Very strong
25/10	08167 00069 97215 15614					Extremely strong
27/10	08167 00069 97215 15614		[1520z Weak]			Very strong

XPA2 p

Sunday/Friday

September 2015

1500z	**16147kHz**	**1520z**	**14947kHz**	**1540z**	**14447kHz**	
04/09	03631 00001 00000 10140					Extremely strong
06/09	06731 00001 00000 10140					Extremely strong
11/09	NRH Conditions very pootr					
13/09	06149 00149 00491 34431					Extremely strong
20/09	04753 00001 00000 10140					Extremely strong
25/09	01982 00001 00000 10140					Extremely strong
27/09	05802 00001 00000 10140					Very strong

October 2015

1500z	**16147kHz**	**1520z**	**14663kHz**	**1550z**	**14447kHz**	
02/10	02481 00001 00000 10140					Extremely strong
04/10	08217 00001 00000 10140			[1500z Very weak, 1520z Weak]		Strong
09/10	01327 00001 00000 10140					Very strong
11/10	04962 00001 00000 10140					Strong
18/10	02037 00135 53084 65644					Fair
23/10	01848 00001 00000 10140					Very strong
25/10	07728 00001 00000 10140					Very strong
30/10	08530 00001 00000 10140					Extremely strong

XPA2 r

Friday/Saturday

September 2015

1900z	**16167kHz**	**1920z**	**14663kHz**	**1940z**	**13923kHz**	
04/09	03830 00001 00000 10140					Fair
05/09	08949 00001 00000 10140			[1500z 100kHz high]		Very strong
11/09	Too weak to process ... lasted 3m45s					
12/09	06977 00123 29666 51477			[3m45s lg]		Extremely strong
18/09	Msg ~ 2m53s lg			[Condx poor]		Extremely weak
19/09	Msg ~ 2m53s lg			[Condx poor]		Extremely weak
25/09	09314 00115 67265 03373					Very weak
26/09	06049 00001 00000 10140	[1900/1940z extremely weak]				Extremely strong

Ongoing problems with transmitter or personnel or recipient agent(s) relocated or travelling?

October 2015

1400z	**17462kHz**	**1420z**	**16114kHz**	**1440z**	**14828kHz**	
02/10	06210 00001 00000 10140			[1440z missed]		1400z Weak, noisy, 1400z Extremely strong
03/10	02422 00001 00000 10140					Extremely strong
09/10	07485 00067 98568 52154					Extremely strong

XPA2 r October 2015 continued:

10/10	07485 00067 98568 52154	Extremely strong
16/10	03474 00001 00000 10140	Strong
17/10	05952 00001 00000 10140	Extremely strong
23/10	09192 00049 71525 00767	Very strong
24/10	08490 00001 00000 10140	Very strong
30/10	00115 00089 18917 20230	Extremely strong
31/10	00115 00089 18917 20230	Extremely strong

Unscheduled, courtesy of Ary/tiNG:

XPA2

Wednesday/Friday

October 2015

0700z 16284kHz 0720z 18184kHz 0740z 19584kHz

20/10 00475 00121 31708 02523

00475 00121 31708 51141 64395 34813 27202 17845 12228 91839
70744 83587 51810 67073 78595 47781 12051 19040 22963 67882
14078 62497 97662 09512 50454 38045 71588 89655 49906 01838
27802 27099 94339 27602 61752 54104 92139 71789 19878 42833
07314 89075 15886 72641 57939 37505 76515 22350 63524 90876
09168 23455 80596 96956 63381 94829 53871 44589 42348 01733
60452 41007 78066 78879 40818 07530 51182 84179 27093 65561
17496 91720 51798 49857 74261 76279 10064 81233 16897 21718
57664 06565 40964 91852 77813 96410 21677 98555 80182 67175
72968 84107 68617 11489 00131 17316 10669 90707 64637 57855
77124 49980 99710 05308 28357 43108 58636 61593 07436 16232
16928 01267 43466 56178 42121 73662 44845 97599 99623 13370
06990 81713 35824 02523 *Courtesy Ary*

23/10 00475 00121 31708 02523 Weak

28/10 NRH

30/10 Null Message; weak signal - varying frequency - pirate or idiot?

HM01

HM01 has continued on the same frequencies and schedules during the past two months. Twice in the past two months, 27/9 to 5/10 and 11/10 to 21/10 the last digits of the callups did not increment..
The phenomeon of the 1600z transmission beginning with the previous day's callups before switching to the correct ones has continued. This led to an interesting event on 22/10 when the first callup was different from the previous day. As that callup had a last digit of 0 it had probably switched on or around the 2100z transmission the previous day. On 20/9 at 1600z a complete set of new callups appeared including one that contained a 9 in a position other that the last digit which is unusual. The expected callups had returned by 1800z on the same day. Presumably this was a mistake or some special event. Several files transmitted had the .F1C and .F1G extensions instead of .TXT. These were
50283311.F1C 50405140.F1C 36467402.F1G 36275063.F1G 36275063.F1G. As always, file names with F1C begin with 50 and those with F1G begin with 36.

Logs

HM01 11435kHz 1600z 1/9 [14054 68486 43761 48385 78521 86774] New callup position 3, 43761 = 46654376.TXT. TUE
HM01 11435kHz 1600z 2/9 [14054 68486 43761 48385 78521 86774] Same callups as yesterday. WED
HM01 11435kHz 1600z 3/9 [14054 68486 43761 48385 78521 86774] Same callups as past two days. THU
HM01 11435kHz 1600z 4/9 [14055 68487 43761 48386 78522 86775] FRI
HM01 11435kHz 1600z 5/9 [14056 68488 43762 48387 78523 86776] Started with yesterday's callups before switching to the correct ones. SAT
HM01 11435kHz 1600z 6/9 [14057 68489 43763 43681 78524 86777] New callup position 4, 43681 = 17384368.TXT. Started with yesterday's callups before switching to the correct ones. SUN
HM01 11435kHz 1600z 7/9 [88411 53581 43764 43681 78525 86778] New callups positions 1 and 2, 88411 = 25668841.TXT, 53581 = 60655358.TXT. Started with yesterday's callups before switching to the correct ones. MON
HM01 11435kHz 1600z 8/9 Present but too weak to copy. TUE
HM01 11435kHz 1600z 8/9 [88411 53581 43765 43682 78526 45511] New callup position 6, 45511 = 42844551.TXT. TUE
HM01 11435kHz 1600z 9/9 [88412 53582 43766 43683 78527 45511] Started with yesterday's callups before switching to the correct ones. WED
HM01 11435kHz 1600z 10/9 [88413 53583 43767 43684 78528 45512] THU
HM01 11435kHz 1600z 11/9 [88414 53584 43768 43685 63761 45513] New callup position 5, 63761 = 62586376.TXT. Started with yesterday's callups before switching to the correct ones.
HM01 11435kHz 1600z 12/9 [88415 53585 87181 43686 63761 45514] New callup position 3, 87181 = 55288718.TXT. SAT
HM01 11435kHz 1600z 13/9 [88416 53586 87181 43687 63762 45515] Started with yesterday's callups before switching to the correct ones. SUN
HM01 11435kHz 1600z 14/9 [88417 53587 87182 43688 63763 45516] Started with yesterday's callups before switching to the correct ones. MON
HM01 11435kHz 1600z 15/9 [88541 53588 87183 64201 63764 45517] New callups positions 1 and 4, 88541 = 26588854.TXT, 64201 = 66066420.TXT. Started with yesterday's callups before switching to the correct ones.
HM01 11435kHz 1600z 16/9 [88541 53589 87184 64201 63765 45518] WED

HM01 11435kHz 1600z 17/9 [88542 58771 87185 64202 63766 45519] New callup position 2, 58771 = 25165877.TXT. THU
HM01 11435kHz 1600z 18/9 [88543 58771 87186 64203 63767 33111] New callup position 6, 33111 = 50283311.F1C. FRI
HM01 11435kHz 1600z 19/9 [88544 58772 87187 64204 63768 33111] Started with yesterday's callups before switching to the correct ones. SAT
HM01 11435kHz 1600z 20/9 [17569 26691 54011 50637 44144 14767] All new callups including two containing 9s. 17569 = 76421756.TXT, 26691 = 74122669.TXT, 54011 = 07375401.TXT, 50637 = 36275063.F1G, 44144 =23504414.TXT, 14767 = 13641476.TXT. SUN
HM01 11435kHz 1600z 20/9 [88545 58773 87188 64205 63769 33112] Has reverted to the expected callups since 1600z.
HM01 11435kHz 1600z 21/9 [88546 58774 87189 64206 12371 33113] MON
HM01 11435kHz 1600z 22/9 [88547 58775 85861 64207 12371 33114] New callup position 3, 85861 = 76148586.TXT. Started with yesterday's callups before switching to the correct ones.
HM01 11435kHz 1600z 24/9 [35651 58777 85862 56241 12373 33116] New callups positions 1 and 4 35651 = 20413565.TXT, 56241 = 00065624.TXT. THU
HM01 11435kHz 1600z 26/9 [35651 72261 85863 56241 12374 33117] New callup position 2, 72261 = 36477226.TXT. SAT
HM01 11435kHz 1600z 27/9 [35652 72261 85864 56242 12375 33118] SUN
HM01 11435kHz 1600z 28/9 [35652 72261 85864 56242 12375 33118] Same callups as Sunday. MON
HM01 11435kHz 1600z 29/9 [35652 72261 85864 56242 12375 33118] Same callups as yesterday. TUE
HM01 11435kHz 1600z 30/9 [35652 72261 85864 56242 12375 33118] Same callups as yesterday. WED
HM01 11435kHz 1600z 1/10 [35652 72261 85864 56242 12375 33118] Same callups as yesterday. THU
HM01 11435kHz 1600z 2/10 [35652 72261 85864 56242 12375 33118] Same callups as yesterday. FRI
HM01 11435kHz 1600z 3/10 [35652 72261 85864 56242 12375 33118] Same callups as yesterday. SAT
HM01 11435kHz 1600z 4/10 [35652 72261 85864 56242 12375 33118] Same callups as yesterday. SUN
HM01 11435kHz 1600z 5/10 [35652 72261 85864 56242 12375 33118] Same callups as yesterday. MON
HM01 11435kHz 1600z 6/10 [74024 51402 63446 82454 27666 87101] All new callups since yesterday, started with what should have been yesterday's numbers. 74023 51401 63445 82453 27665 87101.
74024 = 36467402.F1G, 51402 = 50405140.F1C, 63446 = 60876344.TXT, 82454 = 30568245.TXT, 27666 = 00712766.TXT, 87101 = 21528710.TXT
HM01 11435kHz 1600z 7/10 [74025 51403 63447 82455 27667 87102] Started with yesterdays callups before switching to the correct ones. WED
HM01 11435kHz 1600z 8/10 [74026 51404 83051 82456 01561 87103] New callup positions 3 and 5, 83051 = 01278305.TXT, 01561 = 36060156.TXT. Started with yesterday's callups before switching to the correct ones. THU
HM01 11435kHz 1600z 9/10 [74027 51405 83051 82457 01561 87104] Started with yesterday's callups before switching to the correct ones. FRI
HM01 11435kHz 1600z 10/10 [74028 51406 83052 82458 01562 87105] Started with yesterday's callups before switching to the correct ones. SAT
HM01 11435kHz 1600z 11/10 [74029 51407 83053 82459 01563 87106] Started with yesterday's callups before switching to the correct ones. SUN
HM01 11435kHz 1600z 12/10 [74029 51407 83053 82459 01563 87106] Same callups as yesterday. MON
HM01 11435kHz 1600z 13/10 [74029 51407 83053 82459 01563 87106] Same callups as yesterday. TUE
HM01 11435kHz 1600z 14/10 [74029 51407 83053 82459 01563 87106] Same callups as yesterday. WED
HM01 11435kHz 1600z 15/10 [74029 51407 83053 82459 01563 87106] Same callups as yesterday. THU
HM01 11435kHz 1600z 16/10 [74029 51407 83053 82459 01563 87106] Same callups as yesterday. FRI
HM01 11435kHz 1600z 17/10 [74029 51407 83053 82459 01563 87106] Same callups as yesterday. SAT
HM01 11435kHz 1600z 18/10 [74029 51407 83053 82459 01563 87106] Same callups as yesterday. SUN
HM01 11435kHz 1600z 19/10 [74029 51407 83053 82459 01563 87106] Same callups as yesterday. MON
HM01 11435kHz 1600z 20/10 [74029 51407 83053 82459 01563 87106] Same callups as yesterday. TUE
HM01 11435kHz 1600z 21/10 [74029 51407 83053 82459 01563 87106] Same callups as yesterday. WED
HM01 11435kHz 1600z 22/10 [14740 51408 83054 55021 01564 87107] Started with the same callups as the last 11 days except that 1st callup was new (14740). The transmission stopped and then restarted with the correct callups all with the last digit incremented by 1. New callup position 4. 55021 = 36015502.F1G. THU
HM01 11435kHz 1600z 23/10 [14742 51409 83055 55021 01565 87108] New callup position 1. 14741 = 37831474.TXT. FRI
HM01 11435kHz 1600z 24/10 [14743 48831 83056 55022 01566 87109] New callup position 2, 48831 = 88354883.TXT. SAT
HM01 11435kHz 1600z 25/10 [14744 48831 83057 55023 01567 67781] New callup position 6, 67781 = 46556778.TXT. SUN
HM01 11435kHz 1600z 26/10 [14745 48832 83058 55024 36881 67781] New callup position 5, 36881 = 01533688.TXT. MON
HM01 11435kHz 1600z 27/10 [14746 48833 83059 55025 36881 67782] TUE
HM01 11635kHz 1800z 28/10 [14747 48834 53871 55026 36882 67783] New callup position 3, 53871 = 05055387.TXT WED
HM01 11435kHz 1600z 29/10 [14748 48835 53871 55027 36883 67784] Up late. THU
HM01 11435kHz 1600z 30/10 [14749 48836 53872 55028 36884 67785] FRI
HM01 11435kHz 1600z 31/10 [32431 48837 53873 55029 36885 67786] New callup position 1, 32431 = 82643243.TXT SAT

Intercepts from Daniel in the Argentine followed by PoSW's effort from England:

10715kHz2200z	16/09[88541 53589 87814 64201 63765 45518] QSA2	DanAR	WED
2200z	18/09[88543 58771 87186 64203 63767 33111] QSA2	DanAR	FRI
2230z	23/09[88548 58776 85861 64208 12372 33115] QSA 2	DanAR	WED
2230z	05/10[51401 63445 82453 27665 87100 74023] QSA1	DanAR	MON
2200z	09/10[74027 51405 83051 82457 01561 87104] QSA2	DanAR	FRI
2200z	12/10[74029 51407 83053 82459 01563 87106] QSA2	DanAR	MON
2200z	14/10[74029 51407 83053 82459 01563 87106]QSA2	DanAR	WED
2200z	19/10[????? 51407 83053 82459 01563 87106]QSA2	DanAR	MON
17480kHz2200z	08/09[88411 53581 43765 43682 78526 45511] QSA2	DanAR	TUE
2200z	10/09[88413 53583 43767 43684 78528 45512]Weak	DanAR	THU
2200z	15/09[88541 53588 87183 64201 63764 45517] QSA2 QSB2	DanAR	TUE
2200z	17/09[88542 58771 87185 64202 63766 45519] QSA3	DanAR	THU
2230z	22/09[88547 58775 85861 64207 12371 33114] QSA 3	DanAR	TUE
2200z	06/10[51402 63446 82454 27666 87101 74024] QSA2	DanAr	TUE
2230z	08/10[74026 51404 83051 82456 01561 87103] QSA3	DanAR	THU
2230z	13/10[74029 51407 83053 82459 01563 87106] QSA3	DanAR	TUE
2200z	15/10[74029 51407 83053 82459 01563 87106] QSA3	DanAR	THU
2230z	22/10[14471 51408 83054 55021 01564 87107] QSA3	DanAR	THU

PoSW writes:

Signals from the mixed-mode station were somewhat mediocre in September, often it was just about possible to tell that there was something on frequency but generally unreadable,
things improved somewhat in the second half of October:-

2-Sept-15, Wednesday:- 0759 UTC, 9,065 kHz, "14054 68486 43761 48385 78521 86774", peaking S9 although audio level somewhat low, a better signal from HM01 than in the last few days. Data noise started at 0802:35s UTC.

4-Sept-15, Friday:- 0800 UTC, 9,065 kHz, weak signal, unreadable.

6-Sept-15, Sunday:- 0700 UTC, 9,330 kHz, very weak, unable to confirm as HM01.

7-Sept-15, Monday:- 0700 UTC, 9,330 kHz, weak, unreadable signal.

12-Sept-15, Saturday:- 0659 UTC, 13,435 kHz. Very weak signal, could only make out some of the 5Fs, "8?414 53584 43768 43685 ??376 46613", all "query", was sinking into the noise as I listened.

14-Sept-15, Monday:- 0559 UTC, 10,345 kHz, weak signal, thought I heard "88416 53586 "
in there somewhere.

25-Sept-15, Friday:- 0714 UTC, 9,330 kHz, transmission in progress, best signal from HM01 this month, over S9, heard 5Fs, "35651 58777 85862 56241 12373 33116", did not stop for the break at around twenty minutes past the hour, stopped at 0725 UTC. Call-up in progress when checked again just after 0729, data at 0732:10s.

26-Sept-15, Monday:- 0729 UTC, 9,330 kHz, S9 carrier but audio low, "35652 72261 85864 56242 12375 33117", all "?".

29-Sept-15, Tuesday:- 0744 UTC, 13,435 kHz, transmission in progress, S7 with QSB but audio better than usual, heard 5Fs, "35652 72261 85864 56242 12375 33118", interference from the rapidly swept carrier which resides here.

7-Oct-15, Wednesday:- 0730 UTC, 9,330 kHz, very weak signal, unreadable.

14-Oct-15, Wednesday:- 0730 UTC, 9,330 kHz, surprised to find the best signal from Cuba for the past couple of weeks, S9 with the usual variations, "74029 51407 83053 82459 01563 87106", data noise started just before 0732 UTC.
0759 UTC, 9,065 kHz, 5Fs as earlier, S7 to S8.

18-Oct-15, Sunday:- 0740 UTC, 9,330 kHz, transmission in progress, heard 5Fs, "74029 51407 83053 82459 01563 87106", same as heard on Wednesday. S9 signal with QSB, strong FSK signal started up on the HF side shortly after being tuned in.

19-Oct-15, Monday:- 0836 UTC, 9,065 kHz, transmission in progress, 5Fs still unchanged from the past few days.

21-Oct-15, Wednesday:- 0735 UTC, 9,330 kHz, transmission in progress, over S9 with good audio, heard 5Fs, "74029 51407 83053 82459 01563 87106", unchanged.

22-Oct-15, Thursday:- 0742 UTC, 13,435 kHz, a surprisingly strong signal with good audio,
heard 5Fs, "14740 51407 83053 82459 01563 87106", so one of the 5F groups has changed. Voice stopped just before 0750 UTC.
0758 and 20s UTC, 11,635 kHz, starting up with 5Fs as earlier, over S9, best copy on this frequency for ages.
0858:20 UTC, 11,462 kHz, S8 to S9, again best HM01 on this frequency for a while.
1004 UTC, 12,180 kHz, transmission in progress, peaking S9 with rapid QSB, again by far the best signal on 12,180 for a long time.

23-Oct-15, Friday:- 0728 UTC, 9,330 kHz, starting up after the break, the 5F groups are on the move, "14741 51408 83054 55021 01564 87107", peaking S9 with the usual fading.
0758 UTC, just after, 9,065 kHz, 5Fs as earlier, S9, data started at 0801:45s UTC.

26-Oct-15, Monday:- 0728 UTC, just after, 9,330 kHz, "14744 48831 83057 55023 01567 67781", S9.

27-Oct-15, Tuesday:- 0828:25s UTC, 11,635 kHz, after the break, "14745 48832 83058 55024 36881 67781", up to S9.

DATA transmissions

October 2015

FSK POL 7863kHz 0300z	01/10[Too weak for decode]0301z Weak Associated E11 253/00	JkC	THU
FSK POL 7863kHz 0305z	01/10[Too weak for decode]0306z Weak	JkC	THU
FSK POL 7371kHz 0900z	02/10[0554 (R5) 00000 (R10)]0901z Fair Associated S11a 484/00	JkC	FRI
FSK POL 7371kHz 0905z	02/10[0554 (R5) 00000 (R10)]0906z Fair	JkC	FRI
FSK POL 9431kHz 1005z	02/10[0675 (R5) 00000 (R10)]1006z Fair Associated S11a 426/00	JkC	FRI
FSK POL 9431kHz 1010z	02/10[0675 (R5) 00000 (R10)]1011z Fair	JkC	FRI
FSK POL 13575kHz 1405z	02/10[NRH]1406z Associated M03 (879) also NRH	JkC	FRI
FSK POL 13575kHz 1410z	02/10[NRH]1411z	JkC	FRI
FSK POL 15632kHz 1525z	04/10[0221 (R5) 00000 (R10)]1526z Fair Associated S11a 228/00	JkC	SUN
FSK POL 15632kHz 1530z	04/10[0221 (R5) 00000 (R10)]1531z Fair	JkC	SUN
FSK POL 15632kHz 1525z	05/10[Too weak for decode]1526z Weak Associated E11 228/00	JkC	MON
FSK POL 15632kHz 1530z	05/10[Too weak for decode]1531z Weak	JkC	MON
FSK POL 8803kHz 1305z	08/10[No decode]1306z Fair Associated M03 437/00	JkC	THU
FSK POL 8803kHz 1310z	08/10[No decode]1311z Fair	JkC	THU

FSK POL 14972kHz 1245z	13/10[0132 (R5) 00000 (R10)]1246z Strong Associated E11 133/00	JkC	TUE
FSK POL 14972kHz 1250z	13/10[0132 (R5) 00000 (R10)]1251z Strong	JkC	TUE

Ary's offering here fully illustrates the link between Polish FSK and E11a

POL-FSK, 10728 kHz, 20-10, 0630/0635 UTC, FSK 100/625
0574 0574 0574 0574 0574
88888 88888 97804 42162 16087 23470 55237 21937 25926 25373
46016 60984 70010 34971 05553 91753 84169 22547 92759 86558
11128 69889 92697 46862 66917 85063 81579 09304 58697 84463
75898 74341 86098 52428 88888 88888
00036 00036

E11a, 10800 kHz, 20-10, 0645 UTC, USB
512/32 Attention
97804 42162 16087 23470 55237 21937 25926 25373 46016 60984
70010 34971 05553 91753 84169 22547 92759 86558 11128 69889
92697 46862 66917 85063 81579 09304 58697 84463 75898 74341
86098 52428
Attention, rpt msg, out *Courtesy Ary*

Pol-FSK 7317kHz0900z 20/10, 0900/0905 UTC, FSK 100/625
0554 0554 0554 0554 0554
88888 88888 51805 11075 41545 39996 09389 15736 70099 87710
50275 58377 67143 25292 74319 20177 07066 71863 99869 64230
56086 01903 30641 83634 83926 03950 83828 84815 81597 66276
09552 05338 82660 63096 27231 25291 88888 88888
00038 00038 Courtesy Ary

S11a, 7317 kHz, 20-10, 0915 UTC, USB Same freq, 15m after Pol-FSK start
486/34 Vnimanie
51805 11075 41545 39996 09389 15736 70099 87710 50275 58377
67143 25292 74319 20177 07066 71863 99869 64230 56086 01903
30641 83634 83926 03950 83828 84815 81597 66276 09552 05338
82660 63096 27231 25291
Vnimanie, rpt msg, konec *Courtesy Ary*

Thanks Ary!

FSK POL 8803kHz 1305z	22/10[0437 (R5) 00000 (R10)]1306z Strong Associated M03 = 437/00	JkC	THU
FSK POL 8803kHz 1310z	22/10[0437 (R5) 00000 (R10)]1311z Strong	JkC	THU
FSK POL 7371kHz 0900z	27/10[0554 (R5) 00000 (R10)]0901z Strong Associated S11a = 484/00	JkC	TUE
FSK POL 7371kHz 0905z	27/10[0554 (R5) 00000 (R10)]0906z Strong	JkC	TUE
FSK POL 9431kHz 1005z	27/10[0675 (R5) 00000 (R10)]1006z Strong Associated S11a = 426/00	JkC	TUE
FSK POL 9431kHz 1010z	27/10[0675 (R5) 00000 (R10)]1011z Strong	JkC	TUE
FSK POL 8274kHz 1030z	27/10[NRH]1031z Associated E11 = ???	JkC	TUE
FSK POL 8274kHz 1035z	27/10[NRH]1036z	JkC	TUE
FSK POL 14972kHz 1245z	27/10[0132 (R5) 00000 (R10)]1246z Strong Associated E11 = 133/00	JkC	TUE
FSK POL 14972kHz 1250z	27/10[0132 (R5) 00000 (R10)]1251z Strong	JkC	TUE
FSK POL 5358kHz 1305z	28/10[0547 (R5) 00000 (R10)]1306z Strong Associated M03 = 543/00	JkC	WED
FSK POL 5358kHz 1310z	28/10[0547 (R5) 00000 (R10)]1311z Strong	JkC	WED

X06 Mazielka (1c) logs section

Date	Day	UTC	Freq	Scale	Monitor	Comments
20150901	Tue	0916-0918	20336	246531	Peter/UK	G16
20150901	Tue	1145-1151	18523	325614	Peter, Antonio/IT	Fair in UK, G392
20150902	Wed	0630-0635	13838	256341	Antonio	G311
20150902	Wed	0825-0831	17445	362154	Peter	Good, G32
20150902	Wed	0956-0958	18197	214356	Peter	Poor, G24
20150902	Wed	1105-1109	16115	215346	Peter	Fair, G25
20150902	Wed	1421-1427	16013	645321	Peter	Fair, G401 (new group)
20150903	Thu	1309-1318	16132	352416	Peter, Antonio	G43
20150904	Fri	0822-0838	14570	324615	Peter	Good but fading to poor by end, G52
20150904	Fri	1016-1032	12215	361245	Peter	Good but fading to poor by end, G53
20150904	Fri	1028-1030	10547	625413	Peter	S1 (only visible), G56
20150906	Sun	1606	13527	1--6--	Schorschi	X06b before E07 with S9
20150906	Sun	1628	13527	1--6--	Schorschi	X06b comeback + high test tones, S9
20150909	Wed	1003-1004	14944	621543	Peter	Alert 3.1 S1, G102
20150909	Wed	1056-1101	14944	621543	Peter	3.2 Much stronger, G102
20150909	Wed	1159-1206	15878	621543	Schorschi	3.3 I. p., S9, G102
20150911	Fri	0837-0843	10653	356412	Peter	Fair and clear, G126
20150911	Fri	1016-1022	14863	615243	Peter	Good, G127
20150914	Mon	0925-0928	16117	463125	Peter	Good, G77
20150914	Mon	1304-1305	15656	364152	Peter	Weak, G73
20150915	Tue	0857	15687	154263	Peter	Weak, G148
20150915	Tue	1204	17454	325614	Peter	Weak, G400
20150917	Thu	1835	11576	1-----	Schorschi	X06b single tone with S9
20150918	Fri	0830-0834	16219	324615	Peter	Very good, G189
20150918	Fri	0930-0947	18197	645321	Peter	Good, G194
20150918	Fri	1009-1016	12215	361245	Peter	Good, G190
20150918	Fri	1400	16147	1-----	Schorschi	X06b single tone before XPA2 (S9)
20150921	Mon	0732-0741	18750	641523	Peter	Fair, G337
20150922	Tue	1706	14538	21-216	Schorschi	X06b before XPA2 with S9
20150922	Tue	1707	14538	1-6154	Schorschi	X06b again (S9) in H3E/J3E-U
20150923	Wed	0510	11464	21-216	Antonio	X06b before E07a
20150928	Mon	1835	12108	1--6--	Schorschi	X06b before E07 in A3E with S9
20150930	Wed	1118	14944	621543	Peter	Weak, faded away after 3 mins, G297
20151001	Thu	0654-0659	17468	436512	Peter	Good, G44
20151001	Thu	1235-1237	19405	352416	Peter	Alert 2 (G43) 1 Only visible
20151001	Thu	1242-1246	16132	352416	Peter	2.2 S1
20151002	Fri	0621-0626	16320	241563	Peter	Good, G50
20151002	Fri	0827	14570	324615	Peter	Weak, G52
20151002	Fri	0933-0942	18197	645321	Peter, RNGB, Jim/US	Strong and clear, G57
20151003	Sat	0500	11464	1--6--	Ary/NL	X06b before E07 (9064kHz @0501 UTC)
20151003	Sat	0733-0739	19511	314265	Peter	Fair, G11
20151003	Sat	0900-0911	14970	216354	Danix/PL	R
20151003	Sat	1008-1024	19878	231654	Danix	Alert 2 (G309) 1
20151003	Sat	1023-1035	18245	231654	Peter	2.2 S9
20151004	Sun	1320-1328	13481	452163	Peter	S1, G66
20151004	Sun	1632	13376	1--6--	Schorschi	X06b before E07 in A3E with QSA2(1)
20151005	Mon	0807	14631	362154	Antonio/IT	R
20151005	Mon	1020	16103	465321	Antonio	Alert 2 (R) 1
20151005	Mon	1037-1043	14547	645321	Schorschi	2.2 Fair
20151005	Mon	1537-1541	12199	532614	Peter	G4
20151006	Tue	0805	11462	165423	Peter	S1, only visible, G12
20151006	Tue	0909	20336	246531	Peter	S1, only visible, G16
20151006	Tue	1140	17454	325614	Antonio	New frequency, G392
20151008	Thu	0833-0836	16153	153624	Peter	Good and clear, G249
20151008	Thu	0949-0953	13506	164532	Peter	Good and clear, G106
20151008	Thu	1448-1459	10214	263145	Peter	Fair, G111
20151008	Thu	1520	10535	564213	Peter	Fair, G118
20151009	Fri	0847-0903	10635	356412	Peter	Only visible, G126
20151009	Fri	0956	19611	256134	Peter	Only visible, G125
20151009	Fri	1024	14358	154263	Antonio,Ary	R
20151009	Fri	1032-1041	12213	615243	Peter	Fair, G127
20151009	Fri	1221	14650	215346	Peter	S1, only visible, G124
20151010	Sat	0629-0630	13368	1--6--	Ary	X06b + test tones before XPA(2)
20151011	Sun	1219-1221	15710	261453	Peter	Good, G138
20151012	Mon	0929-0937	13517	463125	Peter	Good, G77
20151012	Mon	1254-1256	14863	364152	Peter	Weak, G73
20151012	Mon	1818	10243	1--6--	Schorschi	X06b before E07 with QSA2 in A3E
20151013	Tue	0809-0812	13506	534216	Peter	Fair, G87
20151013	Tue	1406-1408	14547	645321	Danix	R
20151013	Tue	1406	16338	1--6--	Schorschi	X06b before XPA2 with QSA2 in J3E-U
20151013	Tue	1838	10343	6-----	Danix	X06b singl tone variant before M12
20151014	Wed	0737-0738	13369	412356	Peter, Antonio	Very good, G97
20151014	Wed	0757-0759	13419	465132	Peter	Good, G100
20151014	Wed	0854	16116	134265	Schorschi	Shortie with QSA2, G90
20151014	Wed	1659-1700	12109	431625	Danix	R
20151015	Thu	0747-0748	13448	162543	Peter	Alert 1 (G175) 1 Fair
20151015	Thu	0800-0801	13448	162543	Peter	1.2 Weak

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20151015 Thu 1234-1237 18575 352416 Peter       Fair, G179
20151016 Fri 0829-0848 14570 324615 Peter       Good, G189
20151016 Fri 0942-0948 16103 645321 Peter       Alert 7 (G194) 1 Fair
20151016 Fri 0947-0958 18197 645321 Peter       7.2 Fair
20151016 Fri 1002-1018 12215 361245 Peter       Fair, G190
20151016 Fri 1013-1022 12178 645321 Antonio     7.3
20151016 Fri 1104-1105 16103 645321 Peter       7.4 fair
20151016 Fri 1106-1108 18197 645321 Peter       7.5 Fair
20151019 Mon 0737-0747 14377 432516 Antonio,
                                    Peter       G341
20151019 Mon 0805-0810 14845 641523 Antonio     New frequency, G337
20151019 Mon 0814-0817 13452 165324 Peter       Fair, G145
20151019 Mon 1551-1604 13395 532614 Peter,Danix S9, G147, followed by CROWD36
20151020 Tue 0757-0806 11462 165423 Peter       G151, starting "165432"
20151021 Wed 1107-1113 14650 215346 Peter       S1, G167
20151022 Thu 0955-1000 13506 164532 Peter       Good, G252
20151022 Thu 1413-1418 11561 263145 Peter       Fair, G256
20151022 Thu 1530-1536 10535 564213 Danix,Peter Good, G263 (single tone at 1529)
20151026 Mon 0902-0905 13423 421635 Peter       G220
20151026 Mon 0937-0941 16117 463125 Peter       G222
20151026 Mon 0951-0952  9923 431625 Peter       G221
20151026 Mon 1244-1249 15656 364152 Peter       G73
20151026 Mon 1929-1940  8131 164532 Danix,Avare G204
20151027 Tue 1027-1042 16317 612534 Peter       Alert 2 (G234) 1 S3-8 fading)
20151027 Tue 1043-1054 13510 612534 Peter, Jim  2.2 Good, strong and consistent
20151027 Tue 1123-1125 13420 534216 Peter       Good and strong, G232
20151028 Wed 0751-0752 18177 164253 Danix,
                                    Antonio     R
20151028 Wed 0853-0903 13419 465132 Peter       Good, G246
20151028 Wed 0853-0905 16116 134265 Peter       Very good, G90
20151028 Wed 1133-1334 18660 621543 Peter,
                                    Antonio     Shortie, G248
20151030 Fri 1104      12224 615243 Peter       New freq, G305

1) Again at 1635 in H3E-U
    2) Test tones and XPA were weaker than X06b
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Thanks Jochen and team!

Gizza Job

PoSW's Items of Interest in the Media:-

Mostly from *The Times* newspaper, about the only daily which concerns itself with real news and articles of interest to a general readership, most papers are more and more going for the female reader, as typified by the *Daily Mail* , gradually becoming a daily version of a women's magazine, obsessed with the shallow, empty-headed world of the "celebrity" culture of show business - for the most part I do not know who these people are - and an increasing emphasis on what I believe is called "lifestyle".

So starting off with an obituary from *The Times* of 4-September, of one "General Manuel Contreras", a nasty piece of work by all accounts, described as "Ruthless spy chief in Pinochet's Chile", which says, " General Manuel Contreras was the implacable enforcer of the iron-fist rule of the Chilean dictator Augusto Pinochet.
While President Pinochet could boast that not even a leaf stirred in Chile without his knowing, it was Contreras who supplied the information. As head of the National Intelligence Directorate (DINA) from 1974 to 1977 he was held responsible for thousands of deaths and 'disappearances' in the wake of Pinochet's coup against President Allende's left-wing government in 1973. When he died he was serving prison sentences totalling more than 500 years.
At the time of the coup, Contreras was a 44 year-old lieutenant-colonel commanding a regiment of engineers based at Tejas Verdes, a seaside resort. He quickly turned it into an efficient interrogation and execution centre. His tentacles reached to Washington where he planned the assassination of Allende's former defence minister, Orlando Letelier, along with his American assistant, in a car bombing in 1976. He dismissed those who claimed to have been tortured by him as 'a bunch of liars'.
Juan Manuel Guillermo Contreras Sepulveda was born into a military family in Santiago in 1929. He passed out from the Chilean military academy in 1947 as the top cadet in his year. Pinochet was one of his instructors and was later godfather to one of his children.
Contreras enjoyed rapid promotion in the Chilean army and was given the task of centralising the various intelligence services. By mid-1974 DINA's operating methods were well established: squads dressed in civilian clothes and driving pick-ups would conduct lightning raids under the cover of the curfew.
Contreras met Maria Teresa Stevenson, an admiral's daughter, and married her in 1953.
Their son, Manual Orlando was a fierce defender of his father's reputation. He began a relationship with his young secretary at DINA whom he married in prison in 2010.
Contreras was forced into retirement after the assassination of Letelier. With the return of democracy in 1990, his immunity from prosecution was over. In 1995, the Supreme Court confirmed a seven-year sentence for his role in Letelier's death. He accumulated 59 convictions. Even Pinochet, who died in 2006, disowned Contreras insisting that he had enjoyed full autonomy.
General Manuel Contreras, Chilean secret police chief, was born on August 7, 1929. He died on August 7, 2015, aged 86."

New book with espionage theme:- I don't buy a paper every day but I happened to purchase *The Times* on 1-September and saw that they were in the process of publishing extracts from a new book by veteran writer Max Hastings, with the title, "The Secret War: Spies, Codes and Guerillas 1939-1945". On this particular day the subject was the famous Richard Sorge, a German who was in reality spying for the Russians during World War 2 and made use of radio in this espionage activities. Some of the more interesting points, after covering Sorge's early life:- "In 1929 the Red Army's Fourth Department - later the GRU - offered him an overseas assignment. He requested China, and arrived in Shanghai that November under cover as a freelance journalist, with a wireless operator in tow ….. The GRU decided to post him to Tokyo.
In preparation for this assignment, Sorge travelled to Germany, now Nazi ruled, to secure appropriate credentials. He met the publisher of the *Zeitschrift fur Geopolitik*, an ardent National Socialist, and secured from him both a contract as a 'stringer' and a letter of introduction to the German embassy in Tokyo …..he became a member of the National Socialist Party.
Thus armoured, this avowed Nazi set off for Tokyo via the United States with a wireless operator, Bruno Wendt of the Red Army, carrying in his luggage a copy of the 1933 German *Statistical Yearbook* to provide the key for his coding. Sorge was 38 and on the threshold of one of the greatest espionage careers in history. In Japan he established a relationship with the German ambassador Herbert Von Dirksen, a Prussian aristocrat; and a much closer one with Colonel Ott.
Sorge, with characteristic recklessness began an affair with Ott's wife. ……. The colonel was an austere and unbending figure who perhaps saw qualities in Sorge which he envied, not least exuberance. Sorge threw himself into acquiring information about the country, its people , history and culture forming a library of over a thousand books, although he never learned to read Japanese or speak it well. ……. Meanwhile, patiently and skilfully, Sorge built up his informants for Moscow..
Sorge once said, 'Spying work must be done bravely.' He became a famous figure in Tokyo's social, journalistic and diplomatic circles, careering about the city on a motorbike, drinking heroic quantities of alcohol, bedding every woman within his reach. ……. Sorge's priority was service to Moscow. As the weight of GRU material increased, so did the difficulties of transmitting it.
Wendt, his radio man, was incompetent, and Sorge insisted that a better man must be found. A new wireless operator and courier joined him from Moscow. Max Clausen held officer's rank in the Red Army.
Sorge persuaded a friend and fellow journalist, Gunther Stein, to allow the Soviet operator to message from his flat. Since Clausen dared not set up an external aerial, he attached two copper stranded wires, seven metres in length, around the room from which he transmitted. Anna Clausen, Max's adored wife, arrived in Tokyo from Moscow to share the wireless operator's hazardous existence.
Sorge's luck held. In 1938 Herbert Von Dirksen was invalided home. His successor as ambassador was none other than Colonel Ott. Sorge thenceforward found himself drafting the German embassy's dispatches for Berlin while transmitting his own to Moscow. On his 43rd birthday he was presented with a signed photograph of Nazi foreign minister Joachim Von Ribbentrop as a token of Berlin's appreciation for his services.
He sought to strengthen his cover by publicly taunting Soviet diplomats when he met them at receptions, but the stress of his fantastic high-wire act increasingly told on him, and was reflected in massive infusions of alcohol ….. One night he crashed his motorbike with agonising consequences - many days in hospital and the loss of his teeth. For the rest of his life he could only eat meat if it was minced.
Sorge's surreal relationship with Colonel Ott's mission took on a new twist when he was offered a staff post as press attaché. He declined, because he was fearful of the security checks into his past that acceptance would have provoked, but he worked for four hours a day in the embassy building, while assuming a new journalistic role as a stringer for the *Frankfurter Zeitung*. It was hardly surprising that in October the Japanese police foreign section committed an agent to follow Sorge. They suspected that he was spying ….. for Germany.
During the months that followed, stresses on the network intensified. Max Clausen became grossly overweight and his health deteriorated. Bedridden for some time, he had to get his wife, Anna, to assemble the transmitter before tapping out messages to Moscow from his sickroom. But the radio man kept sending: in 1940 he transmitted 60 times, sending 29,179 words of Sorge's wisdom ……. Japan assumed a pivotal importance after Germany invaded the Soviet Union, a development which deeply distressed Sorge, as all those around him observed.
Ever more of his material was failing to reach the GRU because Clausen could not handle the stack of messages awaiting encryption and transmission. On August 20 however, a signal did get to its destination, saying that Japan's military leadership was still unwilling to enter the war, pending decisive German success in the West.
On Saturday, October 4, a further message stated that an early Japanese attack on Russia was now highly unlikely. This proved to be the last transmission Clausen ever made.
On October 10, 1941 the Tokyo security police arrested two members of Sorge's network.
One told all he knew. Clausen and Sorge were arrested in their homes. The wireless operator made no attempt to destroy his codes, and had preserved copies of scores of messages.
Sorge initially held out. ….. On October 24 however, the spy suddenly broke. He wrote with a pencil: 'I have been an international Communist since 1925,' then burst into tears.
Sorge's trial dragged on until September 1943, when he received a capital sentence. It was carried out on November 7 1944 at Tokyo's Sugamo prison."

"Spies, Codes and Guerrillas" by Max Hastings, published by William Collins at £30. One for inclusion in this year's letter to Santa, I think.

Southern English town to get Vietnam themed monument:- but not like the one they have in Washington DC with over 50,000 names of young Americans who died in that country for no good purpose. Whatever his faults may have been, the man who was the UK's Prime Minister in the late 1960's, Harold Wilson, refused to send British soldiers to take part in the war that Uncle Sam had gotten himself mired in in South East Asia, despite great pressure from the American government of the day. "Town plans monument to former communist leader", is the headline from the same issue of *The Times* as the Max Hastings article above, which says:- "A council has been criticised over plans to put up a monument to celebrate Ho Chi Minh, the former communist leader of Vietnam.
Newhaven town council is running a competition to design a tribute to Ho Chi Minh because he worked as a pastry chef on the Newhaven – Dieppe ferry after the First World War.
The leader of the Vietnamese nationalist movement was responsible for the massacre of thousands of his countrymen in the 1960's.
If the statue is erected it will be the East Sussex town's third tribute to him. A banner and a small statue have been in place for several years..
Maria Caulfield, the Conservative MP for Lewes, has criticised the competition.
She said: 'I agree that it is a laudable aim to want to promote international co-operation and friendly relations with other countries. However, I do not believe that a statue of a dead communist dictator should be a priority for the town council.'
Steve Saunders, the mayor of Newhaven, said, that the project would not be paid for by taxpayers and it could boost tourist links with Vietnam.
He added: 'I am conscious of the depth of feeling by some residents regarding the Vietnam War. I am sure that these will be properly addressed and considered during any discussions, before any memorial is proposed and in the assessment of the application to be sited in Newhaven.' "

And as an aside, with reference to Prime Minister Wilson's refusal to send British troops to Vietnam in the late 60's, I hadn't realised until last year that we had been there before. May 2014 saw the sixtieth anniversary of the battle of Dien Bien Phu, in what was then French Indo-China, and BBC Radio 4 did an hour-long documentary on the subject. The French were keen to hang on to their colonies, presumably for the same reason that the British wanted to keep theirs, for access to cheap raw materials, a secure market for their manufactured goods and to demonstrate to all and sundry that they were a "World Power".
The Vietnamese nationalists who were fighting to kick their French colonial masters out, surrounded and laid siege to the French at Dien Bien Phu. The French were not too worried as they believed they could be supplied by air and make a successful counter attack and break the siege, but against all expectations the Vietnamese were able to bring heavy artillery, including anti-aircraft guns, over mountain ranges and through forests to pound the French which eventually resulted in their defeat. The Americans were not directly involved although they supplied weapons and aircraft to the French, but as things got worse they were keen to become involved with troops on the ground but wanted another nation to join them, and according to the BBC documentary they approached the British government of the day to send troops, a request which was refused.

Baltic spy swap:- From *The Times* of 28-September comes a story from the paper's Moscow correspondent, Tom Parfitt, with the headline, "Russia and Estonia make Le Carre style spy exchange" - and I can't see a way of doing the acute accent over the last letter in "Carre" with this keyboard. The article says, "Russia and Estonia have exchanged two alleged spies on a bridge joining the countries in scenes reminiscent of a Cold Way thriller. Eston Kohver, who was sentenced to 15 years for espionage by a Russian court last month, was swapped for Aleksei Dressen, a former Estonian security policeman convicted of treason for passing state secrets to Russia.
Footage of the incident showed the two men being escorted by one plain-clothes handler each to the centre of the mist-shrouded bridge over the River Piusa and then handed over.
Mr Kohver's capture last year caused a diplomatic furore after Estonia alleged he had been snatched by armed Russian security men using stun and smoke grenades.
The veteran officer in the Estonian internal security service had been expecting to meet a Russian informant with tips about smugglers close to the border, according to Estonian officials.
Moscow insisted Mr Kohver had been on an underground spying mission inside Russian territory.
The arrest took place two days after President Obama had visited Tallinn, the Estonian capital, for talks.
Relations between Moscow and the the Baltic countries of Estonia, Latvia and Lithuania have become increasingly tense since 2004 when they joined NATO and the European Union.
Mr Dressen, an ethnic Russian, was arrested in 2012 at Tallinn airport as his wife Viktoria allegedly prepared to fly to Moscow carrying a memory stick of secret information. He was sentenced to 16 years and spent a year in jail.
In the most prominent spy swap of recent years, ten Russian sleeper agents in the United States were exchanged in 2010 at Vienna airport for four men jailed in Russia for spying.
The Russian agents included Anna Chapman who has since become a minor TV celebrity in Moscow."

Point to Ponder:- "To learn who rules over you, simply find out who you are not allowed to criticise". (Voltaire).

Thanks PoSW, excellent stuff indeed!

Spectre's NEWS ARTICLES

BBC NEWS 30/08/2015

Frederick Forsyth reveals MI6 spying past

The Day of the Jackal author Frederick Forsyth has revealed he was working for MI6 for more than 20 years.
The disclosure comes with the publication of the author's autobiography The Outsider: My Life.

Fans have long suspected that Forsyth, 77, acclaimed for his highly realistic spy novels, may have been involved with British intelligence.
He told the BBC it started when he was asked to send information from the Biafran War in Nigeria.

He said he was approached by an intelligence officer who asked him to "tell us what's going on" during the civil war, which lasted from 1967 to 1970.

The zeitgeist was different... the Cold War was very much on Frederick Forsyth

"For the last year of the Biafran War I was sending... both journalistic reports to the media and other reports to my new friend," he said.
He said MI6 wanted to know if it was true that many children were dying.
"The Foreign Office was denying that there were any dying children and they were passionate in supporting the dictatorship in Lagos, and it was, oddly enough, MI6 that had a different viewpoint," he said.
Forsyth said he saw "no harm" in confirming the truth that "children were dying like flies" in Biafra.

"It was controversial... but not about the security of our country," he told BBC News.

He added that, like many others, he was never paid for the work undertaken.

"There was a lot of volunteer assistance that was not charged for.
"The zeitgeist was different... the Cold War was very much on.
"If someone asked, 'Can you see your way clear to do us a favour?', it was very hard to say no."

Forsyth remains best known for novels such as The Day of the Jackal, The Odessa File and The Dogs of War.

'OK, Freddie!'

A former BBC and Reuters journalist, many of his fictional plots drew on his real-life experiences covering stories around the world.
Despite becoming an established author with the success of 1971's The Day of the Jackal - which earned Forsyth a three-book publishing deal and led to a hit film - he undertook missions to Rhodesia, South Africa and, at the height of the Cold War, East Germany.

As a kind of pay-off for his services, he said MI6 did approve passages from some of his later novels.

Forsyth said he was given a number to ring. He was told: "Send us the pages and we will vet them, and if they are too sensitive, we will ask you not to continue."

"But usually the response was: 'OK, Freddie!'"

Forsyth has sold some 70 million books, many of which have been adapted into films. His most recent novel was 2013's The Kill List.
He was awarded a CBE in 1997.

SALON.COM 26/09/2015

How to explain the KGB's amazing success identifying CIA agents in the field?

Paranoid CIA heads blamed Soviet moles, but the real reason for the repeated disasters was much simpler.

As the Cold War drew to a close with the fall of the Berlin Wall in November 1989, those at CIA headquarters in Langley, Virginia, finally hoped to resolve many long-standing puzzles.
he problem dated from the mid-'70s, the very time that James Angleton, the paranoid head of agency counterintelligence, was at last ushered out of office, to the relief of conscientious officers hitherto cast under a dark cloud of suspicion, their promotion delayed or, worse still, denied, and in some cases entire careers wrecked.

But could Angleton have been right? Some consistently maintained so, notably the late Bruce Bagley. Their argument was simple. How could these disasters have happened with such regularity if the agency had not been penetrated by Soviet moles?

The problem with this line of thought was that it did not so much overestimate CIA security as underestimate the brainpower of their Russian counterparts.

A name soon emerged from the KGB undergrowth: that of Yuri Totrov, a veritable legend who soon became known with grim humor as the shadow director of personnel at CIA.

The Cold War over, a senior and very experienced officer was dispatched to Japan to seek out Totrov and offer him a vast sum of money for his "memoirs." Totrov's retort was typically blunt. "Have you not read what is on my file at Langley? It says, 'Not to be Pitched.'"

So how, exactly, did Totrov reconstitute CIA personnel listings without access to the files themselves or those who put them together?

His approach required a clever combination of clear insight into human behavior, root common sense and strict logic.

In the world of secret intelligence the first rule is that of the ancient Chinese philosopher of war Sun Zi: To defeat the enemy, you have above all to know yourself. The KGB was a huge bureaucracy within a bureaucracy — the Soviet Union. Any Soviet citizen had an intimate acquaintance with how bureaucracies function. They are fundamentally creatures of habit and, as any cryptanalyst knows, the key to breaking the adversary's cipher is to find repetitions. The same applies to the parallel universe of human counterintelligence.

The difference between Totrov and his fellow citizens was that whereas others at home and abroad would assume the Soviet Union was somehow unique, he applied his understanding of his own society to a society that on the surface seemed unique, but which, in respect of how government worked, was not in fact that much different: the United States.

From the late 1950s at the Soviet mission in Thailand and later Japan, both deep within the American sphere of influence, Totrov first applied his methods to identifying U.S. intelligence officers in the field.

Back in Moscow he began systematically combing the KGB archives for consistent patterns observable in the postings of CIA counterparts. The research was extended to take in the records of the KGB's allies, Cuba and the Warsaw Pact. The open source literature from the United States was also exploited to the full. And wherever possible access was obtained to data compiled by the local police authorities.

What Totrov came up with were 26 unchanging indicators as a model for identifying U.S. intelligence officers overseas. Other indicators of a more trivial nature could be detected in the field by a vigilant foreign counterintelligence operative but not uniformly so: the fact that CIA officers replacing one another tended to take on the same post within the embassy hierarchy, drive the same make of vehicle, rent the same apartment and so on.

Why? Because the personnel office in Langley shuffled and dealt overseas postings with as little effort as required.
The invariable indicators took further research, however, based on U.S. government practices long established as a result of the ambivalence with which the State Department treated its cousins in intelligence.

Thus one productive line of inquiry quickly yielded evidence: the differences in the way agency officers undercover as diplomats were treated from genuine foreign service officers (FSOs). The pay scale at entry was much higher for a CIA officer; after three to four years abroad a genuine FSO could return home, whereas an agency employee could not; real FSOs had to be recruited between the ages of 21 and 31, whereas this did not apply to an agency officer; only real FSOs had to attend the Institute of Foreign Service for three months before entering the service; naturalized Americans could not become FSOs for at least nine years but they could become agency employees; when agency officers returned home, they did not normally appear in State Department listings; should they appear they were classified as research and planning, research and intelligence, consular or chancery for security affairs; unlike FSOs, agency officers could change their place of work for no apparent reason; their published biographies contained obvious gaps; agency officers could be relocated within the country to which they were posted, FSOs were not; agency officers usually had more than one working foreign language; their cover was usually as a "political" or "consular" official (often vice-consul); internal embassy reorganizations usually left agency personnel untouched, whether their rank, their office space or their telephones; their offices were

located in restricted zones within the embassy; they would appear on the streets during the working day using public telephone boxes; they would arrange meetings for the evening, out of town, usually around 7.30 p.m. or 8.00 p.m.; and whereas FSOs had to observe strict rules about attending dinner, agency officers could come and go as they pleased.

As soon becomes evident on reading, the fact that Totrov was able to produce telephone book-size volumes of CIA and other intelligence officers for KGB chief Yuri Andropov testified to the structural defects within the U.S. government in the relationship between its key operational departments in the sphere of foreign policy. All Totrov did, once apprised of this crucial flaw, was follow through schematically and draw out the pattern. This was human intelligence of the highest order and an acute embarrassment, once known, to those responsible for the conduct of U.S. foreign intelligence.

BOSTON GLOBE 28/09/2015

A former CIA officer on how a shutdown hurts national security

ecause Congress seems unable to carry out one of its fundamental responsibilities — approving an annual budget — the federal government could shut down on Oct. 1. Such shutdowns are costly — the Economist estimates that the 2013 shutdown cost the US economy $24 billion in lost output. Yet our lawmakers need to realize that such a drastic action can have adverse consequences beyond dollars and cents. Any shutdown could have serious deleterious effects on American national security.

To be clear, certain mission critical work will continue. Navy SEAL teams will be armed and on call. Nuclear missile silos will be staffed and at the ready. In less obvious ways, however, a government shutdown forces significant and underappreciated costs on national security.

As a CIA technical intelligence officer, I had first-hand experience with these costs during the last government shutdown in 2013. While a contingent of designated "excepted" government personnel were exempt from the shutdown and reported for duty, many CIA officers and support contractors were furloughed and ordered not to come to work. By law, furloughed personnel were even prohibited from voluntarily carrying out their duties.

As a result of the shutdown, some overseas missions that had taken months to organize and plan were postponed. Some work with foreign partners was put on the back-burner. Training to keep officers operationally honed was temporarily put on hold or ended mid-course.

As the threat of a shutdown loomed in 2013, CIA managers were forced to spend their time and efforts making certain that their components would be in full compliance with the shutdown, lest they ran afoul of Congress. This legal compliance extended to ordering CIA officers who had travelled overseas for official duties to fly immediately back to Washington prior to the Oct. 1 deadline. No doubt history is repeating itself now.

To be sure, America did not suffer a terrorist attack during the 2013 shutdown. And certainly, there are countless times in intelligence work when missions and projects get delayed or scrubbed for various reasons. Moreover, intelligence officers are seasoned in dealing with setbacks and adversity.

But intelligence operations, unlike many other government tasks, cannot simply be restarted after postponement — these operations often present a one-shot opportunity that, once lost, cannot be regained. (Not to mention that the trust and cooperation of foreign partners is difficult to sustain in the face of obvious legislative dysfunctionality that a shutdown exemplifies). As a result, a shutdown threatens to kill — permanently — potentially valuable intelligence operations.

Congress cannot ignore these real-world consequences of their actions. The nation faces many threats, and intelligence officers are an invaluable first line of defense. But they must be allowed to do their jobs. Dealing with a turbulent world is challenging enough without Congress making it more difficult.

If Congress insists on a shutdown, then President Obama should exercise his executive powers by declaring all personnel and activities in the US intelligence community excepted from the shutdown.

The advice lawmakers should heed is that a take-no-prisoner approach does not work well in resolving legislative conflicts, nor does it help the nation's security.

John D. Woodward Jr., a retired CIA officer, is a professor at the Pardee School of Global Studies at Boston University. The views expressed are his own.

THE INDEPENDENT 29/09/2015

MI6 spy Gareth Williams was 'killed by Russia for refusing to become double agent', former KGB man claims

Defector Boris Karpichkov claims Russia had a secret agent in GCHQ and Williams knew who it was.

A Russian defector has claimed that the MI6 spy who was found dead in a padlocked holdall in his bath in Pimlico was "exterminated" by Russian intelligence agents because he refused to become a double agent and knew the identity of a Kremlin spy working inside GCHQ.

Codebreaker Gareth Williams was found dead at his home in 2010. He had been a cipher expert at GCHQ but was on secondment to MI6 when he died. According to the coroner at the subsequent inquest, his death was likely a "criminally mediated" unlawful killing, though it was "unlikely" to be satisfactorily explained. Police investigating Williams' death suggested he had died as the result of a sex game gone wrong.

ut a defector, Boris Karpichkov, claims intelligence sources in Russia have admitted the MI6 spy was killed by the SVR, the current incarnation of the country's espionage agency which was formerly known as the KGB.

Speaking to the Daily Mirror, Karpichkov claimed the SVR attempted to recruit Williams as a double agent, allegedly using details from the British cypher's private life as leverage.

Police disclosed at the time of Williams' death that he owned £15,000 worth of women's designer clothing, a wig and make up. It had been suggested that Williams dressed as a woman outside of work, though a forensics expert has since said they believe the spy likely worked undercover as a woman.

Karpichkov, who is ex-KGB, claims the SVR threatened to reveal the Briton was a transvestite, before Williams in turn revealed he knew the identity of the person who had "tipped the Russians off" about him.

"The SVR then had no alternative but to exterminate him in order to protect their agent inside GCHQ," he alleges.

Karpichkov, who also lives in the Pimlico area, said he had seen Russian diplomatic cars in the area around the time of Williams' death but had believed they had been sent to monitor himself. He claims to have not seen the cars since Williams died.

Karpichkov has also claimed that Williams was killed by an untraceable poison which was pushed into his ear using a needleless syringe.

At the time of the inquiry the coroner said that the involvement of intelligence services in Williams' death remained a "legitimate line of inquiry" but stressed "there was no evidence to support that he died at the hands" of a government agency.

ANTI WAR.COM 29/09/2015

Officials Claim CIA Drone War Against Syria a 'Growing Success'

Attacks Never Meant to Defeat ISIS in the First Place, Officials Say
Alongside the Pentagon's war against ISIS in Syria, there's a whole separate one, run jointly by the CIA and Joint Special Operations Command, which are conducting drone strikes against ISIS as well as fictional al-Qaeda affiliate Khorasan in northern Syria.

The strikes against "Khorasan" really just targeted al-Qaeda's Nusra Front, and seemed to quickly taper off. The campaign against ISIS continues, and officials say it is a "growing intelligence and military success" in Syria, which like most claims of US success in Syria doesn't make a lot of sense.

With ISIS growing in Syria, it's tough to see how anything done against them is going all that well, but officials say that the drone war was never meant to defeat ISIS or anyone else in the first place. It's doing a real good job of not defeating those guys, but officials also say the occasional drone strike keeps people "off-balance" in those areas.

The theory there is that if drones weren't be launched willy-nilly at ISIS, they'd be more able to carry out major attacks, and thus the attacks are doing what they're intended to do. Yet ISIS seems to continue to carry out major attacks across Syria on a regular basis, which makes these claimed results, like so many others, illusory.

The Guardian 27/09/2015

Russia frees Estonian officer in cold war-style spy swap

Eston Kohver, sentenced in August to 15 years in jail on espionage charges, exchanged for former Estonian official jailed for spying for Moscow

Russia has freed an Estonian officer jailed for spying last month, exchanging him for a Russian spy in a cold war-style bridge swap just days before President Vladimir Putin's visit to the US.

Eston Kohver, who was sentenced in August to 15 years in a Russian prison on espionage and other charges, was exchanged for Aleksei Dressen, a former Estonian security official serving a 16-year sentence for spying for Moscow, Russia's FSB security service said in a statement.

The swap took place on Saturday on a bridge over the Piusa river that separates Russia's western Pskov region and Estonia's Polva county, after which Kohver was taken to Tallinn to make a statement before taking a "vacation" to be reunited with his family.

"I am happy to be home again," said Kohver, looking well and even cracking jokes after speaking to his wife on the phone. "I would like to thank everyone who helped my family cope."

Estonia had launched a high-profile campaign for Kohver's release. The country's president, Toomas Hendrik Ilves, has called on citizens to wear yellow ribbons and both the European Union and the US have urged Moscow to send him home.

Estonia's top officials welcomed the release with an outpouring of praise and support. Ilves called Kohver a "tough and loyal" officer in a statement to the press, and Hanno Pevkur, the Estonian interior minister, said he was a "very strong man".

Pevkur said the exchange had been made possible after Putin wrote a pardon for Kohver, while Ilves pardoned Dressen.

Dressen was convicted in 2012 together with his wife Victoria, who was given a suspended sentence. He was found guilty of treason for funnelling classified information to Russia for years after Estonia's independence in 1991.

Kohver's defence lawyer, Mark Feygin, said the swap was "organised on the political level" and was timed to boost Russia's image before Putin's speech at the United Nations on Monday. "It's all happening before Putin's visit to the UN tomorrow. There are no other reasons," Feygin wrote on Twitter.

Putin is flying to New York to speak at the UN for the first time in a decade and to meet the US president, Barack Obama, for their first formal talk since 2013.

Kohver's release was hailed by Estonia's foreign minister, Marina Kaljurand, as "good news for Estonia and the whole of Europe", as she thanked countries for pressing Moscow to agree to the exchange.

Kohver's conviction on 19 August drew international condemnation after Tallinn said he had been kidnapped at gunpoint from Estonian territory, with Washington demanding that Moscow set him free immediately.

On Saturday, the US embassy in Tallinn said: "We welcome Estonian-Russian agreement to swap Eston Kohver back to Estonia."

Brussels also welcomed Kohver's release. "We are pleased that Eston Kohver returned home and was reunited with his family," the EU's diplomatic service said in a statement.

"A wrong has been made right," tweeted the Swedish foreign minister, Margot Wallström.

The Kohver scandal was the latest in a series of spy cases involving Russia and the Baltic states, former Soviet republics turned Nato and EU members increasingly wary of Russia's intentions after the annexation of Crimea from Ukraine in 2014.

Russia's relations with the west have hit their lowest point since the cold war over the conflict in Ukraine, leading to a spike in spying claims.

Russia is still holding several other suspected spies in custody, including Lithuanian nationals. A US court is hearing the case of businessman Alexander Fishenko, who could face up to 20 years in prison for smuggling sensitive technology to Russia.

Exchanges of captured agents were a regular tactic across the Iron Curtain in the cold war, sometimes on the Glienicke Bridge between East and West Germany.

The Guardian 29/09/2015

Russian 'spy swaps': the cold-war cliche making a comeback

The exchange of alleged Estonian and Russian spies on a deserted bridge has all the hallmarks of vintage espionage fiction – and the way things are going it could come to be a regular event

The deserted bridge, the unmarked cars driving up at the appointed hour on each side, and the men in dark jackets meeting in the centre and swapping handlers. The spy swap is a classic cold-war trope; often happening on the Glienicke Bridge which separated east and west Berlin.

All long in the past in today's Europe without borders, you might think, but footage from the release of Estonian agent Eston Kohver over the weekend bore an uncanny resemblance to the cold-war swaps. Grainy footage with faces blurred out showed the denouement: four men in dark jackets meeting in the centre of an empty bridge linking Russia's Pskov region with Estonia on a foggy morning, one of each pair swapping to the other side.

Kohver's story also started like an episode from a vintage thriller, at least if you believe Estonia's version of events, which appears to be backed up by an initial Russian report. The agent was supposedly the victim of an audacious kidnapping from inside Estonian territory. Officials in Tallinn claim Kohver was snatched by a well-trained group of Russian operatives who slipped across the border, covering their movements with smoke and stun grenades, grabbed Kohver and took him back to Russia at gunpoint.

Kohver appeared on Russian television the next day amid claims he was an Estonian spy apprehended on Russian territory. He was held in detention for a year before being sentenced to 15 years in jail on espionage charges in a closed trial last month. Going the other way in Saturday's swap was Alexei Dressen, a former Estonian security official who had been jailed for 16 years in Estonia on charges of spying for Russia.

Russia has a number of other prisoners on trial for espionage and other crimes, including a number of Lithuanians, and the Ukrainian pilot Nadezhda Savchenko, currently on trial for involvement in the deaths of Russian journalists in eastern Ukraine. With suggestions that after conviction she may be swapped for two Russian soldiers currently being held by Kiev, the choreographed prisoner swap could again become a regular feature of relations between Russia and the west.

Business Insider UK 19/10/2015

GCHQ spies don't trust the Chinese to build nuclear power plants in the UK

British spies at GCHQ will monitor computer systems at nuclear plants built by the Chinese on British soil, according to The Times.

The Cheltenham-based spooks will scrutinise the technology going into Britain's nuclear facilities amid concerns that Beijing could use a raft of new commercial deals due to be announced this week to threaten the UK's national security.

The news comes as President Xi lands in London tonight on a four-day state visit that Prime Minister David Cameron is describing as the start of a "golden era" in Britain's relationship with Beijing.

Last week The Times reported that security officials had expressed concerns to UK ministers about allowing Chinese companies with links to the military establishment in Beijing to take a stake in three of Britain's nuclear power plants.

China's involvement in the three nuclear power stations, due to be confirmed during President Xi's visit, could see Chinese companies team up with French energy behemoth EDF at Hinkley Point in Somerset and in Sizewell, Suffolk. China could also get the opportunity to design and build its own nuclear facility in Bradwell, Essex.

Cybersecurity experts have been concerned for several years that Chinese technology companies like Huawei are building backdoors into their equipment that can be used to spy on other nations.

Security sources cited by The Times said that China could take control of Britain's nuclear power plants through these backdoors if diplomatic relationships ever broke down.GCHQMinistry of Defence
GCHQ is based in Cheltenham, Gloucestershire.

It's understood that British intelligence agencies were familiar with the nuclear deal but they haven't voiced their concerns until now.

A GCHQ spokesman said: "GCHQ has a remit to support the cybersecurity of private-sector-owned critical national infrastructure projects, including in the civil nuclear sector and nuclear new builds, when invited to do so by the lead government department involved."

The report in The Times coincides with a report in The Wall Street Journal about state-backed Chinese hackers attacking private American firms.

UK Defence Journal 20/10/2015

Russia Builds Huge Arctic Military Base

Russia has announced it has built a military base capable of hosting strategic bombers in the northern Arctic.

The facility is located on the island of Alexandra Land and can house 150 soldiers with enough fuel and food to sustain them for a year and a half, the Russian defence ministry said.

The site was previously used in the 1950s as a staging base for Soviet Long Range Aviation bombers to reach the US and was maintained by the Russian Air Force until it was mothballed, it is understood that the aviation facilities are now part of the new base.

Franz Josef Land is a chain of islands between the Barents and Kara seas north of Novaya Zemlya archipelago, the islands were annexed by the Soviets in 1926 who settled small outposts for research and military purposes.

Russia is interested in the Arctic due to its recently updated Naval Doctrine, which highlights mineral riches and strategic importance. Russia's Arctic policy statement, approved by former President Medvedev in September 2008, called for the establishment of improved military forces in the Arctic to "ensure military security" in that region, as well as the strengthening of existing border guards in the area.

Russia is one of five countries bordering the region. Two million Russians live in the Arctic.

Last year Russia launched military exercises in the Arctic as it seeks to bolster claims, more than 1,000 soldiers, 14 aircraft and dozens of special military units took part.

The Guardian 20/10/2015

ACLU demands CIA disclose drone program details after document leak

Lawsuit seeks information and legal rationale for US drone strikes that have killed thousands of civilians following anonymous whistleblower's revelation

The American Civil Liberties Union (ACLU) pressed ahead on Monday with a lawsuit to compel the CIA to turn over basic details about the US program of clandestine drone warfare, a week after startling contours of the program emerged in a new leak by an anonymous intelligence source.

The ACLU lawsuit seeks summary data from the CIA on drone strikes, including the locations and dates of strikes, the number of people killed and their identities or status. The ACLU also is seeking memos describing the legal reasoning underpinning the drone program.

None of the summary strike information is currently available to the public, which instead must rely on estimates compiled by analysts and journalists, based on reports on the ground.

"The case is really about the public's right to know, the right of access to information about this very controversial set of policies," said Jameel Jaffer, deputy legal director of the ACLU. "At this point the enemies of the United States already know that the CIA is carrying out drone strikes. The only effect of the kind of secrecy we're seeing now is to keep Americans in the dark about their own government's policies."

The ACLU lawsuit pertains both to the CIA drone program and any information it may have on a parallel program operated by the defense department, Jaffer said.

In combination, the two programs are believed to have killed thousands of civilians in Pakistan, Yemen, Somalia and Afghanistan. Analysis based on classified documents provided by an unidentified whistleblower to the Intercept and published last week revealed that the military labels unknown people it kills as "enemies killed in action".

The ACLU case suffered a setback in June, when a judge with the US district court for the District of Columbia ruled in favor of the CIA's effort to keep the drone strike information and legal reasoning secret.

On Monday, the ACLU appealed that ruling to the DC circuit appeals court, which has previously ruled in favor of the ACLU in the case. In 2013, a three-judge panel on the court rejected a CIA contention that national security concerns prevented the agency from confirming or denying the possession of any pertinent records.

The ACLU has had partial success with similar freedom of information act lawsuits in the past. In 2009, the group won the release of four secret memos laying out the legal justifications for the CIA's post-9/11 torture program.

"We are seeking [the drone memos] for precisely the same reasons we sought the torture memos," Jaffer said. "They are the basis for the government's most significant national security policy right now.

"We think that the public has a right to know both what the government's purported legal justifications are for the drone strikes, and also of any limits that the government recognizes on its authority to carry out these kinds of strikes."

The ACLU also is party, with the New York Times, to a second major drones transparency case currently working its way through the second US circuit court of appeals in Manhattan.

That case resulted in the release last year of a Justice Department memorandum describing an ability to kill an American citizen without trial in Yemen.

That memo contended that the protection of US citizenship was effectively removed by the 2001 Authorization to Use Military Force (AUMF), which blessed a global war against al-Qaida.

The memo was thought to provide the legal basis for the killing of Anwar al-Awlaki, the former al-Qaida propagandist and US citizen, in 2011.

In a post on the Just Security blog, Jaffer decried government noncompliance with freedom of information act (FOIA) requests.

"In practice... the government routinely withholds information that the FOIA requires it to disclose," Jaffer wrote. "On the rare occasion when courts enforce the FOIA over the government's objections, the government often manages to delay release of information by months or years, and the public gets access to information only long after it most needs it."

UK Defence Journal 23/10/2015

Target Drone Washes Up On Scottish Beach

It has been reported by local media that the coastguard at Benbecula have recovered a target drone that has washed up on a Scottish island. The bright orange drone was discovered at Baleshare on North Uist early on Thursday morning.

The find was a Mirach 100/5 target drone. The system, operated by Qinetiq for the British armed forces, is a high performance, reusable Aerial Target which is the standard European Armed Forces threat simulator according to the manufacturer. The system is controlled by a Ground Control Station, allowing mission planning and re-tasking, rehearsal and play back.

The system was used extensively in a recent missile defence exercise, the United Kingdom operate around 50 examples of the system.

Naval vessels from nine countries worked together to simultaneously intercept dummy ballistic and cruise missiles off the coast of Scotland this week. The test involved ships from the United States, Australia, Canada, France, Germany, Italy, the Netherlands, Norway, Spain, and the United Kingdom.

The United Kingdom hosted the event at its Hebrides Missile Test Range.

The Ministry of Defence are yet to comment on the drone

The Independent 24/10/2015

Spy in a bag' case: Gareth Williams was blackmailed with 'staged photos in Las Vegas hotel room' by Russian spies, claims former KGB agent Boris Karpichkov now lives in the UK under a new identity

A former KGB major says he believes Gareth Williams was murdered by Russian hit men as the MI6 spy refused to become a double agent, even after they blackmailed him by taking compromising, staged photographs.

The former major and intelligence officer Boris Karpichkov, who was exiled from Russia and now lives in the UK with a new identity, told his version of events to The Daily Mail. He claims to have a source high up in Russian intelligence services.

Mr William's dead body was found locked in a bag in his Pimlico flat in 2010. He has been a codebreaker at GCHQ but at the time was on secondment to MI6 at their offices in Vauxhall, London.

A coroner ruled in 2012 that the spy was "probably killed unlawfully", but also ruled it unlikely his death will ever be "satisfactorily explained".

Reports that Mr Williams, 31, died from a sex game gone wrong were also dismissed by coroner, Dr Fiona Wilcox who said there was no evidence to suggest claustrophilia — a desire for confinement in enclosed spaces.
Mr Karpichkov claims a Russian double agent working at GCHQ set his sights on recruiting codebreaker Mr Williams to work for the SVR, formerly known as the KGB.

The 'mole', known as 'Orion' befriended Mr Williams in his recruitment bid, and introduced him to a third party named Lukas, according to Mr Karpichkov.

When Mr Williams travelled to Las Vegas for a specialist computer hacking convention, he encountered Lukas and they both visited a nightclub.

Mr Karpichkov alleges that Lukas was aware of rumours that Mr Williams cross-dressed and visited gay nightclubs, and used this as a mechanism to blackmail the codebreaker.

Suggestions that Mr Williams enjoyed cross-dressing and bondage were dismissed by Dr Wilcox during the inquiry into his death, she said: "I wonder if this was an attempt by some third party to manipulate the evidence" and that "Gareth was naked in a bag when he was found, not cross-dressed, not in high-heeled shoes."

Allegedly, Mr Williams drink was spiked and he passed out in a rented home in the US; photographs were then taken of him in bed next to a man and woman and ecstasy tablets were planted in his pocket.

The photos were used to force Mr Williams to cooperate, otherwise his friends and family would see them, says Mr Karpichkov.

The plot to use the photographs for blackmail was unsuccessful, according to Mr Karpichkov, as the Welsh-born spy told Lukas he knew 'Orion' must have informed him.

Fearing that the double agents identity would be revealed at GCHQ, Mr Williams was then murdered by hitmen through a poisonous injection in the ear, alleges Mr Karpichkov.

Dr Wilcox said in 2012 that the involvement of intelligence services in Mr Williams' death was a "legitimate line of inquiry" but there was no actual evidence to support this.

The Telegraph 25/10/2015

Real-life James Bonds: Actual spooks reveal what a job in MI6 is really like

Frank Gardner, the BBC's Security Correspondent, secured a ground-breaking interview with two serving MI6 intelligence officers. Here he writes exclusively for The Telegraph about what they revealed about life in the real MI6

It's slick, it's fast-paced and it's sexy. But that's the cinema. SPECTRE, the latest James Bond thriller starring Daniel Craig opens in cinemas on Monday to critical acclaim. Pure fantasy? Or are there any similarities with the work of a real-life operative in Britain's Secret Intelligence Service (SIS), better known as MI6? I've gone to meet two serving SIS officers to find out.

I don't notice them at first, there are so many people in the room. Are they part of the camera crew? A couple of people sent up from hotel reception perhaps, to check we have everything we need? But then we are introduced. "Kamal" – and I'm going to go out on a limb here and guess that is probably not his real name – is 30-something, unshaven, quietly confident. "Kirsty" is only slightly older. Neatly dressed, she looks like she could be running a medium-sized IT company. In fact, she is in recruiting, having already done the hard yards in the field overseas.

'It would be untrue for me to say that all of our work is free of danger.'

Kamal speaks first. "I'm what people would classify as an agent-runner," he tells me. "Our job is to find individuals with access to secret intelligence of value to the UK government. My job [within MI6] is to build a relationship with these individuals and work with them to obtain the secrets they have access to, securely."
And bang, up in smoke goes one of the biggest misnomers about espionage and spies. James Bond, and all the true-life men and women who work inside those sandstone and emerald-coloured headquarters at Vauxhall Cross on the banks of the Thames are not "secret agents". They are intelligence officers. The people overseas who they persuade to spy for them are the actual agents.

As an agent-runner, Kamal's job is at the sharp end of intelligence-gathering. Put bluntly, he has to try to recruit people to do difficult and dangerous things, sometimes betraying the very organisations they have worked with for years. How, I ask him, do you do that? Is it money? Or charm? Or will power?
"It's a combination of all these things and a little bit more," he says. "People have different motivations for working with the UK but the thing that underpins them all is that they willingly enter into a relationship where they're passing intelligence to the United Kingdom."

It all sounds, to be honest, a bit other-worldly; a throwback, perhaps, to the monochrome world of John Le Carré, where people stubbed out cigarettes beneath their heel while waiting for a defector at Berlin's Checkpoint Charlie. I wonder if, in this digital cyber age of drones and satellites and intercepts, there is still a place for the sort of old-school human spycraft Kamal is alluding to.

The nature of the world is such that we can't operate in isolation," he says. "So we work very closely with MI5 [the UK's domestic Security Service] and GCHQ [the secret listening station at Cheltenham]. It's that combination of technical and human intelligence that allows us to answer the questions that key individuals in Whitehall want to know about."
Like what, for example? "It's a variety of different threats. Traditionally, we have faced states and organisations that have sought to penetrate the heart of the UK government and key UK institutions and then steal their secrets. Those still exist, they haven't gone away."

Kamal does not mention Russia once, but I remember an MI5 officer telling journalists not so long ago that there were just as many Russian intelligence officers operating in Britain in the 2000s as there were during the Cold War in the early 1980s. "Alongside those threats," continues Kamal, "we have the terrorist threat, we have states and organisations looking to proliferate weapons of mass destruction and nuclear technology. We have states with territorial ambitions and more recently we have people looking to conduct cyber espionage against the UK."

So how does it work, I ask. Do you just walk in each morning, pour yourself a skinny latte, log onto your computer and then discuss what the latest threat is? That turns out to be not too far from the truth, but there is method. Kamal explains something called "the intelligence cycle." It works like this: the political leaders in Whitehall decide there is a requirement to find out something secret, for example – and these are my suggested examples here, not theirs - how many nuclear centrifuges Iran is operating below ground, or which routes ISIS is using to smuggle recruits into Syria.
The targeting officer then works with MI5 and GCHQ to identify the individual overseas who is best placed to know the answers. Next, a "reports officer" articulates these questions to the agent runner and tasks him or her to get the information. A whole team of people then works out how best to get the agent-runner in front of the potential informant.

Some approaches fail. "Often", admits Kamal, "the people we identify are simply unsuitable for intelligence work for a whole host of reasons." But when it works and the agent starts to produce intelligence, this gets passed up the chain to the reports officer, who assesses whether it is credible. "Once they are satisfied it is, they pass it back to the individual in Whitehall who asked the question in the first place. That is the cycle."

'We wouldn't dream of having anybody like Bond in our organisation'

But what about life inside MI6? Is it not, I suggest, a tremendous psychological strain to be living a secret life that you can tell almost no one about?

"When people join the organisation they are given a cover role," says Kirsty. "They get a number of security briefings to help them manage that cover and actually it becomes second nature. So most people may tell their nearest and dearest but to everyone else they would live that cover story for the rest of their career."
Could it, I venture, even sometimes be fun, pretending you are something you are not? "Absolutely" says Kamal. "It is one of the best parts of the job. It's theatre. On occasion it allows you to engage your more flamboyant side, which of course is wonderful."

We are going off-piste here and I remember I have some more serious questions that need asking. I want to know about the danger. Bond, of course, is mysteriously invincible, apparently unhindered by mortality no matter what threats he faces. But in real life, how dangerous is it?

Kirsty chooses her words carefully here. "It would be untrue for me to say that all of our work is free of danger. However, we have a team of security advisors who ensure that both we and our agents are as secure as we can be. No operation would go ahead if we had any doubts about our security, or that of our agent."

Which brings me to the whole double-O prefix thing. I am almost embarrassed to ask but I do it anyway: is anyone in SIS (MI6) licensed to kill? "Absolutely not," replies Kamal. "The mythology around espionage and around SIS in particular is extremely misleading. We are an organisation that revels in subtlety and the methods 007 employs – crash-banging across cities in both hemispheres – is entirely misleading. We seek to operate in the shadows and we don't like to draw attention to ourselves. Having a licence to kill is the antithesis of that."

Yet some myths turn out to be true. The Chief is still known as "C" and is the only person allowed to sign papers in green ink. The gadgets and innovations department depicted in Bond as "Q" branch really does exist. "I think", says Kirsty, clearly warming to her subject, "Ian Fleming would be surprised at the technology we have in the modern-day MI6. We have brilliant technologists who can come up with some amazing devices that can help enable intelligence officers to do their jobs better." Including weapons? "No. We stop short of anything that will do harm to other humans and certainly nothing related to knives coming out of tyres and exploding pens."

And Bond? They both laugh. "I think that is where the fiction ends and the fact begins," says Kamal. "Because we are not like Bond, we don't have officers that seek to fulfil their missions at any cost. Our officers operate within the law…The fact we need to ensure we continue operating in the shadows means we wouldn't dream of having anybody like Bond in our organisation. He has got all manner of personal issues, which I think would be very, very unhelpful in an organisation like ours."

IBTimes 26/10/2015

US fears Russian submarines cutting undersea internet cables

There is growing concern among US military and intelligence officials that Russia could sever underwater fibre-optic cables upon which governments, economies and citizens depend, reports suggest. More than a dozen officials have confirmed the Pentagon is focusing significant attention on the movements of Russian spy ships and submarines in the vicinity of cable routes that carry electronic communications.

Details of Russia's naval activities are highly classified, however sources close to the matter have reportedly revealed suspicious activity has been monitored in the North Sea, north east Asia and close to US shores. Some officials have gone as far as to call the level of Russian activity around these cables as "comparable to what we saw in the Cold War".

The cables are so vital to global electronic communications and commerce that the Department of Homeland Security lists them at the top of its list of most important "critical infrastructure". More than 95% of daily communications are carried along them and are said to be worth more than $10tn (£6.5tn) to global business. Pentagon planners believe if diplomatic relations break down, Russia could target cables in deep, mid-ocean locations that are difficult to repair.

"The risk here is that any country could cause damage to the system and do it in a way that is completely covert, without having a warship with a cable-cutting equipment right in the area," said Michael Sechrist, as reported by the New York Times. The former project manager for a research project funded by the US Defense Department noted cables were often cut as a result of ship anchors dragging, or due to natural disasters, however such cuts tend to take place close to the the shore and are easy to repair.

Intelligence officials also believe Russia could be collecting data from them in order to eavesdrop on communications. Intelligence analysts claim both the US and Russia possess submarines capable of tapping into the cables.

Admiral Victor Chirkov, head of the Russian Navy, has increased submarine patrols by almost 50% over the past 12 months, according to the commander of US naval operations in Europe. Admiral Mark Ferguson said it is part of a new form of hybrid warfare being adopted by the Russians. "This involves the use of space, cyber, information warfare and hybrid warfare designed to cripple the decision-making cycle of the alliance," he said. "At sea, their focus is disrupting decision cycles."

Chart Section Index

November 2015

NUMBER SYSTEMS

European Numbers sytems:

English	**zero**	**one**	**two**	**three**	**four**	**five**	**six**	**seven**	**eight**	**nine**
Bulgarian	nul	edín	dva	tri	chétiri	pet	shest	sédem	ósem	dévet
French	zero	un	deux	trois	quatre	cinq	six	sept	huit	neuf
German^	null	eins	zwei	drei	vier	fünf	sechs	sieben	acht	neun
Spanish	cero	uno	dos	tres	cuatro	cinco	seis	siete	ocho	nueve
Czech	nula	jeden	dva	tr^i	chtyr^i	pêt	shest	sedm	osm	devêt
Polish	zero	jeden	dwa	trzy	cztery	pie,c'	szes'c'	siedem	osiem	dziewie,c'
Romanian	zero	unu	doi	trei	patru	cinci	s,ase	s,apte	opt	nouâ
Slovak*	nula	jeden	dva	tri	shtyri	pät'	shest'	sedem	osem	devät'
* West	nula	jeden	dva	try	shtyry	pet	shest	sedem	ossem	devat
* East	nula	jeden	dva	tri	shtyri	pejc	shesc	shedzem	osem	dzevec
Serbo-Croat	nula	jèdan	dvâ	trî	chètiri	pêt	shêst	sëdam	ösam	dëve:t
Slovene	nula	ena	dva	tri	shtiri	pet	shest	sedem	osem	devet
Russian	null	odín	dva	tri	chety're	pyat'	shest'	sem'	vósem'	dévyat'

^ 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 ‘ZYNCE’ the ‘Y’ as in eye.

Numeral Systems used on selected Slavic Stations [*those discontinued in italics*]

	Actual Polish[S11]	**S11a Cherta**	***S11 Kreska***	***S10d***	***S17c***
0	zero	nul	*zero*	*Nula**	*Nula**
1	jedynka	adinka	*yezinka*	*Jeden^*	*Jeden^*
2	dwójka	dvoyka	*dvonta*	*dva*	*dva*
3	trójka	troyka	*troika*	*tri ‘*	*tri ‘*
4	cztery	chetyorka	*chidiri*	*shytri*	*shytri*
5	pi¹tka	petyorka	*peyonta*	*pyet*	*pyet*
6	szeœæ	shest	*shes*	*shest*	*shest*
7	siedem	syem	*sedm*	*sedoom*	*sedoom*
8	osiem	vosyem	*osem*	*Osoom~*	*Osoom~*
9	dziewie,c'	dyevyet	*prunka*	*devyet*	*devyet*

Notes on Numeral Systems used on selected Slavic Stations:

* Nula heard as ‘nul’

^ Jeden heard as ‘Yedinar’

‘ Tri heard as ‘she’

~ Osoom often heard as ‘bossoom’ or ‘Vossoom.’

Arabic Numerals [E25 and V08]

English	zero	one	two	three	four	five	six	seven	eight	nine
	0	1	2	3	4	5	6	7	8	9
Arabic	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	Nov kHz, ID, ...	Dec kHz, ID, ...	Remarks
						x	0100/0120/0140		V07	01B	18074/15874/14374 883	16037/14637/12137 661	
						x	0300/0320/0340		V07	01B			
		x	x				0315		E11	03	5779 253/00	5779 253/00	since 01/14, last log 11/15
x	x	x	x	x			0400		S06	01A	15721 480	15721 480	
			x				0430/0450/0510		E07A	01B			
x							0430/0450/0510		M12	01B			
x							0450		E11	03	5082 416/00	5082 416/00	since 02/10, last log 11/15 2nd transmission Thu 1730z
	x			x			0455		S11A	03	4828 321/00	4828 321/00	since 09/14, last log 11/15
			x	x			0500/0600	1/3	E06	01A			
x		x		x		x	0500		HM01	18	5855	5855	
	x		x		x		0500		HM01	18	11462	11462	
					x		0500/0520/0540		M12	01B			
						x	0500/0520/0540		V07	01B			
		x					0530/0540		S06S	01A	7425/ 9069 464	7425/ 9069 464	
x							0530/0550/0610		M12	01B	4617/ 5317/ 5817 638	4457/ 5157/ 417, search	
			x				0530/0550/0610		E07A	01B	5111/ 5811/ 6911 189	5111/ 5811/ 6911 189 or 6922/ 8122/ 9322 913 or 6788/ 7488/ 8188 741	
		x		x			0545		E11	03			since 06/11, last log 09/15
x				**x**			**0600/0610**		**E11A**	**03**	**13046 181/00**	**13046 181/00**	**since 07/15, last log 11/15**
x		x		x		x	0600		HM01	18	10345	10345	
	x		x		x		0600		HM01	18	14375	14375	
	x						0600/0610		S06S	01A	16145/14240 438	16145/14240 438	
				x			0600/0610		S06S	01A			
		x			x		0600/0620/0640		E07	01B		9064/10264/11464 024, check	
					x		0600/0620/0640		M12	01B	7637/ 9137/10237 612	5784/ 7584/ 9184 751	
		x			x		0600/0620/0640		XPAc	01B			
			x	x			0600/0700	1/3	E06	01B	18285/20140 507, search	x15810/18455 923, search	
			x				0630/0650/0710		M12	01B			
						x	0630/0640		S06S	01A	13470/16515 524	13470/16515 524	
	x		x				0645		E11	03	7840 517/00	7840 517/00	since 07/09, last log 11/15
x		x		x		x	0700		HM01	18	9330	9330	
	x		x		x		0700		HM01	18	13435	13435	
						x	0700		M01	01B	5465 197	5465 197	
				x			0700/0710		S06S	01A	7150/ 8215 916	7150/ 8215 916	
	x						0700/0710(15)		S06S	01A	5250/ 6320 374	5250/ 6320 374	
		x			x		0700/0720/0740		E07	01B			
				x			0700/0720/0740		M12	01B	9338/10638/12138 238	8060/ 9060/10160 238	
						x	0700/0720/0740		E07	01B	10112/11112/12112 111	10112/11112/12112 111, check	
		x			x		0700/0720/0740		XPAc	01B	11409/13509/14609	7756/ 9056/10656	
	x			x			0710		E11	03	10800 633/00	10800 633/00	since 02/11, last log 11/15

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Nov kHz, ID, ...	Dec kHz, ID, ...	Remarks
			x		x		0710		E11	03	**12924** 491/00	**12924** 491/00	since 07/15, last log 11/15
				x		x	0730		E11	03	325/00, search	325/00, search	since 04/15, last log 10/15
	x						0730/0740		S06S	01A	7410/11532 427	7410/11532 427	
		x					0730/0740		S06S	01A			
			x				0730/0750/0810		M12	01B	5884/ 6884/ 888, search	5284/ 5784/ 277, search	
x							0745		E11	03	10213 262/00	10213 262/00	since 03/14, last log 11/15 2nd transmission Thu 1530z
	x		x				0745		E11	03	16112 335/00	16112 335/00	since 10/11, last log 11/15
			x				0800/0810		E17Z	01A	11170, 9820 674	11170, 9820 674	
x							0800		G06	01A	5329 329	5329 329	since 07/10, last log 10/15 repeat at Thu 1300Z
x		x		x		x	0800		HM01	18	9065	9065	
	x		x		x		0800		HM01	18	10635	10635	
					x		0800/0900		M14	01A	5430/ 5561 171	5430/ 5561 171	
	x						0800/0810		S06S	01A	11945/13195 352	11945/13195 352	
x		x					0800/0820/0840		XPA2p	01B	16073/14973/14373	15861/14761/13561	
					x		0800/0820/0840		E07A	01B			
x		x					0800/0820/0840		M12	01B	17427/15827/14527 485	14819/13919/12219 892	
		x				x	0805		E11	03	10429 311/00	10429 311/00	since 07/14, last log 11/15
x			x				0820		E11	03	10125 438/00	10125 438/00	since 10/09, last log 11/15
		x					0820/0830		S06S	01A	6778/ 7675 471	6778/ 7675 471	
x				x			0830		E11	03	9446 649/00	9446 649/00	since 01/10, last log 11/15
x							0830/0840		S06S	01A	8057/ 8530 371	8057/ 8530 371	
		x					0830/0840		S06S	01A	7335/11830 745	7335/11830 745	
			x	x			0830/0930		S06S	01A	19875/16067 842	17435/14380 842	
x		x					0900		E11	03	9446 534/00	9446 534/00	since 10/05, last log 11/15
x		x		x		x	0900		HM01	18	9240	9240	
	x		x		x		0900		HM01	18	11462	11462	
x							0900/0910		S06S	01A	14675/12830 872	14675/12830 872	
			x				0900/0910		S06S	01A	12952/13565 167	12952/13565 167	
			x				0900/0910		S06S	01A	5765/ 6315 624	5765/ 6315 624	
					x		0900/0920/0940		E07A	01B	11553/12153/13553 515	11121/12221/13421 124	
	x			x			0915		S11A	03	7504 484/00	7504 484/00	since 01/10, last log 11/15
		x	x				0930		E11	03	9950 270/00	9950 270/00	since 02/14, last log 10/15
			x				0930/0940		S06S	01A	8812/ 9540 314	8812/ 9540 314	
				x			0930/0940		S06S	01A	11780/12570 516 9445/10195 search	11780/12570 516 9445/10195 search	
x		x		x		x	1000		HM01	18	5855/ 9155	5855/ 9155	
	x		x		x		1000		HM01	18	11635/12180	11635/12180	
	x						1000/1010		S06S	01A	6440/ 5660 893	6440/ 5660 893	
		x					1000/1010		S06S	01A	12365/14280 729	12365/14280 729	
			x			x	1010/1030/1050		M12	01B	15969/17479/18169 941	13569/14869/16269 582	

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Nov kHz, ID, ...	Dec kHz, ID, ...	Remarks
x			x				1015		S11A	03	12530 475/00	12530 475/00	since 04/10, last log 11/15
	x			x			1020		S11A	03	9610 426/00	9610 426/00	since 02/10, last log 11/15 2nd transmission Thu 1730z
	x						1045		E11	03	12153 576/00	12153 576/00	since 01/12, last log 10/15 2nd transmission Fri 2000z
x							1100/1120/1140		M12	01B	12205/13559/14728 973, check	12205/13559/14728 973, check	
	x						1100/1110		S06S	01A			
		x					1200	?	G06	01A	4946 248	4946 248	since 10/14, last log 11/15 yearly changing frequencies + id repeat at 1300Z
					x		1200/1210/1220		M42C	01C			
x							1200/1210		S06S	01A			
			x				1200/1210		S06S	01A	12155/10920 425	12155/10920 425	
					x		1200/1210		S06S	01A	8680/ 8260 254	8680/ 8260 254	
	x	x					1205		E11	03	**11100** 469/00	**11100** 469/00	since 03/10, last log 11/15
	x	x					1300		E11	03	18030 133/00	18030 133/00	since 08/13, last log 11/15
		x					1300	?	G06	01A	4051 248	4051 248	since 10/14, last log 11/15 yearly changing frequencies + id repeat from 1200Z
			x				1300		G06	01A	4460 329	4460 329	since 09/11, last log 11/15 repeat from Mon 0800Z
					x		1300/1310/1320		M42C	01C	20374/18351/16249	20562/18194/16107	
x							1300/1310		S06S	01A	8420/10635 831	8420/10635 831	
	x					x	1300/1320/1340		XPA2m	01B	18238/16238/14438	14538/13538/12138	
			x		x		1310/1330/1350		M12	01B	9162/ 8062/ 7462 104	7741/ 6841/ 5784 787	
x		x					1320		M03	03	4505 543/00	4505 543/00	since 08/13, last log 11/15
			x			x	1320		M03	03	4828 437/00	4828 437/00	since 02/11, last log 11/15
	x						**1345**		**E11**	**03**	**14666 911/00**	**14666 911/00**	**since 10/15, last log 11/15**
				x	x		1400/1420/1440		XPA2r	01B	17462/16114/14828	15967/13884/12217	
				x		x	1420		M03	03	13911 879/00	13911 879/00	since 01/12, last log 10/15 2nd transmission Fri 2000z
					x		1500		M01	14	5810 197	5810 197	
	x						1500/1510		S06S	01A	6845/ 9170 537	6845/ 9170 537	
			x				1500/1520/1540		M12	01B	13386/12189/11491 725, check	13386/12189/11491 725, check	
	x					x	1500/1520/1540		XPA2m	01B			
				x		x	1500/1520/1540		XPA2p	01B			
				x			1510/1530/1550		E07A	01B			
			x				1530		E11	03	5409 262/00	5409 262/00	since 06/14, last log 11/15 2nd transmission Mon 0745z
x						**x**	1540		E11	03	15632 228/00	15632 228/00	since 03/11, last log 11/15
x	x	x	x	x	x	**x**	1600		HM01	18	11435	11435	
					x		1600 (1605)		S06	01A	6778 (5073) 491	6778 (5073) 491	
				x			1610/1630/1650		E07A	01B	8138/ 7538/ 6838 158	5887/5387/ 5087 830	
		x				x	1625		E11	03	10448 978/00	10448 978/00	since 02/15, last log 11/15
x							1700	1/2	G06	01A	3728 248	3728 248	since 04/10, last log 11/15 yearly changing frequencies + id repeat at 1800Z
x	x	x	x	x	x	**x**	1700		HM01	18	11530	11530	
		x				x	1700/1720/1740		E07	01B			
x							1700/1720/1740		M12	01B	11435/10598/ 9327 938	11435/10598/ 9327 938	

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Nov kHz, ID, ...	Dec kHz, ID, ...	Remarks
			x				1700/1720/1740		M12	01B	13386/12189/11491 725	13386/12189/11491 725	
				x			1700/1800	1/3	M14	01A	5374/ 4975 382	5374/ 4975 382	
		x			x		1705		E11	03	9443 392/00	9443 392/00	since 02/14, last log 11/15
			x				1730		E11	03	5082 416/00	5082 416/00	since 03/10, last log 11/15 2nd transmission Mon 0450z
	x		x				1730/1750/1810		XPAe	01B			
x							1800	1/2	G06	01A	4484 248	4484 248	since 05/09, last log 11/15 yearly changing frequencies + id repeat from 1700Z
x	x	x	x	x	x	**x**	1800		HM01	18	11635	11635	
	x		x				1800		M01	14	5320 197	5320 197	
		x				x	1800/1820/1840		E07	01B	8153/ 6853/ 5453 184	7464/ 5864/ 4564 485	
x		x					1800/1820/1840		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463	
		x					1800/1820/1840		M12	01B	9176/ 7931/ 6904 257	9176/ 7931/ 6904 257	
			x				1800/1820/1840		M12	01B	10343/ 9264/ 8116 124	10343/ 9264/ 8116 124	
	x					x	1800/1820/1840		XPA2m	01B			
x							1810		M01B	14			
					x		1810/1820/1830		M42C	01C	search	8129/ 6822/ 4469	
	x						1820	2/4	M14	01A	4636 186	4636 186	
			x				1830	2/4	G06	01A	4519 271	4519 271	since 05/01, last log 10/15 repeat at Fri 1930Z
			x				1832		M01B	14			
x		x					1900/1920/1940		E07	01B			
		x					1900/1920/1940		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463	
x							1900/1920/1940		M12	01B	9176/ 7931/ 6904 257	9176/ 7931/ 6904 257	
			x				1900/1920/1940		M12	01B	10343/ 9264/ 8116 124	10343/ 9264/ 8116 124	
			x				1900/1910/1920		M42C	01C			
	x		x				1900/1920/1940		XPAe	01B	8123/ 7523/ 6823	8164/ 7364/ 5864	
	x		x				1900/1920/1940		XPA2p	01B			
				x	x		1900/1920/1940		XPA2r	01B			
					x		1900/2000	1/3	S06	01A			
				x			1902		M01B	14			
x							1910		M01B	14	2435, 3519 853	2435, 3519 853	
x							1915		M01B	14			
		x					1920	2/4	M14	01A	4761 748	4761 748	since 05/09, last log 09/14 yearly changing frequencies + id
	x		x				1925		E11	03	551/00, search	551/00, search	since 07/15, last log 10/15
				x			1930	2/4	G06	01A	4792 436	4792 436	since 04/01, last log 10/15 repeat from Thu 1830Z
	x						1930/1950/2010		M12	01B	10343/ 9264/ 8116 124	10343/ 9264/ 8116 124	
		x					1930/1950/2010		M12	01B	11435/10598/ 9327 938	11435/10598/ 9327 938	
		x		x			1955		S11A	03	5815 371/00	5815 371/00	since 02/14, last log 11/15
				x			2000		E11	03	6304 576/00	6304 576/00	since 03/12, last log 10/15 2nd transmission Tue 1045z
	x		x				2000		M01	14	4490 197	4490 197	
x		x					2000/2020/2040		E07	01B	7724/ 6924/ 5824 798	7478/ 6778/ 5278 472	
		x					2000/2020/2040		E07A	01A			

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Nov kHz, ID, ...	Dec kHz, ID, ...	Remarks
			x				2000/2010/2020		M42C	01C	6926/ 5158/ 4016	5784/ 4538/ 3827	
	x					x	2000/2020/2040		XPA2m	01B			
					x		2000/2100	1/3	S06	01A	4047/ 3522 738	4047/ 3522 738	
				x			2002		M01B	14	2653, 3197 866	2653, 3197 866	
					x	x	2005		E11	03	11107 363/00	11107 363/00	since 03/14, last log 10/15
				x			2010		M01B	14			
			x				2010/2030/2050		E07	01B			
x							2015		M01B	14	2427, 3205 375	2427, 3205 375	
			x				2030	1/3	E06	01A	4836 321	4836 321	
			x				2042		M01B	14	2485, 3160 382	2485, 3160 382	
x		x		x		x	2100		HM01	18	11635	11635	
	x		x		x		2100		HM01	18	16180	16180	
		x					2100/2120/2140		E07A	01A	5877/ 5277/ 4577 825	5877/ 5277/ 4577 825	
		x					2100/2120/2140		M12	01B			
	x					x	2100/2120/2140		XPA2m	01B			
				x	x		2100/2120/2140		XPA2r	01B			
				x			2110		M01B	14	2405, 3180 610	2405, 3180 610	
		x			x		2110/2130/2150		M12	01B			
			x				2110/2130/2150		E07	01B	6777/ 5449/ 4483 774	6777/ 5449/ 4483 774	
				x			2130	1/3	E06	01A	4760 472	4760 472	
x		x		x		x	2200		HM01	18	10715	10715	
	x		x		x		2200		HM01	18	17480	17480	
		x					2200/2220/2240		M12	01B	5429/ 4629/ 4029 460	5312/ 4512/ 350, search	
x		x		x		x	2300		HM01	18	11530	11530	
	x		x		x		2300		HM01	18	17540	17540	

M01 FREQUENCY LIST

Frequencies may vary by a few kHz

JAN FEB NOV DEC M01/1 197

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

MAR APRIL SEPT OCT M01/2 463

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

MAY JUNE JULY AUG M01/3 025

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

M12 Log1 Sep 2015 **Brian - S.E. England**

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Tue 1	19**30**	10343	19**50**	9264	20**10**	8116	124	9444	57
Wed 2	1800	9176	1820	7931	1940	6904	257	4021	135
	1900	8047	1920	6802	1940	5788	463	7637	138
	19**30**	11435	19**50**	10598	20**10**	9327	938	1396	51
	2100	6793	2120	5893	2140	4593	785	8478	111
	21**10**	11469	21**30**	10469	21**50**	- - -	441	0 0 0	
Thu 3	06**30**	NRH*	06**50**	7684^	07**10**	- - -	761	0 0 0	
	13**10**	13873	13**30**	13373^	13**50**	- - -	834	0 0 0	
	1500	13386	1520	12189	1540	11491	725	8414	110
	1700	13386	1720	12189	1720	11491	725	5363	117
	1800	10343	1820	9264	1840	8116	124	4791	149
	1900	10343	1920	9264	1940	8116	124	6963	115
Fri 4	Not	Moni	-tored						
Sat 5	0500	8176^	0520	9376^	0540	10476^	134	847.	11.
	13**10**	13873	13**30**	13373^	13**50**	- - -	834	0 0 0	
	21**10**	11469		*missed*					
Sun 6	Not	Moni	-tored						
Mon 7	04**30**	5792	04**50**	6992	05**10**	- - -	796	0 0 0	
	1100	12205		*missed*					
	1700	11435		*missed*					
	1800	8047	1820	6802	1840	5788	463	7336	150
	1900	9176	1920	7931	1940	6904	257	7617	120

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Tue 8	19**30**	10343	19**50**	9264	20**10**	8116	124	1089	62
Wed 9	1800	9176	1820	7931	1940	6904	257	5729	155
	1900	8047	1920	6802	1940	5788	463	6933	147
	19**30**	11435	19**50**	10598	20**10**	9327	938	2395	58
	2100	6793	2120	5893	2140	- - -	785	0 0 0	
	21**10**	NRH	21**30**	NRH	21**50**		441		
Thu 10	06**30**	NRH*	06**50**	NRH	07**10**		761		
	13**10**	13873^	13**30**	13373^	13**50**	11473	834	6752	145
	1500	13386	1520	12189	1540	11491	725	8893	145
	1700	13386	1720	12189	1720	11491	725	7358	111
	1800	10343	1820	9264	1840	8116	124	3822	151
	1900	10343	1920	9264	1940	8116	124	6694	101
Fri 11	None	Found							
Sat 12	0500	8176^	0520	9376^	0540	- - -	134	0 0 0	
	13**10**			*missed*					
	21**10**	11469	2130	10469	2150	- - -	441	0 0 0	
Sun 13	None	Found							
Mon 14	04**30**	5792	04**50**	6992	05**10**	- - -	796	0 0 0	
	1100	12205		*missed*					
	1700	11435	1720	10598	1740	9327	938	8027	100
	1800	8047	1820	6802	1840	5788	463	2072	153
	1900	9176	1920	7931	1940	6904	257	1847	109

Highlighted cell indicates new or changed loggings

* Severe XJT QRM on freq

- - - Indicates no 3rd transmission sent as message 0 0 0

^ Weak reception NH Not Heard NF Not Found

M12 Log2 Sep 2015 **Brian - S.E. England**

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Tue 15	19**30**	10343	19**50**	9264	20**10**	8116	124	9199	68
Wed 16	0710	14575	0730	16075	0750	- - -	504	0 0 0	
	1800	9176		*missed*					
	1900	8047	1920	6802	1940	5788	463	1071	155
	19**30**	11435	19**50**	10598	20**10**	9327	938	5810	70
	2100	6793	2120	5893	2140	- - -	785	0 0 0	
	21**10**	11469	21**30**	10469	21**50**	- - -	441	0 0 0	
Thu 17	06**30**	6784	06**50**	7684	07**10**	- - -	761	0 0 0	
	13**10**			*missed*					
	1500	13386	1520	12189	1540	11491	725	1481	121
	1700	13386	1720	12189	1720	11491	725	8360	117
	1800	10343	1820	9264	1840	8116	124	2160	140
	1900	10343	1920	9264	1940	8116	124	7933	119
Fri 18	Not	Moni	-tored						
Sat 19	0500	8176	0520	9376	0540	- - -	134	0 0 0	
	13**10**	13873	13**30**	13373^	13**50**	- - -	834	0 0 0	
	21**10**	11469		*missed*					
Sun 20	Not	Moni	-tored						
Mon 21	04**30**	5792	04**50**	6992	05**10**	- - -	796	0 0 0	
	1100	12205	1120	13559	1140	14728	973	6576	117
	1700	11435	1720	10598	1740	9327	938	1701	109
	1800	8047	1820	6802	1840	5788	463	1354	150
	1900	9176	1920	7931	1940	6904	257	5066	107
	2000	8047	2020	6802	2040	5788	463	6458	50

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Tue 22	19**30**	10343	19**50**	9264	20**10**	8116	124	7041	58
	2000	8047	2020	6802	2040	5788	463	4688	147
Wed 23	0710	14575	0730	16075	0750	- - -	504	0 0 0	
	1800	9176	1820	7931	1940	6904	257	5160	136
	1900	8047	1920	6802	1940	5788	463	5477	132
	19**30**	11435	19**50**	10598	20**10**	9327	938	1918	69
	2000	8047	2020	6802	2040	5788	463	9261	125
	2100	6793	2120	5893	2140	- - -	785	0 0 0	
	21**10**	11469	21**30**	10469	21**50**	- - -	441	0 0 0	
Thu 24	06**30**			*missed*					
	13**10**	13873	13**30**	13373^	13**50**	- - -	834	0 0 0	
	1500	13386	1520	12189	1540	11491	725	2751	112
	1700	13386	1720	12189	1720	11491	725	7403	104
	1800	10343	1820	9264	1840	8116	124	9011	147
	1900	10343	1920	9264	1940	8116	124	4563	116
Fri 25	2000	8047	2020	6802	2040	5788	463	9574	62
Sat 26	0500	8176	0520	9376	0540	10476	134	9261	125
	13**10**	13873	1330	13373	1350	- - -	834	0 0 0	
	21**10**			*missed*					
Sun 27	2000	8047	2020	6802	2040	5788	463	1169	60
Mon 28	04**30**	5792	04**50**	6992	05**10**	- - -	796	0 0 0	
	1100	12205		*missed*					
	1700	11435	1720	10598	1740	9327	938	7992	114
	1800	8047	1820	6802	1840	5788	463	4688	147
	1900	9176	1920	7931	1940	6904	257	4636	111
	2000	8047	2020	6802	2040	5788	463	5989	65

Highlighted cell indicates new or changed loggings

- - - Indicates no 3rd transmission sent as message 0 0 0

^ Weak reception NH Not Heard NF Not Found

Thanks to Jim (JkC) for finding the daily 2000z ID 463 sched

Apologies for the numerous missed scheds on these logs this time.
Hopefully, all will be back to normal soon..

M12 Log1 Oct 2015 **Brian - S.E. England**

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Thu 1	13**10**	12214	13**30**	10814^	13**50**	- - -	282	0 0 0	
	1500	13386	1520	12189	1540	11491	725	6173	123
	1700	13386	1720	12189	1740	11491	725	6834	113
	1800	10343	1820	9264	1840	8116	124	3516	100
	1900	10343	1920	9264	1940	8116	124	8059	66
Fri 2	2000	8047	2020	6802	1740	5788	463	6353	68
Sat 3	0500	6832	0520	7932	0540	- - -	892	0 0 0	
	13**10**	12214	13**30**	10814^	13**50**	- - -	282	0 0 0	
	2000	8047	2020	6802	2040	5788	463	8381	73
	21**10**	10269	21**30**	9269	21**50**	- - -	229	0 0 0	
Sun 4	2000	8047	2020	6802	2040	5788	463	6177	76
Mon 5	04**30**	4617	04**50**	5317	05**10**	- - -	638	0 0 0	
	1100	12205^	1120	13559	1140	14728	973	6962	126
	1700	11435	1720	10598	1740	9327	938	8577	107
	1800	8047	1820	6802	1840	5788	463	5261	146
	2000	8047	2020	6802	2040	5788	463	5582	70
Tue 6	19**30**	10343	19**50**	9264	20**10**	8116	124	9320	64
	2000	8047	2020	6802	2040	5788	463	5166	82
Wed 7	1800	9176	1820	7931	1840	6904	257	116	117
	1900	8047	1920	6802	1940	5788	463	7357	148
	2000			*missed*					
	2100	5814	2120	5214	2140	4614	826	997	113
	2110	NRH	2130	NRH	2150		229		

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Thu 8	06**30**	6784	06**50**	7684	07**10**	- - -	761	0 0 0	
	13**10**	12214	13**30**	10814	13**50**	9214	282	9180	163
	1500	13386	1520	12189	1540	11491	725	787	121
	1700	13386	1720	12189	1740	11491	725	6571	116
	1800	10343	1820	9264	1840	8116	124	5092	142
	1900	10343	1920	9264	1940	8116	124	2148	105
	2000	8047	2020	6802	2040	5788	463	299	101
Fri 9	1500	20036	1520	18636	1540	17436	064	760	69
	2000	8047	2020	6802	2040	5788	463	988	83
Sat 10	0500	6832	0520	7932	0540	9232	892	997	113
	13**10**	12214	13**30**	10814^	13**50**	9214	282	9180	163
	2000	8047	2020	6802	2040	5788	463	982	83
	21**10**	NRH	21**30**	NRH	21**50**		229		
Sun 11	2000	8047^	2020	6802^	2040	5788	463	7945	83
Mon 12	04**30**	4617	04**50**	5317	05**10**	- - -	638	0 0 0	
	1700	11435	1720	10598	1740	9327	938	9212	110
	1800	8047^	1820	6802	1840	5788	463	7006	150
	2000	8047	2020	6802	2040	5788	463	933	75
Tue 13	19**30**	10343	19**50**	9264	20**10**	8116	124	7106	61
Wed 14	1800	9176^	1820	7931	1840	6904	257	116	117
	1900	8047	1920	6802	1940	5788	463	5990	153
	2000	8047^	2020	6802	2040	5788	463	2999	70
	2100	5814^	2120	5214	2140	- - -	826	0 0 0	
	2110	NRH	2130	NRH	2150		229		

Highlighted cell indicates new or changed loggings

^ Weak reception NH Not Heard NF Not Found

- - - Indicates no 3rd transmission sent as message 0 0 0

Thanks to JkC for finding the Fri 1500z sched - ID 064

M12 Log2 Oct 2015 **Brian - S.E. England**

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Thu 15	06**30**	6784	06**50**	7684	07**10**	- - -	761	0 0 0	
	13**10**	12214	13**30**	10814^	13**50**	- - -	282	0 0 0	
	1500	13386	1520	12189	1540	11491	725	886?	138
	1700	13386*	1720	12189*	1740	11491*	725	7882	103
	1800	10343	1820	9264	1840	8116	124	6049	145
	1900	NRH	1920	NRH	1940	NRH	124		
	2000	8047	2020	6802	2040	5788	463	3100	68
Fri 16	1500	20036	1520	18636	1540	17436	064	5539	114
	2000	8047	2020	6802	2040	5788	463	863	114
Sat 17	0500	6832	0520	7932	0540	- - -	892	0 0 0	
	13**10**	12214	13**30**	10814^	13**50**	- - -	282	0 0 0	
Sun 18	2000	8047	2020	6802	2040	5788	463	9576	90
Mon 19	04**30**	4617	04**50**	5317	05**10**	- - -	638	0 0 0	
	1700	11435	1720	10598	1740	9327	938	3974	113
	1800	8047	1820	6802	1840	5788	463	4804	142
	2000	8047	2020	6802	2040	5788	463	8315	73
Tue 20	19**30**	10343	19**50**	9264	20**10**	8116	124	9677	69
	2000	8047	2020	6802	2040	5788	463	5707	79
Wed 21	07**10**	NF	07**30**	18254	07**50**	- - -	324	0 0 0	
	1800	9176	1820	7931	1840	6904	257	566	135
	1900	8047	1920	6802	1940	5788	463	7294	155
	19**30**	11435**	19**50**	10598	20**10**	9327	938	8417	57
	2000	8047	2020	6802	2040	5788	463	6558	73
	2100	5814	2120	5214	2140	4614	826	5617	131
	2110	10269	2130	9269	2150	- - -	229	0 0 0	

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Thu 22	06**30**	6784	06**50**	7684	07**10**	- - -	761	0 0 0	
	13**10**	12214	13**30**	10814	13**50**	- - -	282	0 0 0	
	1500	13386	1520	12189	1540	11491	725	8937	146
	1700	NRH	1720	NRH	1740	NRH	725		
	1800	10343	1820	9264	1840	8116	124	3652	150
	1900	NRH	1920	NRH	1940	NRH	124		
Fri 23	1500	20036	1520	18636	1540	17436	064	4640	68
	2000	8047	2020	6802	2040	5788	463	3535	78
Sat 24	0500	6832	0520	7932	0540	9232	892	5617	131
	13**10**	12214	13**30**	10814^	13**50**	- - -	282	0 0 0	
	2000	8047	2020	6802	2040	5788	463	4343	72
	21**10**	10269^	21**30**	9269	21**50**	- - -	229	0 0 0	
Sun 25	2000	8047	2020	6802	2040	5788	463	1072	76
Mon 26	04**30**	4617	04**50**	5317	05**10**	- - -	638	0 0 0	
	1100	12205	1120	13559	1140	14728	973	9010	148
	1700	NRH	1720	NRH	1740	NRH	938		
	1800	8047	1820	6802	1840	5788	463	7755	142
	2000	8047^	2020	6802	2040	5788	463	2347	74
Tue 27	19**30**	10343	19**50**	9264	20**10**	8116	124	5538	59
	2000	8047	2020	6802	2040	5788	463	181	128
Wed 28	07**10**	16354	07**30**	18254	07**50**	- - -	324	0 0 0	
	1800	9176	1820	7931	1840	6904	257	845	84
	1900	8047	1920	6802	1940	5788	463	6137	136
	19**30**	11435^	19**50**	10598^	20**10**	9327	938	5728	61
	2000	8047	2020	6802	2040	5788	463	191	128
	2100	5814	2120	5214	2140	- - -	826	0 0 0	
	2110	10269^	2130	9269	2150	- - -	229	0 0 0	

^ Weak reception NH Not Heard NF Not Found

Highlighted cell indicates new or changed loggings

* Tx problem? Sounded like two feeds with delay on one. Copy difficult

** Reappeared - missing from 30 Sept

- - - Indicates no 3rd transmission sent as message 0 0 0

M12 Log2 Sep 2015 (Residue)

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Cont…									
Tue 29	19**30**	10343	19**50**	9264	20**10**	8116	124	1888	70
Sept	2000	8047		*missed*					
Wed 30	0710	14575		*missed*					
Sept	1800	9176	1820	7931	1940	6904	257	1523	140
	1900	8047	1920	6802	1940	5788	463	1698	142
	19**30**	11435	19**50**	10598	20**10**	9327	938	9476	57
	2000	8047	2020	6802	2040	5788	463	522	71
	2100	6793	2120	5893	2140	- - -	785	0 0 0	
	21**10**			*missed*					

M12 Log2 Oct 2015 (Residue) Brian - S.E. England

Day / Date	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	Time (UTC)	Freq (kHz)	ID	Decode Key	Grp No.
Cont…									
Thu 29	06**30**	6784	06**50**	7684	07**10**	- - -	761	0 0 0	
October	13**10**	12214	13**30**	10814	13**50**	- - -	282	0 0 0	
	1700	NRH	1720	NRH	1740	NRH	725		
	1800	10343	1820	9264	1840	8116	124	4623	154
	1900	NRH	1920	NRH	1940	NRH	124		
	2000	8047	2020	6802	2040	5788	463	2958	61
Fri 30	2000	8047	2020	6802	2040	5788	463	7613	68
October									
Sat 31	13**10**	12214	13**30**	10814^	13**50**	- - -	282	0 0 0	
October	2000	8047	2020	6802	2040	5788	463	6904	90
	21**10**	10269	21**30**	9269	21**50**	- - -	229	0 0 0	

Highlighted cell indicates new or changed loggings

--- Indicates no 3rd transmission sent as message 0 0 0

^ Weak reception NH Not Heard NF Not Found

M89 O **A full list of M89 logs received from JPL for September & October 2015**

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 downloaded from the 'Articles' section of the ENIGMA 2000 website.

Operator Chat from M89

3333 2210 - 2226z 13 Sep (IP) (Remote tuner Hong Kong) JPL SUN
CJK2/HGSA8 AR K (IP – Hand sent – 2210z) R **QSL 0611 K** R FF GA K (Both stations on this frequency)
R FF NR .AGN LF NR 02/EX 0602 RMKS .A.N FF **NR 02/EX 0612 RMKS BT** .23.TO 7.6. R 02/.T.. (Fading badly – 2212z)
MIZO6 AR K (2213z) **QSL 0614 K** R HR 7G GA K R GA K 7G NR 01 CK 115 85 0914 0600 RMKS AGN
NR 01 CK 115 85 0914 0600 RMKS 7167 TO 4234 K (2214z) GA K BT DN6U D3T6 NNST6 675D7 (Cont'd–Machine sent–2215z)
QSL 06.. K (2221z) R AS (2222z) K K (2225z) K K SK R R SK (2226z)

3340 1429z 08 Sep (IP) (Remote tuner Siberia) JPL TUE
7UUT U4ND 64NN NUA. (IP – Cont'd – Hand sent – 1429z)

3340 1223 - 1224z 23 Oct (IP) (Remote tuner Siberia) JPL FRI
56U4 N..A 6AU3 6T.T T636 (IP – Hand sent – weak - 1124z)

3406 1816 - 1820z 23 Oct (IP) (Remote tuner Siberia) JPL FRI
6354 D6N5 T73U .UN6 7T63 4ADT (IP – Cont'd - Machine sent) III 2P 1W GA BT .D7U U365 4UDA AT5D (Cont'd – 1820z)

3553 1342 - 1352z 26 Sep **6IVI** (Remote tuner Siberia) JPL SAT
TTUN 67D7 AR (IP – 1342z) VV LKB AR DE 6EEEEEE VV LKBAR DE 6IV EEEEEE VV **LKB5 DE 6IVI K** (1343z) RPT
R U KP K (1343z) K RPT K VI S EEEE VV **GSN6 DE 6IVI K** (1344z) K VV GSN6 DE 6IVI K R U BOZ QSY NR 51 K
(1345z) BOZ QSY NR 51 K VV **VIQ8 DE 6IVI K** (1345z) R BOZ QSY NR 41 K VV LKB5 DE 6IVI K (1346z) GA (1347z)
GA (1347z) R QSL .... K (1352z - Silent)

3676 1435 - 1441z 08 Sep (IP) (Remote tuner Siberia) JPL TUE
N5U6 553N 75UA 5NNN (IP – Cont'd – Machine sent – 1435z) III 43DU 3D3N 5UN5 DA63 (Cont'd – 1436z)
AR AR D1D BT 3EEEE **TJTY** K TJTY K TJTY K (1437z) RPT EEE R R RPT 2P 11W TO 21W BT BT 76NU (Cont'd – 1438z)
AR K (1438z K K K TJTY K K R R **GFT3** K (1439z) R R **EXE4** K EXE4 K R R **PJJ3** K PJJ3 K (1440z) R R R
TJTY K TJEEEEE U GA GA (1441z – Lost remote tuner)

3742 1358 - 1400z 05 Sep (IP) (Remote tuner Siberia) JPL SAT
RPT 79W K (135z) R **QSL 2200 K** (1359z) QSL 2200 K (1359z) ... QSB K (1400z - Silent)

3744 1355 - 1356z 05 Sep (IP) (Remote tuner Siberia) JPL SAT
N63A 7T5N (IP – Cont'd - Weak/fading – 1355z) (Repeating groups - 1356z) (Other station on 3742)

3818 1750z 30 Sep V U2MD (x3) DE 3PWG (x2) (IP - Cont'd) (// Not monitored) (Remote Siberia) JPL WED
V U2MD (x3) DE 3PWG (x2) (IP – Cont'd – Very weak - 1750z)

3870 1413 - 1421z 11 Sep (IP) (Remote tuner Siberia) JPL FRI
6D3A 5A6D 753N 4T5N 6A7T (IP – Cont'd – Machine sent – very fast – 1419z) III BT 5N3U 5A6T AS (1419z)
(Into message again at what seems like 50 WPM, then slowed to very fast – 1421z)

3870 1611 - 1613z 21 Oct (IP) (Remote tuner Siberia) JPL WED
365A DAN4 ADN4 D54N 467A A57T 76N3 (IP – Cont'd – Hand sent – 1611z) (Silent – 1612z)
BT 53A4 NT3U 3T4A TE (1213z) BT 53A4 NT3U 3T4A T6UN NU54 5N37 (Cont'd – 1613z)

3871 1357 - 1358z 21 Sep (IP) (Remote tuner Siberia) JPL MON
AN7U 4DAN 7UD3 4T64 3DU5 (IP – Cont'd – Machine sent – Very fast – 1357z) III .... AR (1358z - Silent)

4047 1446z 10 Sep (IP) (Remote tuner Siberia) JPL THU
III BT A3ND 5576 4T5T (IP – Cont'd – Machine sent – 1446z)

4111 1316z 08 Sep (IP) (Remote tuner Siberia) JPL TUE
3NTN A5D4 UT77 (IP – Cont'd – Machine sent – 1417z)

4136 1505 - 1515z 18 Oct (IP) (Remote tuner Siberia) JPL SUN
GB SK (IP – 1505z) R E (1506z) 7G .. **72.. 12 11 1018 2130 RMKS .3 TO ... 3 K BT** ..553 4U. . (Fading badly – 1507z) K (1512z)
RPT RPT RPT 20W BT DNDA DNDA AR K (1513z) RPT RPT RPT RPT RPT RPT (1514z) QSL QSL. 31.. K R OK (1514z)
SK GB SK GB SK GB (1515z - Silent) **(Suspect this may be DP91 related)**

4136 1843z 23 Oct (IP) (Remote tuner Siberia) JPL FRI
BT BT NTTT T64. DD7T D6.7 5AT5 (IP – Cont'd – Machine sent – 1843z)

4373 1654 - 1701z 26 Oct (IP) (Remote tuner Siberia) JPL MON
7U6A 6UN6 U454 35T5 T73N N6U5 7676 (IP – Cont'd – Hand sent – 1654z) ?? (1656z)
3T64 U5AT UNA3 NU4T (Cont'd – 1657z) IIII 2P 1W GA BT 353A NUD6 3A7U NTNU (1701z)

4385 1619 - 1621z 21 Oct (IP) (Remote tuner Siberia) JPL WED
RPT 14W TO 16W BT UTD5 537N 57A4 AR K (IP – Machine sent – 1618z) R R R EEEEEE R RPT 22W K R RPT 22W .... K
(Cont'd repeat groups – 1619z) R **QSL 0030** K R HR WK NR 0023 K R HR WK NR 011. K R HR WK NR 0119 K
R HR NIL SK R HR NIL SK (1621z)

4444 1515 - 1517z 21 Sep (IP) (Remote tuner Hong Kong) JPL MON
BT 66T3 D464 D73 4D75 5EDN3456T74D5 (IP – Cont'd – Hand sent - 1515z) D734D 75T6 456N A3AA D5D3 UAD5 NT73 D337

4444 1202 - 1212z 11 Oct CIVW (Remote tuner Hong Kong) JPL SUN
3AU34567DNT (IP – Hand sent – 1202z) JAH3 **JAH3 DE CIVW** K R **DE CIVW K** QSA 2 QSA ? R QSA 2 K R IEC 5GK
M AR K R **IEC** BT AR K (Normally Exercise related) IEC R NR 112 K R IEC R NR 331 K IER 7G GA K GA K
MSG NR 01/CCK CK 125 37 0714 0200 K R GA K (1205z) VV BT BT AUTA NN67 T7AN 5UNU U5DN U4DT A534 A435 BT
AUTA NN67 T7AN 5UNU U5DN U4DT A534 A435 UT57 UA5U N437 N53U TDUN T343 3UTT 33TN AT3N AA3T UU34 U335
(Cont'd – 1208z) AR AR QST QSL QSL K (1210z) VVV A NN67 7T7N 5UNU U5DN EE EE (1212z - Silent)

4664 1708 - 1730z 15 Oct 1NKP (Remote tuner Siberia) JPL THU
NR 01 QSY NR 01 K (IP – Hand sent - 1708z) R **6MWP** QSA 3 K R HR NR 209 K (1708z) R ORWME EEEEEE QRW 4 CPS K
R QRW 2 PHI K R SK GB K (1709z) VV KXG9 **KXG9 DE 1NKP** 1NKP K (1711z) VV KXG9 DE 1NKP K R R R **2PHI** QSA 3 K
(1712z) QSA 1 QSA 1 QSY NR 04 QSY NR 04 K EEEE QSY NR 04 K (1713z)
QSA 1 OEEEEE QSA 1 QSY NR 11 QSY NR 11 QSY NR 11 K (1714z) R R 2PHI QSA 3 K (1715z) R HR NR 209 K
R QRW 4CPS K (1715z) R R QRW WE6A K R SK GB K (1716z) R R R R R **VCPS** QSA 3 K (1717z) 4EEEE VCPS QSA 3 K
R HR NR 209 K R HR NR 209 K R QRW WE6A K (1719z) R SK GB K (1719z) VV WE6A **WE6A DE 1NKP** 1NKP K (1720z)
VV WE6A DE 1NKP K (1721z) R QSA 1 QSA 1 QSA 1 QSY NR 02 QSY NR 02 QSY NR 02 K (1722z) QSA 1 QSA 1
QSY NR 21 QSY NR 21 QSY NR 21 K (1723z) QSA 1 QSA 1 (1724z) QSY NR 13 QSY NR 13 K (1725z) QSY NR 13 K (1726z)
QSA 1 QSA 1 QSA 1 (1727z) QSY NR 16 QSY NR 16 EEEE QSY NR 16 QSY NR 16 K (1727z) QSY NR 11 QSY NR 11 K (1729z)
QSA 1 AS (1730z) QSY QSY NR 18 QSY NR 18 K (1730z)

4737 1257z 02 Sep (IP) (Remote tuner Siberia) JPL WED
AR AR K (IP – 4 Fig cut numbers M89 format - Hand sent - 1257z) R K R GA (1257z)

4737 1413 - 1414z 11 Sep (IP) (Remote tuner Siberia) JPL FRI
NR 215 CK 91 25 0911 2210 K (1414z) (IP – Hand sent – 1413z) BT BT T4A5 D BT BT
T4A5 DTA6 ADUU 5A43 ANAU T64N 6354 7UUT U4ND 64NN (Cont'd - 1414z)

4757 1258 - 1301z 02 Sep (IP) (Remote tuner Siberia) JPL WED
RPT K (IP – Hand sent - 1258z) R R R R (1259z) QSL 21 AS QR **QSL 2059 K** (1300z) 4RP. K (1301z)

4853 1200z 12 Oct (IP) (Remote tuner Hong Kong) JPL MON
05 05 05 (IP – 1200z) SRI U SRSITCGA **NR 011** (1200z - Silent)

4860 1302z 02 Sep (IP) (Remote tuner Siberia) JPL WED
DNTD TDUT T7TNU 35DT N7D6 (IP – Cont'd - Machine sent – 1302z) AR HR WK NR 203 (1302z - Silent)

5171 1030 - 1034z 18 Sep (IP) (Remote tuner Hong Kong) JPL FRI
AR K (In traffic – Machine sent - Weak signal - 1033z) QSL 2132 K R R SK K R SK K (1033z) R R /108 K R RPT K NR 128 K

5176 1209 - 1216z 16 Sep (IP) (Remote tuner Siberia) JPL FRI
NR 27/CCK CK 55 21 1016 2000 RMKS CQ BT BT (IP – Hand sent - 1209z) UADA TNND 7N7. NDN6 3UU3 DD6A 2384
(Cont'd – 1210z) AR (1213z) **YUQ3** K R 46W BT T774 AR K R SK **EF5B** K (1214z) R 7W AGN 7W BT U374 AR K
R 54W BT TUD3 AR K R SK **SS3** K QSA ? K R SK N.CD K (1215z) QSL ? K R SK (1216z - Silent)

5197 1400z 11 Sep (IP) (Remote tuner Siberia) JPL FRI
543T 6355 NN43 435U 3D5N 44U4 (IP – Cont'd – Machine sent – 1400z)
III III III BT BT BT 5374 DA45 7556 4754 7T5A A7TN UU6D DT74 D746 (Cont'd – 1401z)

5197 1416z 30 Oct (IP) (Remote tuner Siberia) JPL FRI
367A 5UAU 433N 6UN. N56N (IP – Machine sent – Cont'd – 1416z)

5260 1515 - 1529z 05 Sep (IP) (Remote tuner Siberia) JPL SAT
OK ALL OK AGN AGN OK ADD (IP – Hand sent - 1515z) OK GB GB GB OK JUST JUST JUST KEY KEY KEY KP KP
(1516z) BK BTR BTR OK BEC BEC BEC OK BOZ BOZ (1518z) CS CS CS FIG FIG FIG (1519z) LTR LTR
SPC SPC SPC OK CRT CRT QSD QSD (1521z) D BT HA050 05 BT BT (Hand sent)
EEE RH NR 3 PSE TCRMA EEEEE EEEE RMKS YRNR 2 PSQ QSL ? HR QSA ? HR QA EEEEE
HR QSS O QSA U 2 PSE QSY K EEEEEE (1523z) BT H EEEE BT BT U345 65T7 5E (1523z) QSL ? QSL ? (1524z) QQSO QSO
QSA 2 QSA 2 22 QSA 2 (1525z) (Now back to machine sent) VY VY VY VIA VIA YY OK STD STN STN STN (1526z)
RCA RCV R RCVR (1527z) XMTR XMTR XMTR XQS XQS YSE XQS YR YR (1528z) OK TY TY TY TMW TMW (Silent)

5323 1532 - 1533z 05 Sep (IP) (Remote tuner Siberia) JPL SAT
N35A ANNN UT.A 4377 46A4 (IP – Cont'd – very fast – machine sent – 1532z) III NAAT TADA (Cont'd – 1533z)

5288 1712 - 1716z 06 Sep (IP) (Remote tuner Siberia) JPL SUN
R RPT 81W 6DUN 6DUN K (IP - 1712z) R RPT 74W 5A7N 5A7N K (1713z)

R RPT 74W TO 81W BT 5A7N DT63 43NT UND5 6NAT D6U3 36DT 6DUN AR K (1715z) R U MSG GA K (1716z)

5324 1335 - 1343z 05 Sep (IP) (Remote tuner Siberia) JPL SAT
N3U4 764N 643U 3T6A 77NU A665 (IP – Cont'd – Machine sent – 1335z) III III BT BT D7? DU7A TU53 7T7U D47T (Cont'd–1336z)
III III BT BT 3N33 DU6T U7D5 3D7A ADA7 (Cont'd – 1341z) III III III (1343z – Silent)

5335 1044 - 1102z 05 Sep (IP) (Remote tuner Siberia) JPL SAT
290 WK (IP – Hand sent – weak/fading – 1044z) NR GA K R U NW M EEEE R V NW COMS (1045z)
R U NW COMM 4905..OTECP HR K R F9EEEE VV **F8TZ DE DORO** K (1046z) R HR AKEEEEE
R QSA 2 HR WK NR 290 K WK NR GA K (1048z) R HR WK NR 290 K R U HW COMM 4790 U NOTE KPHR K (1049z)
VV **F8TZ DE D0R0** K (1050z)(Now sending D0R0 using long zeros) VV F8TZ DE D0R0 K (1050z) VV F8TZ DE D0R0 K (1051z)
VV **DHU9 DE D0R0 K** (1053z) R QSA 2 HR WK NR 28 EEEE R QSA 2 HR EEEEE R QSA 2 HR WK NR 290 K WK NR .. K
(1055z) R U NW COMM 4790 U COMM KPH R K (1055z) VV F8TZ DE D0R0 K (1056z) VV F8TZ DE D0R0 K (1056z)
VV **GKHU DE D0R0** K (1057z) VV GK4U DE D0R0 K (1058z) R QSA 2 HR WK NR 290 U WK NR GA K (1059z)
R U NW COMM 4790 U N. EEEEE R U NW COMM 4790 U NOTE KP K EEEEEEE R U NW COMM (1101z)
VV F8TZ DE D0R0 K (1101z) R QSA 2 (1102z) NOTE KP K (1102z)

5340 0938 - 0941z 08 Sep (IP) (Remote tuner Siberia) JPL TUE
7574 UADA 57DD 437D U6U3 (IP – Cont'd – Machine sent - 0938z) III III BT BT BT 337U 5A7D A3AD (Cont'd – 0941z)

5380 1403 - 1404z 05 Sep (IP) (Remote tuner Siberia) JPL SAT
A744 DNA7 3U5N A5TT 54UU (IP – Cont'd – Machine sent – 1403z) III III (1404z) 7 7 ? U (1404z - Silent)

5388 1304 - 1332z 06 Sep (IP) (Remote tuner Siberia) JPL SUN
AGN (IP – Hand sent - 1304z) VV JO EEEEE (1306z) VV JM EEEEEE 4 EEEEE VV JOTV DE DW EEEEEE VV N EEEEEE
(1307z) VV **JOTV DE DLV2 K** R **DPO9 DE 8PNT** R QSA 2 QSA ? K (1307z) DP09 DE 8PNT R QSA 2 QSA ? K
VV HB EEEEEE VV **HGPH DE DLV2 K** (1308z) **DP09 DE BBPS** R QSA 2 QSA ? K (1309z) DP09 DE BBPS R QSA 2 QSA ? K
VV **HOP5 DE DLV2 K** R DP09 DE BBPS R QSA 2 QSA ? K (1310z) VV **4NRS DE DLV2 K** (1311z) VV NEEEEEE
VV 4NRS DE DLV2 K (1313z) R **DP09 DE DK05** R QSA 2 QSA ? K K R DP09 DE DK05 R QSA 2 QSA ? K (1314z)
VV **DGS1 DE DLV2 K** R **DP09 DE HMP1** R QSA 2 QSA ? K (1315z) R DP09 DE HMP1 R QSA 2 QSA ? K (1316z)
VV **B2MS DE DLV2 K** (1317z) R **DP09 DE CGBW** R QSA 2 QSA ? K R QSA 2 K R HR WK NR 32 K (1318z)
R HR WK NR 12 K R HR KJ EEEEE R HR KP U K (1319z) R HR KP U K R (1320z) VV **ONNW DE DLV2** K
R **DP09 DE HITB** R QSA 2 QSA ? K R QSA 2 K R HR WK NR 32 K R HR WK NR 18 K (1321z) R HR KT EEEP U HR KP U K
OK VV **8IVR DE DLV2** K (1322z) VV 8IVR DE DLV2 K (1324z) VV **FOST DE DLV2** K (1325z) VV FOST DE DLV2 K
(1326z – Lost remote tuner until 1329z) (Monitored until 1332z)

5415 1311 - 1321z 02 Sep (IP) (Remote tuner Siberia) JPL WED
3UTD N33T 3N7D 7N74 (IP – Cont'd – Hand sent – 1311z) K K (1312z) R R ... GA K (Both stations on this frequency) BK
R R YT YK R TU D3D4 A747 5NA. (Cont'd – 1313z) K K (1318z) .... 18 K HR RPT K K R **QSL 2118 K** (1319z) C H. RR
MSG GA K K R R GA MSG **NR 030 CK 199 30 0902 2100 RMKS 5106 TO 7596 K** K (1320z) R R GA K K R R BT BT
N65T 74U4 DT54 U667 DT75 U46T T75D AD4T TT47 TTUA 643U 6TDA D3T5 4N4A (Cont'd – Machine sent – 1321z)

5462 1405 - 1422z 05 Sep (IP) (Remote tuner Siberia) JPL SAT
5125 BT ACD1/AFD2 AR K (IP – Hand sent – 1405Z) RPT K (Both stations on this frequency) NRPT .. T K (1406z) N RPT TIME K
R F NR 019/EX EEEEEEE R F NR 019/EX EEEEEEE R F **NR 019/EX 1003 RMKS 0021 TO 5125 BT ACD1/AFD2 K** (1408z)
R **QSL 2205 K** N QSL 2205 K R U F GA K NR F **NR 019/EX 2205 RMKS 5125 TO 0021 BT BT ACD1/AFD2 AR** K (1411z)
R QSL 2209 AR K NR 7G GA K 7G GA K R **MSG NR 020 CK 99 97 0905 RMKS 0021 TO 5125 BT** (Missing time)
AT64 757U 36DA 6T5U U33A 6D7A U43U 5T74 TUAU TTAA K RPT TIME K (1414z) N RPT TIME K RPT
NR RPT TIME K (1415z) NPT TIME K (1416z) R MSG NR 0A EEEEEEE R MSG NR 020 CK 99 97 0905 1020 EEEE (1417z)
NR GA K R MSG NR 020 CD EEEEEE R NR 020 EEEEEEEEE R NR 020 CK 99 9EEEE NR NR 0 EEEE R NR EEEEEEEEE
R **NR 020 CK 99 97 0905 2215 RMKS 0021 TO 5125 BT** AT64 757U 36DA 6T5U U33A 6D7A U43U 5T.4 TUAU TTAA AR (1420z)
E F TTAA K F TTAA K NR GA K R EEEE R 11U EEEEEE R 11W EEEEEEEE R 11U EEEEEE R 11W BT 5363 NUNT
(Cont'd – 1422z – Remote tuner timed out)

5500 1008z 07 Sep (IP) (Remote tuner Hong Kong) JPL MON
VV UGT COMM BT BT (1008z - Silent - On same frequency as QV5B is sending R/S)

5500 1030 - 1045z 18 Sep (IP) (Remote tuner Hong Kong) JPL FRI
R QSL 6 (IP – Hand sent – 1030z) DE HR E QR. DG1Z ? **DG1Z** 10 R QSL .. RZ RPT G A 1810 R CQ N ? CQ ? CQ UP K
(1031z) CQ R R ? CQ LW VV . A (1031z – Silent) (Switched to voice, then to digital 4+4 mode LSB (1035 -1045z)

5511 2037 - 2039z 25 Oct (IP) (Remote tuner Siberia) JPL SUN
RPT NR K (2037z) R R QSL 0437 EEEE QSL 0437 K (2037z) R R NR 107 K R HR NR 107 HR NR 107 K (2039z) R OK (2039z)

5533 1436z 11 Sep (IP) (Remote tuner Siberia) JPL FRI
NU5U AUD7 4TT3 (IP – Cont'd – Hand sent – 1436z) 745 (1436z - Silent)

5555 1107 - 1108z 22 Sep (IP) (Remote tuner Hong Kong) JPL TUE
AR K (IP – Hand sent – 1106z) RPT 27 K (1106z) HR RPT 28 DWK R R HR RPT 28W K
R RPT 28W N5RR EEE R RPT 28W DN3T DN3T K (1107z) R **QSL 1908 K** (1108z - Silent)

5555 1132z 01 Oct (IP) (Remote tuner Hong Kong) JPL THU
05 05 05 (IP – 1132z) IIII III R AR AR AR VVV 50 (1132z) 4475T TTUU 1 IIIES 643 624NE

(1133z – Switched to 8073 for XSV85 sked)

5555 1220 - 1230z 05 Oct (IP) (Remote tuner Hong Kong) JPL MON
4774 7G NR 37 (1220z – Hand sent) 7G GA **NR 3710 CK CK 200 41 1005 1959 RMKS 0505 T0 1626 BT** BT
NU64 A73D 63T5 UDA7 53T6 36AU N4D5 N435 TTTT TTTT TTTT 40TTTT TTTT 4537 NU64 A73D 63T5 UDA7 (Cont'd – 1224z)
QSY QSY 11010 (1225z) 457 7G NR 34 EEEEE 3 7G NR 305 (1226z) 7G 57 G4 T I E E (1227z) MSG (1228z)
5TT. VE HE 443 444 (1230z - Silent)

5555 0026 - 0030z 06 Oct (IP) (Remote tuner Hong Kong) JPL TUE
LLG5 7G (IP – 0026z) LLG557. VVV L5H5LL. R (0027z) VV LR VVV RR G57 LRE LR LLG555555 (0028z) T T (0029z)
05 05 7G 57 LLG57 LLM7G5 (0030z - Silent)

5555 1111 - 1118z 08 Oct (IP) (Remote tuner Hong Kong) JPL THU
/CCK CK 28733 1005 2220 RMKS 9973 TO 4593 9DG (IP – Hand sent - 1111z) GNR 1M V 0 7G NR
7G NR 16/CCK CK 28 73 1005 2220 RMKS RMKS 9973 TO 459EEEE BT 4R RMKS 9973 TO 4593 3 .89850 EEEEE (1114z)
7G **NR 16/CCK CK 28 73 1005 2220 RMKS 9973 TO 4593 9857 9974 94A8** (1116z) 7G NR
4T3N D7A5 6U34 U576 6.57 DAN DT.3 NDT3 (1118z - Silent)

5555 0931 - 0940z 10 Oct (IP) (Remote tuner Hong Kong) JPL SAT
TU34 4444 4444 4444 444E T BT USUA UUUU (IP – Hand sent – 0931z) UUU CY HW A ? QSL ? (0932z) QSL 10800 K M
K K K K K K K K ??????? 444444 S 444 UTTE E 5 5EEEEEEEEEEEEEEE 000000 (Long zero) (0934z) 45 45 AR BT 344444 (0935z)
4444444444444444444444 BT BT BT BT BT BT BT BT AUU3333433S 444DE 473NT7 4NAI ? 4NASE 67D4 6DAU DIII BT ST4U
(0938z) VV EEEEE 44 BT 433334 370 **05 05 05** (Long zero – 0940z - Silent)

5555 1218 - 1224z 16 Oct (IP) (Remote tuner Siberia) JPL FRI
3A6D 5D3T 7T5U 4N7U 6A4N 3D7U 4N3N (IP – Cont'd – Hand sent – 1218z) 05 05 05 (Cont'd – long zero – 1218z)
EEEEEEEEEEEE 555555 BT BT 5476576III AR AR K 7U6T4A6N6D3A3T5D5TGA 7N4U676III AR AR K
EEEEE 55.. 555EEEEEEEEE (1219z) AU447 AU.5AU3476III AR AR K OK MU EEE 476543T EEEEEEE 5476 III 5. 54TT 77050
05 05 05 AU3. 457D.III AR AR K III AR AU345676 III AR K OK GA HW ? K (1221z) EEE 55555555555 555555 BT 4
BT BT B T T.EEEEE 5437 6AU3 476 III AR AR EEEEE **50 50 50 50** GA HW ? K (1223z)
BT BT BT BT BT BT BT BT 466T6T4AA5T65U7T4N6A5T3.7N4U 5T7U 3T5D (Cont'd – Lost remote tuner – 1224z)

5555 1738 - 1745z 24 Oct (IP) (Remote tuner Hong Kong) JPL SAT
U 12CLI K (IP – 1738z) R AS K K VVV KKK KKKK VVV VVV V U12CLI DU 1 K (1740z) BOZ NIL SK BOZ NIL SK
SK SK SK SK SK SK SK (1741z - Silent) SB SB SB SB (1744z) 12 K 12 HR NR SB K (1745z - Silent)

5555 1941 - 1942z 28 Oct (IP) (Remote tuner Hong Kong) JPL WED
4AN3 D4TN 4463 36N3 U445 AR (IP – Hand sent - 1941z) A HR U PSB WK (1942z – Silent)

5555 1109 - 1113z 30 Oct (IP) (Remote tuner Hong Kong) JPL FRI
VV RSG EEE LLL FF VVVV (IP – Hand sent – Horrible CW Operator - 1109z) 7FG55555555 R. GVVVVV RRGL (1110z)
GH5N VVVVVV RG555555N.FFGEE FG5557GM..M U AAU35 AAAUY RNALA567/.A354567/TA.3ST567/AR K K TN (1112z)
VVVVVVSVVVVVI.EE EEEEEEEE (1113z - Silent)

5566 1038z 02 Sep (IP) (Remote tuner Siberia) JPL WED
III BT 54T7 76DD 4N7A D7N5 UUD4 756A (IP – Cont'd – Machine sent – 1038z)

5566 1442 - 1446z 02 Oct (IP) (Remote tuner Siberia) JPL FRI
54D5 473U 7D36 DAT4 NA7N 47U3 (IP – Cont'd – Hand sent – 1442z) AR AR K (1445z) R R 7G GA K (1446z)

5708 1145 - 1158z 22 Oct (IP) (Remote tuner Siberia) JPL THU
88 1021 0911 RMKS 758 7585 CWTO 7117 CW TO 7.69WX TO 7167 CW TO 7539 .. 541cW. TO 7585 (1145z)
NR 8356/CCK CK .22 1020 0925 RMKS .25CW TO 3507CW TO 3548WX TO 37..CW TO 3758 TO A? .. 3M84WX TO 3525 AR W
(1146z) 55 BT BT BT .545465 BT BT BT BT BT BT BT BT 6NNK 5 **05 05 05 05 05 05** 223..9 (1147z) 9191 RMKS K
54/NT CK 5 555555555555555555 (1148z) CK 666 **05 05 05** BT BT 5.54D NR 1249 NR 1249... (1149z)
NR 1249/JKCB CK 50 22 2019 0814 RMKS 3..56CW TO 3541CW TO 3507WX TO 3787CW TO 3785CW TO 3758WX TO 3575
(1150z) ..34/1X/B.. 23 (1152z) NR 6531.. NR
NR 1602/JKCB CK 50 99 1013 0819 RMKS 3494CW TO 3427CW TO 3416WX TO 3764CW TO 3746CW TO 3761WX TO 3494
(1154z) 555555555 (1155z) 55AAU3 K 519TU 5T9...3TDAN 3494N NN..TO 34U7 NNW TO3 AA .. (1156z) 555555555 (1157z)
NR 8561/JKCB CK 50 99 1008 1017 RMKS ... (1158z – Having audio problem with remote tuner)

5742 1440 - 1441z 24 Sep (IP) (Remote tuner Siberia) JPL THU
37U3 5UAD UNAD T63N 6TD4 (IP – Cont'd – Machine sent – 1440z) III BT BT N7U3 6334 D6AU (Cont'd – 1441z)

6565 1430 - 1434z 02 Oct (IP) (Remote tuner Siberia) JPL FRI
7T4N 4A67 DUAN 5A6D 73NU 5D36 (IP – Cont'd – Hand sent) AR QSL ? HR WK NR 1 (1433z) AR QSL ? HR WK NR 23 K

6566 1341 - 1347z 21 Sep (IP) (Remote tuner Siberia) JPL MON
QSL ? K (IP – Hand sent - 1341z) R K H VVV .7OO R DE 3N R DE SP.7 K VV **87OO DE ACLG K** R **DE SPY7** K
QSU 5 MBA? K R QSA 2 K KP K R VV **LNU3 DE ....** K VV LNU (1343z - Silent - Monitored until 1347z)

6636 1429 - 1433z 11 Sep (IP) (Remote tuner Siberia) JPL FRI

UTTTU NAA6 T454 W W (IP – Cont'd – Machine sent1429z) LLA LLLL (1430z)
BT BT BT BT BT N7N6 N7UA TDUA T55U TAA6 N5UA TTT5 NU63 T444 (Cont'd – 1432z) AR (1433z)

6666 1526 - 1541z 17 Sep (IP) (Remote tuner Hong Kong) JPL THU
T457 D7AN 35U4 TND4 (IP – Cont'd – Hand sent – 1526z) 4367 DNAU3444444433343444444 AR AR (1534z)
3444455555557333334444T635U.5ADT3T7N65 AT37 6A4D A535 ATAN T3UA TTUU 636U D675 (Cont'd – 1535z) AR (1541z)

6666 0930 - 0940z 26 Oct V LM89 DE RJRN (Remote tuner Hong Kong) JPL MON
R QSA 2 K (0930z) R QSA 2 K (Both stations on this frequency) R QSA 2 K R IEC BT EEEEEEEE IEC BT EFAA EEEEEEE R
IEC BT EF AR K (Normally associated with exercise) R **IEC BT EF AR** K (0931z) R BT C EEEEEE (0933z) R BT DW AR K
R HR NR 34 K R HR NR 34 K R HR NR 34 K R HR NR 43 K (0934z) R HR NR NOT K R HR MSG GA K R GA K (0935z)
VV LM89 LM89 DE R1RN RJ EEEEEEEEEE (0936z) VV LM89 **LM89 DE RJRN** K R DE YV7K K (0938z) DE YV7K K
R HR QSA 2 K R QSA 2 K R H EEEEEEE R HR NR R IEC BT EF AR K (0939z) R BT DW AR K R HR NR NOT K
R HR NR 134 K R (0940z - Silent)

6709 1158z 16 Oct (IP) (Remote tuner Siberia) JPL FRI
U456 5D4N TA6N 3TUA DTNT A436 3674 (IP – Cont'd - Machine sent – 1157z) AR AR K K (1158z)

6760 1015 - 1019z 18 Sep **V U2MD (x3) DE 3PWG** (x2) (IP - Cont'd) (Remote tuner Siberia) JPL FRI
Note: Went silent at 1019z, after which Q2M DE NYZ could be heard on frequency. Shifted to 6840 //10640 for 1020z sked.
NYZ was active on 6840 but extremely weak. Normally has a booming signal. 10640 had the usual signal strength.

6792 0958 - 1009z 18 Sep (IP) (Remote tuner Siberia) JPL FRI
34N6 4N7D 334A 456T 76T3 (IP – Cont'd – Hand sent – 0957z) RPT BT **005/EX** AR (1006z) AGN AGN (1007z)
W TO... W K (Very weak – both stations on this frequency) AGN (1007z) R RPT 1W .. 4W BT TDT4 N3.T 465T AT4. 65A6 5TND ..

6818 1009 - 1032z 26 Sep **7G6Y** (Remote tuner Siberia) JPL SAT
N3N7 UTTA A7T6 5NT4 765U 6ADA (IP – Cont'd – Machine sent – 1009z) AR QSL ? (1009z) VV **8GT5 DE 7G6Y K** (1010z)
R QSA 2 QSL ? K (All stations on this frequency, but mostly very weak) NR PRT TO . K NRPT ... 8W K
R RPT 7W TO 8W BT U.7. ANN. AR N37U EEEEEEEE AR K (1011z) R RPT 27W K R RPT 27 W UN73 UN73 K QSL 081. K
R HR WK NR 00430 K R HR WK NR 05.2 K R HR NIL SK HR NIL SK (1013z) **FHY6 DE 7G6Y K** (1013z)
DH3E DE T5RG QSA 2 QSA ? K R QSA 2 QSL ? K R... R R 81W UAA4 UAA4 K QSL 0815 K R HR WK NR 00430 K
HR WK NR 627 K R HR NIL SK HR NIL SK (1015z) VV **8JU7 DE 7G6Y** K R QSA 2 QSL ? K R HR WK NR 00430 K
(1017z) R HR NIL SK VV **MKU8 DE 7G6Y** K **DH3E DE LDR5** QSA 2 QSA ? K R QSA 2 QSL ? K R QSL 181. K
R HR WK NR 00430 K HR WK NR 08310 K R HR NIL SK NIL SK (1018z) VV **QA1W DE 7G6Y** K
DH3E DE 8BHG R QSA 2 QSA ? K R QSA 2 QSL ? K R QSL 1819 K R HR WK NR 00430 K WK NR 0455 K R AS N Q....
VV **ZD3S DE 7G6Y K** (1020z) R QSA 2 QSL ? K R RPT 64W D6T3 D6T3 K R HR WK NR 00430 K R HR WK NR 00430 K
R HR NIL SK (1023z) VV QA1W DE 7G6Y K 3E DE 8B R QSA 2 QSA ? K R HR QWJ U QSY NR 63 K
R HR QRJ U QSY NR 63 K OK (1026z) VV QA1W DE 7GBY K VV QA1W DE 7G6Y K N DH3E DE 8BHG R QSA 2 QSA ? K
N DH3E DE 8BHG R QSA 2 QSA ? K (1029z) R HR QRJ U QSY NR 24 K R OK VV QA1W DE 7G6Y K (1030z)
VV QA1W DE 7G6Y K VV QA1W DE 7G6Y K (1031z) N DH3E DE 8BHG R QSA 2 QSA ? K R HR QRJ U QSY NR 44 K OK

6819 1027z 05 Sep (IP) (Remote tuner Siberia) JPL SAT
R HR WK NR 51 K (IP - Hand sent - 1027z - Silent)

6825 1023 - 1037z 05 Sep (IP) (Remote tuner Siberia) JPL SAT
N63U NAUA N5AA NNNA NATA TTT3 T74U **NNNA NATA TTT3 TU74** NUU6 TUU6 N7UA N5DA 7N47 T5N6 (IP – Cont'd)
Machine sent – Repeated groups in bold - 1023z) AR W (1024z) QSL 1203 OK OK NIL SK GB
ABCDEFGHIJKLMNOPQRSTUVWXYZ (Cont'd – 1025z) ... 5A3D N3T7 D4AU NAAD U7A5 3N5A 63.. (Cont'd – 1027z)
III BT 34 (1037z - Silent)

6858 1108 - 1117z 05 Sep (IP) (Remote tuner Siberia) JPL SAT
R (IP – Hand sent – 1107z) **XB1L DE CQPZ** R QSA 2 QSA ? K (1108z) R (1109z) QSA 2 K R HR WK NR 15 R HR (1111z)
R HR WK NR 38 R AGN (1112z – Silent) R HR WK NR 38 A EEEE (1114z) R HR WK NR 38 K R U 173E EEEEEE
U A730 K (1115z) R U N EEEEE R U 1730 K OMM1 EEEEEEEE R U 1730 K OMM J0D EEEEEEE
R U 1730 COMM 10MA K (1116z) AGN (1117z - Remote tuner timed out)

6871 2141 - 2145z 06 Sep (IP) (Remote tuner Siberia) JPL SUN
6NTA TAUN 7T4U 3NA4 637U U57A (IP – Cont'd – Machine sent – 2141z) AR QSL ? K (2142z) R RPT 19W K
(Both stations on this frequency) R RPT 19W 36AD 36AD K (2143z) (Cont'd to repeat groups) R **QSL 0643** HR WK NR 0.230 K
R HR WK NR 0011 TK R HR NIL SK HR HR NL EEEEEE R HR NIL SK (2145z)

6936 1219 - 1220z 23 Oct (IP) (Remote tuner Siberia) JPL FRI
NR 123 CCK 300 10 33 2.222 W BT (IP – Hand sent) NUN5 NAT6 N7D3 T7N5 TADU T35U DU55 N646 (Cont'd – 1220z)

6937 1034 - 1035z 22 Sep (IP) (Remote tuner Siberia) JPL TUE
MSG NR 034.AR K3 EX .922.835 BT (IP – Machine sent - 1034z) W RM 3.MK.. (1035z) OK BT BT BT
N7U6 TAU4 .N5 53A4 T4D4 T7U. NAAA T4T4 N3DU (Cont'd – 1035z)

6976 1139z 22 Oct (IP) (Remote tuner Siberia) JPL THU
7DU6 U55T 4774 D7.U 6NUA A4NA (IP – Cont'd – Hand sent – 1139z)

7531 1148z 15 Oct (IP) (Remote tuner Siberia) JPL THU
36A5 NAT6 74AT DDN7 7UDA 655D 4645 (IP – Hand sent – 1148z)

7553 1116 - 1126z 01 Oct (IP) (Remote tuner Hong Kong) JPL THU
QSL 1915 K (IP – Hand sent) R HR 7G GA K 7G NR NR 40MEEEEE **NR 4017 CK 80 48 1001 1916 RMKS 8395 TO 8335 K**
(1117z) 1916 K R TIME 1916 K R BT BT NU6D 7535 T47N D64N 575T 6..3 K ? 6437 5745 U63A .T75 TTAD (Cont'd – 1119z)
AR K (1125z) OK OK GA K (1126z)

7554 1009 - 1042z 02 Oct V YZD1 DE IDJM (Remote tuner Siberia) JPL FRI
VVV 50 BT D6.E (1009z) VVV (1026z) EEEE S (1027z) 434A VVV R K AR AR R K ER (1028z)
VVV YZD1 **YZD1 DE IDJM** IDJM K R EEE JX DE XSBY K (1029z) (Both stations on this frequency) R QSA 2 QSA ? K
R QSA 2 K R **IEC DEBT 8213 AR** K (Normally exercise related) R **IEC BT 5565 K** (1030z) R HR 7G GA PSE CY K R GA
R IER **NR 1002/CCK CK 19 33 1002 1831 RMKS 3534 TO 3511 III K** (1032z) R GA R 1P 1W BT
TA7U 3UA6 NAT3 A3NU T5NT N4TA N7TA 4D74 T3AD TTAA 6TND NU5T TD45 U4AD NDN5 3T45 4363 TD76 36AD III AR K
R K (1034z) 1P 1W BT TA7U 3UA6 NAT3 A3NU T5NT (Repeats message – 1035z) III AR (1036z) R R
BT AR H NR 100... CK 1. EEEEE 835 QSL ? K R R QSL 1836 K (1037z) R GA K
R 7G GA **NR 1002/CCK CK 19 33 1002 1837 RMKS 3511 TO 3534 K** R U 7G GA K R 7G 7G BT BT TA7U 3UA6
(Changed DTG of previous message, reversed FM and TO and resent message) AR **QSL 1841 K** (1041z) R HR WK NR KK 1042 K
R HR WK RPT K HR WK NR 1042 K R HR WK NR 24 K R NIL SK GB R NIL GB K (1042z)

7621 1345 - 1353z 11 Sep (IP) (Remote tuner Siberia) JPL FRI
65D6 III BT (IP – Machine sent – 1345z) U5UA N3DN U67T 3A34 6NU6 DNU5 76DN 464T TTTT TTTT DAA7 7TAU
(Cont'd – 1346z) III BT AR AR (1349z) HR MSG GA HR MSG GA
MSG **NR 0045/CCK CK 299 16 0911 2130 RMKS 7980 TO 7996 7995 BT** BT (1051z) 35T 3N3T 46NA TTTTT TTTTT 4DT5

7754 0228 - 0259z 24 Oct (IP) (Remote tuner Hong Kong) JPL SAT
VVV IHUK (IP) VVV IHUK K VVVV 8VNJ 8VNJ K N K (0229z) K K MNIT (0230z) KKK (0233z - Silent)
.R49 K (0239z) R R MSG NR MSG NR **MSG NR 3009 CK 100 11 1024 1040 BT**
4AU3 47T6 6UD7 7T6A 6UD3 63UD 47T6 6UD3 47T6 6UD3 3D47 (Cont'd – 0240z) AR (0244z) VVV 84NJ QSL ? R R (0244z)
AS AS (0246z) VVV IHUK K OK FF GA (0247z) FF FF **NR 3008 1030 BT** DP3/CF5 III FFF **NR 3008/EX 1030 BT**
DP3/CF5 III FFF NR 1030 BT DP3/CF5 AR (0248z) QSL ? RPT K RPT RPT (0249z) RPT (0250z) **QSL 1045** (0250z)
SK SK SK AS AS AS MSG NR CJCK MSG VVV IHUK GA MSG NR MSG NR (0252z) MSG NR
MSG NR 3009 CK 100 11 1024 1040 BT 4AU3 47T6 6UD7 7T6A 6UD3 63UD 47T6 6UD3 47T6 6UD3 3D47 (Cont'd – 0254z)
AR QSL ? (0258z) OK OK UTOU SK ST K K U SK (0259z – Silent)

7777 1142 - 1143z 21 Sep (IP) (Remote tuner Hong Kong) JPL MON
IEC BT IEC IEC BT 210 EEEEE (IP –Hand sent – 1142z) **IEC BT 2189** KR. EEEEE HR NR 05KRS HR
(Normally associated with Exercise traffic) NR 10 RMKS R HR NIL SK GB AS AS (Both stations on this frequency - 1143z)

7777 1425 - 1430z 10 Oct G3Y (Remote tuner Hong Kong) JPL SAT
3T433T53NT73DD5N ? 537N 7467 T5AU AR W (IP – Hand sent - 1425z) AR AR YR YA YA YA YG YA YA Y TWA TWA
LLLLYY 3 GYYYYY. YKYY VVV CQ CQ CQ DE 3GY 3G. EEEE VVV CQ (x3) DE 3GY 3GM Y EEEEEEEE
VVV **CQ (x3) DE 3GY** 3GY 3GY MSG CQ **NR 0086/CCK CK 259 09 1012** EEEE VVV CQ CQ GA 0 EEEEEEE TOO0 (1428z)
3.. QQ FY FY FM MM BT BT 4535 D5NN AD53 T4N4 54DU 376 AR AR (1430z) VVV CQ T (1430z - Silent)

7777 1117 - 1119z 17 Oct (IP) (Remote tuner Hong Kong) JPL SAT
180 BT (IP – Machine sent – very weak – 1117z) .9556345.387.07.410118261.. VV MSG NR 0. CK 40 .... (1118z)
VV **MSG NR 01 CK 300 51 1017 1800 BT** ..95 4.3T (1819z)

7788 1126 - 1129z 01 Oct (IP) (Remote tuner Hong Kong) JPL THU
RMKS 15.5 TO 97.. K (IP – Fading - 1126z) R R R R R R BT BT BT BT BT 28.. K (1127z) R BT BT ..28 AR K
R R R R BT BT E R R 1W GA BT A647 76A3 D75D 4764 T6T5 D735 N.AA 3N65 T5AU TT3A (Cont'd – Machine sent – fast – 1129z)

7810 1040 - 1043z 10 Sep (IP) (Remote tuner Siberia) JPL THU
N55U TTT5 7D55 N3D4 (IP – Cont'd – Machine sent – 1040z) (Fading badly) III III BT BT N63U TTT4 N535 NNNU NAAU (Cont'd)

7810 0839 - 0842z 25 Oct (IP) (Remote tuner Siberia) JPL SUN
473T N3AU NNN3 N5DU TTT6 NU6A N6A6 (IP – Cont'd – Machine sent – 0839z)
III III BT BT T535 TTT4 TTTU NNNU N554 TDD5 N7UU N7N4 TD53 N3U6 N77U TTT5 T4T5 (Cont'd - 0842z)

7609 1031z 23 Sep (IP) (Remote tuner Siberia) JPL WED
75DN TNTT 57DA 5ADD 7743 III BT BT 3A57 DA7A UTA6 (IP – Cont'd – Machine sent – 1031z)

8006 1127 - 1128z 25 Oct (IP) (Remote tuner Siberia) JPL SUN
R 10W ?(IP – 1127z) R 10W BT TTAT K (1127z) (Both stations on this frequency) R GA K
R 11W BT D5T7 .736 6DDN .A3T DU6A (Cont'd - Hand sent -1128z)

8031 1129z 25 Oct (IP) (Remote tuner Siberia) JPL SUN
37NU 7T64 A64N 5N.. 4N75 7T4D D5AN U46T (IP – Cont'd – Machine sent – 1129z)

8031 1230z 25 Oct (IP) (Remote tuner Siberia) JPL SUN
47TU D54T 5ADN 4ANT NU34 (IP – Machine sent – 1230z)

8036 0147 - 0155z 08 Oct (IP) (Remote tuner Siberia) JPL THU
A5U5 5TAT UNDT D6AA 7AT ND.7 3T34 T64N 7346 (IP – Cont'd – Machine sent - 0147z) AR K (0148z)
(Both stations on this frequency) R 10W BT TT46 AR K N 1 .. K R 16W BT DNT4 AR K N 20W K R 20W BT 737T AR K
(0149z) (Cont'd repeat groups) R 41W TO 59W BT 3UAT (Cont'd – 0153z) (Silent – 0155z)

8048 1319z 22 Oct (IP) (Remote tuner Siberia) JPL THU
A4UN AD4T 766U 7D7N N5T6 (IP – Cont'd – Machine sent – 1119z)

8065 1206z 23 Oct (IP) (Remote tuner Siberia) JPL FRI
74TA 4T6A 57AU 4443 (IP – Cont'd – Machine sent – 1206z)

8065 1043 - 1053z 24 Oct (IP) (Remote tuner Siberia) JPL SAT
T5U3 7UT4 547D 6D74 4DN6 (IP – Cont'd – Machine sent - 1043z) AR K (1051z) VAQ 5W BT 63DU AR K
(Cont'd repeating groups) R U MSG GA K (1052z) R GA (1053z)

8065 1139z 25 Oct (IP) (Remote tuner Siberia) JPL SUN
BT TA3T 5DN. D7TN T44U NDD7 NN55 D7U6 (IP – Cont'd – Machine sent – 1139z)

8088 1236z 25 Oct (IP) (Remote tuner Siberia) JPL SUN
6653 D7T4 6AU5 47DD 3A7D TU3U NN3N (IP – Cont'd – Hand sent – 1236z)

8096 1201 - 1211z 25 Oct (IP) (Remote tuner Siberia) JPL SUN
CQ CQ (IP - 1201z) AS (Different station – 1201Z) GA (1202z) CQ CQ GA 7TTT 6TUT ND76 56T4 TU3A A57 AR K (V.weak)
1W 1W BT 4... K (1203z) 1W GA 2W GA 2W BT .TTT UUAT D764 6U4T U3.A 57 AR K (1204z) 3W GA 3W BT UUAT
UUAT OK CQ CQ GA GA BT BT 4T34 D4TTTN 6UTTT 64T.64 U3D A5T CW (1206z) 3W GA
3W BT BT 6UTTT 64TUNI4 U.DA. T AR K (1206z) AS (1207z) 7W 7W GA 7W BT BT A5T. (1207z) CQ GA CQ CQ GA
OK BT BT 4TD7 TTTT 6UTTT D363 336T U53U 34A 5W GA 5W BT BT BT 36T4 .3.3 4.6U4W (1209z) 2W 2W BT BT 5. AR W
5W 5W BT .36T AR W (1210z) OK (1211z - Silent)

8110 0827 - 0852z 02 Sep (IP) (Remote tuner Hong Kong) JPL WED
/ANR ? K (IP – Hand sent – Fading - 0827z) / AS AS VVV **NMQ. DE 6DEH K** (0829z) NR QSA 2 K K NR QSA 2 (0830z)
QSL ? QSL ? (0831z) NR U NR ? (0832z) B AS VV C (0833z) VV C5YF **C5YF DE 6DEH K** K (0834z)
/QSA 2 ... 501III BT 7501 AR K / / QSA ? K NR (0836z) N RPT ... W 6U3D AR / QSL 164. ? K QSL 16. QSL 1630 ? K
NNR .. AA EEEEE U NR ? (0837z) NR AZ GA K (0838z) NR GA NR GA K (0839z) R QSL 164. K (0844z) AS
VV DTHW DE ... EEEE WN8 MW MWN MR8D MU.W EEEEE A NR ? D MR8I DE 6DEH ... K (0846z)
Z NM. . SZ. MZM. QSA 4 QSA 2 QSA ? K K (0848z) NN .TN T BT TC BT OIEIT ..C SCGX DA.501 K K (0849z) M QSL QSL ?
DTNUNR .. NT B VVV HR NR 5 NR 113 HR NR HR NR 113 HR NR 113 (0851z) M SK GB SK GB (0852z)

8123 1100 - 1109z 15 Oct (IP) (Remote tuner Hong Kong) JPL THU
ND63 3TT. NTU4 54NA 4T5N 4TD5 (IP – Hand sent – 1100z) AR K R QSL 1905 K (1103z) (Both stations on this frequency)
R HR NP6 K HR /27 K R HR NR .. SK GB (1103z)

8124 1104 - 1109z 15 Oct (IP) (Remote tuner Hong Kong) JPL THU
QSA 2 K (IP – Hand sent - 1103z) ... 0K K 5. 05 05 05 (1104z) **05 05 05** K K (Long zero) 50 K K 50 K K (1105z) 50 K K (1106z)
50 K K (1107z) (Switched to voice USB – Male – 1109z)

8124 1118z 22 Oct (IP) (Remote tuner Siberia) JPL THU
U5T7 6TU6 3NA5 T5T6 5TN4 (IP – Cont'd – Hand sent – 1118z)

8175 0830z 25 Oct (IP) (Remote tuner Siberia) JPL SUN
78/./30/22/COMM/6703/DUTY AR (IP – Hand sent - 0830z)

8175 1141 - 1143z 25 Oct (IP) (Remote tuner Siberia) JPL SUN
AR (IP – 1141z) BT BT 6990/14/12NE EEEEEE BT 6990/14/12/32/COMM/6703/DUTY AR (1142z)
HR NR 1110 EEEEE HR NR 1110 VA (1143z)

8188 0958z 25 Oct (IP) (Remote tuner Siberia) JPL SUN
6D54 D6D7 A6DA 67U5 A3T3 (IP – Cont'd – Machine sent – 0958z)

8747 1205 - 1231z 17 Sep **VVV (x2) 4GN (X3) DE (x2) QJ7 (x3)** (Remote tuner Hong Kong) JPL THU
VVV (x2) 4GN (X3) DE (x2) QJ7 (x3) (IP – Cont'd – Machine sent – 1205z) (Signal distorted) (Monitored until 1206z)
NR 4D6U 4D6U 4D6U (1225z – Cont'd) (Silent – 1227z) NR 4D6U 4D6U 4D6U (1228z) MSG MSG MSG BT
NR 4D6U 4D6U 4D6U MSG MSG MSG BT (1229z) NR 7700 A33U TAUU NT7T 4N3T (1230z) NR 00A6 4A3N TA55 NT4T
4N3T NR 77AT UT43 TA66 NT4T 4N3A NR 002. N7N7 TA55 NT5T 4N3A NR (Cont'd – now going very fast – 1231z)
(Appears to be Chinese Air Defence tracking)

8826 1027z 23 Sep (IP) (Remote tuner Siberia) JPL WED
UDU7 67AU 36N. 3DN3 7AUN 7UTU (IP – Cont'd – Machine sent Very fast – 1027z)

8888 1116 - 1126z 20 Sep V GKSQ (x3) DE YSJC (x2) (IP - Cont'd) (Remote tuner Hong Kong) JPL SUN
05 (Cont'd – Hand sent – Long zero – 1116z) **GKSQ DE YSJC** (1118z) GKSQ DE YSJC 05 (Cont'd – 1119z)
VVV GKSQ GKSQ DE YSJC YSJC (Cont'd – 1121z) 305 AR BT A000 (1124z) **MSG NR 0786 CK 168 35 0920 A536 BT** BT

(1124z) TUT 3U6 3AN 3U7 TAU 773 TA7 773 357 374 4T3 NN3 445 474 437 3DU 4DT 4D5 TAD 773 (Silent – 1126z)
(Appears to be next XSV85 message that will be sent at 1130z sked on 8073!)

8888 1027 - 1029z 28 Sep (IP) (Remote tuner Hong Kong) JPL MON
3D4 (IP – Hand sent – 1027z) 355N 4D67 5T47 6AD7 765U DT67 N47A 3D64 (Cont'd – 1027z) AR K (1029z)
35U5 4ND7 5T3U 6A37 7637 (Cont'd – 1029z)

8888 1052 - 1055z 12 Oct (IP) (Remote tuner Hong Kong) JPL MON
7G 7G .... K (IP – Hand sent – 1052z) .U34 AR 85AR K HA. AR 5IRD AR AR7D AR7D (Horrible CW – 1053z)
AR 05 UE5 AR . AU355 EEE AU36 5AR. 5. HIA (1055z - Silent)

8888 0928z 26 Oct (IP) (Remote tuner Hong Kong) JPL MON
47ND 6TAU 357T 34A4 NAD3 N7A6 UN75 645D T56D 67TU (IP – Cont'd – Hand sent – 0928z)

8888 1113 - 1128z 28 Oct (IP) (Remote tuner Hong Kong) JPL WED
NR 115/EX 16MEEEEEE (IP – Hand sent – 1113z) FF **NR 115/EX 1607 RA RMKS 1429 TO 253D** 44EEEEEE VV S FF 3
FF **NR 364DN/TX21T3 RMKS 8O818 8174 TO 5496 K** (1114z) V FF 364/EX 210303 RMKS 8174 TO 45496 K
BT T64 A6AB BBAB55AB5./CD8 AB AR BT AB AB 5/CD8 AR K QSL ? L? ? FF NR 369/EX 0804 RMKS 8184 TO 5480 EEEEE
FF **NR 369/EX 0804 RMKS 8184 TO 5480 K** BT AB5/CD8 AR BT AB5/CD8 (1118z) FF NR 374/EX 1622 RMKS 818EEE
FF **NR 374/EX 1622 RMKS 8184 TO 54D6 K** (1819z) BT M73/KG7 T AR K BT M73/KG7 N AR K (1120z) QSA QSL ?
QSA ? ? ? ? ? ? ? BOZ USE UPSB W K (1121z) 77G NR 7G **NR 01 CK 30 73 1028 1922 K** (1122z) VV C BT DE /????
FF 2 ? (1123z) WP 1 06RO12 W BT AUAA AB43 N47T N57N A6N3 A7N6 DTN7 DANU (Cont'd – 1125z) (Silent 1128z)

9245 1016 - 1018z 16 Oct (IP) (Remote tuner Siberia) JPL FRI
HR NR 3030 K (IP – Hand sent - 1017z) R NIL GB (Both stations on this frequency) NIL NIL GB (1018z)

12210 0810 - 0811z 17 Oct (IP) (Remote tuner Siberia) JPL SAT
BT 79...352NN9 440/39/ EEE BT (IP – Hand sent – 0810z) 794/C35F EEEEE BT 794/C3.2/9440/39/.2/05/331.. BT
794/C352/9440/39/32/05/3313 ...9 AR HR NR .030 SR NR HR NR 1030 EEE NIL SK NIL NIL SK (0811z - Silent)

DP91 Logs: To simplify logs, the dual frequency scheds are shown as // Please note the two frequencies are not strictly a true // sched.
Start / Finish times are often displaced & some content can vary slightly.

4832//NRH 1404 - 1413z 11 Sep **CQ (x3) DE DP4091 (x2) V** (Remote tuner Siberia) JPL FRI
CQ (x3) DE DP4091 (x2) V (IP – Cont'd – Machine sent – 1404z) (Sending letter O for zero) NIL SK GB (x3) (1413z)

6825//NRH 1003 - 1008z 01 Sep CQ (x3) DE DP91 (x2) V (// Not monitored) (Remote tuner Siberia) JPL TUE
CP (x3) DE DP91 (x2) V (Cont'd – 1003z - Very weak/Fading) (Unable to get ending, but appears to be working 91 stations - 1008z)

6825//NRH 0958z 13 Sep CQ (x3) DE DP91 (x2) V (// Not monitored) (Remote tuner Siberia) JPL SUN
CQ (x3) DE DP91 (x2) V (IP - Cont'd – 0958z) NIL SK GB (0707z - Silent)

6825//NRH 0204z 11 Sep CQ (x3) DE DP91 (x2) V (// Not monitored) (Remote tuner Siberia) JPL FRI
CQ (x3) DE DP91 (x2) V (IP - Cont'd – 0204z) HR NIL SK GB (x3) (0210z – Silent)

6825//NRH 1006 - 1009z 20 Sep CQ (x3) DE DP91 (x2) V (// Not monitored) (Remote tuner Siberia) JPL SUN
CQ (x3) DE DP91 (x2) V (IP - Cont'd – 1006z) HR NIL SK GB (x3) (1009z – Silent)

6825//NRH 1001 - 1011z 19 Sep CQ (x3) DE DP91 (x2) V (// Not monitored) (Remote tuner Siberia) JPL SAT
CQ (x3) DE DP91 (x2) V (IP - Cont'd – 1001z) HR PSE ALL LL .. (x2) (1008z) **DP91 DE DP7591 K** (1009z)
... QSA 2 K DP91 DE DP7591 K DE DP7591 Q.. K (1011z - Silent)

6825//NRH 0157 - 0208z 21 Sep CQ (x3) DE DP91 (x2) V (// Not monitored) (Remote tuner Siberia) JPL MON
CQ (x3) DE DP91 (x2) V (IP - Cont'd – 0157z) HR NIL SK GB (0208z)

6825//NRH 0159 - 0207z 22 Sep CQ (x3) DE DP91 (x2) V (// Not monitored) (Remote tuner Siberia) JPL TUE
CQ (x3) DE DP91 (x2) V (IP - Cont'd – 0159z) HR NIL SK GB (x2) (0207z – Silent)

6825//NRH 1002z 23 Sep CQ (x3) DE DP91 (x2) V (// Not monitored) (Remote tuner Siberia) JPL WED
CQ (x3) DE DP91 (x2) V (IP - Cont'd – 1002z) (Extremely weak - completely faded out at 1004z)

6825//8948 0958 - 1009z 05 Sep CQ (x3) DE DP91 (x2) V (Remote tuner Siberia) JPL SAT
CQ (x3) DE DP91 (x2) V (IP - Cont'd – 0958z) NIL SK GB (x3) (1008z) HR S HR NIL SK GB (x2) (1009z)
(Again, different ending from // 8948 - NIL SK GB (x6) (1006z))

6825//8948 0158 - 0207z 07 Sep CQ (x3) DE DP91 (x2) V (Remote tuner Siberia) JPL MON
CQ (x3) DE DP91 (x2) V (Cont'd – 0158z) HR NIL SK GB (x6) (0207z)

6825//8948 1001 - 1008z 08 Sep CQ (x3) DE DP91 (x2) V (Remote tuner Siberia) JPL TUE
CQ (x3) DE DP91 (x2) V (Cont'd – 1001z) (R/S slower than R/S on 8948) 8A 8A (1008z) HR NIL SK GB (x6) (1008z)

6936//NRH 0946 - 1000z 08 Sep (IP) (Remote tuner Siberia) JPL TUE
DP7691 W (IP – 0946z) 35II 35W BT TA3A II (0947z) 35W BT TA3A W CFM 3 IIII 40W 40W 40 W TDA5 W

46W (Cont'd repeat groups -0949z) 85W (0957z) K K BT BT NAU4 N7UA N6N4 N574 N73U NUN5 NDNU (Cont'd – 0959z)
R NIL SK R NIL SK (1000z)

9848//NRH 0957 - 1024z 11 Sep CQ (x3) DE DP91 (x2) V (// N/H) (Remote tuner Siberia) JPL FRI
CQ (x3) DE DP91 (x2) V (IP - Cont'd – 0957z) PSE PSE ALL TC FRESQ WK (1005z) PSE ALL TC FREQ WK
PSE ALL TC VREQ WK PSE ALL AC FREQ WK **DP8291** QSA 3 U ? DP82 DP8291 QSA 3 NIL NIL SK SK GB GB
7291 QSA 4 **DP4691** QSA ... **DP4091** QSA 3 ? DP4091 QSA 3 NIL DP4091 DP4091 QSL 3 NIL (1008z) **DP6991** QSA 3 U ?
DE DP6991 QSA 3 U ? **7191** QSA 5 ? 98UT4. DUEEE (1010 691 QSA 5 U ? K DP7191 QSA 3 U ? **DP8191** AR (1011z)
DP7391 QSL 3 ? U ? DP6191 QSA 5 U ? 970 DP69 AR D. **DP6191** QSA 3 NIL NIL SK GB GB (1013z)
DP719 QTR 15? 0373 ? **DP6591** QSA 2 U ? DP6591 QSA 2 ? **DP6791** QSA .. ? DP6191 QSA 5 U DP79 DP6591 QSA 2 ?
DUT4795 ? TUU ? (1015z) **DP7391** QSA 5 ? R DP6191 QSA . ? DP6191 QSA 3 NIL NIL SK SK GB GB DP4091
DP DP4091 AR DP4091 DP409 AR QSA 3 NIL (1018z) R DP6191 QSA 5 U ? DP7391 QSA 3 U ? DP71 FM 5? 02373 ? (1019z)
CL CL CL R R 6191 QSA 5 U ? DP4091 DP6.91 QSA ? DP4091 QSA 3 ? (1021z) **DP6391** QSA . ? (1022z)
DP7191 QSA 3 NIL DP7191 QSA 3 ? (Unable to monitor any longer – 1024z)

4720kHz Hand- Sent sched

4720//NRH 1829 - 1834z 01 Sep VVV WNF DE FXM (Remote tuner Hong Kong) JPL TUE
VVV **WNF (x3) DE FXM (x2)** (Cont'd – Hand sent – 1829z) QSA ? QSV K (1834z)

1329 - 1334z	05 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	SAT
2229 - 2234z	10 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	THU
1729 - 1734z	12 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	SAT
1329 - 1334z	13 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	SUN
1429 - 1434z	14 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	MON
1929 - 1934z	17 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	THU
1729 - 1734z	18 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	FRI
1929 - 1934z	18 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	FRI
1729 - 1734z	20 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	SUN
1929 - 1934z	20 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	SUN
1729 - 1734z	21 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	MON
1529 - 1534z	22 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	TUE
1430 - 1535z	24 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	THU
1630 - 1635z	24 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	THU
1730 - 1735z	25 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	FRI
1630 - 1635z	26 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	SAT
2130 - 2135z	26 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	SAT
1730 - 1735z	27 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	SUN
1430 - 1435z	29 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	TUE
1830 - 1835z	30 Sep	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	WED
1830 - 1835z	01 Oct	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	THU
2130 - 2135z	01 Oct	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	THU
1730 - 1735z	05 Oct	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	MON
2030 - 2035z	05 Oct	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	MON
2230 - 2235z	05 Oct	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	MON
1430 - 1435z	06 Oct	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	TUE
1430 - 1435z	08 Oct	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	THU
1630 - 1635z	14 Oct	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	WED
2130 - 2135z	14 Oct	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	WED
1830 - 1835z	15 Oct	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	THU
1730 - 1735z	16 Oct	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	FRI
1730 - 1735z	24 Oct	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	SAT
1430 - 1435z	25 Oct	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	SUN
1530 - 1535z	26 Oct	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	MON
2230 - 2235z	27 Oct	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	TUE
1230 - 1235z	30 Oct	VVV WNF DE FXM (Remote tuner Hong Kong)	JPL	FRI

M89 Regular Logs

September 2015: (New pairings marked in **bold** type)

3300//NRH	1153z	01 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1544z	02 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1305z	05 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1338z	06 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1208z*	07 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
			*Switched from daytime 5588 frequency to this night time frequency.		
	1205z	08 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1637z	09 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	1440z	10 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU

	1125z	11 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1325z	13 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1742z	14 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	2147z	16 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1517z	17 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1023z	18 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1254z	19 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1529z	20 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1350z	21 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
	2026z	22 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	2035z	23 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1111z	24 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1540z	25 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	2107z	26 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1700z	27 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1114z	28 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1417z	29 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1814z	30 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
3642//NRH	1659z	01 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	TUE
	1640z	09 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	2209z	13 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	2157z	16 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	WED
	1919z	18 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	FRI
	1458z	19 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1733z	20 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	2256z	24 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1329z	26 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
	2108z	26 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	0031z	27 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1745z	30 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	WED
3642//7602	1814z	01 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1707z	06 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1427z	08 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	TUE
	1442z	10 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1743z	14 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1519z	17 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1924z	18 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1722z	21 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1514z	22 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	2325z	25 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	1947z	27 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	2219z	28 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1919z	29 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
3757//3777//4532					
(3757 only)	1527z	20 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	SUN
	1734z	20 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1927z	20 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1515z	22 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
3777//NRH	1700z	01 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (// Not Monitored) (Remote tuner Siberia)	JPL	TUE
3777//4532	1815z	01 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1546z	02 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1307z	05 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1339z	06 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1206z	08 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1642z	09 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	1444z	10 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1126z	11 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1728z	12 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1326z	13 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	2028z	22 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
3797/4532	**Note: New // for this R/S**				
	1927z	24 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1627z	26 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	2113z	27 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1418z	29 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
3821//5644					

(3821 only)	1423z	11 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
(3821 only)	1736z	12 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (// Not Monitored) (Remote Hong Kong)	JPL	SAT
	1328z	13 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1744z	14 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1500z	19 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1928z	20 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1111z	21 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1735z	21 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
	2038z	23 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
(3821 only)	1654z	24 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
(3821 only)	1926z	24 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1117z	26 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	2247z	27 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1419z	29 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
(3821 only)	1812z	30 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	WED
4131//NRH	1555z	07 Sep	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
	1416z	08 Sep	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	TUE
	1449z	10 Sep	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1931z	24 Sep	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	2137z	26 Sep	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
4225//NRH	1202z	08 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	2207z	13 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1745z	14 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1544z	25 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	2313z	26 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	2225z	28 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1010z	30 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
4532//NRH	1437z	14 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	2117z	17 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1708z	18 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1257z	19 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1515z	21 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1653z	24 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1543z	25 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1848z	28 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
4532//6793	1034z	28 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
4532//8060	1116z	25 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
4532//6793//8060	2151z	16 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1126z	17 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1113z	21 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1050z	22 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1113z	24 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1119z	26 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1128z	27 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
4860// 6840	1820z	01 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	TUE
	1620z	02 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	WED
	1320z	05 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	SAT
	1720z	12 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	SAT
	2220z	13 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	SUN
	1520z	17 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	THU
	1920z	18 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	FRI
	1920z	20 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	SUN
	1520z	21 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	MON
	2020z	22 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	TUE
	1420z	24 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	THU
	1320z	26 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Siberia)	JPL	SAT
	1720z	27 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Siberia)	JPL	SUN
	2220z	28 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	MON
	1420z	29 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	TUE
	1820z	30 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	WED
5177//NRH	1323z	02 Sep	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	1514z	05 Sep	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
	1359z	11 Sep	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	1156z	24 Sep	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU

5500//NRH	1817z	01 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1008z	07 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
			Note: Slight change in R/S - Sending DNPE vice 7NPE.		
	1113z	20 Sep	**V DNPE (x3) DE QV5B** (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1514z	21 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1052z	22 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1118z	26 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1950z	27 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1033z	28 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1422z	29 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
5588//NRH	1014z	01 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	0957z	07 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
	1205 - 1208z	07 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	/4296/20.36/237NR/6437 BT (IP – Hand sent – 1205z) 6757/4296/20.6/237NR/6437 AR BT				
	6757/4296/20.6/237NR/6437 AR (1206z – Return to R/S – Switched to 3330 at 1208z)				
	0926z	08 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	0925z	10 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	0926z	11 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	0943z	13 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	2315z	16 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1025z	19 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1158z	20 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1102z	21 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	QSY QSY QSY (1102z) (Switched to 3330kHz night time frequency)				
	1059z	22 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	NR 088 CK 301 44 0922 1900 BT (From R/S – 1100z) ...N.756 UT7D D3UT A5U4 6TU7 ADTU 6UTN TT6D TTT5 (Cont'd – 1100z)				
	1013z	23 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1013z	24 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1022z	28 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1026z	29 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1125z	30 Sep	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
5644//NRH	1816z	01 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1548z	02 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1342z	06 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1600z	07 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
	1127z	08 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	TUE
	1652z	09 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	1456z	10 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	2305z	12 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	2243z	14 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	2149z	16 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1124z	17 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1709z	18 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1542z	25 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1849z	28 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1117z	29 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	9A0/..81/6314 AR (IP – 1117z) HR WK NR 3.. K (Return to R/S – 1118z)				
	1740z	30 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
5801//NRH	1601z	07 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
5801//7602	1335z	06 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
5801//10180	1154z	01 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1030z	02 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	1017z	05 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
	1310z	05 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	0802z	07 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
	0217z	08 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	TUE
	0939z	10 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	0955z	11 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	1127z	17 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1024z	23 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	0716z	24 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1044z	26 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
	1155z	27 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN

6421//9131	0935 - 0938z	13 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	QRW L1... 1900 COMM 48.. AR AGN (From R/S – 0935z - Very weak/fading) **NR .8. 1730 RMKS .780 TO 5.8/4.2.BT**				
	SVC QRW 4020 QRW L 1840.8.9.0 COMM ..0 AR A QSL ? HR WK NR 3.. K (Return to R/S – 0938z)				
	0811z	17 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	2348z	20 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	0019z	21 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1047z	22 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1010z	23 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	2349z	25 sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1048z	26 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1024z	28 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	0947z	30 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	RMKS .... TO 660/6.30 BT (IP – 0947z) .OMM /.830/FLZ052./6./60. 333 01 BT 901...EEEE BT COMM/.../LZ52A0.68 AR				
	60051 FM .? 02... .201III BT (Return to R/S – 0950z)				
6793//NRH	1122z	05 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Hong Kong)	JPL	SAT
	UGT COMM BT 057/6157/6878/09/05/1955/883/A/80/23 AR (1125z – Sent 3 times) (Return to R/S – 1127z)				
	0814z	17 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1005z	18 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	FRI
	1002z	29 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	TUE
6793//8060	1018z	01 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	0843z	02 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1013z	07 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	0923z	08 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	0919z	10 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	0927z	11 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	2302z	12 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	0944z	13 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	2245z	14 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	2316z	16 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	2315z	19 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1011z	20 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	SUN
	1017z	20 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1055z	21 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	0022z	22 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1045z	22 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	TUE
	1012z	23 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	0758z	24 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	2314z	26 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	2249z	27 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	2222z	28 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1028z	29 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1127z	30 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	6878/09/30/1955/882/A/83/23 AR (IP – 1127z) (Return to R/S – 1127z)				
6840//NRH	2220z	18 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (// Not monitored) (Remote Siberia)	JPL	FRI
6840//10640	1020z	01 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	TUE
	0020z	02 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	WED
(10640 only)	1020z	05 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Siberia)	JPL	SAT
	1120z	05 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	SAT
	0820z	07 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	MON
	0020z	08 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	TUE
	1120z	08 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Siberia)	JPL	TUE
	0920z	10 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	THU
	1120z	11 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	FRI
	2320z	16 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	WED
	0820z	17 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	THU
	1020z	18 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	FRI
	2320z	19 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	SAT
	0220z	20 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	SUN
	1120z	21 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	MON
	0020z	22 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	TUE
	1020z	24 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	THU
	0120z	25 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	FRI
	2320z	24 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Siberia)	JPL	FRI
	1120z	26 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Siberia)	JPL	SAT
	0020z	27 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Siberia)	JPL	SUN
	1120z	28 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	MON
	1120z	29 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	TUE

	1120z	30 Sep	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	WED
7582//NRH	0922z	08 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
7602//NRH	0148z	07 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
8060//NRH	0027z	02 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1043z	05 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
	2150z	06 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	2344z	07 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
	2301z	24 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	2319z	30 Sep	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
8110/NRH	0814z	07 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	0024z	08 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	0026z	22 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1129z	27 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1012z	29 Sep	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	AGN (IP – Hand sent – 1012z) VV TC2 7G NR 09/CCK CK 25 37 0929 0145 RMKS 1951 TO .11 AGN				
	VV TC2 7G NR 09/CCK CK 25 37 0929 0145 RMKS 1951 TO 7110 / 7201 / 7582 / 7129 / 7205 / 7732 / 1231 / 7566 AR (1015z)				
	VV TC3 UGT/ AGN VV TC3 UGT COUM8 SAFN VV TC3 UGT COMM 7386/1020/G42 /1958 AGN				
	VV TC3 UGT COMM 7386/1020/G42A AGN VV TC2 T AGN VV TC3 UGT COMM AGN				
	VV TC3 UGT COMM 7386/1020/G42/1957 AR (1018z) VV TC4 UGT COMM 7263/1035/Z32/1951 AR				
	VV TC5 UGT COMM 1652/1305/41/1451 AR VV TC6 UGT COMM 717AM AGN VV TC6 UGT COMM AGN				
	VV TC6 UGT COMM 7183/1475/Z38/1951 AR (1021z) (Return to R/S – then Silent - Switched to 5500 - 1022z)				
9131//NRH	0024z	02 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1018z	05 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
	0921z	08 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	0923z	10 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	2343z	19 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1111z	20 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1010z	24 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	0036z	26 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
9131//10947					
(10947 only)	1016z	01 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
(10947 only)	0133z	07 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
(10947 only)	0951 - 0953z	07 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	LZ057A0/6781/9082 AR (IP – 0951z) HR AGN EEEE AG				
	NR 4.745 RMKS 6780 TO 40.2/4.20 BT COMM/1830/LZ057A0/6781/4082 AR (0953z) QSL ? HR WK NR 31 (Return to R/S – 0953z)				
	0925z	11 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
(10947 only)	0742z	18 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1023z	18 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1016z	19 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	2316z	26 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	0026z	27 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1010z	29 Sep	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
10180//NRH	1019z	19 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1054z	21 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1013z	25 Sep	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
October 2015:	(New pairings marked in **bold** type)				
3300//NRH	1202z	01 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1432z	01 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	UGT NR 01841/0535/2300/23.R/931 AR(IP - Return to R/S – 1432z)				
	1655z	02 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	2135z	03 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1204z	04 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1453z	04 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	2023z	05 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1100z	06 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1343z	06 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	TUE
	1847z	07 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	2026z	08 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	2013z	09 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1419z	10 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1023z	11 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN

	1028z	14 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	VVV F GA CQ63 010097../0931 UGT COMM BT BT (From R/S – 1036Z) 01841/9758/2000/117NR/3301 AR BT 1741K/ EE (1038z) 01841/9758/2000/117NR/3301 AR BT 01841/9758/2000/117NR/1301 AR AR (1039z – Return to R/S)				
	2133z	14 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1221z	15 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1719z	16 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1110z	17 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1746z	18 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1407z	19 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
	1604z	21 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	1353z	23 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	1354 - 1355z	24 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	/7.8/2225/..07NR.08../.. (IP – Weak/fading signal - 1354z) COMM /4L./...25/23/NR09311.... (Return to R/S – 1355z)				
	1500z	25 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	2031z	25 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	2210z	27 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1938z	28 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1223z	29 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	04/1/2052/237NR/0931 AR (IP – Hand sent - Return to R/S - 1223z)				
	1103z	30 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1408z	30 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
3642//NRH	1436z	01 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1657z	02 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	2042z	02 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	2207z	05 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1347z	06 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	TUE
	1848z	07 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	2015z	09 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	2134z	14 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1840z	27 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	TUE
	1940z	28 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	2338z	29 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1412z	30 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
3642//7602	1656z	03 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	2024z	05 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1550z	07 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	2341z	07 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	1546z	08 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	0056z	12 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
	1634z	14 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	1702z	15 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1621z	16 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1703z	17 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
	1450z	18 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1747z	18 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1408z	19 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
	2248z	20 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	TUE
	1606z	21 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	1315z	22 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1823z	23 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	1735z	24 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1510z	26 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	2251z	31 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
3777//NRH	1212z	04 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	SUN
	1348z	06 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	TUE
	1606z	20 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	TUE
3777//4532	1437z	01 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1658z	02 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	1657z	03 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	2133z	03 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
	2004z	04 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1708z	05 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1148z	07 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1421z	10 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1158z	11 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1227z	15 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU

	1704z	15 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1723z	16 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1453z	18 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1927z	20 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	TUE
	1608z	21 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	1824z	23 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	1226z	25 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1513z	26 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	2212z	27 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1141z	28 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1222z	29 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
3777//4532//6793	1111z	01 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1050z	24 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1104z	30 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
3777//4532//6793/8060					
	1208z	05 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	UGT COMM BT 328/1155/1585/10/05/2040/594/A/58/97 AR (From R/S – Machine sent - 1210z) (x3) (Return to R/S – 1212z)				
	1048z	06 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	2027z	08 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1107z	09 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	2137z	14 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1119z	22 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
3818//4476	**New Round slip & frequency pair Although //, the Round Slip on 4476kHz is slower than the one on 3818kHz**				
(3818 only)	2112	01 Oct	V U2MD (x3) DE 3PWG (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1700z	02 Oct	V U2MD (x3) DE 3PWG (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	2130z	03 Oct	V U2MD (x3) DE 3PWG (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
*(3818 only)**	1242z	04 Oct	V U2MD (x3) DE 3PWG (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	SUN
	* **Note: Switched from daytime 6761 to this night time frequency**				
	1456z	04 Oct	V U2MD (x3) DE 3PWG (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1709z	05 Oct	V U2MD (x3) DE 3PWG (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
(3818 only)	1350z	06 Oct	V U2MD (x3) DE 3PWG (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	TUE
	1419z	06 Oct	V U2MD (x3) DE 3PWG (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1149z	07 Oct	V U2MD (x3) DE 3PWG (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
3821//5644	1658z	03 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	2136z	03 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
	1215z	05 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
(3821 only)	1352z	06 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	TUE
	1423z	06 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1851z	07 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1101z	08 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1104z	09 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1212z	10 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1200z	11 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1047z	12 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	Note: New call sign R/S for this station.				
	2105z	15 Oct	**V QDKC (x3) DE XLDF** (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1724z	16 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	Note: Having problems with R/S - Sending V DKSK (x3) DE (x3)				
	1114z	17 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1413z	19 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
	2253z	20 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	TUE
	1610z	21 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	1825z	23 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	1401z	24 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1227z	25 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1512z	26 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	2213z	27 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	2254z	31 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
4131//NRH	2121z	01 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1453z	02 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	1723z	03 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
	1853z	07 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	2048z	08 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	2038z	09 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	0058z	12 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
	1638z	14 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED

	2103z	15 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1710z	17 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
	1504z	18 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1612z	20 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	TUE
	1826z	23 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	1756z	24 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
	1230z	25 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1705z	26 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
	2231z	27 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	TUE
	1951z	28 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	2339z	29 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	2249z	31 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT

4137//NRH **Note: New R/S and frequency**

1852z 19 Oct **V 6LUA (x3) DE 3QWG** (x2) (IP - Cont'd) (Remote tuner Siberia) JPL MON
CL DE (From R/S - 1853z) **.7TI** QSA 2 QAF NL SK GB NIL CL CL CL CA (1854z) DE R CE6Q QSA 2 QSA ? (1855z)
DE CL DE R **EX.4** QSA 2 QSA ? (Fading) NIL SK GL M EEEEE NIL SK GA EEEE GB CL DE R TE CL (1856z)
DE R **Q68M** QSA 2 QSA ? (1857z) NIL SK GB CL ET EEEE DE R XV6EQ EEEEEE **GB6E** QSA 2 QSA ? (1958z) NIL SK
GB CL DE DE R QB8 EEEEEEE DE CL DE R **FG7R** QSA 2 QSA ? (1900z) NIL SK GB CL CL DE DE
R CE6Q EEEEEEE **CE6Q** 4A2 QSA ? (1901z) NIL SK GB CL DE DE R **D2VA** QS2 QA? NIL GB SK CL
CL CL CL CL TE TE EEEEEEE DE (1902z) R **SOPG** QSA 2 QSA ? CL CL KL CL DE (1903z) SOPG QSA 2 QSA ? NIL SK
CL CL DE DE (1905z - Silent)

4225//NRH	2058z	01 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1500z	04 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	2212z	05 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1852z	07 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	2050z	25 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1146z	27 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE

4532//NRH 1739z 02 Oct V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Hong Kong) JPL FRI
/1585/10/03/0210/596/A/58/97 AR (IP – 1739z) UGT COMM BT 328/1875/1585/10/03/0210/596/A/58/97 AR
UGT COMM BT 328/1875/1585/10/03/0210/596/A/58/97 AR (1742z – Return to R/S)

	1416z	19 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
	1551z	23 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
4532//6793/8060	1010z	13 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1111z	17 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	2257z	31 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
4860// 6840	1120z	01 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	THU
	2320z	02 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	FRI
	1720z	03 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Siberia)	JPL	SAT
	2020z	05 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	MON
	1020z	06 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	TUE
	0020z	07 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	WED
	1420z	08 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	THU
	1120z	09 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	FRI
	0020z	10 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	SAT
	1120z	11 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	SUN
	1320z	12 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	MON
	0020z	13 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	TUE
	1620z	14 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	WED
	1820z	15 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	THU
	1120z	16 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	FRI
	1520z	16 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Siberia)	JPL	FRI
	1120z	17 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	SAT
	1620z	21 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Siberia)	JPL	WED
	1120z	22 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Siberia)	JPL	THU
	1820z	23 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Siberia)	JPL	FRI
	1220z	25 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Siberia)	JPL	SUN
	1520z	26 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	MON
	1720z	26 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Siberia)	JPL	MON
	2220z	27 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	TUE
	0020z	28 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	WED
	1220z	29 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	THU
	1120z	30 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	FRI
(4860 only)	1420z	30 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Siberia)	JPL	FRI
5177//NRH	0211z	02 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	1319z	09 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	1202z	15 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU

	1405z	19 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
	1626z	21 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	1304z	22 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1205z	24 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
	1125z	25 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1153z	27 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	TUE
	1415z	30 Oct	V JKDJ (x3) DE SLBC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
5500//NRH	1114z	01 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1736z	02 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1703z	03 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1424z	06 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1554z	07 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1058z	12 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1013z	13 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1751z	18 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1459z	25 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
5588//NRH	1126z	08 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	0926z	10 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1049z	12 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1012z	13 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	0953z	16 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	1055z	24 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	0947z	26 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	0959z	27 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	0923z	28 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	2354z	29 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	2259z	31 Oct	V MW3D (x3) DE 2SLC (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
5644//NRH	1832z	01 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1440z	02 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	2047z	02 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	2257z	04 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	2211z	05 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1555z	07 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	2029z	08 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1628z	14 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	Note: New call sign R/S for this station.				
	1226z	15 Oct	V **QDKC (x3) DE XLDF** (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1503z	18 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1749z	18 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1142z	28 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1419z	30 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
5801//NRH	1109z	08 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1057z	24 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
5801//10180	0152z	02 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	1204z	05 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1106z	06 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	0852z	09 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	1045z	14 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	1051z	15 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1223z	15 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1016z	16 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	1126z	16 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	0834z	17 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
	III MEEEE QSL ? (IP – Machine sent – 0834z) R QSL ? HR WK NR 22 EEE R EEEE AR QSL ? HR WR NR 230 (Return to R/S)				
	1108z	17 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1034z	21 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	1115z	22 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	THU
	1150z	23 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	NR 092 1945 RMKS 9437 TO 9424 BT (IP – Hand sent – 1150z) 9427 BT				
	COMM/2030/LZ18767/9437/9424 AR QSL ? HR WK NR 230 (Return to R/S – 1152z)				
	1207z	24 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
	0822z	25 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1218 - 1219z	25 Oct	(IP - Probably 3A7D) (Remote tuner Siberia)	JPL	SUN
	2000 RMKS 2617 TO 2647 2697 9784 9087 9737 EEEEE (IP – Machine sent) RMKS (Lost remote tuner for a few seconds – 1218z)				
	9427 9467 .752 6157 6707 6817 BT BT (1218z) AT63 U56A 63N7 6T5U 4UN5 4D53 ANU3 374D TU53 TT3D N6UD (Cont'd-1219z)				

	1510z	27 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	0815z	28 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
6421//9131	1106z	01 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	2312z	02 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	0813z	03 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1040z	06 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	NR 186 1830 RMKS 2617 TO 2217 2647 BT (IP 1040z) .4C QRW 2647 QR. L18... (Lost remote tuner – 1041z)				
	7717/261./2277 HR WK NR 13 (Return to R/S – 1045z)				
	2339z	07 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
	0013z	08 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
(6421 only)	0758z	09 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
(6421 only)	0026z	10 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	0918z	10 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	1016z	11 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	1043z	12 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	0018z	13 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	1044z	14 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	0859z	23 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	0858z	26 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	0023z	28 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	0934z	29 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
6760//NRH	**New frequency for this new Round Slip**				
	2342z	07 Oct	V U2MD (x3) DE 3PWG (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	WED
6761//NRH	**New frequency for this new Round Slip**				
	1153z	04 Oct	V U2MD (x3) DE 3PWG (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	1007z	06 Oct	V U2MD (x3) DE 3PWG (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	TUE
6775//NRH	**New frequency & Round Slip**				
	1937 - 1940z	20 Oct	V SD2Y DE CV6K (Remote tuner Siberia)	JPL	TUE
	CVBKM EEEEE (In tfc – Hand sent – 1937z) VV SD2Y **SD2Y DE CV6K** CV6K				
	HR SVC GA HR SVC GA EEEEEE SVC GA HR SVC GA (1938z) BT BT 6932/32 BT EEEEEE BT BT				
	6932/32/13/29/22/COMM/6703/DUTY AR R N BT BT 6932/32/13/29/22/COMM/6703/DUTY AR AR (1940z - Silent)				
	1638z	26 Oct	(IP) (Remote tuner Siberia)	JPL	MON
	10/23/22/COMM/N.03/DUTY AR (IP – Hand sent - 1637z) HR SVC GA BT 6965/..EEEE HR SVC GA BT				
	6955/10/23/12/COMM/6703/DUTY AR (1638z – Silent)				
	1945 - 1946z	28 Oct	(IP) (Remote tuner Siberia)	JPL	WED
	BT 6905/32/38/29/22/COMM/6703/DUTY AR AR (IP – Hand sent 1945z) BT 6905/32/38/29/22/COMM/6703/DUTY AR AR (1946z)				
	1446 - 1504z	29 Oct	V SD2Y DE CV6K (Remote tuner Siberia)	JPL	THU
	V **SD2Y (x3) DE CV6K (x2)** (IP – Hand sent – Very weak/Noisy - 1446z) HR SVC R GA HR SVC BT (1447z)				
	BT BT 6924/..18/1./32/COMM/6703/DUTY BT BT 6924/33/18/17/32/COMM/6703/DUTY (1449z – Silent) V SD2Y DE CV6K				
	(Cont'd – 1452z) GA HR SVC GA HR SVC (1455z - Silent) V SD2Y DE CV6K (Cont'd - 1456z) HR SVC GA HR SVC GA				
	(1458z - Silent) V SD2Y DE CV6K (1500z) HR SVC GA ....67../DUTY AR BT BT ....75/18/17/72/COMM/6703/DUTY AR				
	BT BT .../...EEEEE BT BT 6.../../../COMM/EEEEE BT BT /.../COMM/... AR (1504z - Lost remote tuner)				
	2328 - 2329z	29 Oct	(IP - Probably CV6K) (Remote tuner Siberia)	JPL	THU
	HR SVC GA BT 6990/72/20/42/COMM/6703/DUTY (x2) (2329z - Silent)				
	2343 - 2344z	29 Oct	V SD2Y DE CV6K (Remote tuner Siberia)	JPL	THU
	V **SD2Y (x3) DE CV6K (x2)** (IP – Cont'd - Hand sent – 2342z) HR SVC GA BT BT 6932/72/26/22/COMM/6703/DUTY AR (2343z)				
	HR SVC GA BT BT 6932/72/26/22/COMM/6703/DUTY AR (2344z - Silent)				
	1355 - 1404z	30 Oct	V SD2Y DE CV6K (Remote tuner Siberia)	JPL	FRI
	V **SD2Y (x3) DE CV6K (x2)** (IP – Hand sent – 1355z) HR SVC GA HR SVC GA BT BT 6943/72/11/12/COMM/6703/DUTY AR				
	(1356z) BT BT 6943/72/11/12/COMM/6703/DUTY AR HR NR 1060 HR NR 1060 NIL SK NIL SK (1357z – Silent)				
	V **SD2Y (x3) DE CV6K (x2)** (IP – Hand sent – 1359z) HR SVC GA BT BT (1402z) 6953/72/1./72/COMM/6703/DUTY AR (x2)				
	NIL SK HR NR 1060 K (1404z - Silent) (Previously heard on 8175 – checked to see if // but N/H)				
	2144 - 2148z	30 Oct	V SD2Y DE CV6K (Remote tuner Siberia)	JPL	FRI
	V SD2Y (x3) DE CV6K (x2) (Cont'd – Hand sent – 2144z) HR SVC GA HR SVC GA BT 6965/73/25/12/COMM/6703/DUTY AR				
	(2147z) HR SVC GA BT 6965/73/25/12/COMM/6703/DUTY AR (2148z - Silent)				
6793//8060	0744z	01 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1002z	01 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (// Not monitored) (Remote tuner Siberia)	JPL	THU
	0802z	09 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	0923z	10 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT

UGT COMM .../1195/1.85/..10/1750/594/A/53/97 AR (IP - Return to R/S – 0923z)

	1022z	11 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	0019z	13 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	0955z	16 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	0852z	23 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	FRI
	0837z	25 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	0859z	26 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1007z	27 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	2237z	27 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	TUE
	0800z	28 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	0938z	29 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
6840//10640	0820z	03 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	SAT
	0620z	05 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	MON
	0920z	07 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	WED
	0920z	10 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	SAT
	1020z	11 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	SUN
	1020z	13 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	TUE
	0720z	15 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	THU
	0020z	25 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	SUN
	0920z	26 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	MON
	1020z	27 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	TUE
	0020z	28 Oct	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (Remote tuner Hong Kong)	JPL	WED
7602//NRH	1406z	08 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1406z	26 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	MON
8060//NRH	2315z	02 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
	0819z	03 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	2300z	04 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	0019z	06 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	0042z	12 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	0723z	15 Oct	V M8JF (x3) DE RIS9 (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
8110/NRH	0034z	01 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	0816 - 0817z	03 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SAT
	VV UGT COMM BT 2674/1645/Z46/8398 AR (From R/S – Hand sent) VV UGT COMM BT 2674/1645/Z46/8398 AR (Return to R/S)				
	0607z	05 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	0018z	06 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	0017z	07 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
	0043z	12 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1013z	13 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
		Note: Moved to 5500kHz			
	0919z	26 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	MON
	1004z	27 Oct	V 7NPE (x3) DE QV5B (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
9131//NRH	0031z	01 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	0023z	25 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	SUN
	0827z	25 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN
	0759z	28 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	WED
9131//10947	0958z	27 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	TUE
	2355z	29 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	THU
	1106z	30 Oct	V DKSL (x3) DE ALSK (x2) (IP - Cont'd) (Remote tuner Hong Kong)	JPL	FRI
10180//NRH	0836 - 0838z	03 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SAT
	NR 012 1630 RMKS 9427 TO 9968/9997 BT (From R/S – Hand sent – 0836z) COMM/1700/XZ758/83 BT EEEEE BT COMM/170EEEEEEE BT COMM/1700/XZ758/83/9425/9968 AR QSL ? (0837 HR WK NR 300 (Return to R/S – 0838z)				
	1019z	11 Oct	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	SUN

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Sep kHz, ID, ...	Oct kHz, ID, ...	Nov kHz, ID, ...	Dec kHz, ID, ...	Remarks
		x	x				0315		E11	03	7850 253/00	7850 253/00	5779 253/00	5779 253/00	since 01/14, last log 10/15
x							0450		E11	03	6304 416/00	6304 416/00	5082 416/00	5082 416/00	since 02/10, last log 10/15 2nd transmission Thu 1730z
	x			x			0455		S11A	03	5358 321/00	5358 321/00	4828 321/00	4828 321/00	since 09/14, last log 10/15
	x				x		0530		E11A	03	10213 98#/##	10213 98#/##	13455 98#/##	13455 98#/##	since 04/14, last log 10/15
		x		x			0545		E11	03	15915 348/00	15915 348/00			since 06/11, last log 09/15
	x		x				0645		E11	03	10800 517/00	10800 517/00	7840 517/00	7840 517/00	since 07/09, last log 10/15
	x			x			0710		E11	03	10221 633/00	10221 **10213?** 633/00	10800 633/00	10800 633/00	since 02/11, last log 10/15
					x		**0710**		**E11**	**03**	**14769 491/00**	**14769 491/00**	**491/00, search**	**491/00, search**	**since 07/15, last log 10/15**
				x		x	0730		E11	03	15825 352/00	15825 352/00			since 04/15, last log 10/15
x							0745		E11	03	10213 262/00	10213 262/00	10213 262/00	10213 262/00	since 03/14, last log 10/15 2nd transmission Thu 1530z
	x		x				0745		E11	03	14575 335/00	14575 335/00	16112 335/00	16112 335/00	since 10/11, last log 10/15
		x				x	0805		E11	03	11450 311/00	11450 311/00	10429 311/00, **check**	10429 311/00, **check**	since 07/14, last log 10/15
x			x				0820		E11	03	9960 438/00	9960 438/00	10125 438/00, **check**	10125 438/00, **check**	since 10/09, last log 10/15
x				x			0830		E11	03	10690 649/00	10690 649/00	9446 649/00	9446 649/00	since 01/10, last log 10/15
x		x					0900		E11	03	9399 534/00	9399 534/00	9446 534/00	9446 534/00	since 10/05, last log 10/15
	x			x			0915		S11A	03	7317 484/00	7317 484/00	7504 484/00	7504 484/00	since 01/10, last log 10/15
		x	x				0930		E11	03	8803 270/00	8803 270/00	9950 270/00	9950 270/00	since 02/14, last log 10/15
x			x				1015		S11A	03	16112 475/00	16112 475/00	12530 475/00	12530 475/00	since 04/10, last log 10/15
	x			x			1020		S11A	03	9960 426/00	9960 426/00	9610 426/00	9610 426/00	since 02/10, last log 10/15 2nd transmission Thu 1730z
	x						1045		E11	03	8102 576/00	8102 576/00	12153 576/00	12153 576/00	since 01/12, last log 10/15 2nd transmission Fri 2000z
	x	x					1045		E11	03	~~7449~~ ~~469/00~~	~~7449~~ ~~469/00~~	8091 469/00	8091 469/00	since 03/10, last log 08/15 **changed to 1205Z**
x				x			1110		E11A	03	13375 95#/##	13375 95#/##	14410 95#/##	14410 95#/##	since 12/11, last log 09/15 **d e l e t e d ? cf. 1710Z**
		x	x				1155		E11	03	15915 718/00	15915 718/00	15632 718/00	15632 718/00	since 04/11, last log 08/15 **d e l e t e d ?**
	x	**x**					**1205**		**E11**	**03**		**9443 469/00**			**since 03/10, last log 10/15**
	x	x					1300		E11	03	15632 133/00	15632 133/00	18030 133/00	18030 133/00	since 08/13, last log 10/15
x		x					1320		M03	03	5463 543/00	5463 543/00	4505 543/00	4505 543/00	since 08/13, last log 10/15
			x			x	1320		M03	03	9150 437/00	9150 437/00	4828 437/00	4828 437/00	since 02/11, last log 10/15
	x				x		1400		E11A	03	13375 98#/##	13375 98#/##	10690 98#/##	10690 98#/##	since 10/11, last log 10/15
				x		x	1420		M03	03	13911 879/00	13911 879/00	13911 879/00	13911 879/00	since 01/12, last log 10/15 2nd transmission Fri 2000z
			x				1530		E11	03	10330 262/00	10330 262/00	5409 262/00	5409 262/00	since 06/14, last log 10/15 2nd transmission Mon 0745z
x						**x**	1540		E11	03	15915 228/00	15915 228/00	15632 228/00	15632 228/00	since 03/11, last log 10/15
		x				x	1625		E11	03	10448 978/00	10448 978/00	10448 978/00, check	10448 978/00, check	since 02/15, last log 10/15
		x			x		1705		E11	03	10213 392/00	10213 392/00	9443 392/00	9443 392/00	since 02/14, last log 10/15
x				x			1710		E11A	03	5194 95#/##	5194 95#/##	6923 95#/##	6923 95#/##	since 11/11, last log 09/15 **d e l e t e d ? cf. 1110Z**
			x				1730		E11	03	9371 416/00	9371 416/00	5082 416/00	5082 416/00	since 03/10, last log 10/15 2nd transmission Mon 0450z
	x				x		1810		E11A	03	13455 98#/##	13455 98#/##	10213 98#/##	10213 98#/##	since 08/12, last log 10/15
	x		**x**				**1925**		**E11**	**03**	**10620 551/00**	**10620 551/00**	**551/00, search**	**551/00, search**	**since 07/15, last log 10/15**
		x		x			1955		S11A	03	4016 **371/00**	4016 **371/00**	5815 **371/00**	5815 **371/00**	since 02/14, last log 10/15
				x			2000		E11	03	7377 576/00	7377 576/00	6304 576/00	6304 576/00	since 03/12, last log 10/15 2nd transmission Tue 1045z
					x	x	2005		E11	03	8186 363/00	8186 363/00	11107 363/00	11107 363/00	since 03/14, last log 10/15

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Sep kHz, ID, ...	Oct kHz, ID, ...	Nov kHz, ID, ...	Dec kHz, ID, ...	Remarks
x							0800		G06	01A	6810 329	6810 329	5329 329	5329 329	since 07/10, last log 10/15 repeat at Thu 1300Z
		x					1200	?	G06	01A	5915 248	5915 248	4946 248	4946 248	since 10/14, last log 10/15 yearly changing frequencies + id repeat at 1300Z
		x					1300	?	G06	01A	5458 248	5458 248	4051 248	4051 248	since 10/14, last log 10/15 yearly changing frequencies + id repeat from 1200Z
			x				1300		G06	01A	**4598** **329**	**4598** **329**	4460 329	4460 329	since 09/11, last log 10/15 repeat from Mon 0800Z
x							1700	1/2	G06	01A	4632 248	4632 248	3728 248	3728 248	since 04/10, last log 10/15 yearly changing frequencies + id repeat at 1800Z
x							1800	1/2	G06	01A	5380 248	5380 248	4484 248	4484 248	since 05/09, last log 10/15 yearly changing frequencies + id repeat from 1700Z
			x				1830	2/4	G06	01A	5934 579	5934 579	4519 271	4519 271	since 05/01, last log 10/15 repeat at Fri 1930Z
				x			1930	2/4	G06	01A	5442 947	5442 947	4792 436	4792 436	since 04/01, last log 10/15 repeat from Thu 1830Z

Current HM01 Schedules

Freq 1	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
5855	0500	0500		0500		0500	
11462			0500		0500		0500
10345	0600	0600		0600		0600	
14375			0600		0600		0600
9330	0700	0700		0700		0700	
13435			0700		0700		0700
9065	0800	0800		0800		0800	
11635			0800		0800		0800
9240	0900	0900		0900		0900	
11462			0900		0900		0900
5855	1000	1000		1000		1000	
9155	1000	1000		1000		1000	
11635			1000		1000		1000
12180			1000		1000		1000
11435	1600	1600	1600	1600	1600	1600	1600
11530	1700	1700	1700	1700	1700	1700	1700
11635	1800	1800	1800	1800	1800	1800	1800
11635	2100	2100		2100		2100	
16180			2100		2100		2100
10715	2200	2200		2200		2200	
17480			2200		2200		2200
11530	2300	2300		2300		2300	
17540			2300		2300		2300

Text in red requires confirmation.

Transmissions in cells highlighted in Yellow have not been heard since early January 2014 and appear to have been discontinued. Although HM01 is occasionally heard on 8009 and 8135kHz in this time slot.

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

Current only known schedule: Daily. 7351kHz 0500 - 0530z (Variable - can start up to 10 minutes earlier)

Carrier on around 0450 - 0500z (variable) FSK data transmission 0450 - 0500z Morse msg follows at 0500z (variable)

Jim (JkC) noted the return of HM02 on 25 September when tuning at 0510z near 7351kHz & recognised the waterfall pattern, but it had ended by the time he tuned on frequency. However, he was able to confirm this the following day & Jim supplied a number of logs over the next few days, before it disappeared again.

Ary (AB) noted a brief return on 07 October, with only the FSK transmission present - No Morse was heard. 0459z carrier up, 0503 FSK, carrier off at 0505z.

There are two notable changes from the May / June transmissions. Firstly, although the carrier is appearing around the same time the FSK now starts usually within 5 minutes, followed by the Morse message a minute or two later, whereas previously the FSK did not start until 0510z - irrespective of the carrier starting time, followed by the Morse element that always commenced at 0515z.

Secondly, the FSK element is much shorter than was noted in May & June 2015, with this element of the transmission now lasting only for 1 minute as opposed to 5 minutes in May & June transmissions.

HM02 Logs

HM02 7351kHz 0455z 26 Sep15
(810Hz tone on freq - 0455z)
(FSK - 0509z)
(Silent - 0511z)
(CW begins - 0512z)
999 159 38 =
54201 19650 94027 36356 37981
36817 73293 69857 21579 57196
65087 38481 34601 92942 75692
26390 35780 77384 53012 60134
17756 85277 86471 05045 94586
13969 65877 70474 12627 06079
87221 43884 72177 56090 50360
53471 97094 68122
= 159 38
159 38 = (0516z)
(Repeat message)
= 159 38 000
(Silent - 0519z)

Courtesy JkC

HM02 7351kHz 0459z 27 Sep15

(FSK - 0459z)
(Silent - 0501z)
(CW begins - 0501z)
999 205 37 =
37064 76227 36375 17773 03734
72059 49261 95618 00132 26728
26857 96571 98828 35229 06447
47638 11996 90976 56308 76874
25318 07799 07212 53418 89497
85485 68244 30868 04989 98855
42641 51982 69473 03549 71386
57894 36598
= 205 37
(Repeat message)
= 205 37

Courtesy JkC

HM02 7351kHz 0453z 28 Sep15
(810Hz tone already on freq - 0453z)
(FSK 120Hz shift - 0454z)
(Silent - 0457z)
(CW begins - 0501z)
999 286 39 =
22230 22645 18447 70260 69604
29199 13557 66861 65105 72797
39129 19459 99222 81376 88456
87486 45845 44303 64692 20673
24875 70285 33563 67666 26559
04533 51549 76562 99551 52753
32187 69459 10377 42541 81114
59673 57454 87627 14731
= 286 39
286 39 =
(Repeat message)
= 286 39 000

Courtesy JkC

HM02 7351kHz 0452z 30 Sep15
(810Hz tone - 0452z)
(FSK 120Hz shift - 0454z)
(CW begins - 0459z)
999 456 38 =
58211 09865 39720 46007 36519
34078 31460 38199 33507 51364
65774 74109 29024 74915 52987
02607 21749 86124 79784 66239
10204 86094 49800 09008 87282
77772 73973 23049 85538 08332
76995 95040 58911 28585 22822
92083 75206 97871
= 456 38
456 38 =
(Repeat message)
= 456 38 000

Courtesy JkC

HM02 7351kHz 0449z 01 Oct15
(810Hz tone - 0449z)
(FSK 120Hz shift - 0452z)
(CW begins - 0454z)
999 249 34 =
37589 24952 51497 20107 08930
77941 95207 81298 36933 04650
15920 07463 29404 04500 72483
54376 35660 69482 24490 41213
84353 97812 68500 09276 46114
13080 91979 68559 71489 24273
50869 93271 45432 03197
= 249 34
249 34 =
(Repeat message)
= 249 34 000

Courtesy JkC

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

Zulu > / Month v	0600/0700 Sched c Wednesday/Saturday USB 10baud			1730/1900 Sched e Tuesday / Thursday USB 10baud			XPA2 Sched m Various Sun/Tue H 00 H+20 H+40 1300,1500,1800,2000,2100			XPA2 Sched r Various Fri/Sat H 00 H+20 H+40 1400, 1900, 2100		
Jan	9108	10908	12208	7891	6791	5391	16138	14438	13438	16167	14663	13923
Feb	11409	13509	14609	8123	7523	6823	16338	14538	13538	18667	17419	16212
Mar	11409	13509	14609	9362	8062	7462	16138	14438	13438	18667	17419	16212
Apr	10359	11559	13559	10943	10243	9243	14538	13538	12138	17462	16114	14828
May	10868	12168	13368	10438	9938	9138	14538	13538	12138	17462	16114	14828
June	11409	13509	14609	10438	9938	9138	14738	13438	12138	16167	14663	13923
July	11409	13509	14609	10943	10243	9243	14538	13538	12138	15967	13884	12217
Aug	10868	12168	13368	12187	10787	9387	14738	13438	12138	16167	14663	13923
Sept	10359	11559	13559	11576	10476	9276	14538	13538	12138	16167	14663	13923
Oct	10868	12168	13368	9362	8062	7462	16338	14538	13538	17462	16114	14828
Nov	11409	13509	14609	8123	7523	6823	18238	16238	14438	17462	16114	14828
Dec	7756	9056	10656	8164	7364	5864	14538	13538	12138	15967	13884	12217

Notes:

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

XPA c 0600/0700z schedule appears to be robust with reasonably strong signals into UK
XPA e 1730/1900z schedule E appears robust; sometimes difficult to receive in Great Britain, monitor in Slovenia has good success.
XPA2 m Repetitive frequency triplets, appears robust, generally strong into UK
XPA2 r Schedule appears robust; generally very strong signals to UK

XPA2 p Six day variable schedule, separate document

Updated 05/09/2015

XPA2 p Russian Intelligence Multitone Systems [Radiogramma] Transmission Schedules

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

XPA2 p

Appears to be a robust schedule
Strong into UK

05/09/2015

SPECIAL MATTERS

Operation Jallaa:

MESSAGES:

'E' Many thanks your letters.

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