ENIGMA 2000 NEWSLETTER

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See Editorial for more info

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Editorial

Several unusual and out of the ordinary events taking place in the number stations scene in the last couple of months; the E06 English Man was active in the second week of March on several consecutive days in the UK afternoon.

The related S06 Russian Man also made an appearance on the 13th and 14th of the month at 1500 UTC, these transmissions seemingly not part of any regular schedules since they were not found again in either March or April, although with short-wave propagation being the way it is these days the non-appearance of a transmission might all be down to the ionosphere.

Some most unusual activity logged from the Sunday/Wednesday E07 which has been heard with some extremely long messages in April, the group counts well into the two hundreds including a two-message variant heard in the middle of the month.

Other E07 and E07a schedules have not displayed any behaviour in terms of length of messages which could be described as out of character.

Is this connected with the ongoing events in Syria and the chemical attack at the home of the former Russian agent in Salisbury?

Both events are being used by the British establishment as a stick with which to beat Russia - and to divert attention from ever increasing problems on the domestic front.

Who knows!

Peter of Saffron Walden's reference to the Portland Spy Ring [NL105] brought some rather interesting replies from our readership. The Portland Spy Ring had a number of players – in pic order**: Bunty Gee and Harry Houghton , Gordon Lonsdale/Konon Molody and the the Krogers/Cohens**

Houghton persuaded Gee to remove Top Secret files in her care and together they delivered same to Lonsdale on a Friday. Lonsdale took them to 45 Cranley Drive Ruislip where they were copied by antiquarian book dealer Peter Kroger and reduced to microdots with help from Helen Kroger. The microdots then passed to Moscow using a book to conceal the microdot.

As was shown in NL105 the bungalow was home to certain radio equipment but there was also optical equipment for the generation of microdots as well as photographic equipment allied to that task and a bathroom that could be converted into a darkroom.

An interesting remark came from reader 'CQ' which read, 'The surveillance on 45 Cranley Drive, as I'm sure you know, was conducted from 1 Courtfield Gardens, the home of the Search family whose daughter Gay later became one of the first 'TV Gardeners' and was quite famous in her time. Her father, an ex RAF chap, worked as a civilian at RAF Northolt and was a 'known quantity'.

Brooke and wife

The 'Krogers' were later swapped for an idiot (or perhaps Soviet 'useful idiot') who got himself arrested in Moscow for handing out anti -Soviet leaflets. Thus the Russians had someone to swap for the Krogers.

Idiot Brooke in exchange for for two high level illegals. Greville Wynne [Wynne and Penkovsky], another low level agent, was exchanged for Gordon Lonsdale. That meant the Soviets had a full team of illegals repatriated for little output of worth on their side.


DAILY EXPRESS

FREEDOM Spy Lonsdale sent back

Wynne on his way home

SWOP

Wynne Swap for Lonsdale

The image left shows the Public Convenience at New Alresford, Hampshire which in 1960 was used by Harry Houghton and others as a dead letter drop.

Our helpful reader CQ writes further, 'Harry Houghton would sometimes use the public lavs in New Arlesford Hampshire as a drop for documents that Molody/Londsale would collect.

So what did the council do? They put up a plaque in the bog! Maybe they'll want the conveniences to achieve listed status next'.

The plaque, dedicated to this act is on the front cover of this issue.

Recommended Reading

In keeping with the front page image and the quick description of the why's and wherefores here are two books covering the matter.

'Operation Portland' was written by Harry Houghton, the black marketer, diplomatic fact totum , sometime boozer and convicted spy. Having read extensively on this case Houghton's own words [assuming no ghosting here] promised a fresh view of matters surrounding the case. Whether Houghton was reminded of the OSA before writing there was nothing new apart from Houghton's whinge. He did explain the prison term and its effect on him and his partner in crime, Bunty Gee. Bunty, it seems was a bit of a stirrer. Readers might be interested to learn that neither Houghton or Gee served their full tariff and were released nine years having seen the exchanges for low level persons for the three illegals they had served. They married shortly after.

'Spy Ring' is a reasonable read, if not somewhat dated now. As a singular read on the subject it is good but other books I have read look outside the immediate circle and at parallel operations. Nonetheless, a recommended book.

RadioUser, Practical Wireless and 'Shadows of the State'

Sometime back I was asked by the Editor of 'RadioUser', now a Warner Group Publication [£3.99 monthly], to write a piece on Number Stations. I wasn't interested and suggested that he contact another member of E2k which he did. He is now in possession of a piece covering the subject. It is included in the May 2018 edition with part 2 in the June edition. There's other Cold War stuff too. [Since this our member has been approached for another piece …].

As I waded through my April copy which arrived on Saturday 17/03 I saw the book review section, written by David Harris, sporting the title 'Numbers, Spies and the Joy of Sets.'

I saw a review of the book 'Shadows of the State' and a photo work by Lewis Bush. You can have a look inside the book here: http://bravebooks.berlin/#brave-books

Lewis Bush
Shadows of the State

58 images, texts in English

18×28 cm, 180 pages
Section-sewn, hardcover
Edition of 1000. January 2018

ISBN 978-3-947312-02-3

and the cost £40

Even more info on the book is available here: https://vimeo.com/251843929 but 40 quid! Who is this Lewis Bush? I suspect there's past intercept officers either side of the now drawn back Iron Curtain that would be laughing at some of the content of the book - to be fair I haven't read it and don't intend to; Mr Bushs' statement in the book, 'This information was compiled from a variety of unofficial sources and does not represent a complete list of all active and defunct stations, but rather is intended to give a sense of the diversity of stations that have existed' says it all to me. Lewis Bush was born in 1988 and was four years old as the iron curtain fell. I personally won't be lining Mr Bush' bank account with forty quid.

There is a barcode facility used in conjunction with your mobile phone that allows you to listen to recordings of Number Stations, supported by 58 images. I immediately wondered where the recordings came from but according to info from Mr Harris, ' Because of the author's interests, the information offered in this book links in with the extensive collection of numbers stations recordings (in many languages) of the Conet 1111 Project ....'

More so Mr Harris says the book will be of interest to members of ENIGMA and its *successors* and similar bodies. Love to know what he knows about E2k that we don't, especially when he can't even be arsed to use our proper URL.

You can hear from Mr Bush on this 'Gordon Corera' production via the BBC as he gives his expert opinion on Number Stations:
http://www.bbc.co.uk/news/av/world-42819704/numbers-stations-the-spy-radio-that-anyone-can-hear

As for RadioUser, I have a subscription. It was once a magazine under the auspices of PWP Publishing; the group that used to bring Short Wave Magazine and Practical Wireless to the radio buff. SWM went to the wall and reappeared as RU. Another mag on sale was Radio Communications and Monitoring Monthly and owned and published by SWM's editor Kevin Nice. An excellent magazine [I had a column in there on Number Stations ... *Atencion Uno Dos Tres*] it sadly went to the wall giving way to RU which once in its new guise went well under the skilled eye of Andy Thomsett, himself an ex-GCHQ employee. Before Andy it was quite mundane.
Then Andy retired and we have this new bloke, Georg Wiessala. Not only did the mag change editors but its direction seems to have changed. Two very good columnists were lost, Pat Carty and Godfrey Manning who looked at matters Military and Aeronautical respectively and now Mike Richards has been cast/lost to the wind

I thought I would give the magazine a chance and continue with the subscription; what do I get ..... *merde alors!* Tomas Hood of The Spectrum Magazine writing about matters solar and I'm sure I've read all this before and seen the pics too.

There's even BCE and CE used in place of BC and AD --- something very sad going on here. I don't like the over the top Health and Safety we now have thrust upon us from every direction and I dislike having PC, political correctness waved at me from every nook and cranny even less. If we had H&S in the 10th Century we'd all still be living in the 16th Century today. God knows what the effects of this stupid and over-hyped PC nonsense will be and that seems to be manifesting itself in the wimping, moaning, complaining snowflake generation that mars society today: ' *weep weep* I've just been called a rice pudding *weep weep*.' The reply just has to be 'Get over it you prick, sticks and stones etc……..'

Even the remaining long serving columnists seem to have changed style and their previous and often informative columns that were a 'must read' now seem bland to me and others I know. I hope the mag does liven up a little but it's been three months of [for me] mostly boring content and even the feedback section with its carefully selected readers letters requires a forced will to read. [No Feedback in May's offering but we did have a full page obituary to Trevor Baylis who fitted a clockwork powered generator to a radio and won the OBE, hardly a hobby interest there, I think].

Is RU any good? I realise a magazine of this sort cannot be all things to all people but from my perspective I'm hoping it will get better. If not it will join my subscription for Practical Wireless ..... discontinued.

Believe this, if you will ……..!

REVEALED: The bombshell Russian message intercepted on DAY of Skripal poisonings

AN ELECTRONIC message to Moscow sent on the day former Russian spy Sergei Skripal and his daughter Yulia were poisoned with a nerve agent in Salisbury included the phrase "the package has been delivered".
By Marco Giannangeli

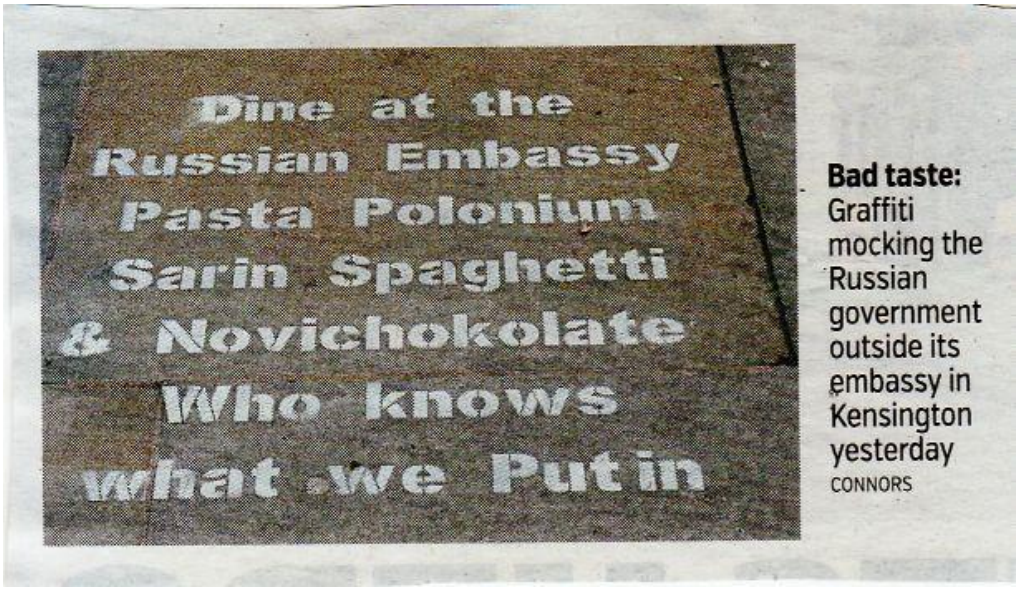
PUBLISHED: 09:20, Mon, Apr 9, 2018 | UPDATED: 09:21, Mon, Apr 9, 2018

https://www.express.co.uk/news/world/942903/Sergei-Skripal-russian-spy-poisoning-russian-message-intercepted

It also said two named individuals had made a successful departure.
This and an earlier intercept form a key part of Britain's intelligence evidence against Russia over the Skripal poisonings, sources said last night.
Insiders said the two messages were intercepted by RAF analysts stationed at a listening post in southern Cyprus.
On the day of the poisonings, March 4, one was sent from a location near Damascus in Syria to "an official" in Moscow including the phrase 'the package has been delivered" and saying that two individuals had "made a successful egress".
This prompted a young Flight Lieutenant to recall a separate message that had been intercepted and discounted on the previous day.
What it said has not been revealed but sources say it became relevant once the Skripals were attacked.
The intercepts were automatically shared with the Government communications headquarters GCHQ in Cheltenham.
They are understood to have formed "just one part" of the intelligence packet which later allowed Prime Minister Theresa May to state it was "highly likely" that Russia was behind the attacks.
They emerged as Russia's embassy in London called for a meeting between its ambassador, Alexander Yakovenko, and Foreign Secretary Boris Johnson "in order to discuss the whole range of bilateral issues, as well as the investigation of the Salisbury incident".
The offer was described by the Foreign Office as "a diversionary tactic".

https://www.express.co.uk/news/world/942903/Sergei-Skripal-russian-spy-poisoning-russian-message-intercepted

From 'E', adequately adding some well needed irony ……..



Bad taste: Graffiti mocking the Russian government outside its embassy in Kensington yesterday
CONNORS

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.

RMP - Russian Navy

PoSW sends us this report of a station heard daily on 5293kHz. We know the identity of this one, Peter. The call sign is that of the Russian naval station in Kaliningrad - Call sign RMP. Base for the Balkan Fleet.

First observed in the second week of March:-

09-Mar-18, Friday:- 1851 UTC, 5293 kHz, strong CW in progress, thought at first it was 60 metre amateur but not so, also not connected with the two regular Morse occupants of the lower portion of the short-wave bands, FAV22 which was at the time busy on 3881, or 4XZ which was in its "VVV DE 4XZ" routine on 6607.

This appeared to be sending numbers and letters, using the long, i.e. 5-dash zero. Stopped around 1906 UTC then started up again with, "REO REO REO DE RMP RMP...." and continued with more CW

My understanding of Morse is not too good but noticed that the sequence "TIRE" always crops up frequently.

Was found in progress on each following day when 5293 was monitored at various times after 1700 UTC, a more detailed observation made on the 13th:-

13-Mar-18, Tuesday:- laying in wait on 5293, started up at 1701 UTC with, "REO REO REO DE RMP RMP QTC 830 166 13 1953 830 = SML =" - or at least, that's how I read it, then into Morse, signal varying between S7 and S9. Referring to a 1990's edition of the ARRL Handbook, "Operating a station – Q signals" says QTC means, "I have ___ messages for you".

This showed up every day in March that a watch was kept on 5293 starting up shortly after 1700 UTC; strict "on the hour" timekeeping not a priority, apparently:-

16-Mar-18, Friday:- 1701 UTC, starting up with, "REO REO REO DE RMP RMP QTC 462 182 16 1956 462 = SML =", S9 signal.

18-Mar-18, Sunday:- always with the same "REO..." opening , "241 173 18 1953 241 = SML =".

20-Mar-18, Tuesday:- 1700:40s UTC, "315 200 20 1952 315 = SML =", signal strength becoming weaker as the month of March progresses, S6 at best.

23-Mar-18, Friday:- appeared to be having some kind of transmitter trouble this evening, nothing heard until 1706 UTC, a carrier rapidly breaking up, bad relay contact in the keying circuit? Arcing over in an air-spaced capacitor in the PA compartment? Turned into Morse around 1707z, broke up again and went off at 1708, came back at 1709 with Morse. Paused at 1714z then sent, "REO REO REO DE RMP RMP QTC 948 194 23 1953 948 = SML =", and continued on its way.

25-Mar-18, Sunday:- 1701 UTC, with the start of British Summer Time today now shows up one hour later local time, weak signal.

30-Mar-18, Friday:- 1741 UTC, transmission in progress, S7 to S8, stronger signal than the last few days.

In April was not found when 5293 was monitored for a while after 1700 UTC, but was heard when checked later on in the evening, around 1830 UTC, 7.30 pm in the UK, appears to have moved to a start-up time at some point after 1800z but is too weak a signal to justify spending much time in monitoring.

However, the same station was found on a higher frequency and at an earlier time in April:-

19-Apr-18, Thursday:- 1704 UTC, 8417 kHz, strong CW in progress, appeared to be the same kind of traffic heard on 5293, "TIRE" heard several times. Suspicions confirmed around 1708 UTC when it paused and started up again with, "REO REO REO DE RMP RMP QTC 941 113 19 1950 941 = SML =", and continued.

Heard starting up after 1700z on following days, always with the "REO...DE RMP...QTC" routine:-

22-Apr-18, Sunday:- "587 108 22 1953 587 = SML =".

23-Apr-18, Monday:- 1716 UTC, transmission in progress, paused after 1725z then started up again, "REO....588 132 23 1957 588 = SML =".

25-Apr-18, Wednesday:- 1700:20s UTC, "...235 158 25 1956 235...".

26-Apr-18, Thursday:- 1700 UTC, just after, "...595 186 26 1957 595...".

27-Apr-17, Friday:- 1700:30s UTC, "....404 190 27 1953 404...".

Update:- this CW station is also active on 8417 earlier in the day but with a much weaker signal than that which starts around 1700z; was heard in progress at 0807 UTC on Saturday
28-April, confirmed as being the same station when it paused then started up again with the "REO..." routine, very weak and only just readable.

Morse - Number Stations

Unidentified Morse

Who said Morse was obsolete?

26-Mar-18, Monday:- 1704 UTC, 7703 kHz, very strong CW, 5Fs as singles, short-form "0", too slow to be M12, ended 1709 UTC with, "RPT AL QLN K".

You are quite right Peter, Morse is certainly not obsolete. Firstly there is the very encouraging interest in Morse by many of the newer, (and younger!), amateur radio stations, (although the far too frequent contests are a step too far for those of us who are not into such competitive activities).

Secondly, although the merchant & passenger services have all moved over to these fancy new comms systems & sent their radio operators packing, there is still a lot of military and naval Morse to be heard on the short wave bands, China & Russia being the most heard, depending of course in what part of the world you are monitoring. I would guess that these countries do not see the need to invest huge sums of money in new systems when they have an endless supply of conscripts & heaps of Morse keys!

Talking of Russian Morse...

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

Following the log from Chris, CB, featured in the last NL we have had two more, similar transmissions with long, mostly random strings of figures at 1800z & 2000z on Tuesday, 13 March. Both transmissions started with normal repeated five-figure groups before degenerating into random strings that continued until the end of the message.

Variant formats continue to be used on an irregular but frequent basis. There are three formats currently in use:

Standard Format: 197 (R4m) 117 117 30 30 = = 93447 .... 20478 = = 117 117 30 30 000

Variant Format 1: 197 (R4m) 147/30 147/30 78902 ... 86083 147/30 000

Variant Format 2: 197 (R4m) 521=30 = = 521=30 = = 46547 ... 88305 = 521=30 = = 521=30 0=0=0

The standard format is still the most used of the three, with Format 1 making a number of irregular appearances. It did seem as if Format 2 had been dropped, but it made one appearance on 24 April at 2000z, although only partially following the format in that it used the standard ending for the transmission.

March 2018:

5020	2000z	01 Mar	'463' 948 30 = =	88056...	...LG 80867 = =	Fair, fast. Long pause before msg. One error.	CB	THU
	2000z	06 Mar	'463' 747/30 = =	45334...	...LG 60597	Good, med-fast. Grp07 9595 (x2). Format 1	BR	TUE
	1959z	08 Mar	'463' 137 30 = =	30575...	...LG 81191 = =	Strong. Perfect rapid delivery. No errors	CB	THU
	2000z	13 Mar	'463' 324 30 = =	76346...	...LG 51913 = =	Strong, slow. Jumble of figures from grp04	CB	TUE
	2000z	15 Mar	'463' 547 30 = =	07000...	...LG 83194 = =	Strong, steady. Longer spaces with no errors	CB/HFD	THU
	2000z	20 Mar	'463' 119 30 = =	25251...	...LG 04248 = =	Good, slow. Longer spaces with no errors	BR	TUE
	2000z	22 Mar	'463' 549/30	13912...	...LG 75887	Fair, steady. One error in grp23. Format 1	CB	THU
	2000z	27 Mar	'463' 675/30	61937...	...LG 00412	Strong, med-fast. Good delivery. No errors	BR	TUE
	2000z	29 Mar	'463' 352 30 = =	20382...	...LG 63428 = =	Fair, fast. Numerous errors inc. part grps	BR	THU
5475	1759z	01 Mar	'463' 926 30 = =	80504...	...LG 05089 = =	Strong, rapid. Errors noted, inc. grp01	AB/CB/HFD	THU
	1759z	06 Mar	'463' 521/30	74268...	...LG 98848	Strong, fast. No errors. Format 1	CB	TUE
	1759z	08 Mar	'463' 271 30 = =	40540...	...LG 77510 = =	Strong. Perfect rapid delivery. No errors	CB	THU
	1800z	13 Mar	'463' 322 30 = =	93679...	...LG 89739 = =	Strong, slow. Jumble of figures from grp06	CB	TUE
	1800z	15 Mar	'463' 475 30 = =	15416...	...LG 41151 = =	Strong, rapid. Some errors & jumbled grps	CB	THU
	1800z	20 Mar	'463' 273 30 = =	10800...	...LG 54357 = =	Strong, slow. Longer pauses. No errors	CB	TUE
	1800z	22 Mar	'463' 286/30	58443...	...LG 72266	Strong, steady, faultless delivery. Format 1	CB	THU
	1800z	27 Mar	'463' 285/30	54144...	...LG 35218	Good, med-fast. Error grp26. Format 1	BR	TUE
	1800z	29 Mar	'463' 284 30 = =	58493...	...LG 85670 = =	Fair, fast. Numerous errors inc. part grps	BR	THU

6260	1500z	03 Mar	'463' 987 30 = =	45334...	...LG 60597 = =	Fair / Weak. Difficult copy at times	AB/CB/HFD	SAT
	1500z	10 Mar	'463' 621 30 = =	34269...	...LG 99848 = =	Fair, rapid. High noise. Possible errors noted	AB/CB	SAT
	1500z	17 Mar	'463'	Good signal but local strong QRM			BR	SAT
	1500z	24 Mar	'463' 121 30 = =	62294...	...LG 88909 = =	Fair, med-fast. Good delivery. No errors	AB/BR/CB	SAT
	1500z	31 Mar	'463' 485/30	54144...	...LG 35218	Good, med-fast. Good. No errors. Format 1	BR	SAT
6510	0700z	04 Mar	'463' 678 30 = =	74268...	...LG 99848 = =	Strong. Call-up started 197 & 468 before 463	AB/CB/HFD	SUN
	0700z	11 Mar	'463' 847 30 = =	8. 223...	...LG 6059 = =	Strong, fast. Periods used in grps 01, 03 & 05	BR	SUN
	0700z	18 Mar	'463' 268/30	97721...	...LG 39469	Strong, slow. Error in grp11. Format 1	AB/BR	SUN
	0700z	25 Mar	'463' 375 30 = =	76175...	...LG 62253 = =	Fair, fast. Several errors inc. periods sent	AB/BR	SUN

April 2018:

5020	2000z	03 Apr	'463' 657 30 = =	80329...	...LG 33795 = =	Good, med-fast. Longer pauses. No errors	BR	TUE
	2000z	05 Apr	'463' 723 30 = =	22428...	...LG 29238 = =	Strong signal. Steady faultless delivery	BR/CB	THU
	2000z	10 Apr	'463' 539 30 = =	99318...	...LG 05419 = =	Strong, slow. Good delivery. No errors	BR/CB	TUE
	2000z	12 Apr	'463' 768 30 = =	15343...	...LG 3807 = =	V.strong, fast. Numerous errors	CB	THU
	2000z	17 Apr	'463' 728 30 = =	76174...	...LG 62277 = =	Strong, slow. Period sent in grp09 & repeat	CB	TUE
	2000z	19 Apr	'463'	Txmission ceased 2001z, garbled CW at 2004z + Vs. Nothing further heard			CB	THU
	2000z	24 Apr	'463' 109=30 = =	71034...	...LG 70199 = =	Fair, med-fast. Numerous errors. Format 2	BR	TUE
	2000z	26 Apr	'463' 286 30 = =	71791...	...LG 52991 = =	Strong, rapid. Errors at grp23 & 27.	CB	THU
5475	1800z	03 Apr	'463' 453 30 = =	84434...	...LG 94085 = =	Good, slow. Longer pauses. No errors	BR	TUE
	1800z	05 Apr	'463' 381 30 = =	60883...	...LG 54420 = =	Strong signal hi noise, steady faultless delivery	CB	THU
	1800z	10 Apr	'463' 443 30 = =	57754...	...LG 96529 = =	Good, slow. Rambling strings after first 5 grps	BR/CB	TUE
	1800z	12 Apr	'463' 315/30	53898...	...LG 11360	Strong, Fast delivery. No errors. Format 1	BR/CB	THU
	1800z	17 Apr	'463' 117 30 = =	92905...	...LG 81576 = =	Good / Strong. slow. No noted errors	BR/CB	TUE
	1800z	19 Apr	'463' 554 30 (x1) 7 = = 42402...		...LG .4161 = =	Fair, fast & steady. QSB & QRM at times	CB	THU
	1800z	24 Apr	'463' 901 30 = =	73861...	...LG 43196 = =	Fair, fast. Several errors noted. High noise	BR	TUE
	1800z	26 Apr	'463' 437 30 = =	74991...	...LG 46354 = =	Fair, rapid. Copy difficult due to high noise.	BR/CB	THU
6260	1500z	07 Apr	NRH - Heterodyne on frequency, (probably pirate BC given the frequency)				BR/CB	SAT
	1500z	14 Apr	'463' 834 30 = =	7139.???	...LG 7 0 6 4???	Weak with high noise. Irregular. Difficult copy	CB	SAT
	1500z	21 Apr	'463' 121 30 = =	60328...	...LG 33796 = =	Weak, rapid. Error grp02 - 03. Difficult copy	CB	SAT
	1500z	28 Apr	'463' 557=30 = =	62379...	...LG 55755 = =	Difficult copy, ended 00000. Partial Format 2	BR	SAT
6510	0700z	01 Apr	'463' 371 30 = =	61937...	...LG 00312 = =	Fair, med-fast. Excellent Morse. No errors	BR	SUN
	0700z	08 Apr	'463' 413/30	17136...	...LG 23345	Strong, perfect faultless deliver. Longer pauses	CB	SUN
	0700z	15 Apr	'463' 856 30 = =	11833...	...LG 66049 = =	Strong, steady. Two errors noted grps03 & 10	CB	SUN
	0700z	22 Apr	'463' 731 30 = =	84534...	...LG 94085 = =	Strong, rapid. 2nd half of msg jumbled delivery	CB	SUN
	0700z	29 Apr	'463' 449 30 = =	03780...	...LG 73954 = =	Fair, med-fast. Several errors noted inc. 4F grps	BR	SUN

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

3308	0557z	28 Mar	333 (Rx3) 111 000	CW	F5JBR	WED
4729	0615z	28 Mar	893 (x3) 78504 (x2) 893 (x3) 78504 (x2) 333 78574 78574 333 78574 333 77778 77778 333 77778 77778 1111 999 443 35 = 13266 26742 98373 46770 82605 95369 03039 27425 38589 32325 73694 94767 38756 49863 51636 72546 02233 24174 84618 18248 36639 01349 22441 34885 05203 17808 48660 12450 72749 37396 95033 10651 05262 33964 43478 = 443 35 000	CW	F5JBR	WED
3597	0636 - 0706z	28 Mar	289 (x3) 53207 (x2) 289 (x3) 53207 (x2) 89 (x3) 53067 (x2) 89 (x3) 53067 (x2) 289 (x3) 54817 (x2) 289 (x3) 53717 (x2) 333 53217 (x2) 111 999 203 41 = 80560 70303 20266 49994 30406 98240 19652 05340 72886 52881 30366 65823 02278 37951 25595 63438 51182 77127 00294 05455 60549 44752 18601 59726 16770 57119 33269 99351 72315 34779 01215 10711 78174 31286 69592 38260 04010 43664 87764 90578 71782 = 203 41 999	CW	F5JBR	WED

			206 42 = 88602 97149 99148 44705 69186 12273 88888 41068 76628 13017 78546 66711 51566 33055 34711 32286 67936 92780 47353 47337 72673 85407 10169 15430 76710 67897 21818 42355 74056 49073 01654 47350 48884 67783 59009 42240 06566 64967 32758 70547 47654 17626 = 206 42 111 000 *[E.T. at 0706z]*			
4843	0708 - 0711z	28 Mar	111 999 11464 31347 90526 79728 39913 22689 74663 21755 91548 70830 68548 75133 34734 44634 82941 … / … 85640 436114 19821 65236 64691 56848 14537 44735 87917 44102 78769 12251 = 312 31 111 000 *[E.T. at 0718z]*	CW	F5JBR	WED
4549	0722z	28 Mar	865 (x3) 12115 (x2) 111 333 111 12… 111 000	CW	F5JBR	WED
4619	0725 - 0736z	28 Mar	897 1263 111 333 11663 111 897 (x3) 258 36 = 39502 56277 72156 39378 08002 92908 53365 55063 57375 22282 34284 03952 22504 49449 49490 85254 38947 53095 11637 51095 89856 77676 65521 62613 23315 61454 75310 09296 30063 35577 81984 91458 95013 47826 04381 512241 =258 36 111 000 *[E.T. at 0736z]*	CW	F5JBR	WED
5209	0742z	28 Mar	260 (x3) 94930 (x2) 260 (x3) 94930 (x2) 260 (x3) 93552 (x2)	CW	F5JBR	WED
4683	1438z	04 Apr	333 07 333 11 333 15 333 19 333 25 111 000 111 000	CW	F5JBR	WED
4603	1442z	04 Apr	333 48928 333 46328 444 333 000 333 000 111 333 030 812	CW	F5JBR	WED
4830	1446z	04 Apr	111 = 80849 111 000	CW	F5JBR	WED
4803	1450z	04 Apr	104 (x3) 900 38 (x2) 111 111 333 999 /673229654324467334480 45580/31005000	CW	F5JBR	WED

M01b

Conditions proved difficult once again for reception of M01b in south-east England. Often, although a weak carrier could be heard, no audio was audible.

March 2018:

3510//4605	1932z	08 Mar	'201'	V.weak//V.weak (WEFAX QRM on 4605kHz)	BR	THU
	1932z	22 Mar		Carrier present on both freqs - No audible mod	BR	THU
3510	1932z	15 Mar	'201' 917 32 = 19211.... (Nil on 4605kHz)		HFD	THU
3520//4585	2110z	02 Mar	'582' 917 32 = 19211....		HFD	FRI
	2110z	23 Mar	917	Carrier present - V.weak audio on 4585kHz	BR	FRI
3535//4590	1910z	12 Mar	'420' 917 32 = 19211.... (Via WebSDR Silec 4590kHz under DigiQRM)		HFD	MON

3625//4941	2002z	02 Mar	'153' 917 32 = 19211....	Stronger on //4941			HFD	FRI
	2002z	23 Mar		Carrier heard on 3625kHz			BR	FRI
3645//4465	2015z	05 Mar	'771' 917 32 = 19211....				HFD	MON
	2015z	19 Mar	'771'	V.weak			BR	MON
3715//4570	2042z	08 Mar	'447' 917 ??	V.weak	NRH on 4570kHz		BR	THU
	2042z	15 Mar	'477' 917 32 = 19211....		NRH on 4570kHz		HFD	THU
	2042z	22 Mar		Carrier present on both freqs - No audible mod.			BR	THU

April 2018:

3510//4605	1832z	12 Apr	'201' 781 32 = 60883...				HFD	THU
	1932z	26 Apr		Carrier present on both freqs - No audible mod.			BR	THU
3520//4585	2010z	06 Apr	'582' 781 32 = 60883....				HFD	FRI
3520	2010z	13 Apr		Weak - Severe QRM from amateur keying rapid 'dits'			BR	FRI
3535//4590	1810z	02 Apr	'420' 781 32 = 60883....		3535 stronger//4590		HFD	MON
	1810 - 1828z	23 Apr	'420' 781 32 = 60883 ... 17773 000		Weak//Fair	MCW	BR	MON
	1810z	30 Apr		Carrier present on both freqs - No audible mod.			BR	MON
3626//4940	1902z	06 Apr	'153' 781 32 = 60883....		3625 stronger//4940		HFD	FRI
3645//4455	1915z	02 Apr	'771' 781 32 = 60883....		3655 stronger//4455		HFD	MON
3645	1915 - 1934z	23 Apr	'771' 781 32 = 60883 ... 17773 000		Weak	MCW	BR	MON
3645//4455	1915z	30 Apr. 18		Carrier present on both freqs - No audible mod.			BR	MON
3715//4570	1942z	12 Apr	'477' 781 32 = 60883				HFD	THU
	1942z	26 Apr	'477'		Weak//Fair	MCW	BR	THU

M01b 3535//4590kHz 1810z 23 April 2018

420 (R4m) 781 781 32 32 = =

60883 58049 53679 98167 49925 79620 72686 92178 71593 98926
70806 68187 85954 70422 04681 33015 05184 68732 20224 63070
83059 12148 99258 94015 74291 92590 07677 60621 64951 54420
22428 17773 = =

781 781 32 32 000

Courtesy BR

M08a XVIII ICW / CW, some MCW

Our regular M08a report from AnonUS:

As noted in the last newsletter things had started to go a little awry with M08a notably missing transmissions and weak signals and this trend remained generally true during March and April. The Morse was intermittent on a few occasions and on 07 March the transmission started early with one set of call-ups before another set of call-ups started mixing with the first at the proper time. The clocks have drifted slightly since the last reset with call-ups starting approximately 4 minutes before the top of the hour.

On Sunday 17 March, after an absence of nearly 15 months the usual weekend call-ups of 18262 22501 35022 once more appeared & were heard a few times over the period.

On 28 April, a Saturday, a very weak transmission was found in progress. After deciphering a short sequence of the numbers and comparing to a transcript of the weekend messages from a few years ago it appears that the same message is being transmitted also. On 03 April & 05 April the weekend call-ups were also heard, this being on a Tuesday and Thursday however.

On 22 March at 1400z all three call-ups ended with a 2, which is unusual. On 28 March at 1400z the Morse sped up noticeably during the transmission and finally on 20 April, the Morse generator had a problem and was sending an almost continuous tone.

March 2018:

7554	2000z	01 Mar	Intermittent Morse 61 35 671 77 11 8 all heard during the call-ups		AnonUS	THU
	2000z	05 Mar	Weak and intermittent Morse 18 31362 just made out		AnonUS	MON
	2000z	13 Mar	[12762 35101 47422]		AnonUS	TUE
	2000z	15 Mar	[05881 18322 32641]		AnonUS	THU
	2000z	17 Mar	[18262 22501 35022]	Standard weekend call-ups. Last heard on Christmas Day weekend, 2016	AnonUS	SAT
	2000z	20 Mar	[- - - - 51061 64302]	Up late in progress	AnonUS	TUE
	2000z	22 Mar	[23751 45171 58412]	Extremely weak	AnonUS	THU
	2000z	29 Mar	[34452 47771 51112]		AnonUS	THU
8009	2300z	05 Mar	[21412 34751 46161]		AnonUS	MON
	2300z	26 Mar	[07861 11302 23621]		AnonUS	MON

8096	1400z	01 Mar	[55311 68642 71061]		AnonUS	THU
	1400z	02 Mar	[52881 65222 78641]		AnonUS	FRI
	1400z	07 Mar	[57171 61511 74322]	Transmitter came up at 1355 with [54222 67641 71072] the proper Call-ups began mixing in as expected at 1357z.	AnonUS	WED
	1400z	13 Mar	[08011 12442 25761]		AnonUS	TUE
	1400z	14 Mar	[11342 24671 37112]		AnonUS	WED
	1400z	15 Mar	[- - - -- 02271 25612]	Up late in progress	AnonUS	THU
	1400z	18 Mar	[18262 22501 35022]	Came up at 1348z with standard weekend call-ups	AnonUS	SUN
	1400z	19 Mar	[- - - -- 45071 58412]		AnonUS	MON
	1400z	21 Mar	[65752 77181 81512]		AnonUS	WED
	1400z	22 Mar	[26712 47442 52562]	All three call-ups end in 2	AnonUS	THU
	1400z	23 Mar	[84882 16221 20642]		AnonUS	FRI
	1400z	26 Mar	[76132 88061 02381]		AnonUS	MON
	1400z	27 Mar	[21842 34262 47501]		AnonUS	TUE
	1400z	28 Mar	[- - - -- 35752 48171]	Up late in progress sped up noticeably during the third call-up	AnonUS	WED
	1400z	30 Mar	[380?? 4???? 55712]	Extremely weak only partial copy	AnonUS	FRI
8135	2300z	02 Mar	[157?2 28771 30412]	Weak and difficult to copy	AnonUS	FRI
	2300z	13 Mar	[67881 70222 83641]		AnonUS	TUE
	2300z	20 Mar	[62031 74361 88682]		AnonUS	UE
	2300z	23 Mar	[03481 16721 20241]		AnonUS	FRI

April 2018:

7554	2000z	28 Apr	In progress, too weak to copy		AnonUS	SAT
8009	2300z	09 Apr	Present but too weak to copy		AnonUS	MON
	2300z	23 Apr	[10162 23502 46821]		AnonUS	MON
	2300z	28 Apr	[18262 22051 35022]	Usual weekend call-ups	AnonUS	SAT
8096	1400z	03 Apr	Too weak to copy 35022 possibly the 3rd call-up, indicating the weekend call-ups on a Tuesday		AnonUS	TUE
	1400z	05 Apr	[- - - -- 18262 22501]	Up late in progress weekend call-ups on a Thursday, timing suggest a start around 1359z with the 3rd message	AnonUS	THU
	1400z	09 Apr	[08381 11622 24041]		AnonUS	MON
	1400z	11 Apr	[86871 08252 12532]		AnonUS	WED
	1400z	12 Apr	[160- - ????? ?????]	Present but too weak to copy	AnonUS	THU
	1400z	17 Apr	[53652 66181 70412]		AnonUS	TUE
	1400z	18 Apr	[11851 24282 37611]		AnonUS	WED
	1400z	18 Apr	[38632 41152 54481]		AnonUS	THU
	1400z	28 Apr	Came up in progress weak (call-ups not noted but a short sequence of numbers copied indicates it was the usual messages transmitted by the usual weekend call-ups.)		AnonUS	SAT
	1400z	30 Apr	[78311 82642 05061]		AnonUS	MON
8135	2300z	05 Apr	[18262 22501 35022]	Slow Morse with usual weekend call-ups. Definitely not expected in this slot	AnonUS	THU
	2300z	10 Apr	[- - - -- 17882 21321]		AnonUS	TUE
	2300z	13 Apr	Present but too weak to copy		AnonUS	FRI
	2300z	17 Apr	[20102 32432 45851]		AnonUS	TUE
	2300z	20 Apr	Problem with the Morse, almost a continuous tone		AnonUS	FRI

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

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

European M12 Logs

March 2018: **New scheds in bold type**

5763/5163/4463	2200/20/40z	07 Mar	714 1 (6206 71) 49704 44742....	BR	WED
	2200/20/40z	14 Mar	714 000	BR	WED
	2200/20/40z	21 Mar	714 1 (116 87) 63551 97491....	BR	WED
	2200/20/40z	28 Mar	714 000	BR	WED
8047/6802/5788	1900/20/40z	07 Mar	463 1 (8941 140) 19292 40900....	BR	WED
	1900/20/40z	14 Mar	463 1 (8067 138) 11977 41217....	BR/HFD	WED
	1900/20/40z	21 Mar	463 1 (3903 149) 61059 18259 ... 05674 83371 000 000	AB	WED
	1800/20/40z	**26 Mar**	**463 1 (4895 81) 57854 05022....**	BR	MON
8158/9258/10658	0600/20/40z	10 Mar	126 1 (6206 71) 49704 44742 ... 87460 77011 000 000	AB/HFD	SAT
9176/7931/6904	1800/20/40z	07 Mar	257 1 (5107 142) 69332 86514....	BR	WED
	1800/20/40z	14 Mar	257 1 (9959 149) 72214 39992....	BR	WED
	1800/20/40z	21 Mar	257 1 (8764 143) 74582 26320 ... 09043 81388 000 000	AB/HFD	WED
10172/9072/---	**2050/2110/2130z**	**02 Mar**	**105 000**	HFD	FRI
	2050/2110/2130z	**07 Mar**	**105 000**	BR	WED
	2050/2110/2130z	14 Mar	105 000	BR	WED
	2050/2110/2130z	21 Mar	105 000	BR	WED
	2050/2110/2130z	28 Mar	105 000	BR	WED

10343/9264/8116	1900/20/40z	01 Mar	124 1 (3164 127) 92149 40540....	BR	THU
	2000/20/40z	05 Mar	124 1 (1346 101) 02144 35553....	BR/HFD	MON
	2000/20/40z	12 Mar	124 1 (9394 106) 85883 43245....	BR	MON
	1900/20/40z	15 Mar	124 1 (6608 125) 70015 95166 ... 07521 10412 000 000	Gert/HFD	THU
	1900/20/40z	22 Mar	124 1 (1311 123) 11432 48067....	BR	THU
	1900/20/40z	26 Mar	124 1 (9941 110) 40183 97239....	BR	MON
	1900/20/40z	29 Mar	124 1 (6903 115) 31263 62685....	BR	THU
12214/10814/9214	1310/30/50z	01 Mar	282 1 (9080 80) 56854 82345....	BR	THU
	1310/30/50z	03 Mar	282 1 (9080 80) 56854 82345....	BR/HFD	SAT
	1310/30/50z	08 Mar	282 000	BR	THU
	1310/30/50z	10 Mar	282 000	BR	SAT
	1310/30/50z	15 Mar	282 1 (9018 77) 22299 01789 ... 27960 27094 000 000	Gert	THU
	1310/30/50z	29 Mar	282 1 (8634 91) 81414 20173....	BR	THU
14377/13461/12114	**1700/20/40z**	**01 Mar**	**317 1 (2896 109) 95437 48451 ... 65914 95439 000 000**	AB/HFD	THU
18169	1054 (IP) - 1055z	01 Mar	(In progress) ... 69875 67870 000 000	Very Strong Topol	THU
14769/16269/18169	1010/30/50z	04 Mar	721 1 (8997 51) 14229 44035 ... 69875 67870 000 000	Gert/HFD	SUN
	1010/30/50z	11 Mar	721 000	Gert	SUN
	1010/30/50z	15 Mar	721 1 (8081 67) 33723 43257 ... 75984 06015 000 000	Gert	THU
	1010/30/50z	18 Mar	721 1 (8081 67) 33723 43257 ... 75984 06015 000 000	Gert	SUN
16276/14876/13376	1400/20/40z	05 Mar	283 000	BR	MON
	1400/20/40z	07 Mar	283 000	HFD	WED
	1400/20/40z	12 Mar	283 1 (9233 143) 30226 06662....	BR	MON
	1400/20/40z	14 Mar	283 1 (9233 143) 30226 06662 ... 67020 05457 000 000	Gert	WED
	1400/20/40z	21 Mar	283 000	BR	WED

April 2018:

6793/5893/---	2100/20/40z	11 Apr	785 000	HFD	WED
8047/6802/5788	1800/20/40z	09 Apr	463 1 (9773 90) 09550 12428....	BR	MON
	1800/20/40z	23 Apr	463 1 (6329 96) 50605 20987....	BR	MON
	1800/20/40z	30 Apr	463 1 (9176 100) 98726 25243....	BR	MON
10343/9264/8116	1900/20/40z	05 Apr	124 1 (2043 125) 27445 91868....	BR	THU
	2000/20/40z	16 Apr	124 1 (8671 109) 75177 87242....	BR	MON
	2000/20/40z	23 Apr	124 1 (4388 106) 35866 07968....	BR	MON
	1900/20/40z	26 Apr	124 1 (6095 121) 24919 77046....	BR	THU
13453/12153/---	**1950/2010/2030z**	**04 Apr**	**414 000**	HFD	WED
	1950/2010/2030z	**06 Apr**	**414 000**	HFD	FRI
	1950/2010/2030z	25 Apr	414 000	BR	FRI
14377/13461/12114	1700/20/40z	05 Apr	317 1 (7515 104) 83372 14446....	BR	THU
	1700/20/40z	26 Apr	317 1 (3926 105) 04804 77618....	BR	THU
14468/13568/12178	1310/30/50z	05 Apr	451 1 (9987 63) 03714 24593....	BR	THU
	1310/30/50z	07 Apr	451 1 (9987 63) 03714 24593....	BR/HFD	SAT
	1310/30/50z	21 Apr	451 1 (240 83) 78047 82479....	BR	SAT
	1310/30/50z	28 Apr	451 000	BR	SAT
18524/17424/15824	1400/20/40z	02 Apr	548 1	HFD	MON

M12 8158/9258/10658kHz 0600/0620/0640z 10 Mar 2018

126 126 126 1 (R2m) 6206 71 6206 71

49704 44742 98274 27880 90324 89735 39190 30051 07031 77392
92001 52093 70486 75657 14108 71817 89570 34883 01699 02796
57503 76096 24441 46844 63985 66469 77390 81262 14698 38434
97194 51013 48240 84368 70216 69320 55930 86075 97059 88803
08234 42371 05302 50095 44462 77577 52198 33548 27783 96107
47625 63762 27970 46288 81906 37875 89837 20952 17025 43141
58247 87055 67199 50892 51884 02037 33640 40356 99927 87460
77011 000 000

Courtesy AB

M12 12214/10814/9214kHz 1310/1330/1350z 15 Mar 2018

282 282 282 1 (R2m) 9018 77 9018 77

22299 01789 77564 84935 00349 86366 88748 43531 56588 77928
02893 99947 62036 08436 77343 60189 98067 30256 74733 05578
15289 84782 14973 22428 97734 11920 44501 63218 84337 02065
38096 26639 68947 24173 67621 76585 07031 60708 67687 23214
05494 84999 97350 05561 21847 41964 52058 75559 39654 95423
50168 11380 86859 66785 17053 41424 39338 35704 16667 28008
16968 71125 14011 77438 81008 56921 14369 46951 67990 37006
82270 95609 00198 24833 21001 27960 27094 000 000

Courtesy Gert

M14 IA MCW / ICW Short 0

PoSW's M14 Report - (to be read in conjunction with logs below).

Wednesday M14 MCW:- An M14 MCW transmission with call "725" had been noted in February at 1600 UTC on 5320 kHz; this has continued in March and April, moving to a higher frequency:-

07-Mar-18:- 1602 UTC, 6780 kHz, strong M14 constant carrier keyed audio tone with, "725 725 725 00000". Stopped at 1604:15s UTC, carrier stayed up until just before 1609.

No sign of this one on Wednesday 14-March, but showed up on the following Wednesday:-

21-Mar-18:- 1605 UTC, or a bit before, 6780 kHz; started late, strong carrier on frequency noted at 1536 UTC, 1600 came and went with no Morse heard, seemed that this carrier was nothing to do with M14 but on checking again around 1605 was in progress with, "725 725 725 00000". Stopped after 1608 UTC.

Looks like first + third Wednesdays in the month schedule. Continued in April:-

04-Apr-18:- 1600 UTC, 6780 kHz, no change of frequency, calling "725" for a full message,
DK/GC "831 831 86 86" - a pause of about ten or twelve seconds after the "725" before
continuing with the DK/GC and into 5Fs, no "break" symbol heard. Ended before 1622 UTC. Looked for a possible repeat at 1630 and again at 1700 UTC but nothing found.

18-Apr-18:- 1600 UTC, 6780 kHz, "725" and "831 831 86 86" again, a strong "XJT" sitting on top, not noticed on past occasions, M14 managing to be heard over it.

A Friday M14 CW:-
30-Mar-18:- 1602 UTC, 8095 kHz, strong M14 CW calling "058", then DK/GC "147 147 62 62 = =", used the "break break" sign unlike the MCW above. Ended before 1614 UTC with "= = DKDK GCGC" and 5-dash "00000".
There was a repeat half an hour later:-
1633 UTC, 6792 kHz, the last minute or so of the "058" call-up, DK/GC as earlier, peaking over S9 with QSB.

Also found in April, different call and frequencies:-
13-Apr-18:- 1600 UTC, 9075 kHz, M14 CW calling "534", DK/GC "209 209 68 68 = ="
signal strength S5 to S7. Ended a few seconds before 1615 UTC.
1630 UTC, 7377 kHz, second sending inside the 41 metre BC band, strong signal, close to a broadcast station on 7380.

Showed up on the following Friday but with a different call:-
20-Apr-18:- 1600 UTC, 9075 kHz, calling "636", DK/GC "851 851 69 69 = =". Weak signal.
1630 UTC, 7377 kHz, very weak signal with severe interference from the broadcaster on the HF side.

Seems to be a weekly Friday schedule:-
27-Apr-18:- 1600 UTC, 9075 kHz, call gone back to "534", as on the 13th, very weak signal, unreadable.
1630 UTC, 7377 kHz, very weak with BC interference, unreadable.

M14 Test Transmissions

Ary, (AB), logged this series of test transmissions from M14 on Friday, 02 March on several frequencies between 5477kHz & 5930kHz, all in MCW.

5944	1656z	02 Mar	Several tests between 1656 and 1658z. Heavy QRM from broadcasting stations. Switched to 5930 kHz	MCW	AB
5930	1700z	02 Mar	382 382 382 00000	MCW	AB
5477	1715z	02 Mar	Test: 007 3960 26284 45 124572 07 1A W1 08126 53710 19446 21279 53	MCW	AB
5477	1748z	02 Mar	Test: 2000 267	MCW	AB
5477	1748z	02 Mar	382 382 382 00000	MCW	AB

Great catch Ary!

Monthly Logs:

March 2018:

5463	1920z	14 Mar	537 273 55 = 74653....			HFD	WED
5477	1800z	02 Mar	382 00000			HFD	FRI
5740	1600z	06 Mar	725 00000			HFD	TUE
	1600z	20 Mar	725 00000	MCW		RNGB	TUE
5930	1700z	02 Mar	382 00000			HFD	FRI
5940	1820z	27 Mar	346 613 82 = 76251....			HFD	TUE
6780	1602z	07 Mar	725 00000			PoSW	WED
	1605z	21 Mar	725 00000			PoSW	WED
6792	1633z	30 Mar	058 147 62 =			PoSW	FRI
8095	1602z	30 Mar	058 147 62 =			PoSW	FRI
17458	0930z	10 Mar	617 00000			HFD	SAT
18041	0500z	19 Mar	952 316 50 = 36054 82852 .... 32519 77922 00000	CW	(Via SDR S. Korea)	AB	MON
	0500z	20 Mar	952 316 50 = 36054....		(Vis SDR Japan)	HFD	TUE
	0500z	27 Mar	952 764 50 = 63951....		(Via SDR China)	HFD	TUE

April 2018:

6780	1600z	04 Apr	725 831 86 =			PoSW	WED
	1600z	18 Apr	725 831 86 =			PoSW	WED
7377	1630z	13 Apr	534 209 68 =			PoSW	FRI
9075	1600z	13 Apr	534 209 68 =			PoSW	FRI

		20 Apr	636 851 69 =			PoSW	FRI
11122	1130z	03 Apr	825 468 53 = 03089....			HFD	TUE
18041	0500z	04 Apr	952 367 50 = 08286 29564 ... 24857 48221 00000	CW	(Via SDR China)	AB	WED
	0500z	19 Apr	952 816 50 = 42315 80112 ... 19875,... Stops after 49grps		(Via SDR Korea)	AB	THU

M14 18041kHz 0500z 19 March 2018

952 (R4m) 316 316 50 50 = =

36054 82852 21254 75644 86306 92064 02646 87295 08163 20037
39403 72646 28182 13715 11929 37103 65366 02945 18648 93764
65063 88749 11135 07797 64605 90294 22694 08101 95384 73983
07587 52196 51031 13123 33094 55270 76399 51581 91593 19319
57035 69905 24844 23330 13829 77296 77668 60433 32519 77922
= =

316 316 50 50 00000

Courtesy AB

M14 18041kHz 0500z 04 April 2018

952 (R4m) 367 367 50 50 = =

08286 29564 31221 75826 05369 35301 69239 51144 00960 72606
74294 77954 87121 86144 66469 15440 28596 18739 30454 14955
96681 74518 00061 86352 19623 64595 55344 27298 47930 27443
93203 20263 58090 41167 57600 26874 43084 69869 39992 34323
63162 11264 86257 33510 55313 37766 70855 33609 24857 48221
= =

367 367 50 50 00000

Courtesy AB

M23 O ICW

No reports

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

No reports

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

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

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. .

No reports for a long time on this one. May now have ceased.

Morse Stations - Not Number Related

M51 XlX

3881//6825 M51 has for some time now been transmitting almost continuously on the two scheduled frequencies of M51a with the usual continuous output of mainly 5-figure groups, with some number & punctuation groups included. These cease shortly before a scheduled M51a transmission & recommence shortly afterwards.

Monitoring shows an M51 slow Morse lesson commencing at 2000z nightly, also but that it was the same lesson repeated, always - Monday's lesson 01-1/1 to 01-1/4 at 420 groups per hour. So perhaps the whole of the continuous broadcast is a daily repeat?

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

3881//6825

1130 - 1206z	25 Apr	Mercredi- Leçon	23-1/1 Codé,	23-1/2 Clair,	23-1/3 Codé,	23-1/4 Clair (720 grps/hr)	BR	WED
1130 - 1157z	26 Apr	Jeudi- Leçon	24-1/1 Codé,	24-1/2 Clair,	24-1/3 Codé,	24-1/4 Clair (840 grps/hr)	BR	THU
1130 - 1203z	27 Apr	Vendredi- Leçon	25-1/1 Codé,	25-1/2 Clair,	25-1/3 Codé,	25-1/4 Clair (960 grps/hr)	BR	FRI
1130 - 1213z	30 Apr	Lundi-Leçon	21-2/1 Codé	21-2/2 Clair,	21-2/3 Codé,	21-2/4 Clair (420 grps/hr)	BR	MON

M89 O

This is a summary of activity from the M89 stations.

Traffic & Operator Chat from M89
Traffic & Op. chat reported on the following freqs. (All in kHz).

3223 3494 3875	4111 4120 4777 4788 4811	5202 5370 5511 5512	6580 6782 6864 6866 6877	9364	10250	11250

New Scheds for Mar / Apr 2018: **From logs submitted from JPL & F5JBR**

3378//4783	New freqs for this Round Slip	First heard 03 Apr	V C4TY (x3) DE NSF5 (x2)
4783//NRH	New freqs for this Round Slip	First heard 04 Apr	V C4TY (x3) DE NSF5 (x2)
4904//NRH	New freqs for this Round Slip	First heard 01 Apr	V C4TY (x3) DE NSF5 (x2)
10378//NRH	New freqs for this Round Slip	First heard 04 Apr	V C4TY (x3) DE NSF5 (x2)
4783//3378	New, previously unknown Round Slip Sending different Round Slips	First heard 15 Apr	4783kHz V GP4L (x3) DE KMY1 (x2) 3378kHz V C4TY (x3) DE NSF5 (x2)
10378	New, previously unknown Round Slip	First heard 15 Apr	V GP4L (x3) DE KMY1 (x2)
5835//10589	Sending different Round Slips	First heard 05 Mar	5835kHz V QW2A (x3) DE G5VD (x2) 10589kHz V WE3V (x3) DE CF5T (x2)
		First heard 13 Mar	5835kHz V FT6V (x3) DE SE4R (x2) 10589kHz V QW2A (x3) DE G5VD
3378//4783	Sending different Round Slips (Both sending NSF5 on 09 Apr & again on 24 Apr)	First heard 03 Apr	3378kHz V JU7B (x3) DE 3FCX (x2) 4783kHz V C4TY (x3) DE NSF5 (x2)

Chart of M89 Freq & Call signs heard in Mar / Apr 2018 **New Scheds shown in Bold Type** **From logs submitted from JPL & F5JBR**

Freq in KHz	Call Slip
3238//4870	V M8JF (x3) DE RIS9 (x2)
3238//4870//**6874**	V M8JF (x3) DE RIS9 (x2)
3238//4870//6874//**8157**	V M8JF (x3) DE RIS9 (x2)
3378//NRH	**V C4TY (x3) DE NSF5 (x2)**
3378//4483	V JU7B (x3) DE 3FCX (x2)
3378//4783	**V C4TY (x3) DE NSF5 (x2)**
4125//NRH	V UISD (x3) DE CBFG (x2)
4131//NRH	V JKDJ (x3) DE SLBC (x2)
4326//NRH	V FT6V (x3) DE SE4R (x2)
4326//4904	**V FT6V (x3) DE SE4R (x2)**
4326//NRH	V QW2A (x3) DE G5VD (x2)
4326//4904	V QW2A (x3) DE G5VD (x2)
4620//4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
4620//4860 //6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
4720//5150	VVV WNF (x3) DE FXM (x2)
4783//NRH	**V C4TY (x3) DE NSF5 (x2)**
4783	**V GP4L (x3) DE KMY1 (x2)**
4860// 6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?
4870//6874//8157	V M8JF (x3) DE RIS9 (x2)
4904//NRH	V WE3S (x3) DE CF5T (x2)
4904//NRH	**V C4TY (x3) DE NSF5 (x2**
4904//4326	**V QW2A (x3) DE G5VD (x2)**
4904//4326	**V WE3S (x3) DE CF5T (x2)**

Freq in kHz	Call Slip
5177//NRH	V JKDJ (x3) DE SLBC (x2)
5743//9131	V UISD (x3) DE CBFG (x2)
5835//10589	**V FT6V (x3) DE SE4R (x2)**
5835//10589	**V QW2A (x3) DE G5VD (x2)**
5835//**10598**	**V WE3V (x3) DE CF5T (x2)**
6840//10640 K	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?
6874//8157	V M8JF (x3) DE RIS9 (x2)
8157//NRH	V M8JF (x3) DE RIS9 (x2)
9131//NRH	V UISD (x3) DE CBFG (x2)
10180//NRH	V DKG6 (x3) DE 3A7D (x2)
10378//NRH	**V C4TY (x3) DE NSF5 (x2)**
10378//NRH	**V GP4L (x3) DE KMY1 (x2)**
10589//NRH	V WE3S (x3) DE CF5T (x2)
10589//NRH	V QW2A (x3) DE G5VD (x2)
10589//5835	V QW2A (x3) DE G5VD (x2)
10640//NRH K`	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?

Courtesy JPL

M89 6782kHz 0727 (IP) - 0732z 13 March 2018

ALL CY (IP – Hand sent – 0727z)
MSG NR 1306 CK 25 15 0313 1527 BT
5NU4 57T3 6NA7 54NU 735T 7UAD 43DT 3DUT AU35 57D6 UD37
AR
UR.M QSL ? K (0729z) (Other station N/H on this frequency)
R RPT 08W BT 3DUT AR K
RPT 17W BT 3A5N AR K (0730z)
R OK K
7... QSL ? K (Fading badly)
R RPT NR 1306 K (0731z)
R RPT K
R OK K
MVG5 QSL ? K (0732z)
R OK K (Silent - 0732z)

M89 4870//6874//8157kHz 0829 (IP) - 0833z 07 April 2018
V M8JF (x3) DE RIS9 (x2)
MSG **NR 0406 CK 93 40 0407 1625 RMKS 5060 TO 5120 5280 5580 BT**
5TDA AU64 UT3U 54D7 4TA6 T4TA NTA7 N5DA T3UA TTUD 3DD7
U366 ... (Cont'd – 0830z)
AR (Return to Round Slip – 0833z)

M89 3238//4870kHz 1204 (IP) - 1205z 13 April 2018
V M8JF (x3) DE RIS9 (x2)
BT 802/5920/.060/73/05/9756/074/0 AR (From R/S – 1204z)
BT 802/5920/5060/73/05/9756/0743. AR (Return to R/S – 1205z)

M89 4811kHz 1708 (IP) - 1710z 18 April 2018

RMKS 6358 TO 5838/3638 BT (IP – Hand sent – 1708z)
QRW N4958 P EEEE BT QRW N4958 380200 KP 6358 AR BT
QRW N4958 380200 KP 6358 AR K (1709z
R R OK QSL 0101 QSL 0101 K (Both stations on this frequency)
R K R WK NR 106 106 AR
WK NR 106 K
R HR WK NR 119 119 K
R SK K
R SK (1710z - Silent)

M89 6877kHz 1628 - 1648z 24 April 2018

ABOL DE A8CK K (IP – Machine sent – 1628z)
VVVV ABOL DE A8CK K (1629z)
V ABOL DE A8CK K
ABOL (x3) DE A8CK (x2) K (1630z)
ABOL (x3) DE A8CK (x2) K (1632z)
VVV ABOL DE A8CK K (1635z)
ABOL DE A8CK K (1636z)
ABOL DE A8CK K
R K (1637z – Silent)
(Monitored until 1648z)

Courtesy JPL

M95 O XSV, XSV70, XSV85

M95 Morse Logs	**(Bold type indicates new logging)**					
3642//NRH	Call Sign 3A7D	(Active daily - only first log has been included)				
3642//7602	Call Sign 3A7D	(Active daily - only first log has been included)				
	1953z (IP)	05 Mar	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (// 7602)	(Remote tuner Siberia)	JPL	MON
4100	**III III 05 05 05 05 05**					
	1523 (IP) - 1530z	12 Mar	Msgs in 4-character code	(Remote tuner South Korea)	JPL	MON
4243	Message number differs from current XSV70 and XSV85 message numbers.					
	1117 (IP) - 1120z	20 Mar	NR 40 CK 148 35 03020 1618 BT	(Remote tuner China)	JPL	TUE
			NR 039 CK 19 35 0320 1621 BT		JPL	TUE
			NR 013 CK 2 . 35 032 20 15 .30I	(Practicing for the 1140z sked???)	JPL	TUE
4243//9054	Message number differs from current XSV70 and XSV85 message numbers.					
	1150 (IP) - 1138z	05 Mar	NR 083 CK 24 35 0305 1502 BT	(Remote tuner China)	JPL	MON
			NR 10 CK 143 35 0305 16.3 BT		JPL	MON
			NR 081 CK 15 35 0305 1655 BT		JPL	MON
	1146 (IP) - 1210z	30 Mar	NR 033 CK 17 35 0330 1546 BT	(Remote tuner China)	JPL	FRI
			NR 60 CK 158 35 0330 1603 BT		JPL	FRI
			NR 069 CK 19 35 0330 1643 BT		JPL	FRI
	1140 (IP) - 1152z	09 Apr	NR 053 CK 21 35 0409 1523 BT	(Remote tuner China)	JPL	MON
			NR 18 CK 173 35 0409 1528 BT		JPL	MON
	1143 (IP) - 1210z	12 Apr	NR 059 CK 22 35 0412 1448 BT	(Remote tuner China)	JPL	THU
			NR 059 CK 22 35 0412 1448 BT		JPL	THU
			NR 24 CK 182 35 0412 1623 BT		JPL	THU
			NR 020 CK 22 35 0412 1632 BT		JPL	THU
	1141 (IP) - 1201z	13 Apr	NR 061 CK 20 35 0413 1535 BT	(Remote tuner China)	JPL	FRI
			NR 26 CK 179 35 0413 1603 BT		JPL	FRI
			NR 023 CK 14 35 0413 1626 BT		JPL	FRI
	1140 (IP) - 1225z	15 Apr	NR 065 CK 19 35 0415 1504 BT	(Remote tuner China)	JPL	SUN
			NR 30 CK 151 35 0415 1555 BT		JPL	SUN
			NR 029 CK 20 35 0415 1647 BT		JPL	SUN
	2338 (IP) - 2359z	15 Apr	NR 030 CK 20 35 0416 0618 BT	(Remote tuner China)	JPL	SUN
			NR 31 CK 065 35 0416 0702 BT		JPL	SUN
			NR 066 CK 17 35 0416 0655 BT		JPL	SUN
	1148 (IP) - 1216z	17 Apr	NR 069 CK 16 35 0417 1523 BT	(Remote tuner China)	JPL	TUE
			NR 34 CK 122 35 0417 1610 BT		JPL	TUE
			NR 035 CK 18 35 0417 1616 BT		JPL	TUE
	1141 (IP) - 1200z	19 Apr	NR 073 CK 17 35 0419 1503 BT	(Remote tuner China)	JPL	THU
			NR 041 CK 14 35 0419 1616 BT		JPL	THU
			NR 38 CK 160 35 0419 1630 BT		JPL	THU
	1145 (IP) - 1207z	24 Apr	NR 48 CK 106 35 0424 1550 BT	(Remote tuner China)	JPL	TUE
			NR 056 CK 19 35 0424 1615 BT		JPL	TUE
	1141 (IP) - 1220z	27 Apr	NR 06 CK 43 **49** 0425 1600 BT*	(Remote tuner China)	JPL	FRI
			NR 089 CK 33 35 0427 1501 BT		JPL	FRI
			NR 54 CK 138 35 0427 1620 BT		JPL	FRI
			NR 065 CK 21 35 0427 1623 BT		JPL	FRI
			*(Rare message with 49 vice 35 after the group count)			
4364//NRH	Call Sign XSV85					
	1138 - 1141z	30 Mar	NR 0298 CK 204 35 0330 1544 BT	(Remote tuner China)	JPL	FRI
	1130 - 1131z	09 Apr	USB, then into Chinese digital 4+4 QPSK 75/3000	(Remote tuner China)	JPL	MON
4364//8073	Call Sign XSV85					
	1138 - 1150z	05 Mar	BNGC DE XSV85	(Remote tuner China)	JPL	MON
			NR 0236 CK 280 35 0305 1613 BT		JPL	MON
	1130 - 1141z	09 Apr	NR 0327 CK 163 35 0409 1744 BT	(Remote tuner China)	JPL	MON
	1130 - 1142z	12 Apr	NR 0333 CK 228 35 0412 1600 BT	(Remote tuner China)	JPL	THU
	1130 - 1139z	13 Apr	NR 0335 CK 244 35 04A3 A EEEEEEE 3 BT BT	(Remote tuner China)	JPL	FRI
	1129 - 1139z	15 Apr	NR 0339 CK 202 35 0415 1703 BT	(Remote tuner China)	JPL	SUN
	1131 - 1139z	19 Apr	NR 0347 CK 16. 35 0419 .554 BT	(Remote tuner China)	JPL	THU
	1130 - 1148z	24 Apr	NR 0357 CK 252 35 0424 1616 BT	(Remote tuner China)	JPL	TUE
	1130 - 1140z	27 Apr	NR 0363 CK 207 35 0427 1542 BT	(Remote tuner China)	JPL	FRI

4789	1129z (IP)	27 Apr	NR ... /CCK CK ...27 3931241 RMKS ..694 21 698. 95	(Remote tuner China)	JPL	FRI
5556	05 05 05 05					
	1654 (IP) - 1705z	24 Apr	05 05 05 05 BT BT BT A4U3 U345 UD4 etc.	(Remote tuner Siberia)	JPL	TUE
5780	**Call sign ZX09**					
	0027 - 0038z	16 Apr	05 05 05 & Calls to various stns.	(Remote tuner China)	JPL	MON
5801//NRH	Call Sign 3A7D	(Active daily - only first log has been included)				
	1050z (IP)	05 Mar	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (// N/H)	(Remote tuner Kazakstan)	JPL	MON
5801//10180	Call Sign 3A7D	(Active daily - only first log has been included)				
	0921z	02 Mar	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd)	(Remote tuner Siberia)	JPL	FRI
	1230z	17 Apr	NR 224 2030 RMKS 13290 TO ..70 BT CL../Z/A979/1070 AR QSL? HR WK NR 150		JPL	TUE
8889	0646 - 0653z	16 Apr	05 05 05 & Msgs in alpha & 4-character codes	(Remote tuner China)	JPL	MON
8914	**Call sign used APV**					
	0949 (IP) - 1006z	04 Apr	Msgs in 3-fig code (Appears to be repeating each group twice)	(Remote tuner China)	JPL	WED
10180	Call Sign 3A7D	(Active daily - only first log has been included)				
	1052z (IP)	05 Mar	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (// N/H)	(Remote tuner Siberia)	JPL	MON
	0949 - 1201z	26 Apr	NR 093/CCK 99 19 0427 0750 RMKS CQ BT	(Remote tuner Siberia)	JPL	THU

M95 4243//9054kHz 1150 (IP) - 1210z 05 Mar 18

V V V V V
(From Chinese digital 4+4 QPSK 75/3000 - LSB - 1150z)
VV HR 7G TO YR PSE CY (1150z)
NR 08324 EEEEEE (Some fading)
NR 083 CK 24 35 0305 1502 BT
5TD U. TT5 3U6 7TA N44 (Cont'd – 1151z)
AR
A HR 7G GA
NR 10 CK 143 35 0305 16.3 BT
UTU TT. 3U6 3A4 TTU 773 35A U4T 353 (Cont'd – 1154z)
AR (1204z)
A HR 7G GA
NR 081 CK 15 35 0305 1655 BT
UT5 TT5 3U6 3A4 TTA TTU TT3 773 356 4T3
33U 4A7 446 4D6 3DU AR (1207z)
A HR UP SB WK AR AR (1207z)

(Switched to voice – USB – Female – Chinese)
(Now V26 Sked) (1210z)

M95 4243kHz 1117 (IP) - 1119z 20 March 2018

0320 1530 BT (Hand sent – 1117z)
AHR 7G GA
NR 40 CK 148 35 03020 1618 BT
AHR MSG GA
NR 0U EEE NR E EEEEEE
NR 039 CK 19 35 0320 1621 BT
343A U3333333 33 AHR UP SB WK A BBB A (1119z)
NR 013 CK 2. 35 032 20 15.30I (1120z – Silent)
(Practicing for the 1140z sked???)

M95 4243//9054kHz 1140 - 1152z 09 April 2018
(From Chinese digital 4+4 QPSK 75/3000 -LSB) (1141z)
VVV
HR 7G TO YR PSE CY (Hand sent - 1447z)
NR 053 CK 21 35 0409 1523 BT
5TD UTT TTN 3U6 7TA N44 3A4 356 4TN U7U
N4A 447 46N 3DU TTU TT3 773 44D 46N 3D5
4D3 AR
7G AGN
NR 053 CK 21 35 0409 1523 BT
5TD UTT TTN (Cont'd repeat message – 1149z)
AR (1150z)
A HR 7G GA
NR 18 CK 173 35 0409 1528 BT
UTU TTN 3U6 3A4 7TA NU6 7UD 777 73U 7UT (Cont'd - 1152z)

M95 5556kHz 1654 (IP) - 1705z 24 April 2018

05 05 05 05 (IP Hand sent – Long zero - 1654z)
BT BT A4U3 U345 UD4 (1654z)
BT BT BT BT BT BT BT BT BT BT A33 Y BT (1655z)
BT BT A4U3 U345 UD47 4A66 D36 46DA A6TD (Contd – 1656z)
05 05 05 05 (Cont'd – 1657z)
463D 5N66 4TN. (Cont'd – 1700z)
05 05 05 05 (Cont'd – 1700z)
BT BT BT BT BT BT BT BT (1702z)
BT BT BT BT BT BT BT BT 3333
05 05 05 05 05 05 (1702z)
05 05 05 (Cont'd – 1703z)
503N AR 05 (1704z)
BT BT
05 05 05 (Cont'd – 1705z)
(Unable to monitor any longer)

Courtesy JPL

Contributors: AB, AnonUS, BR, CB, Daniel/AR, F5JBR, Gert, HFD, JPL, PoSW, RNGB, Topol *Thank you all for your logs.*

Voice, Polytone, Tones, Hybrids and FSK

E06

RNGB, followed by PoSW, writes:

E06 March/April log:

Mondays **0210z 11567kHz 0310z 14568khz**

19/03 '537' 862 37 59999 20535 89838 46474 90101 84949 39924 29432 29967 21669 70532 17834 50221 21487 98992 90084 76755 58178 90730 31104 98096 69079 80943 34436 44748 95539 95593 00958 51432 37920 45148 01343 38198 04829 85917 94491 71296 862 37 00000

0210z 11454kHz 0310z 14456kHz

02/04 '537' 268 39 18310 46675 02650 66960 04184 61065 86341 77235 80160 91601 30458 45920 18692 32737 48281 69432 12366 73760 77956 22214 70535 25662 85614 15607 84786 92252 85677 63622 24201 90200 04803 71155 46331 47678 48881 87808 74844 36317 21557 268 39 000000

Thursdays **0300z kHz 0400z kHz**

No reports

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

01/03 '864' 912 50 81816 87776 53102 13579 45253 47001 56206 63765 30254 36250 09525 94930 54946 34032 19933 03980 32788 24012 62667 26638 15135 01623 83123 06074 73758 80379 97194 38325 46734 15092 76077 40092 96153 84160 26490 93579 51085 98136 02242 48079 34228 26744 08081 82974 95696 61545 81770 61859 02369 56434 912 50 00000

15/03 '864' 127 53 27864 79306 94915 97561 25183 99207 33484 48725 84585 88918 94671 63434 30011 15588 26402 17421 93692 88199 87730 51633 83770 39427 76861 06295 22327 59538 19427 56024 89764 62039 15453 38425 36465 85743 68451 93305 47686 62952 45089 54743 72596 08442 38844 63161 53428 08931 36121 89617 15654 17731 08233 89480 05136 127 53 00000

0600z 15645kHz 0700z 17470kHz

05/04 '951' 347 62 75511 12904 41446 31925 47409 87331 57710 81048 67976 43850 04731 18253 64412 77621 29081 05282 64897 01579 30666 92802 53509 64810 73358 67342 73693 13612 09016 65119 66189 24900 63315 94965 52376 66682 56842 37514 98965 65265 59866 12842 24977 83882 04253 33763 36934 42439 00934 86948 03230 33061 36389 09070 03576 11126 46565 50144 14500 66472 91672 41278 16809 04477 347 62 00000

19/04 '951' 472 60 88789 36633 07951 34521 89794 65657 04595 33082 47848 25069 61735 90975 57165 65317 03469 62944 37707 92537 67087 43527 77585 99305 50606 73457 08760 61900 92808 08649 95728 02501 78006 12715 41897 39767 82683 58972 43306 76239 06229 52838 44410 95984 52939 10593 75597 70938 57472 55409 77133 99378 70954 16623 39219 24960 49912 43147 12848 09752 15226 66997 472 60 00000

First/Third Thursday of month **2030z 5186kHz (frequency may vary slightly)**

01/03 '891' 149 52 12265 10965 47839 38654 84677 93453 72217 84393 04673 97564 01824 75643 84221 95647 92112 94543 76577 43435 47322 84232 95674 87344 57438 45763 49325 57438 92190 96785 21244 05674 01765 76354 83645 21234 97564 82133 07564 83234 75312 71211 05674 65374 67321 94884 23483 82521 41212 57333 85331 53234 05124 95732 149 52 00000

15/03 '891' 134 57 69834 91020 28974 71856 74832 89648 73282 64825 48142 73848 36457 38491 82713 43143 65689 28756 42351 73145 32424 67857 83273 56425 34245 23246 76879 87435 28184 61547 93671 75364 72825 34732 53426 47589 73647 58326 15264 37485 63542 43557 64536 47586 76453 45684 65783 74859 82736 47382 74651 27631 72361 74827 36452 35263 72813 26743 84732 134 57 00000

05/04 '891' 183 77 73413……27491 183 77 00000] 2046z

19/04 '891' 134 57 69834……84732 134 57 00000] 2043z Repeat of March message

Friday following First & Third Thursday **2130z 5197kHz (frequency may vary slightly)**

02/03 '634' 149 52 12265…..etc

16/03 '634' 134 57 69834 91020 28974 71856 74832 89648 73282 64825 48142 73848 36457 38491 82713 43143 65689 28756 42351 73145 32424 67857 83273 56425 34245 23246 76879 87435 28184 61547 93671 75364 72825 34732 53426 47589 73647 58326 15264 37485 63542 43557 64536 47586 76453 45684 65783 74859 82736 47382 74651 27631 72361 74827 36452 35263 72813 26743 84732 134 57 00000

06/04 & 20/04 '634' 183 77 73413 48673 92659 68289 43584 32573 24589 34134 65918 95946 19647 87484 25986 28546 59196 27324 59872 48247 28485 96176 87475 92763 83465 14592 56293 28983 29384 98329 21839 32874 93284 98324 59693 25932 15959 61893 26498 23128 96197 12387 13249 76324 76743 43656 87961 28763 54872 35812 54871 63248 64726 56295 91262 52964 52765 43532 47274 12636 32127 63163 47263 47623 76275 26543 76437 36437 64236 43764 28976 49276 42897 73428 34563 92473 91242 17492 27491 183 77 00000

Other transmissions:

Tuesday 13th March

1140z 16303kHz '657' 809 61 groups
1400z 7755kHz '192' 673 40 groups
1430z 12202kHz '158' 204 87 groups
1650z 14357kHz '729' 806 173 groups
1700z 10506kHz '337' 491 205 groups

Wednesday 14th March

0130/0230z 5879/4923 '759' 801 36 groups

E06a (2 messages)

14/03 **1340/1440z** **16080kHz/12109kHz** **Repeated following day at same times using 16083/12111kHz**

'346' 259 2 11111 00084 259 2
'346' 927 153 31835 85382 52641 60962 53251 78761 85758 28593 81247 58140 41795 36410 18186 53490 86806 25949 12029 74164 68082 01536
51527 57121 98374 71460 98060 97304 51602 72872 50150 26153 54165 53506 48958 94629 82154 74196 26950 46159 10491 78165
94696 60179 40313 19579 09737 57869 59625 35310 80524 15232 49842 01272 73095 25908 03476 08495 94323 26271 20746 95462
48949 81826 68057 85243 70251 47354 16413 65216 80612 16979 46742 74608 35420 75320 059165 31270 29523 01365 35857
23064 19616 30694 03090 89310 90384 45875 05181 83069 01651 81301 08460 25260 19608 92830 17080 74538 42048 39398 43736
71249 73596 68328 70708 74674 59249 76280 12579 86932 23932 60589 18276 76071 74390 96130 45967 92528 95874 08365 61575
85909 27204 75873 07045 14181 39810 53286 50150 31390 89435 78743 17801 10606 05982 83484 18468 52780 48106 45810 90792
78507 58565 28606 64217 26593 98646 48196 46297 62546 98152 65936 72849 80726 927 153 00000

From PoSW

The only two regular evening schedules from this once prolific miserable sounding bloke:-

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

1-Mar-18, 5186 kHz:- started about ten seconds before the half-hour, call "891", DK/GC "149 149 52 52", heard many times in the past since the autumn of 2016. Strong signal, well over "9" on the S-meter.

15-Mar-18, 5184 kHz:- started about 30s early, "891", DK/GC "134 134 57 57". This message has been heard before, from E06 in December 2017 and in German from G06 in November. Ended around 2043z, carrier stayed up for some considerable time, was still on at 2108z.

5-Apr-18:- 5186 kHz, DK/GC "183 183 77 77", same message used by the related G06 in March.

19-Apr-18:- 5186 kHz, "891" and, "134 134 57 57", as on 15-March.

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

2-Mar-18, 5197 kHz:- call "634", DK/GC "149 149 52 52", same as yesterday's 2030z.
Over S9.

16-Mar-18, 5197 kHz:- "634", DK/GC "134 134 57 57", same as yesterday's 2030z.

6-Apr-18, 5197 kHz:- "634", DK/GC "183 183 77 77", same as yesterday's 2030z sending.

Other E06:-

Two separate E06 transmissions logged in the afternoon, UK time, of the second Wednesday in March:-
14-Mar-18:- 1354 UTC, 16080 kHz, E06 in progress, S8 with QSB. A fault at around 1406:30s UTC, went off air in full flow on in the middle of a 5F group, "07045 070..."
Gone! Came back after about 90 seconds, called "346" for a while then went into 5Fs without the DK/GC. Took up the message four 5F groups before the one that got cut short.
Ended around 1415z with, "927 927 153 153 00000", quite a long message here. Cut carrier instantly followed by a brief burst of carrier about 50s afterwards.
1447 UTC, 12109 kHz, transmission in progress, the repeat of the 16080 sending on a somewhat lower frequency that expected, confirmed as some 5F groups from the first sending had been noted. S9 with QSB inside the 25 metre broadcast band.
There was a repeat on the following day:-

15-Mar-18, Thursday:- 1340 UTC, 16083 kHz, unusual start time for an E06, perhaps.
Three kHz up on yesterday, a much weaker signal, calling "346", way down in the noise,
unreadable mostly, appeared to be a two-message transmission confirmed by the second sending:-
1440 UTC, 12111 kHz, second sending, "346", then DK/GC "259 259 2 2", a short first message, "11111 00084", then "346" again and second DK/GC "927 927 153 153".

This same message apparently transmitted again on the 16th:-
16-Mar-18 Friday:- 1509 UTC, 12114 kHz, E06 in progress, chance discovery of the last couple of minutes of a transmission. Ended after 1511 UTC, "927 927 153 153 00000", same as on Wednesday and Thursday.

No sign of this one on Wednesdays 21 and 28-March.

Another E06 schedule was logged on the second Wednesday in March, not connected – as was first thought – with the transmission heard earlier on 16080:-
14-Mar-18:- 1432 UTC, 12202 kHz, in call-up with "158", must have started on the half-hour, DK/GC "204 204 87 87", weak at first but came up to a reasonable S7.
No sign of a repeat on the following day.
Not found on Wednesdays 21 and 28-March.

E07

PoSW's logs and analyisis, followed by others' logs:

Sunday + Wednesday Schedule, 1800 UTC Start, 1700 UTC in April:-
4-Mar-18, Sunday:- 1800 UTC, 13439 kHz, "417 417 417 000", S7 to S8, much better audio than is usual from this schedule.
1820 UTC, 12139 kHz, second sending, S9+ with good audio – in January and February this schedule had weak signals with very low audio which made it unreadable on most occasions.

7-Mar-18, Wednesday:- 1800 UTC, 13439 kHz, "417 417 417 000", S6, good audio.
1820 UTC, 12139 kHz, very strong signal with good audio.

11-Mar-18, Sunday:- 1800 UTC, 13439 kHz, "417 417 417 1" for a full message, DK/GC "376 140" x 2, S7 with good audio.
1820 UTC, 12139 kHz, over S9 with good audio.
1840 UTC, 10739 kHz, third sending, over S9, good audio.

14-Mar-18, Wednesday:- 1800 UTC, 13439 kHz, very weak signal, unreadable.
1820 UTC, 12139 kHz, second sending, much stronger, "417" and "376 140", as on Sunday, good audio.
1840 UTC, 10739 kHz, S6 to S7, good audio.

18-Mar-18, Sunday:- 1800 UTC, 13439 kHz, and 1820 UTC, 12139 kHz, both S9 or over with good audio, "417 417 417 000".

4-Apr-18, Wednesday:- 1720 UTC, 13403 kHz, second sending, "641 641 641 1", DK/GC "485 95" x 2, S9 with very good – one is almost tempted to say "excellent" - audio.
1740 UTC, 12103 kHz, third sending, also S9 with good audio.

8-Apr-18, Sunday:- something most unusual this evening, a very long message indeed:-
1734 UTC, 13403 kHz, second sending, tuned in with the thought that the last few seconds of a transmission, if "full message" might be heard; however, was calling "641 641 641 1", i.e. the start of the transmission. Must be running late, the reason being apparent with the DK/GC :- "400 266" - must be the highest group count heard from any E07 transmission, or possibly any other number station. Peaking S9 with very good audio. Ended just before 1803 UTC.
1807 UTC, just after, 12103 kHz, third sending, over S9 with very good audio.

11-Apr-18, Wednesday:- An even longer session this evening:-
1700 UTC, 14603 kHz, weak signal, largely unreadable but was clearly "full message" format. Was still going when checked at 1738, 1745 and 1755 UTC. A receiver was tuned in to the frequency of the expected second sending, 13403, and an audio cassette recorder hooked up and the record button pressed. Returned to the radio around 1815z when the second sending was in progress, rewound the tape back to hear the start of the transmission and heard, "641 641 641 2", so a two message transmission, first DK/GC "468 293", an even longer message than the one heard on Sunday.
1910 UTC, 12103 kHz, third sending starting up, peaking over S9 with good audio, best transmission of the three, "641 2" and "468 293". At around 1940 UTC went into the "641 2" call routine again followed by the second DK/GC "400 266", as heard on Sunday.

18-Apr-18, Wednesday:- 1700 UTC, 14603 kHz, weak signal, another long session, was still on at 1752 UTC.
1808 UTC, 13403 kHz, second sending in progress, S9 but was much weaker when checked at 1827z.
1908 UTC, 12103 kHz, third sending starting up with "641 2", first DK/GC "468 293", at 1940z "641 2" again followed by "400 266". By far the best sending of the three, checked several times during the transmission and was always S9 of over. Managed to catch the "000 000" ending just after 2008z.

22-Apr-18, Sunday:- First sending at 1700z was weak and unreadable but was obviously another long message, decided to concentrate on the third sending since this has been giving the best copy:-
1805 UTC, 12103 kHz, "641 641 641 1", DK/GC "292 245" x 2, another long message, S9 with good audio.

Thursday Schedule, 2110 UTC Start, 2010 UTC in April:-
1-Mar-18:- 2110 UTC, 7516 kHz, very low audio, largely unreadable.
2130 UTC, 5836 kHz, S9 carrier, could just hear "584 1" of a "full message" format.
2150 UTC 4497 kHz, over S9 with very low, unreadable audio.

8-Mar-18:- 2110 UTC, 7516 kHz, "584 584 584 000", S9 carrier, audio low but readable.
2130 UTC, 5836 kHz, over S9, audio low.

15-Mar-18:- 2110 UTC, 7516 kHz, very low audio, unreadable, carrier did not go off after two and a half minutes which suggests "full message" format.
2130 UTC, 5836 kHz, also very low audio.
2150 UTC, 4497 kHz, very low audio again although carrier over S9 with QSB, "584 584 584 1", DK/GC "152 59" (?) x 2.

5-Apr-18:- 2010 UTC, 9387 kHz, "358 358 358 000", very strong broadcast station from Thailand on the HF side, E07 with surprisingly good audio for this schedule, readable with the receiver in LSB mode.
2030 UTC, 7526 kHz, second sending, S9 with reasonable audio, some kind of noise-maker on a close frequency, not the usual "XJT".

12-Apr18:- 2010 UTC, 9387 kHz, low audio, unreadable. Carrier did not go off after two and a half minutes which means a full message.
2030 UTC, 7526 kHz, very low audio, S9 carrier.
2050 UTC, 5884 kHz, "358 358 358 1", DK/GC "9951 65" x 2, audio low but readable, best sending of the three.

19-Apr-18:- 2030 UTC, 7526 kHz, "358 358 358 000", S9 with better than usual audio.

26-Apr-18:- 2030 UTC, 7526 kHz, "358 358 358 1", full message. DK/GC "5554 53" x 2, audio low.
2050 UTC, 5884 kHz, third sending, better audio.

Monday + Wednesday SSB Schedule, 2000 UTC Start, 1900 UTC in April:-

5-Mar-18, Monday:- 2000 UTC, 10651 kHz, very weak signal, unreadable.
2020 UTC, 9151 kHz, second sending much stronger signal, "616 616 616 1", DK/GC "864 75" x 2.
2040 UTC, 7651 kHz, third sending, up to S9 fading down to a much weaker signal at times.

7-Mar-18, Wednesday:- 2000 UTC, 10651 kHz, weak signal, could just make out the "616" of a "full message" transmission.
2020 UTC, 9151 kHz, peaking S7 to S8, "864 75" as on Monday.
2040 UTC, 7651 kHz, S5 to S6, the middle transmission the strongest.

12-Mar-18, Monday:- 2000 UTC, 10651 kHz, very weak signal, unreadable.
2020 UTC, 9151 kHz, much, much stronger, "616" and "864 75" again, peaking over S9.
2040 UTC, 7651 kHz, S8 to S9.

2-Apr-18, Monday:- 1900 UTC, 15819 kHz, very weak signal, could just about hear, "000".
1920 UTC, 14419 kHz, "842 842 842 000", weak but clear.

4-Apr-18, Wednesday:- 1900 UTC, 15819 kHz, "842 842 842 000", S5, much better signal than on Monday.
1920 UTC, 14419 kHz, second sending, peaking over S9.

9-Apr-18, Monday:- 1900 UTC, 15819 kHz, and 1920 UTC, 14419 kHz, both very strong signals, "842 842 842 000".

11-Apr-18, Wednesday:- 1900 UTC, 15819 kHz, in contrast to just 48 hours earlier a very weak signal, only just readable, "842 842 842 000".
1920 UTC, 14419 kHz, also very weak.

18-Apr-18, Wednesday:- 1900 UTC, 15819 kHz, very weak, unreadable.
1920 UTC, 14419 kHz, "842 842 842 000", weak but clear.

25-Apr-18, Wednesday:- 1900 UTC, 15819 kHz, "full message" this evening, "842 842 842 1", DK/GC "499 62" x 2, S5.
1920 UTC, 14419 kHz, slightly weaker signal.
1940 UTC, 12219 kHz, third sending, over S9, strongest of the three.

Saturday + Sunday SSB Schedule, 0700 UTC start, 0600 UTC in April:-
3-Mar-18, Saturday:- 0700 UTC, 10112 kHz, "111 111 111 000", S8.
0720 UTC, 11112 kHz, second sending, stronger signal, over S9.

4-Mar-18, Sunday:- 0720 UTC, 11112 kHz, missed 0700z sending, "111 111 111 000", over S9 again.

10-Mar-18, Saturday:- 0700 UTC, 10112 kHz, "111 111 111 000", weak signal, inside the 30 metre amateur band, fast CW on a close frequency.
0720 UTC, 11112 kHz, stronger signal, peaking an indicated S7.

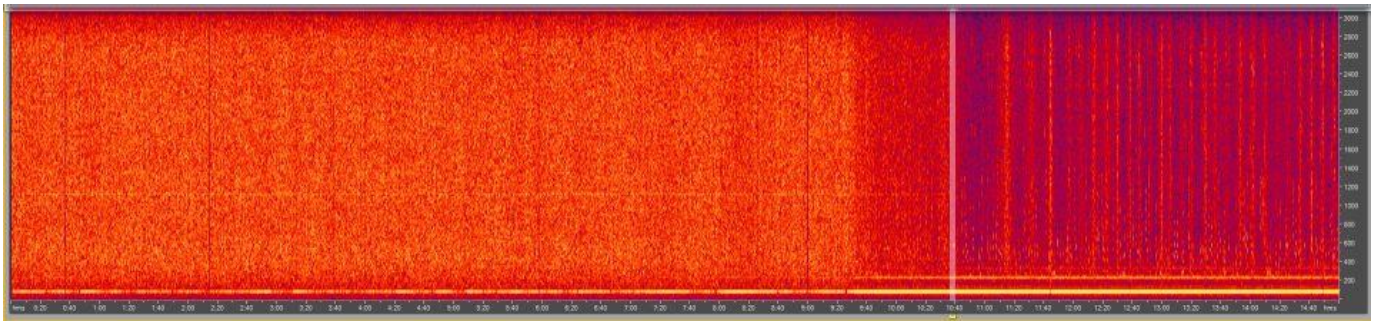
18-Mar-18, Sunday:- 0700 UTC, 10112 kHz, and 0720 UTC, 11112 kHz, both S6 to S7, "111 111 111 000".

8-Apr-18, Sunday:- 0600 UTC, 9064 kHz, "024 024 024 1", full message mode, DK/GC "513 57" x 2, S6 to S7.
0620 UTC, 10264 kHz, second sending, weaker signal.
0640 UTC, 11464 kHz, back up to around S6.

14-Apr-18, Saturday:- 0600 UTC, 9064 kHz, "024 024 024 000", S7 to S8.
0620 UTC, 10264 kHz, slightly weaker.

22-Apr-18, Sunday:- 0600 UTC, 9064 kHz, "024 024 024 1", DK/GC "290 23" x 2, short message, compare and contrast with group counts of well over 200 which have been a feature of the Sunday + Wednesday E07 schedule in April. Peaking over S9, all done by 0605 UTC.
0620 UTC, 10264 kHz, started off around S9, quickly became weaker, S6 to S7.
0640 UTC, 11464 kHz, weakest transmission of the three, S5 to S6.

Others' Logs



13439kHz 1800z 14/03 Starts late, midway into text

Sunday/Wednesday

March 2018

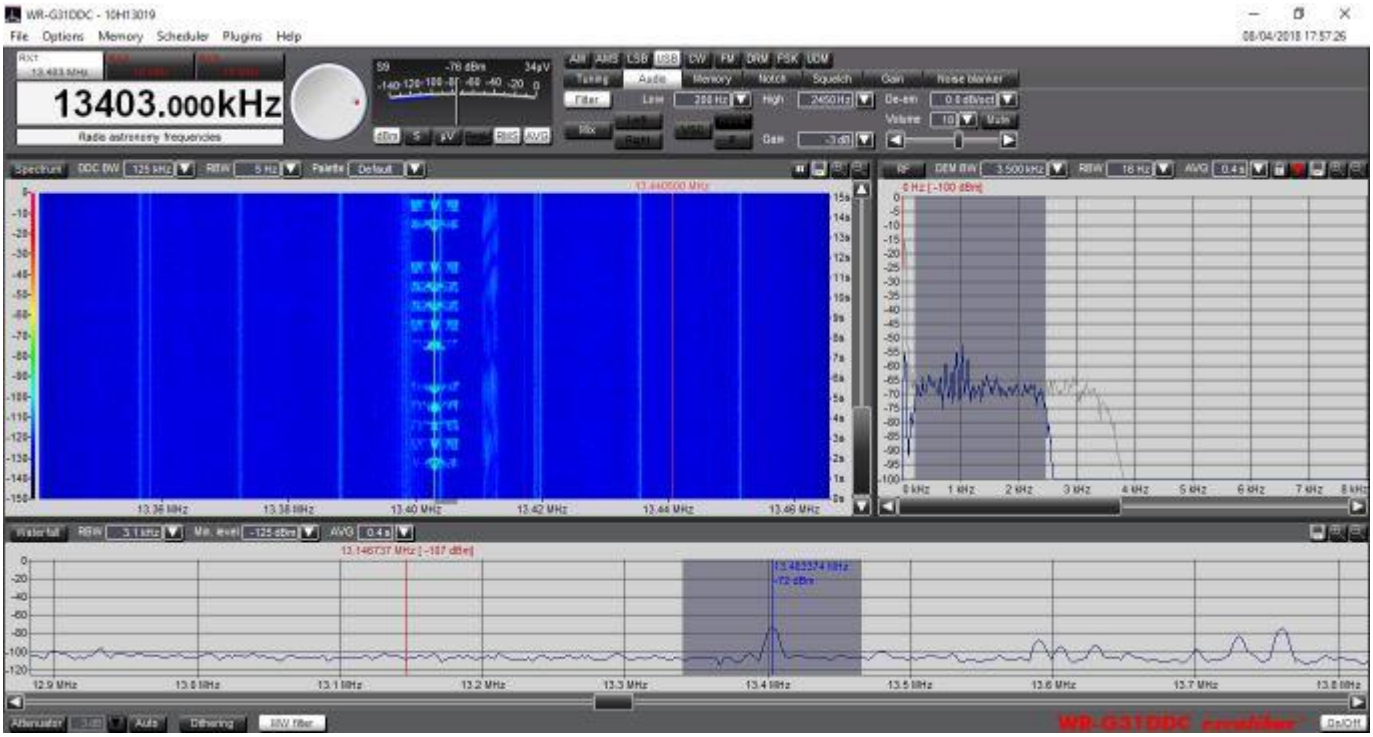
1800z	**13439kHz**	**1820z**	**12139kHz**	**1840z**	**10739kHz**
14/03	417 1 376 140 63818 ... 64672 000 000		[1800z Started at 1811z with text ....see pic]		Strong

18/03	417 000		Strong
21/03	417 000	[1800z NRH]	Weak, noisy
25/03	417 1 5600 150 94917 ... 1n559 000 000	[17m34s lg]	Strong carrier, poor audio
28/03	417 1 5600 150 54917	[1800z NRH]	Weak, unworkable

April 2018

1700z 14603kHz 1720z 13403kHz 1740z 12103kHz

01/04	641 1 485 95 47578 … 20144 000 000	Very strong, QSB2
04/04	641 1 485 95 47578 ... 20144 000 000	Strong



'[855]84 72381 99114'

08/04	641 1 400 266 57478 … 81193 000 000 Length of sending revised start times as:1700z, 1734 and 1808z, effectively allowing 5 mins between sendings. As image, note time, top RH corner.	[1700z Very strong, fading to nil]	Strong [29m lg]
11/04	641 2 Unworkable		
15/04	641 2 rest unworkable	[1720/1740z NRH]	Weak
22/04	641 1 292 245 63482 ... 89658 000 000	[1700z Unworkable, QRN4/5]	Strong, QSB3 29m09s lg]
29/04	641 1 110 168 47287 ... 69944 000 000		Weak

Sunday/Saturday

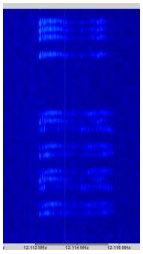
March 2018

0700z 10112kHz 0720z 11112kHz 0740z 12112kHz

03/03	111 000		Strong
04/03	111 000	[0720z Weak]	Strong
10/03	111 000	[0700z NRH]	Weak, noisy
11/03	111 000	[0700z NRH]	Fair
17/03	111 000	[0700/0720z NRH PLdn QTH]	Fair [Twente]
18/03	111 000	[0720z Very weak]	Weak
24/03	111 1 513 57 12959 ... 08961 000 000		Fair

25/03 111 1 513 57 12959 ... 08961 000 000 Weak

111 1 513 57
12959 62837 96047 57368 32122
07669 20448 24891 88376 45112
83939 14440 21131 50890 41677
01100 49847 32120 97801 44258
36404 19721 17694 15141 16748
42318 69639 03417 53920 91533
84379 19675 07924 80692 25255
74182 74278 24758 53256 82761
14569 02256 36242 75521 33691
88062 57586 52762 88400 94590
09452 16898 12361 43916 40537
61055 08961
000 000 *Courtesy PLdn*



'111 1 513 57 513 57'

31/03 111 1 513 57 12959 ... 08961 000 000 [0700z CWQRM3] Fair

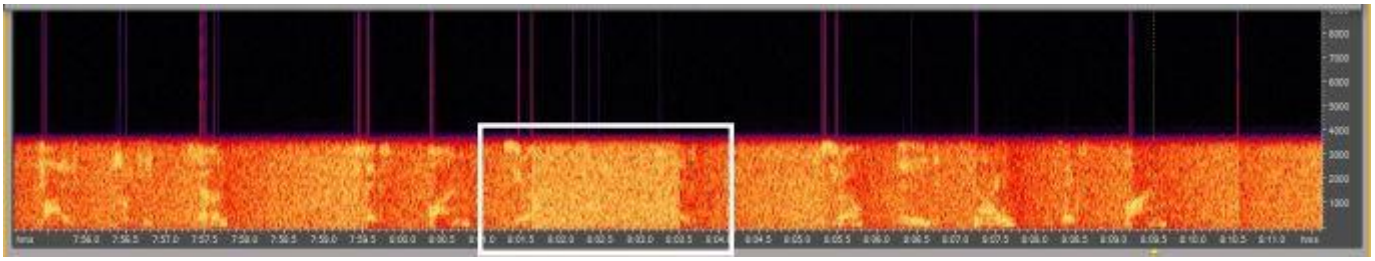
April 2018

0600z 9064kHz 0620z 10264kHz 0640z 11464kHz

07/04 024 1 516 57 12959 ... 08961 000 000 [0620/0640z NRH] Weak, QSB2

08/04 024 1 516 57 12959 ... 08961 000 000 Weak

Reception of the April slot isnot helped by the magnitude of VDSL noise generated by broadband distribution which is doubtless helped by overhead distribution. In the image below the effect of switching off my phase noise remover for two seconds can be seen in the white square – the total obliteration of wanted signals by noise. The wanted signal is available via one of the many online SDR's, but it's not the same ☺



08/04 024 1 516 57 12959 ... 08961 000 000 troubled by noise [9064kHz – 10264 is much, much worse]

14/04 024 000 Weak, noisy

15/04 024 000 [0620z NRH] Weak

21/04 024 1 290 23 34862 ... 90260 000 000 [0620z Weak, noisy] Fair

024 1 290 23
34862 41586 44264 28248 43104
48929 84442 67374 62207 04540
41815 23787 36586 09242 14931
70756 00852 13759 16664 04197
90865 41657 90260
000 000 *Courtesy PLdn*

22/04 024 1 290 23 34862 ... 90260 000 000 [0620z Weak, noisy] Fair

28/04 024 1 290 23 34862 ... 90260 000 000 [0600z Weak] Strong

29/04 024 1 290 23 34862 ... 90260 000 000 [0620z noisy] Strong

Monday/Wednesday

March 2018

2000z 10651kHz 2020z 9151kHz 2040z 7651kHz

12/03 616 1 864 75 13436 ... 53990 000 000 [2000z NRH] Fair

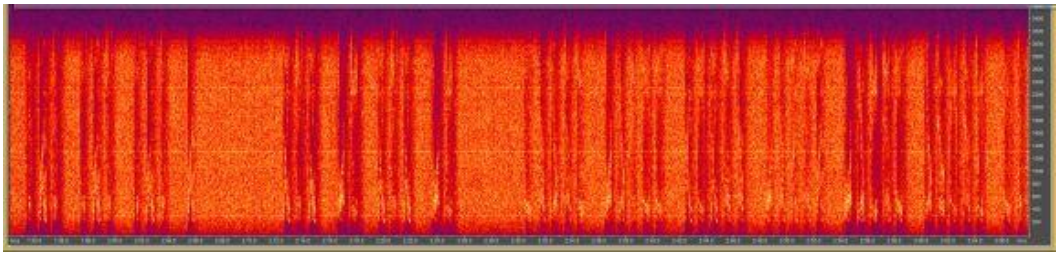
14/03 616 1 864 75 13436 ... 53990 000 000 Fair

19/03 NRH, poor condx

21/03 616 1 864 75 13436 ... 53990 000 000 [2000/2020z NRH] Weak, QSB3/4

26/03 616 1 969 43 87072 ... 12093 000 000 [2000z Fair, noisy] Strong

616 1 969 43
87072 40688 98977 47171 40378
02873 86348 22280 17636 30558
33219 81088 55716 90984 38033
85176 33394 29635 11097 86106
20676 27637 27246 91104 91250
04872 77449 02479 41817 64861
78873 40179 33533 54313 72806
95506 78531 92498 14513 02386
18566 36153 12093
000 000 *Courtesy PLdn*



'616 1 969 43 87072 40688 98977 47171 40378 02873'

28/03	616 1 969 43 87072 ... 12093 000 000	[2040z only, rest noisy] Strong

April 2018

1900z	**15819kHz**	**1920z**	**14419kHz**	**1940z**	**12219kHz**	
02/04	842 000					Fair
04/04	842 000					Fair to strong
09/04	842 000					Very strong
11/04	842 000					Weak
16/04	842 000					Weak
18/04	842 000				[Heard in Argentine]	Weak
23/04	842 1 499 62 65826 ... 45436 000 000				[1900/1920z Unworkable]	Strong
25/04	842 1 499 62 65826 ... 45436 000 000				[1900/1920z NRH]	Fair
30/04	842 000					Strong

Tuesday/Friday

March 2018

1100z	**19118kHz**	**1120z**	**17418kHz**	**1140z**	**15918kHz**	
02/03	149 000				[1100z NRH]	Weak
13/03	149 1 970 131 22685 ... 81417 000 000				[1100z NRH]	Weak
16/03	149 1 9730 131 22685 ... 81417 000 000				[1100z NRH]	Weak (Dutch SDR)
20/03	NRH, poor condx					
27/03	NRH, poor condx					

April 2018

1100z	**20574kHz**	**1120z**	**19074kHz**	**1140z**	**17474kHz**	
03/04	NRH, propagation					
06/04	504 1 9432 75 32363 ... 10193 000 000				[1100/1120z NRH]	No sig report

504 1 9432 75
32363 19022 26366 47842 11142 34812 68573 97432 65244 15213
00618 03906 52518 93466 03305 51890 60379 24709 03784 53455
44849 57511 68736 34288 27654 74869 98366 47183 14619 13751
03465 78902 27889 28277 62783 31548 39173 36571 56113 52894
43521 31721 28831 79487 43565 08737 50115 48397 67916 72333
44174 78225 37046 34540 59793 44616 28078 12977 67138 91844
05356 00934 96379 46974 41878 35985 22321 49453 84710 42723
20430 60238 80135 91030 10193 000 000 *Courtesy Ary*

10/04	NRH, propagation
13/04	NRH, propagation
17/04	NRH, propagation

Thursday

March 2018

2110z	**7516kHz**	**2130z**	**5836kHz**	**2150z**	**4497kHz**	
01/03	584 1 6155 73 14946 ... 51946 000 000					Weak
08/03	584 000					Weak
15/03	584 1 152 59 69775 ... .96704 000 000				[8m32s lg]	Fair
22/03	584 000					Weak
29/03	584 1 323 85 61791 ... 66347 000 000					Weak

April 2018

2010z	**9387kHz**	**2030z**	**7526kHz**	**2050z**	**5884kHz**	
05/04	358 000				[2010z BCQRM4]	Weak, QRM3
12/04	358 1 9951 65 43308 … 09653 000 000				[2010z BCQRM5]	Weak (Dutch SDR)
19/04	358 000				[2010z BCQRM5]	Fair
26/04	358 1 5554 53 55nn8 ... nnnnn 000 000				[7m58s lg, 2010/2030z NRH]	Weak, unworkable

E07a

PoSW's logs and analyisis, followed by others' logs:

Saturday Schedule, 0900 UTC Start, 0800 UTC in April:-
3-Mar-18:- 0900 UTC, 11133 kHz, "114 114 114 000", strength S4 to S5.
0920 UTC, 12133 kHz, second sending, slightly stronger signal.

17-Mar-18:- 0900 UTC, 11133 kHz, "114 114 114 000", S5.
0920 UTC, 12133 kHz, S6 to S7.

24-Mar-18:- 0900 UTC, 11133 kHz, and 0920 UTC, 12133 kHz, both weak, "114 114 114 000".

7-Apr-18:- 0800 UTC, 12218 kHz, "244 244 244 000".
0820 UTC, 13418 kHz, both S5 to S6.

14-Apr-18:- 0800 UTC, 12218 kHz, and 0820 UTC, 13418 kHz, both weak signals, "244 244 244 000".

28-Apr-18:- 0800 UTC, 12218 kHz, peaking around S7, "244 244 244 000".
0820 UTC, 13418 kHz, very weak signal.

Wednesday Schedule, 2100 UTC Start, 2000 UTC in April:-
7-Mar-18:- 2100 UTC, 5877 kHz, "825 825 825 000", S9+, very strong signal.
2120 UTC, 5277 kHz, second sending, also S9+.

14-Mar-18:- 2100 UTC 5877 kHz, and 2120 UTC, 5277 kHz, "825 825 825 000".

4-Apr-18:- 2000 UTC, 8144 kHz, "197 197 197 000", very strong signal.
2020 UTC, 6944 kHz, also very strong.

11-Apr-18:- 2000 UTC, 8144 kHz, "197 197 197 000", S9+.

18-Apr-18:- 2000 UTC, 8144 kHz, and 2020 UTC, 6944 kHz, both S9+, "197 197 197 000".

25-Apr-18:- 2000 UTC, 8144 kHz, "full message" for a change, "197 197 197 1 31905", DK/GC "6143 57", over S9.
2020 UTC, 6944 kHz, second sending, S9+, very strong signal. Transmission failed at approx 2024 UTC, came back with "197..." start-up routine again then continued with 5Fs.
2040 UTC, 5744 kHz, over S9. **Others' Logs follow:**

Wednesday

March 2018

2100z	**5877kHz**	**2120z**	**5277kHz**	**2140z**	**4577kHz**	
07/03	825 000					Very strong
14/03	825 000					Very strong
21/03	825 1 19491 9601 61 85971 ... 20351 000 000					Very strong
28/03	825 1 19491 9601 61 85971 ... 20351 000 000					Very strong

April 2018

2000z	**8144kHz**	**2020z**	**6944kHz**	**2040z**	**5744kHz**	
04/04	197 000					Very strong
11/04	197 000					Very strong
18/04	197 000					Very strong
25/04	197 1 31905 6143 57 52230 ... 09247 000 000					Fair

Thursday

March 2018

0530z	**6922kHz**	**0550z**	**8122kHz**	**0610z**	**9322kHz**	
08/03	913 000					Strong
15/03	913 000					Fair
22/03	913 1 19491 9601 61 85971 ... 20351 000 000					Strong, audio distorted
29/03	913 1 19491 9601 61 85971 ... 20351 000 000				[0610z QRM to S9]	Very strong

April 2018

0430z	**6788kHz**	**0450z**	**7488kHz**	**0510z**	**8188kHz**	
05/05	741 000					Strong
12/04	741 000					Very strong
19/04	741 000					Very strong
26/04	741 1 31905 6143 57 52230 ... 09247 000 000					Fair

Friday

March 2018

1610z	**11473kHz**	**1630z**	**10173kHz**	**1650z**	**9373kHz**	
02/03	413 000					Weak
09/03	413 000					Weak
16/03	413 000					Weak
23/03	413 000					Strong

April 2018

1510z	**12174kHz**	**1530z**	**11074kHz**	**1550z**	**10274kHz**	
13/04	102 000					Fair

Saturday

March 2018

0900z	**11133kHz**	**0920z**	**12133kHz**	**0940z**	**13433kHz**	
03/03	114 000				[0900z Weak]	Strong
10/03	114 000					Fair
17/03	114 000				[0900z NRH]	Weak
24/03	114 000					Weak

April 2018

0800z	**12218kHz**	**0820z**	**13418kHz**	**0840z**	**14418kHz**	
07/04	244 000					Strong
14/04	244 000				[0820zHETQRM3]	Fair
21/04	244 000				[0820zHETQRM3]	Fair
28/04	244 000				[0820z Unworkable, localQRM5]	Fair

E11 log March/April

From RNGB:

5082kHz	0700z	20/03 [573/00] Fair		RNGB	TUE
	0700z	27/03 [573/00] Weak		RNGB	TUE
	0700z	03/04 [577/00] Out 0703z S6		Malc, RNGB	TUE
	0700z	06/04 [574/00] Out 0703z S3		Malc, RNGB	FRI
	0700z	10/04 [579/00] Out 0703z S2		Malc, RNGB	TUE
	0700z	13/04 [577/00] Out 0703z S4	(Dutch SDR)	Malc, RNGB	FRI
	0700z	24/04 [576/00] Out 0703z S3		Malc	TUE
	0700z	27/04 [579/00] Out 0703z S2		Malc, RNGB	FRI
5371kHz	0820z	01/03 [435/00] Weak		RNGB	THU
	0820z	08/03 [438/00]		RNGB	THU
	0450z	19/03 [411/00]		Ary	MON
	0820z	19/03 [434/00]		RNGB	MON
	0820z	22/03 [435/00] Out 0823z S2		Malc, RNGB	THU
	0820z	29/03 [439/00] Out 0823z S2		Malc	THU
	0820z	02/04 [439/00] Out 0823z S2		Malc, RNGB	MON
	0820z	05/04 [430/00] Out 0823z S5		Malc	THU
	0820z	19/04 [439/00] Out 0823z S2		Malc	THU
	0820z	23/04 [432/00] Out 0823z S3		Malc	MON
	0820z	26/04 [435/00] Out 0823z S9	(Dutch SDR)	Malc	THU
	0820z	30/04 [431/00] Out 0823z S2		Malc	MON
5844kHz	1730z	03/03 [402/00] Out 1733z S9		Malc	SAT
	1730z	21/03 [409/00] Out 1730z S9		Malc, RNGB	WED
	1730z	28/03 [409/00] Out 1733z S9		Malc	WED
	1730z	04/04 [408/00] Out 1733z S7		Malc	WED
	1730z	07/04 [406/00] Out 1733z S9		Malc	SAT
	1730z	11/04 [400/00]		Gary H, Malc	WED
	1730z	14/04 [405/00] Out 1733z S6		Malc	SAT
	1730z	25/04 [409/00] Out 1733z S6		Malc	WED
	1730z	28/04 [409/00] Out 1733z S9		Malc	SAT
6397kHz	1605z	20/03 [233/00] Out 1608z S9		Malc, RNGB	TUE
	1605z	27/03 [231/001 Out 1608z S7		Malc	TUE
	1605z	01/04 [233/00] Out 1608z S6		Malc	SUN
	1605z	03/04 [237/001 Out 1608z S7		Malc	TUE
	1605z	10/04 [233/00] Out 1608z S4		Malc	TUE
	1605z	15/04 [231/00] Out 1608z S3		Malc	SUN
	1605z	24/04 [235/00] Out 1708z S6		Malc	TUE
6807kHz	0930z	01/03 [275/00] Out 0933z S3		Malc, RNGB	THU
	0930z	14/03 [273/00] Out 0933z S3		Malc. RNGB	WED
	0930z	21/03 [273/00] Out 0933z S2		Malc, RNGB	WED
	0930z	22/03 [278/00] Out 0933z S4		Malc	THU
	0930z	28/03 [279/00] Out 0933z S3		Malc	WED
	0930z	29/03 [271/00] Out 0933z S4		Malc, RNGB	THU
	0930z	11/04 [273/00] Out 0933z S2		Malc, RNGB	WED
	0930z	12/04 [279/00] Out 0933z S4		Malc	THU
	0930z	18/04 [270/00] Out 0933z S2		Malc	WED
	0930z	19/04 [273/00] Out 0933z S4		Malc	THU
	0930z	25/04 [275/00] Out 0933z S2		Malc	WED
	0930z	26/04 [276/00] Out 0933z S5	(Dutch SDR)	Malc	THU

7317kHz	1900z	15/03 [648/00]	RNGB	THU
	1900z	19/03 [641/00] Heavy BC QRM	RNGB	MON
	1900z	02/04 [646/00] Out 1902z S4	Malc	MON
	1900z	05/04 [643/00] Out 1903z S7	Malc	THU
	1900z	12/04 [641/00] Out 1903z S7	Malc	THU
	1900z	19/04 [647/00]	Gary H, Malc	THU
	1045z	23/04 [969/00] Out 1048z S3	Malc	MON
	1045z	25/04 [969/00] Out 1048z S2	Malc	WED
	1900z	30/04 [641/00] Out 1903z S6	Malc	MON
7727khz	1205z	13/03 [463/00]	RNGB	TUE
	1205z	14/03 [464/00] Out 208z S3	Malc	WED
	1205z	20/03 [463/00] Out 1208z S3	Malc	TUE
	1205z	21/03 [460/00] Out 1208z S2	Malc	WED
	1205z	27/03 [461/00] Out 1208z S2	Malc	TUE
	1205z	28/03 [465/00] Out 1208z S2	Malc	WED
	1205z	03/04 [465/00] Out 1208z S2	Malc	TUE
	1205z	04/04 [462/00] Out 1208z S2	Malc, RNGB	WED
	1205z	10/04 [464/00] Out 1208z S3	Malc	TUE
	1205z	17/04 [469/00] Out 1208z S2	Malc	TUE
	1205z	18/04 [463/00] Out 1208z S2	Malc	WED
7840kHz	1000z	02/03 [302/00] Out 1003z S2	Malc	FRI
	1000z	13/03 [304/00] Out 1003z S5	Malc	TUE
	1000z	16/03 [304/00]	RNGB	FRI
	1000z	23/03 [305/00] Out 1003z S5	Malc, RNGB	FRI
	1000z	27/03 [304/00] Out 1003z S2	Malc	TUE
	1000z	10/04 [300/00] Out 1003z S3	Malc	TUE
	1000z	13/04 [308/00] Out 1003z S3	Malc	FRI
	1000z	20/04 [308/00] Out 1003z S4	Malc	FRI
	1000z	27/04 [309/00] Out 1003z S3	Malc	FRI
7864kHz	1730z	01/03 [415/00] Out 1733z S5	Malc	THU
	1730z	29/03 [412/00] Out 1733z S9	Malc	THU
	1730z	19/04 [412/00] Out 1733z S5	Malc	THU
	1730z	26/04 [415/00] Out 1733z S9	Malc	THU
8102kHz	0710z	10/03 [498/00] Good	RNGB	SAT
	0710z	11/03 [491/00]	RNGB	SUN
	0710z	17/03 [490/00]	RNGB	SAT
	0710z	18/03 [495/00] Out 0713z S2	Malc , RNGB	SUN
	0710z	24/03 [496/00] Good	RNGB	SAT
	0710z	08/04 [498/00] Out 0713z S3	Malc	SUN
	0710z	21/04 [498/00] Out 0713z S3	Malc	SAT
	0710z	22/04 [490/00] Out 0713z S3	Malc	SUN
	0710z	28/04 [495/00] Out 0713z S4	Malc	SAT
	0710z	29/04 [498/00] Out 0713z S4	Malc	SUN
8186kHz	2005z	03/03 [366/00] Out 2008z S9	Malc, RNGB	SAT
	2005z	01/04 [365/00] Out 2008z S9	Malc	SUN
	2005z	21/04 [363/00] Out 2008z S6	Malc	SAT
	2005z	28/04 [360/00] Out 2008z S7	Malc	SAT
	2005z	29/04 [369/00] Out 2008z S3	Malc	SUN
8530kHz	1910z	02/03 [612/00] Out 1013z S7	Malc	FRI
	1910z	16/03 [611/00] Out 1913z S9	Malc	FRI
	1910z	18/03 [617/001 Out 1913z S5	Malc	SUN
	1910z	01/04 [614/00] Out 1913z S5	Malc	SUN
	1910z	06/04 [613/00] Out 1913z S3	Malc	FRI
	1910z	13/04 [613/00] Out 1913z S7 QSB4	Malc	FRI
	1910z	15/04 [617/00] Out 1913z S2 (Dutch SDR)	Malc	SUN
	1910z	22/04 [612/00] Out 1913z S7	Malc	SUN
9200kHz	0805z	17/03 [314/00]	RNGB	SAT
	0805z	18/03 [313/00] Out 0808z S5	Malc	SUN
	0805z	24/03 [313/00]	RNGB	SAT
	0805z	07/04 [313/00] Out 0808z S7	Malc	SAT
	0805z	08/04 [311/00] Out 803z S5	Malc	SUN
	0805z	21/04 [314/00] Out 0808z S6 (Dutch SDR)	Malc	SAT
	0805z	22/04 [316/00] Out 0808z S2	Malc	SUN
	0805z	28/04 [314/00] Out 0808z S6	Malc	SAT
	0805z	29/04 [313/00] Out 0808z S4	Malc	SUN

9399kHz	0900z	05/03 [533/00]		RNGB	MON
	0900z	07/03 [535/00] Good		RNGB	WED
	0900z	12/03 [533/00] Good		RNGB	MON
	0900z	14/03 [530/00] Out 0903z S3		Malc, RNGB	WED
	0900z	19/03 [535/00] Good		RNGB	MON
	0900z	21/03 [538/00] Out 0903z S2		Malc	WED
	0900z	02/04 [535/00] Out 0903z S2		Malc	MON
	0900z	04/04 [532/00] Out 0903z S2		Malc	WED
	0900z	11/04 [535/00] Out 0903z S2		Malc, RNGB	WED
	0900z	23/04 [530/00] Out 0903z S4	(Dutch SDR)	Malc	MON
	0900z	25/04 [530/00] Out 0903z S2		Malc	WED
	0900z	30/04 [535/00] Out 0903z S4	(Dutch SDR)	Malc	MON
9963kHz	0715z	20/03 [639/00] Out 0718z S5		Malc, RNGB	TUE
	0715z	23/03 [637/00] Out 0718z S5		Malc, RNGB	FRI
	0715z	27/03 [634/00] Out 0715z S3		Malc, RNGB	TUE
	0715z	30/03 [636/00]		RNGB	FRI
	0715z	03/04 [631/00] Out 0718z S5		Malc, RNGB	TUE
	0715z	06/04 [633/00] Out 0718z S2		Malc	FRI
	0715z	10/04 [633/00] Out 0718z S4		Malc	TUE
	0715z	13/04 [639/00] Out 0718z S3		Malc, RNGB	FRI
	0715z	17/04 [634/00] Out 0718z S5		Malc, RNGB	TUE
	0715z	20/04 [633/00] Out 0718z S6		Malc	FRI
10213kHz	1705z	03/03 [394/00] Out 1708z S9		Malc	SAT
	0745z	05/03 [267/00] Strong		RNGB	MON
	0745z	12/03 [264/00] Good		RNGB	MON
	1705z	14/03 [391/00] Out 1708z S4		Malc	WED
	1705z	17/03 [391/00] Out 1708z S9		Malc	SAT
	1705z	21/03 [393/00] Out 1708z S5		Malc	WED
	1705z	28/03 [393/001 Out 1708z S3		Malc	WED
	1705z	04/04 [395/00] Out 1708z S9+10		Malc	WED
	1705z	07/04 [390/00] Out 1708z S9		Malc	SAT
	0745z	16/04 [264/00]		RNGB	MON
	1705z	21/04 [393/00] Out 1708z S9		Malc	SAT
	0745z	23/04 [262/00] Out 0748z S8		Malc	MON
	1705z	25/04 [291/00] Out 1708z S9+20		Malc	WED
	1705z	28/04 [393/00] Out 1708z S2		Malc	SAT
	0745z	30/04 [264/00] Out 0748z S4		Malc	MON
10246kHz	0845z	01/03 [157/00] Out 0848z S4		Malc, RNGB	THU
	0845z	06/03 [154/00]		RNGB	TUE
	0845z	13/03 [156/00]		RNGB	TUE
	0845z	15/03 [154/00] Strong		RNGB	THU
	0845z	20/03 [155/00] Out 0848z S7		Malc	TUE
	0845z	22/03 [151/00] Out 0848z S8		Malc, RNGB	THU
	0845z	03/04 [152/00] Out 0848z S7		Malc	TUE
	0845z	05/04 [159/00] Out 0848z S5		Malc, RNGB	THU
	0845z	10/04 [157/00] Out 0848z S6		Malc	TUE
	0845z	12/04 [155/00] Out 0848z S4		Malc	THU
	0845z	24/04 [151/00] Out 0848z S4		Malc	TUE
	0845z	26/04 [156/00] Out 0848z S9	(Dutch SDR)	Malc	THU
10302kHz	1300z	01/03 [588/00] Out 1303z S5		Malc	THU
	1300z	03/03 [588/00] Out 1303z S9		Malc	SAT
	1300z	17/03 [587/00] Out 1303z S8		Malc	SAT
	1300z	29/03 [587/00] Out 1303z S7		Malc, RNGB	THU
	1300z	05/04 [580/00] Out 1303z S4		Malc	THU
	1300z	07/04 [589/00] Out 1303z S5		Malc	SAT
	1300z	14/04 [589/00] Out 1303z S9		Malc	SAT
	1300z	21/04 [587/00] Out 1303z S5		Malc	SAT
10330kHz	1530z	01/03 [266/00] Out 1533z S7		Malc	THU
	1530z	08/03 [268/00]		Gary H	THU
	1530z	15/03 [264/00] Strong		RNGB	THU
	1530z	29/03 [268/00]		Gary H	THU
	1530z	12/04 [268/00] Out 1533z S9		Malc, Gary H	THU
	1530z	19/04 [266/00] Out 1533z S9		Malc	THU
	1530z	26/04 [262/00] Out 1533z S8		Malc, Gary H	THU

10448kHz	1625z	14/03 [977/00] Out 1628z S9		Malc	WED
	1625z	18/03 [972/00] Out 1628z S6		Malc	SUN
	1625z	21/03 [975/00]		Gary H, Malc	WED
	1625z	28/03 [974/00] Out 1628z S2		Malc	WED
	1625z	01/04 [975/00] Out 1628z S6		Malc	SUN
	1625z	11/04 [970/00] Out 1628z S3	(Dutch SDR)	Malc	WED
	1625z	15/04 [970/00] Out 1628z S3	(Dutch SDR)	Malc	SUN
	1625z	18/04 [975/00] Out 1628z S3		Malc	WED
	1625z	22/04 [977/00] Out 1628z S4		Malc	SUN
	1625z	25/04 [977/00] Out 1628z S6		Malc	WED
	1625z	29/04 [978/00] Out 1628z S5		Malc	SUN
10620kHz	1925z	01/03 [557/00] Out 1928z S7	(Dutch SDR)	Malc	THU
	1925z	15/03 [551/00]		RNGB	THU
	1925z	22/03 [552/00] Out 1928z S2	(Dutch SDR)	Malc	THU
	1925z	03/04 [557/00] Out 1925z S3	(Dutch SDR)	Malc	TUE
	1925z	05/04 [550/00] Out 1928z S5		Malc	THU
	1925z	10/04 [557/00] Out 1928z S5		Malc	TUE
	1925z	12/04 [556/00] Out 1928z S7		Malc	THU
	1925z	19/04 [558/00] Out 1928z S2		Malc	THU
10800kHz	1645z	01/03 [335/00] Out 1648z S9		Malc	THU
	1645z	13/03 [331/00] Out 1648z S9		Malc	TUE
	1645z	15/03 [333/00]		Gary H	THU
	0645z	20/03 [512/00] Weak		RNGB	TUE
	0645z	27/03 [517/00] Out 0648z S2	(Dutch SDR)	Malc, RNGB	TUE
	1645z	27/03 [330/00] Out 1648z S3	(Dutch SDR)	Malc	TUE
	0645z	29/03 [517/00] Out 0648z S2	(Dutch SDR)	Malc	THU
	1645z	03/04 [331/00] Out 1748z S6		Malc, RNGB	TUE
	1645z	05/04 [338/00] Out 1648z S9		Malc	THU
	0645z	10/04 [514/00] Out 0648z S2	(Dutch SDR)	Malc	TUE
	1645z	10/04 [333/00] Out 1648z S2	(Dutch SDR)	Malc	TUE
	0645z	12/04 [514/00] Out 0648z S2		Malc	THU
	1645z	12/04 [333/00] Out 1648z S2		Malc, Gary H	THU
	0645z	17/04 [511/00] Out 0648z S2		Malc, RNGB	TUE
	1645z	17/04 [332/00]		Gary H	TUE
	0645z	19/04 [511/00] Out 0648z S2		Malc, RNGB	THU
	1645z	19/04 [338/00] Out 1648z S9		Malc	THU
	0645z	24/04 [518/00] Out 0848z S4		Malc	TUE
	0645z	26/04 [517/00] Out 0648z S6		Malc	THU
12153kHz	0640z	02/04 [942/00] Out 0648z S2	(Dutch SDR)	Malc	MON
	0640z	04/04 [949/00] Out 0643z S2		Malc	WED
	0640z	18/04 [941/00] Out 0643z S4		Malc	WED
	0640z	23/04 [945/00] Out 0643z S2		Malc	MON
	0640z	25/04 [948/00] Out 0643z S2		Malc	WED
	0640z	30/04 [946/00]		RNGB	MON
12530kHz	0820z	13/03 [131/00] Strong		RNGB	TUE
	0820z	14/03 [132/00] Out 0823z		RNGB, Malc	WED
	0820z	20/03 [136/00] Out 0823z S2		Malc	TUE
	0820z	21/03 [136/00] Out 0823z S5		Malc, RNGB	WED
	0820z	04/04 [131/00] Out 0823z S4		Malc, RNGB	WED
	0820z	10/04 [130/00] Out 0823z S5 QSB3		Malc, RNGB	TUE
	0820z	11/04 [130/00] Out 0823z S4		Malc	WED
	0820z	24/04 [131/00] Out 0823z S3		Malc	TUE
	0820z	25/04 [133/00] Out 0823z S3		Malc	WED
13046kHz	1345z	03/03 [917/00] Out 1348z S2		Malc	SAT
	1345z	17/03 [914/00] Out 1348z S6		Malc, RNGB	SAT
	1345z	20/03 [912/00] Out 1348z S2		Malc	TUE
	1345z	10/04 [918/00] Out 1348z S3		Malc	TUE
	1345z	14/04 [915/00] Out 1348z S3 QRM		Malc	SAT
	1345z	17/04 [911/00] Out 1348z S3		Malc	TUE
	1345z	21/04 [910/00] Out 1348z S4		Malc	SAT
	1345z	24/04 [919/00] Out 1348z S3		Malc	TUE
13470kHz	1745z	19/03 [247/00] Fair		RNGB	MON
	1745z	01/04 [249/00] Out 1748z S2		Malc	SUN
	1745z	02/04 [247/00] Out 1748z S3		Malc	MON
	0600z	09/04 [185/00] Weak		RNGB	MON
	1745z	15/04 [245/00] Out 1748z S2	(Dutch SDR)	Malc	SUN

	1745z	23/04 [242/00] Out 1748z S3	Malc	MON
	1745z	29/04 [242/00] Out 1748z S3	Malc	SUN
13873kHz	1650z	23/03 [924/00] Out 1653z S4	Malc	FRI
	1650z	30/03 [921/00] Weak	RNGB	FRI
	1650z	01/04 [922/00] Out 1653Z S3 QRM7	Malc	SUN
	1650z	13/04 [927/00] Out 1653z S4 QRM (Dutch SDR)	Malc	FRI
	1650z	15/04 [924/00] Out 1653z S2 QRM (Dutch SDR)	Malc	SUN
	1650z	22/04 [924/00] Out 1653z S2 (QRM Dutch SDR)	Malc	SUN
17410kHz	0745z	02/03 [346/00] Out 0748z S2	Malc	FRI
	0745z	09/03 [340/00] Fair	RNGB	FRI
	0745z	14/03 [347/00] Out 0748z S2	Malc, RNGB	WED
	0745z	21/03 [347/00] Good (Chinese SDR)	RNGB	WED
	0745z	23/03 [342/00] Out 0748z S2 (Dutch SDR)	Malc, RNGB	FRI
	0745z	04/04 [349/00] Out 0748z S2 (Dutch SDR)	Malc	WED
	0745z	06/04 [344/00] Out 0748z S2 (Dutch SDR)	Malc	FRI
20286kHz	1225z	16/03 [527/00] Out 1228z S2	Malc	FRI

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From RNGB:

5082kHz	0700z	13/03 [573/37 95379 97003 70495 71410 97909 74402 03572 95279……10481 86448]	RNGB	TUE
	0700z	17/04 [573/38 53309 88885 50305 63560 13691 98285 08625 28027……87839 75570]	RNGB, Malc	TUE
	0700z	19/04 [573/38 53309…..etc] Repeat of Tuesday	RNGB	THU
5371kHz	0820z	12/03 [438/38 62224 42818 06560 23455 13121 42638 04714 35414……29576 03944] Fair	RNGB	MON
	0820z	12/04 [424/33 69683……05832] Out 0830z S3 (Dutch SDR)	Malc	THU
5844kHz	1730z	14/03 [406/37 56344 18397 89577 20276 57442 05452 23774……20610 21619] Out 1741z S9	Gary H, Malc	WED
	1730z	17/03 [406/37 56344…..etc] Repeat of Wednesday	Malc	SAT
	1730z	18/04 [402/38 09473 82161 64860 43559 16090 86568 17593……21028 88725]	Gary H	WED
	1730z	21/04 [409/38 09473……etc] Repeat of Wednesday	Malc	SAT
6397kHz	1605z	13/03 [231/33 27708 19746 93359 39938 53145 55814 71084 15711 26949……64791 50789]	RNGB	TUE
	1605z	18/03 [231/33 27708…..etc] Repeat of Tuesday	Malc	SUN
	1605z	17/04 [237/40 64541……51647] Out 1608z S9	Malc	TUE
	1605z	22/04 [237/40 64541…..etc] Repeat of Tuesday	Malc	SUN
6807kHz	0930z	08/03 [273/33 51041 98407 13991 85102 04904 58003 45675 57462……10257 07993]	RNGB	THU
	0930z	04/04 [273/35 30377**.....**10091] Out 0940z S3	Malc	WED
	0930z	05/04 [273/35……etc] Repeat of Wednesday	Malc	THU
7317kHz	1900z	29/03 [646/37 59624……66124] Out 1910z S6	Malc	THU
	1045z	11/04 [696/36 64558……75746] Out 1055z S2	Malc	WED
	1900z	23/04 [646/34 45494……34304] Out 1910z	Malc	MON
	1900z	26/04 [646/34 45494……etc] Repeat of Monday	Malc	THU
7727kHz	1205z	07/03 [460/36 99486 20315 41542 83430 00806 46555 17167 42297……49565 94088]	RNGB	WED
	1205z	24/04 [461/31 52816……..86814] Out 1210z S4 (Dutch SDR)	Malc	TUE
	1205z	25/04 [461/31 52816……..56814] Out 1208z S2	Malc	WED
7840kHz	1000z	09/03 [302/22 60995 47362 88796 60959 27178 24211 96674 47822……75187 26625]	RNGB	FRI
	1000z	03/04 [300/36 12510 08920 64697 88969 44059 6751731698 22760…...02503 67003] S3	RNGB, Malc	TUE
7864kHz	1730z	22/03 [414/00] Out 733z S9	Malc	THU
	1730z	05/04 [418/36 08141……13581] Out 1740z S9	Malc	THU
8102kHz	0710z	03/03 [496/32 14387 90989 01491 32884 12880 8630217563……99311] Out 0719z S7	RNGB, Malc	SAT
	0710z	14/04 [495/39 68967 56544 18750 26204 83950 79915 50367……74844 40501]	RNGB, Ary	SAT
	0710z	15/04 [495/39 68967…..etc] Repeat of Saturday	Malc	SUN
8186kHz	2005z	17/03 [367/40 97241…….42481] Out 2016z S4 (Dutch SDR)	Malc	SAT
	2005z	18/03 [367/40 97341 34623 34523 94352 00812 48171 44638 89699……98635 42361]	Gary H	SUN
	2005z	15/04 [365?/34 46035……83813] Out 2015z S3 (Dutch SDR)	Malc	SUN
8530kHz	1910z	23/03 [613/32 14621……28172] Out 1920z S7	Malc	FRI
	1910z	27/04 [618/40 62736……45499] Out 1911z S6	Malc	FRI
	1910z	29/04 [618/40 62736……etc] Repeat of Friday	Malc	SUN

9200kHz	0805z	03/03 [319/40 08432 72500 01170 27008 83734 33402 64048……93459 03882] Out 0816z S3	RNGB, Malc	SAT
	0805z	04/03 [319/40 08432…..etc] Repeat of Saturday	RNGB	SUN
	0805z	14/04 [316/40 87244 60656 74488 38320 66712 65642 99527 88901……75488 11563]	RNGB, Malc	SAT
9399kHz	0900z	28/03 [536/34 20666……..83584] Out 0910z S4	Malc	WED
9963kHz	0715z	13/03 [63?/34 34197 40261 49705 42552 73168 06732 23605 27359……etc]	RNGB	TUE
	0715z	24/04 [639/35 20495 32823 01383 79365 14438 26584 50287……84679 50052] Out 0725z S5	RNGB, Malc	TUE
	0715z	27/04 [639/35 20495……etc] Repeat of Tuesday	Malc	FRI
10213kHz	0745z	19/03 [267/32 51738……94686] Out 0754z S9	Malc	MON
	0745z	02/04 [262/34 97486……39958] Out 0748z S3	Malc	MON
	1705z	11/04 [391/35 18858 07514 72577 74342 35717 99102 14809……71884 13264]	Gary H, Malc	WED
	1705z	14/04 [391/35 18858…..etc] Repeat of Wednesday	Malc	SAT
10246kHz	0845z	27/03 [156/31 94464 93213 68668 87824 81368 562309 21726…...81730 73253] Out 0854z S5	RNGB, Malc	TUE
	0845z	29/03 [156/31 94464…….etc] Repeat if Tuesday	Malc	THU
	0845z	17/04 [152/32 20527…….82123] Out 0855z S6 QSB3	Malc	TUE
	0845z	19/04 [152/32 20527……etc] Repeat of Tuesday	Malc	THU
10302kHz	1300z	08/03 [589/34 25821 14066 90094 91823 83308 01837 59059 09994……87617 75631]	RNGB	THU
	1300z	26/04 [580/31 25444 64117 01646 93404 91959 98736 67433 54920……5241055787] Out 1310z	Gary H, Malc	THU
10330kHz	1530z	22/03 [267/32 51738……94686] Out 1540z S7	Malc	THU
	1530z	05/04 [262/34 97486…….39958] Out 1540z S9	Malc	THU
10448kHz	1625z	07/03 ???[05789 22170 66136 28697 81923 97475 84840 56187……06224 81922] ???	Gary H	WED
	1625z	04/04 [972/39 66038.....88198] Out 1636z S5 QSB2	Malc	WED
10620kHz	1925z	26/04 [552/32 79861…….78021] Out 1935Z S2 (Dutch SDR)	Malc	THU
10800kHz	1645z	20/03 [331/39 92658 49661 33233 76369 21866 75560 96288 26864……97322 09440]	Ary	TUE
		Note: no ATTENTION at the start or before the repeat. The same happened earlier this month.		
	1645z	22/03 [331/39 92658……etc]. (No ATTENTIONs) Repeat of Tuesday	Malc	THU
	0645z	03/04 [518/39 65285 41261 38797 62431 38043 94288 74174……90026 08563] Out 0655z S3	RNGB, Malc	TUE
	0645z	05/04 [518/39 65285…..etc] Repeat of Tuesday	RNGB	THU
	1645z	26/04 [330/40 18939……..48747] Out 1656z S2	Malc	TH U
12153kHz	0640z	11/04 [944/35 74704 61505 51891 24723 88322 00350 54289…….09707 52958] Moscow SDR	RNGB	WED
12530kHz	0820z	06/03 [130/38 46044 21440 23436 89154 18274 01640 72397 75576……81004 30620] Good	RNGB	TUE
	0820z	07/03 [130/38 46044…..etc] Repeat of Tuesday	RNGB	WED
	0820z	17/04 [131/38 41411 35258 97040 38532 86997 89407 62264 82413 2757793581] Out 0831z	RNGB, Malc	TUE
	0820z	18/04 [131/38 41411……etc] Repeat of Tuesday	Malc	WED
13046kHz	1345z	07/04 [911/34 92084…….70950] Out 1355z S5	Malc	SAT
13873kHz	1650z	16/03 [929/35 29429…….59612] Out 1700z S2	Malc	FRI
	1650z	18/03 [929/35 29429……etc] Repeat of Friday	Malc	SUN

E17z

March 2018

Thursday

0800z	**14260kHz**	**0810z**	**12930kHz**	
01/03	674 801 5 48446 88417 44331 36068 41988 801 5 00000			Weak
22/03	Weak, unworkable			
29/03	674 00000		[0800z NRH]	Weak

April 2018

05/04	674 215 8 63024 84648 97814 65521 45784 74844 00641 99629 215 8 00000	Weak

E25

Nil Reports

G06

PoSW's Logs and analysis:

Second + Fourth Thursdays in the Month 1830 UTC Schedule:-
8-Mar-18:- 5920 kHz, seasonal change of frequency to a spot inside the 49 metre broadcast band but clear of other occupiers, just a slight amount of weak side-band splash.
Call "579", DK/GC "183 183 77 77", same 5F message used a couple of times in February. Started about five seconds before the half-hour, ended a bit before 1847 UTC.

22-Mar-18:- 5922 kHz, "579", DK/GC "134 134 57 57", 5Fs used by both G06 and E06 in the past.

12-Apr-18:- 5934 kHz, call "579", DK/GC "273 273 62 62", mostly well over S9.

26-Apr-18:- 5930 kHz, on same frequency as a broadcast station, sounded like the Voice of Iran, G06 quite reasonable copy. "579" and "273 273 62 62" again.

Friday 1930 UTC Schedule Following Second + Fourth Thursdays:-
9-Mar-18:- 5442 kHz, call "947", DK/GC "183 183 77 77", as yesterday's transmission.
Ended approx 1946:54s UTC, the dulcet tones of a computer being shut down a minute or so afterwards.

23-Mar-18:- 5442 kHz, S9+, very strong signal, call "947", DK/GC "134 134 57 57", same as yesterday's 1830z.

27-Apr-19:- 5442 kHz, "947" and "183 183 77 77", strong signal, ended after 1946z, carrier stayed on for a while until going off around 1953:30s.

First + Second Mondays in the Month 1700 + 1800 UTC Schedule:-
5-Mar-18:- 1759 UTC, 5362 kHz, unable to find a sending at 1700z despite much tuning around, would have been running for over half-an-hour with this evenings "full message",
call "938", DK/GC "836 836 119 119", over S9 with the slow delivery which is a feature of this G06 schedule. Ended after 1833z, computer shut-down sound just before 1834 followed by audio hum.

12-Mar-18:- 1659:45s UTC, 4657 kHz, the first sending, S7 carrier noticed earlier, "938" and
"836 836 119 119" again.
1800 UTC, 5362 kHz, had started when tuned in, DK/GC after 1803z so probably started a minute or so before the hour.

9-Apr-18:- Unable to find a transmission at 1700 UTC, expected it to be on 4657, plus or minus, perhaps; probably too weak to hear with the local interference quite fierce on these lower frequencies. No problem with the second sending:-
1800 UTC, 5362 kHz, "938 938 938 00000", very strong "XJT" roaring away.

Others' Logs:

March 2018

Monday

0759z 6810kHz

19/03 329 00000 Weak

1700z 4645kHz 1800z 5362kHz

05/03 938 836 119 97948 ... 53768 836 119 00000

938 836 119
97948 33246 42828 34384 32749 93647 58199 43701 60177 28135
06454 34085 76634 90706 33072 88372 53886 47372 21339 16136
40770 40039 11780 74341 53109 07841 34926 87117 45073 99077
82463 75068 38839 61109 63743 17685 38986 16385 91863 93970
42892 79133 54833 29740 50624 05550 07162 71591 05957 50496
49636 34917 58716 90609 17293 45694 97827 63859 77511 60828
86247 51860 79927 29680 25958 08094 87043 65178 84433 67122
96451 08106 11141 45478 39589 40945 35217 84752 52418 95865
91659 90702 05810 69992 80268 85488 52959 04872 27730 22224
96104 02146 10203 71472 27189 02206 34184 44894 07431 12001
42873 53065 15668 47939 77793 04906 94600 24510 23243 32312
10494 01625 74084 53446 47483 47776 23238 41125 53736
836 119 00000 *Courtesy Ary*

12/03 111 111 111 00000 on 4657kHz 1738z
12/03 938 836 119 97948 ... 53768 836 119 00000 Windows shut down sound at 1833z

April 2018

0759z 6810kHz

02/04 329 00000 Weak

16/04 329 00000 Weak

April 2018

Monday

1700z 4640kHz 1800z 5362kHz

02/04 938 00000 Weak

Wednesday

March 2018

1200z 5912kHz 1300z 5422kHz

14/03 938 836 119 97948 ... 53736 863 119 00000 Weak

April 2018

1200z 5903kHz 1300z 5422kHz

04/04 938 00000 Weak

Thursday

March 2018

1830z 5922 kHz

22/03 579 134 57 69834 ... 84732 134 57 00000

579 134 57
69834 91020 28974 71856 74832 89648 73282 64825 48142 73848
36457 38491 82713 43143 65689 28756 42351 73145 32424 67857
83273 56425 34245 23246 76879 87435 28184 61547 93671 75364
72825 34732 53426 47589 73647 58326 15264 37485 63542 43557
64536 47586 76453 45684 65783 74859 82736 47382 74651 27631
72361 74827 36452 35263 72813 26743
134 57 00000 Windows shut down sound *Courtesy Ary*

April 2018

1300z 4598kHz

05/04 329 00000 Strong

1830z 5934kHz

12/04 579 273 62 64537…unable to copy remaining msg Fair

Friday

March 2018

1930z 5442kHz

09/03 947 183 77 73413 ... 27491 183 77 00000 Strong

947 183 77
73413 48673 92659 68289 43584 32573 24589
34134 65918 95946 16947 87484 25986 28546
59196 27324 59872 48247 28485 96176 87475
92763 83465 14592 56293 28983 29384 98329
28139 32874 93284 98324 59693 25932 15959
61893 26498 23128 96197 12387 13249 76324
76743 43656 87961 28763 54872 35812 54871
63248 64726 56295 91262 52864 52765 43532
47274 12636 32127 63163 47263 47623 76275
26543 76437 36437 64236 43764 28976 49276
42897 73428 34563 92473 91242 17492 27491
183 77 00000 *Courtesy JO*

1948z Windows closing down sound.
Nil "0"copied in this German text.

April 2018

13/04 947 273 62 64537 … 76491 273 62 0000 Strong

S06

S06 log March 2018

Daily Mon- Fri **0400z** **15721kHz**
No reports

Thursdays **(Repeats following day)** **0830z** **19415kHz** **0930z** **16268kHz**

01/03 '842' 607 41 61101 72163 85474 21658 73776 30738 24176 93419 69482 21773 82012 96613 58908 53279 46876 84824 55660 96680 67845 38290 10118 24840 89095 52172 44555 56440 15538 83527 81731 67646 14891 80402 84112 56995 85865 41491 45931 74438 47142 79804 05269 307 41 00000

22/03 '842' 159 43 28079 09166 56683 11748 34719 14220 91911 91081 14448 63601 69754 21201 00712 29010 46048 42975 81326 41887 14796 85382 70985 99686 58261 09717 01041 58567 29189 14444 12521 42203 13592 42882 63301 21385 47539 60905 85370 44125 86393 96858 53138 20924 49917 159 43 00000

29/03 '842' 307 44 76697 89822 09448 81314 53015 16760 03589 12851 32751 15049 39856 52195 88931 40421 24913 47671 13256 76743 79930 89287 51542 06987 64165 70375 30673 41707 86135 87214 75481 97238 63333 81338 39023 40784 16406 54201 94654 44576 08749 08894 63376 16324 67450 98602 307 44 00000

Fridays (1st & 3rd) **2000z** **9047khz** **2100z** **6769kHz** (frequencies may vary slightly)

02/03 '483' 00000
16/03 '483' 00000

Saturdays (1st/3rd) **2000z** **4491kHz** **2100z** **3815kHz** (frequencies may vary slightly)

03/03 '263' 00000
17/03 '263' 00000

Other transmissions:

1000z **13389khz** **1030z** **11487khz** **1700z** **8116kHz** **1730z** **6792khz**

13/03 '480' 296 40 34415 80223 55958 41217 65183 29850 11428 29156 59073 50456 13597 38965 53912 84941 38489 09759 70477 07936 70893 69464 49623 44813 70855 95057 73628 13974 60178 05871 95713 54413 29604 26043 90696 91313 23879 33264 70090 05259 79739 54765 296 40 00000

18/03 '480' 135 44 38242 46045 16619 94601 82040 46795 69921 55941 15903 64313 91653 67421 97700 61483 28452 43208 78646 87173 43262 04309 72604 93390 46472 76509 47464 91755 34140 31170 87099 87476 50135 80378 77662 36926 77384 32258 43795 81190 22191 26184 16869 81013 09636 99271 135 44 00000

20/03 '480' 726 40 29892 12160 63004 98610 77027 77900 36871 19030 84327 99556 48826 40681 78838 64157 50440 33147 78759 64791 17214 63791 24926 19009 37644 43254 57917 06973 93248 07056 26795 68612 38242 46045 16619 94601 82040 46795 69921 55941 15903 64313 726 40 00000

24/03 '480' 951 42 85415 05660 12561 99127 26660 43262 00411 46085 73746 95785 34200 61430 27548 96964 43742 38222 82233 19822 36036 44229 96640 58228 64164 97053 71641 44441 06586 08875 20979 70370 05853 69226 10439 27337 32993 35938 53868 48569 32626 22126 84886 91515 95142 951 42 00000 Note : **43** groups sent!

27/03 '480' 267 43 07833 86229 49643 26658 00630 24239 66754 71222 25406 68514 42101 13665 14101 86553 84810 03156 37918 79230 59749 32740 72604 93390 46472 76509 47464 91755 34140 31170 87099 87476 74804 95315 14409 02521 55044 77254 23497 29008 09380 93249 00790 29330 09572 267 43 00000

Tuesday 13th **1500z** **14913khz** **1600z** **10387kHz**

'387' 901 56 62681 84125 73038 84316 94312 27182 03194 48073 16929 93860 82801 52818 71325 65364 38375 28087 46295 85203 68705 91285 94951 12123 56179 53637 47576 87848 39525 28041 95282 80895 79536 32576 38790 13493 56278 94986 19769 34202 52395 30942 73815 25031 05767 93951 08418 14787 73496 70251 29014 83615 64390 42374 54817 60675 98486 89458 901 56 00000

1615z **7887kHz**

'409' 267 53 43961 52196 64248 52074 30349 67879 21754 75349 54305 34813 25023 35787 75792 51030 38575 48709 05408 71391 89606 83474 53506 07964 50726 40965 19530 25874 89080 58618 71486 75142 47670 94578 94724 62432 14391 67071 83897 10750 82940 89132 49219 15710 59403 43465 23451 04941 68230 63132 78342 19659 08107 54153 26459 267 53 00000

S06 found in progress on **13429khz at 1648z** with a 166 group msg. Thanks to Ary

S06c - No reports

S06s March log:

Monday

5th/12th	0830/0840z	9220/8270	'371' 592 6 47272 36308 46945 34932 33590 88913
19th/26th			'371' 485 6 46062 68672 97478 39685 30485 96632
5th/12th	0900/0910z	14580/13165	'872' 540 6 83456 37393 93068 41916 39297 47993
19th/26th			'872' 463 5 21767 53672 11834 81022 36903
5th/12th	1200/1210z	9145/11460	'831' 574 6 33590 88913 95577 33198 44591 37953
19th/26th			'831' 405 6 52401 63919 92699 14600 74248 48754

Tuesday

6th/13th	0600/0610z	15855/16485	‘438’ 527 6 15690 85544 34558 49232 43249 33666
20th/27th			‘438’ 291 5 35415 40864 38771 39943 40136
6th/13th	0700/0715z	5760/6930	‘374’ 589 6 40293 44460 34814 82272 37567 34375
20th/27th			‘374’ 819 5 40328 35929 47234 33940 48070
6th/13th	0730/0740z	7425/11560	‘427’ 891 5 33796 13577 43494 34545 34694
20th/27th			‘427’ 951 6 71711 58346 70728 32160 26352 08282
6th/13th	0800/0810z	11635/10420	‘352’ 840 6 95225 84090 0953188430 33240 61135
20th/27th			‘352’ 917 6 42036 09394 92918 35601 55121 19941
6th/13th	1000/1010z	6410/7340	‘893’ 425 6 89758 52343 70552 56936 57989 056371
20th/27th			‘893’ 405 6 10471 36598 34348 38331 82214 47755
6th/13th	1100/1110z	6190/7230	‘754’ 938 6 37661 30895 48702 38344 49334 85371
20th/27th			‘754’ 216 8 31209 78591 53753 57310 03140 60339 51871 87170
6th/13th	1500/1510z	6464/7242	‘537’ 480 6 44745 96330 88418 40480 88650 34303
20th/27th			‘537’ 261 8 81878 89663 53276 95842 36410 48525 75761 95920

Wednesday

7th/14th	0820/0830z	8630/9255	‘471’ 506 8 46062 68672 97478 39685 30485 96632 52537 53317
21st/28th			‘471’ 508 6 48318 30605 43003 83659 86760 36014
7th/14th	0830/0840z	9082/9952	‘464’ 258 7 21767 53672 11834 81022 36903 41422 64385
21st/28th			‘464’ 912 5 11394 30307 31450 38153 39650
7th/14th	0830/0840z	11530/12140	‘745’ 261 8 52401 63919 92699 14600 74248 48754 65125 41879
21st/28th			‘745’ 981 6 82333 36958 39423 48076 33739 53821
7th/14th	1000/1010z	13365/14505	‘729’ 538 6 88620 58069 61732 74537 57440 10598
21st/28th			‘729’ 501 6 92971 30490 46481 44987 37393 89598

Thursday

1st/8th	0800/0810z	14260/12930	‘674’ 801 5 48446 88417 44331 36068 41988
15th/22nd			‘674’ 293 5 00712 62133 04070 28363 67621
1st/8th	0930/0940z	9081/10514	‘314’ 206 5 14987 37986 36379 31366 44597
15th/22nd			‘314’ 209 5 24272 41726 84770 11405 06566
1st/8th	1200/1210z	12415/14212	‘425’ 807 6 43409 32571 33313 40597 91430 40489
15th/22nd			‘425’ 809 6 51658 58262 06474 58630 68661 14514

Friday

2nd/9th	0900/0910z	5744/6524	‘624’ 973 5 53516 25616 56069 96813 14199
16th/23rd			‘624’ 879 5 42208 25929 47224 33840 48075
2nd/9th	0930/0940z	12140/13515	‘516’ 483 7 16123 22536 88280 84116 53718
16th/23rd			‘516’ 942 7 49314 47194 40583 33705 22292 44266 84320

Saturday

3rd	0800/0810z	10350/8520	‘254’ 907 6 46062 68672 97478 39685 30485 96632

Sunday

4th/11th	0630/0640z	22185/20050	‘524’ NRH
18th/25th			‘524’ NRH

With thanks to Daniel, Gary H, RNGB, Malc, Ary

S06 log April 2018

Daily Mon- Fri **0400z** **15721kHz**

No reports

Thursdays **(Repeats following day)** **0830z** **19078kHz** **0930z** **16318kHz**

05/04 ‘842’ 169 45 88431 13694 74741 62061 51214 95292 10110 95623 0172? 56946 41972 63016 29794 06259 00397 49920 15463 76596 93122 74496 21874 20327 /0462 02761 05400 53323 77554 63109 34512 42905 07905 03758 40740 56460 25145 24301 0209 12868 28959 34569 69180 03926 56096 81378 22032 169 45 00000

12/04 ‘842’ 735 46 32427 22004 5280? 34349 69260 52693 03632 99088 64694 81810 75265 19035 31030 35094 92567 74322 23118 32664 60505 86632 08612 84056 5808? 82335 53951 31879 25382 22774 37004 08761 17004 62557 22300 57292 20590 38564 59808 67639 63614 96347 93179 12529 57039 02411 88403 64271 735 46 00000

19/04 ‘842’ 190 47 11965 16706 07541 44845 09459 60097 61807 91298 60185 20392 68382 08569 62956 88507 41110 37151 51568 65043 16062 97997 06806 14062 84169 23469 34962 49344 16463 04273 11238 45487 36865 50088 11673 4031….too weak to copy????…….44023 190 47 00000] 0941z

26/04 ‘842’ 567 48 01288 26019 31633 48129 90932 22491 72723 34636 65763 93193 34291 09124 03766 72658 86960 89823 96661 97301 76910 02819 25815 03700 10804 78443 72484 01122 12300 87591 20644 91836 17339 16889 21521 37616 00379 38623 42081 95859 48777 66421 09614 73785 27511 44575 17620 74130 01410 27965 567 48 00000] 0942z

Fridays (1st & 3rd) **1900z** **9047khz** **2000z** **6769kHz** (frequencies may vary slightly)
06/04 '483' 00000

Saturdays (1st/3rd) **1900z** **4491kHz** **2000z** **3815kHz** (frequencies may vary slightly)
07/04 '263' 00000
21/04 '263' 00000

Other transmissions:

1000z 14721khz 1030z 13389khz 1700z 11073kHz 1730z 9412khz

01/04 '480' 539 40 18917 65670 07835 69607 17737 44924 20307 49406 37855 77934 68300 25052 97700 01827 19382 93471 31816 00691 33721 03136 60191 55235 55110 92008 10140 45365 59541 89197 92539 64453 29592 99312 05121 16999 77299 80729 51842 18973 30942 57563 539 40 00000] 1711z

03/04 '480' 127 40 34507 52090 24544 08172 34242 12897 44405 90742 88350 16349 96209 52957 46195 69442 67819 76785 19672 16034 48159 48597 13982 11355 28220 76863 98143 60279 90337 71635 06269 35975 22259 82385 32074 31883 76448 05336 74694 70217 45945 94752 127 40 00000

08/04 '480' 365 42 70589 82923 26824 89765 58148 80068 26130 49585 12374 52666 98472 56001 61612 32882 66922 09444 32084 68156 93716 75140 80939 82960 24283 85906 67011 92711 84220 02044 85796 79127 01365 91883 34722 11922 39634 27120 73397 67790 68444 71952 26964 64582 365 42 00000] 1011z

10/04 '480' 721 40 02603 75046 63126 93200 05567 33184 27254 97132 66210 05386 26587 61794 94171 51830 16588 53845 27434 80054 52460 60498 55954 66529 57799 29559 17506 13724 12502 07085 95026 39742 66180 99221 99945 62554 78683 21360 93558 03133 92306 43904 721 40 00000

S06c - No reports

S06s April log:

Monday

2nd/9th	0830/0840z	9220/8270	'371' 584 6 30244 36012 38323 47662 43630 40846
16th/23rd			'371' 840 5 44475 30322 36034 45445 44008
2nd/9th	0900/0910z	14580/13165	'872' 513 6 36861 33432 89319 32494 37142 32842
16th/23rd			'872' 935 6 35861 33432 89319 32494 37142 32842
2nd/9th	1200/1210z	9145/11460	'831' 945 6 33760 46632 30233 36973 38084 38836
16th/23rd			'831' 294 5 44477 30322 36034 45445 44008

Tuesday

3rd/10th	0600/0610z	15855/16485	'438' 926 5 57545 30989 41691 43753 32543
17th/24th			'438' …….48003 37230 44446 ?? too weak to copy
3rd/10th	0700/0715z	5760/6930	'374' 208 5 37532 34023 33490 41152 34559
17th/24th			'374' 206 5 36914 46467 36973 37967 42149
3rd/10th	0730/0740z	7425/11560	'427' 905 6 93352 42191 30821 33725 37661 30885
17th/24th			'427' 503 6 34031 37016 44834 81384 04278 60424
3rd/10th	0800/0810z	11635/10420	'352' 904 6 80454 42729 32175 48654 89864 48446
17th/24th			'352' 408 6 02463 33445 84163 89164 76987 38953
3rd/10th	1000/1010z	6410/7340	'893' 450 6 92959 46195 32087 84535 38618 31514
17th/24th			'893' 470 5 42223 20147 40494 42013 82042
3rd/10th	1100/1110z	6190/7230	'754' 921 6 43834 33625 36147 43625 49461 85371
17th/24th			'754' 832 6 22688 29998 20667 35947 82954 30663
3rd	1500/1510z	6464/7242	'537' 804 6 ?3456 37393 93068 41916 39294 47993
17th/24th			'537' 862 9 44475 30822 36034 45445 44008 35453 48324 22885 21820

Wednesday

4th/11th	0820/0830z	8630/9255	'471' 932 5 37391 37446 86525 89303 33244
18th/25th			'471' 593 6 07022 62734 34771 48591 47281 41127
4th/11th	0830/0840z	9082/9952	'464' 903 5 34888 33661 34031 33430 37536
18th/25th			'464' 897 5 73687 04565 39895 91670 29257
4th/11th	0830/0840z	11530/12140	'745' 238 6 46062 68672 97478 39685 30485 96632
18th/25th			'745' 820 6 11169 03439 43548 19152 34063 36924
4th/11th	1000/1010z	13365/14505	'729' 841 5 88620 58069 61732 74537 57440
18th/25th			'729' 840 5 08631 58062 36270 08982 92738

Thursday

5th/12th	0800/0810z	14260/12930	'674' 215 8 63024 84648 97814 65521 45754 74844 00641 99629
19th/26th			'674' 902 5 69856 82541 98423 79033 15452
5th/12th	0930/0940z	9081/10514	'314' 926 5 31059 29043 16091 04066 25088
19th/26th			'314' 960 5 19804 96845 22444 08374 98662
5th/12th	1200/1210z	12415/14212	'425' 963 7 09046 11043 16096 55788 31486 57325 44868
19th/26th			'425' 830 6 88620 58069 61732 74537 57440 10597

Friday

6th/13th	0900/0910z	5744/6524	'624' 891 5 63528 92016 83426 74529 04538
20th/27th			'624' 953 7 45326 67545 13218 79745 09674 35105 44921
6th/13th	0930/0940z	12140/13515	'516' 439 7 63012 63426 93524 74536 94638 83046 63428
20th/27th			'516' 270 8 52401 63919 92699 14600 74248 95632 14326 46521

Saturday			
7th	0800/0810z	10350/8520	'254' 930 6 15009 34140 78386 91497 82963 24162
Sunday			
1st/8th	0630/0640z	22185/20050	'524' NRH
15th/22nd			'524' NRH

With thanks to Daniel, Gary H, RNGB, Malc, Ary

An interesting take from PoSW for both months:

As has been the case for some time there appears to still be only two regular S06 OM voice schedules likely to be heard in the UK evening time:-

First + Third Fridays in the Month 2000 + 2100 UTC or 1900 + 2000 UTC Schedule:-
2-Mar-18:- 2000 UTC, 9047 kHz, "483 483 483 00000", no problem to find, S6 to S7 on a clear frequency.
2100 UTC, 6769 kHz, second sending, slightly stronger signal.

16-Mar-18:- 2000 UTC, 9047 kHz, very weak signal, carrier just about detectable, went of after 2004z which suggests, "no message".
2100 UTC, 6769 kHz, "483 483 483 00000", weak but clear.

In April this schedule moved back by an hour - as is its custom - which means that since the clocks did that "spring forward" thing on the last Sunday in March it still shows up at
8 pm and 9 pm in the UK:-

6-Apr-18:- 1900 UTC, 9047 kHz, "483 483 483 00000", not too strong, S4 to S5.
2000 UTC, 6769 kHz, peaking over S9.

First + Third Saturdays in the Month 2000 + 2100 UTC Schedule:-
3-Mar-18:- 2000 UTC, 4491 kHz, "263 263 263 00000", S9 with QSB. Carrier on 4491 found at approx 1939z, tone just after 1946z followed by a single spoken "263" after 1947.
Carrier stayed up for some considerable time after the transmission ended, checked at intervals was still up, went off a bit before 2030z.
2100 UTC, 3815 kHz, second sending, S9. Some pre-transmission chicanery here, strong carrier noted on 3815 at 2035z, vanished off air around 2046z, found on 3820 just afterwards. Vanished from 3820 after a couple of minutes, was back on 3815. Tone heard just before 2049z, single "263" soon after.

21-Apr-18:- 2000 UTC, 4491 kHz, "263 263 263 00000", over S9.
2000 UTC, 3815 kHz, also over S9.

Other S06:-
A Tuesday afternoon Russian Man;-
13-Mar-18:- 1508 UTC, 14913 kHz, transmission in progress while casually tuning around – as you do. Strength around a "7" on the S-meter, ended after 1513z with, "901 901 56 56 00000". Last 5Fs, "60675 98486 89458". Carrier with a high background noise stayed on for about another minute before going off air. Was repeated on the following day:-

14-Mar-18, Wednesday:- 1500 UTC, 14913 kHz, call "387", DK/GC as yesterday, much weaker signal than 24 hours earlier.

No sign of this one on Tuesdays 20 and 27 March. Unable to find it in April.

Return of "480":-
In several past years an S06 schedule with call "480" has been logged in the months of March and April at 1700 UTC with a repeat at 1730; this one found by chance in April,
perhaps it had been around in March too:-
10-Apr-18, Tuesday:- 1706 UTC, 11073 kHz, S06 in progress with "full message" transmission, S9 with QSB, ended before 1712 UTC with, "721 721 40 40 00000".
A search for a repeat found it inside the 31 metre broadcast band:-
1732 UTC, 9412 kHz, calling "480", strong BC station on 9410 removed by using the receiver in USB mode, also an FSK/RTTY type signal, close enough to be a nuisance.
This "480" has been noted in the past to use the same 5F groups as in previous years and such was the case today, up to a point; the first 39 5Fs of today's message were the same
as the first 39 groups of a message of 43 groups sent by 480 on 5-April-2015.
Seems to have been either the last gasp of a schedule or a "one off", not heard on subsequent days in April.

S06s YL Voice:-
As with the S06 Russian Man, the expected seasonal changes of frequency in March.

Monday 0830 + 0840 UTC Schedule, Call "371":-
19-Mar-18:- 0830 UTC, 9220 kHz, DK/GC "485 485 6 6", S5 at best, "46062 68672 97478
39685 30485 96632".
0840 UTC, 8270 kHz, second sending, stronger signal.

2-Apr-18:- 0830 UTC, 9220 kHz, DK/GC "584 584 6 6", S8 with QSB, "30244 36012 38323 47662 43630 40846".
0840 UTC, 8270 kHz, slightly weaker signal.

Tuesday 0730 + 0740 UTC Schedule, Call "427":-
6-Mar-18:- 0730 UTC, 7425 kHz, DK/GC "891 891 5 5", over S9, "33796 13577 43494 34545 34694".
0740 UTC, 11560 kHz, also over S9. These frequencies not so vastly far from the 7410 + 11532 kHz used in the winter months.

27-Mar-18:- 0730 UTC, 7425 kHz, DK/GC “951 951 6 6”, 71711 58346 70728 32160 26352 08282”, weaker broadcast station heard underneath.
0740 UTC, 11560 kHz, peaking over S9.

3-Apr-18:- 0730 UTC, 7425 kHz, over S9 mostly, weaker broadcast station on the same frequency and a FSK/RTTY signal close to, strong enough to be a nuisance. DK/GC “905 905 6 6”, “93352 42191 30821 33725 37661 30885”.
0740 UTC, 11560 kHz, over S9.

17-Apr-18:- 0730 UTC, 7425 kHz, DK/GC “503 503 6 6”, “34031 37016 44834 81384 04278 60424”. S6 at best.
0740 UTC, 11560 kHz, S9 at first, became weaker as the transmission progressed.

Tuesday 0800 + 0810 UTC Schedule, Call “352”:-
6-Mar-18:- 0800 UTC, 11635 kHz, DK/GC “840 840 6 6”, strength S6 at best, “95225 84090 09531 88430 33240 61135”.
0810 UTC, 10420 kHz, very weak signal, unreadable.

20-Mar-18:- 0800 UTC, 11635 kHz, DK/GC “917 917 6 6”, “42036 09394 92918 35601 55121 19941”, peaking S9.
0810 UTC, 10420 kHz, second sending, very weak again.

Wednesday 0830 + 0840 UTC, Call “745”:-
7-Mar-18:- 0830 UTC, 11530 kHz, DK/GC “261 261 8 8”, peaking S9, weaker broadcast station on same frequency, “52401 63919 92699 14600 74248 48754 65125 41879”.
0840 UTC, 12140 kHz, second sending, S9+, very strong signal.

28-Mar-18:- 0830 UTC, 11530 kHz, DK/GC “981 981 6 6”, first three 5Fs copied, “82333 36958 39423” copied, but the broadcast station on this frequency suddenly came up very strong and blocked out S06s.
0840 UTC, 12,140 kHz, S9 on a clear frequency, full message copied as, “82333 36958 39423 48076 33739”.

11-Apr-18:- 0830 UTC, 11530 kHz, first sending unreadable under very strong broadcast station. Better signal from the second sending:-
0840 UTC, 12140 kHz, peaking S9, DK/GC “238 238 6 6”, “46062 68672 97478 39685 30485 96632”.

18-Apr-18:- 0830 UTC, 11530 kHz, weak signal, unreadable under the stronger broadcast station.
0840 UTC, 12140 kHz, DK/GC “820 820 6 6”, over S9, “11169 03439 43548 19152 34063
36924”.

Wednesday 1000 + 1010 UTC Schedule, Call “729”:-
7-Mar-18:- 1000 UTC, 13365 kHz, DK/GC “538 538 6 6”, “88620 58069 61732 74537 57440 10598”.
1010 UTC, 14505 kHz, second sending, both transmissions S6 to S7.

21-Mar-18:- 1000 UTC, 13365 kHz, DK/GC “501 501 6 6”, “92971 30490 46481 44987 37393 89598”, weak signal.
1010 UTC, 14505 kHz, S4 to S5 at first, became weaker as the transmission progressed.

4-Apr-18:- 1000 UTC, 13365 kHz, DK/GC “841 841 5 5”, very strong signal, DK/GC “88620 58069 61732 74537 57440”.
1010 UTC, 14505 kHz, over S9.

Friday 0930 + 0940 UTC Schedule, Call “516”:-
2-Mar-18:- 0930 UTC, 12140 kHz, DK/GC “483 483 7 7”, “16123 22536 88280 84116 53718 78927 34694”, signal up and down, S7 to very weak.
0940 UTC, 13515 kHz, second sending, stronger, peaking S8 to S9.

9-Mar-18:- 0930 UTC, 12140 kHz, “483 483 7 7” and 5Fs same as last time. S9+, very strong signal.
0940 UTC, 13515 kHz, also S9+.

16-Mar-18:- 0930 UTC, 12140 kHz, DK/GC “942 942 7 7”, “49314 47194 40583 33705 22292 44266 84320”, S7 at best this morning.
0940 UTC, 13515 kHz, very weak signal unlike on the 9th, also interference from the rapidly swept carrier that lives here.

23-Mar-18:- 0930 UTC, 12140 kHz, DK/GC “942 942 7 7” 5Fs as last time.
0940 UTC, 13515 kHz, second sending, and unlike last time both transmissions were very strong signals.

6-Apr-18:- 0930 UTC, 12140 kHz, DK/GC “439 439 7 7”, over S9, “63012 63426 93524 74536 94638 83046 63428”.
0940 UTC, 13515 kHz, also over S9.

First Saturday in the Month 0800 + 0810 UTC Schedule, Call “254”:-
3-Mar-18:- 0800 UTC, 10350 kHz, DK/GC “907 907 6 6”, “46062 68672 97478 39685 30485 96632”, weak signal.
0810 UTC, 8520 kHz, second sending, stronger signal, S7 to S8, strong “XJT” roaring away
on the LF side removed by using the RX in USB mode.

7-Apr-18:- 0800 UTC, 10350 kHz, very weak signal, largely unreadable. The second sending was stronger:-
0810 UTC, 8520 kHz, DK/GC “930 930 6 6”, the “XJT” still on the LF side, “15009 34140 78386 91497 82963 24162”.

S11a log March/April

From RNGB:

4016kHz	1955z	02/03 [373/00] Konyetz 1958z S9	Malc	FRI
	1955z	07/03 [372/38 23566 12887 60398 55105 02698 97335 38188 48972……690232 82066] Strong	RNGB	WED
	1955z	14/03 [379/00] Konyetz 1958z S7	Malc	WED
	1955z	16/03 [373/00] Konyetz 1958z S9	Malc	FRI
	1955z	21/03 [372/00] Konyetz 1958z S9	Malc, RNGB	WED
	1955z	23/03 [370/00] Konyetz 1958z S9	Malc	FRI
	1955z	28/03 [378/00] Konyetz 1958z S9	Malc	WED
	1955z	04/04 [372/00] Konyetz 1958z S9	Malc	WED
	1955z	06/04 [379/00] Konyetz 1958z S9	Malc	FRI
	1955z	11/04 [370/00] Konyetz 1958z S5	Malc	WED
	1955z	13/04 [377/00] Konyetz 1958z S8	Malc	FRI
	1955z	18/04 [379/39 78186……..73154] Konyetz 2007z S7	Malc	WED
	1955z	25/04 [373/00] Konyetz 1958z S9	Malc	WED
	1955z	27/04 [372/00] Konyetz 1958z S9	Malc	FRI
5344kHz	2050z	07/03 [483/00]	RNGB	WED
	2050z	14/03 [488/37 11094……80797] Konyetz 2102z S7	Malc	WED
	2050z	18/03 [487/37 11094……etc] Repeat of Wednesday	Malc	SUN
	2050z	21/03 [483/00] Out 2053z S5	Malc	WED
	2050z	01/04 [482/00] Konyetz 2053z S4	Malc	SUN
	2050z	04/04 [482/34 70618.....24586] Konyetz 2101z	Malc	WED
	2050z	11/04 [481/00] Konyetz 2053z S7	Malc	WED
	2050z	15/04 [487/00] Konyetz 2053z S7	Malc	SUN
	2050z	18/04 [484/00] Konyetz 2053z S9	Malc	WED
	2050z	25/04 [486/00] Konyetz 2053z S4	Malc	WED
	2050z	29/04 [484/00] Konyetz 2053z S9	Malc	SUN
9960kHz	1020z	02/03 [423/47 06008 93989 74138 39144 11905 28083 04311 30651…… 74891 73192	Ary	FRI
	1020z	13/03 [429/00] Konyetz 1023z S2	Malc	TUE
	1020z	16/03 [421/00] Konyetz 1023z S3	Malc	FRI
	1020z	20/03 [420/00] Konyetz 1023z S4	Malc	TUE
	1020z	23/03 [421/00] Konyetz 1023z S5 (Dutch SDR)	Malc, RNGB	FRI
	1020z	27/03 [424/00] Konyetz 1023z S3	Malc	TUE
	1020z	03/04 [426/34 72364 08539 13228 75013 55860 81865 90945….37730 41501] Konyetz 1031z S5	RNGB, Malc	TUE
	1020z	06/04 [426/34 72364……etc] Repeat of Tuesday	Malc	FRI
	1020z	10/04 [427/00] Konyetz 1023z S3	Malc	TUE
	1020z	13/04 [426/00] Konyetz 1023z S2	Malc	FRI
	1020z	17/04 [421/00]Konyetz 1023z S4 (Dutch SDR)	Malc	TUE
	1020z	24/04 [429/00]	RNGB	TUE
	1020z	27/04 [425/00] Konyetz 1023z S3	Malc	FRI
10213kHz	1850z	03/03 [287/001 Konyetz 1853z S2 (Dutch SDR)	Malc	SAT
	1850z	14/03 [281/36 56544……21356] Konyetz 1901z S5	Malc	WED
	1850z	17/03 [281/36 56544 76489 12411 72795 14962 21148……21356] Repeat of Wednesday	RNGB, Malc	SAT
	1850z	21/03 [284/00] Konyetz 1853z S2	Malc	WED
	1850z	28/03 [282/00] Konyetz 1853z S2 (Dutch SDR)	Malc	WED
	1850z	04/04 [287/00] Konyetz 1853z S5	Malc	WED
	1850z	07/04 [288/00] Konyetz 1853z S4	Malc, RNGB	SAT
	1850z	11/04 [285/00] Konyetz 1853z S3 (Dutch SDR)	Malc, RNGB	WED
	1850z	18/04 [285/00] Konyetz 1853z S9	Malc	WED
	1850z	21/04 [285/00] Konyetz 1853z S2	Malc, RNGB	SAT
	1850z	25/04 [285/39 96551……58261] Konyetz 1903z S9	Malc	WED
	1850z	28/04 [285/39 96551……etc] Repeat of Wednesday	Malc	SAT
10800kHz	1540z	07/03 [566/00]	Gary H	WED
	1540z	14/03 [565/00] Konyetz 1543z S9	Malc	WED
	1540z	17/03 [566/00] Konyetz 1543z S6	Malc	SAT
	1540z	21/03 [569/00] Konyetz 1543z S3	Malc	WED
	1540z	28/03 [561/35 57855……..56082] Konyetz 1550z S2	Malc	WED
	1540z	04/04 [560/00] Konyetz 1543z S3	Malc	WED
	1540z	07/04 [569/00] Konyetz 1543z S9	Malc	SAT
	1540z	11/04 [561/00] Konyetz 1543z S3 (Dutch SDR)	Malc	WED
	1540z	14/04 [566/00] Konyetz 1540z S4	Malc	SAT
	1540z	18/04 [569/40 97854……50222] Konyetz 1554z S2	Malc	WED
	1540z	25/04 [563/00] Konyetz 1543z S5	Malc	WED
	1540z	28/04 [564/00]	Gary H	SAT

11493kHz	1015z	30/04 [473/00]		Gary H	MON
13537kHz	0735z	13/03 [383/39 18022 50096 69620 50627 78191 36774 30287 22031……99033 18527] Weak		RNGB	TUE
	0735z	15/03 [383/39 18022…..etc] Repeat of Tuesday		RNGB	THU
	0735z	20/03 [386/00] Konyetz 0738z S2	(Dutch SDR)	Malc	TUE
	0735z	22/03 [381/00] Konyetz 0738z		Malc, RNGB	THU
	0735z	29/03 [389/00] Out 0738z S2	(Dutch SDR)	Malc	THU
	0735z	12/04 [387/00] Konyetz 0738z S2	(Dutch SDR)	Malc, RNGB	THU
	0735z	17/04 [385/00]	(Moscow SDR)	RNGB	TUE
	0735z	19/04 [38?/00 very weak to copy] S1	(Dutch SDR)	Malc	THU

V02 a

Not heard.

V07

March 2018

Sunday

0100z 18174kHz 0120z 15874kHz 0140z 14374kHz

04/03 183 000 Weak

11/03 183 1 5669 51 31935 ... 80947 000 000 Weak

183 1 5669 51
31395 62161 53073 12671 08818
39960 80963 38434 40020 56159
94690 28266 49293 98027 46755
85850 61614 64235 17580 88497
01006 26085 99816 32069 38920
21611 28981 51287 20705 75002
16679 68441 83039 71833 33513
95949 49167 66871 77200 89445
7?246 86786 90809 77272 44525
46188 86554 74261 41465 85623
80947 000 000
Courtesy DanAr
Received via Globaltuners RX San Bernardino , California USA

18/03 183 000 Weak

25/03 183 1 3335 4? ?2220 92288 96367 ????? ????? [LoS 0140z] Weak

April 2018

0500z 14482kHz 0520z 13382kHz 0540z 115852kHz

15/04 435 000 Weak
Thanks to Priyom.org for the frequencies data....DanAr

22/04 435 1 179 65 12622 … 03158 000 000 Weak

435 1 179 65

12622 76679 70891 36054 18809
31407 47125 93859 85763 65725
82584 61337 27230 35932 72365
09531 84747 06195 47472 51352
08189 14311 78800 39996 84396
89551 37729 11565 19260 54665
93930 07139 66308 78888 43407
99413 47068 05334 05379 12724
88033 54166 19653 36696 93871
99325 95430 59392 39879 08636
86871 23666 56867 97818 16477
53223 89101 31272 79981 14546
34050 11606 40660 79651 03158
000 000 *Courtesy DanAr*

Video of tertiary sending courtesy T: https://www.youtube.com/watch?v=ipQfE_wjC44

29/04 NRH

V15 North Korean Intelligence via Radio Pyongyang

621, 657, 3320 kHz,
1515z 24/03 (via S Korean web sdr) Ary SAT

North Korean intelligence via PBS Pyongyang Pansong. Music followed by a message in Korean

http://www.numbersoddities.nl/V15-2018-03-24-1515utc.mp3

720, 801, 855, 3320 kHz,
1615z 29/03 (via S Korean web sdr) Ary THU

North Korean intelligence via PBS Pyongyang Pansong. Music followed by a message in Korean.

http://www.numbersoddities.nl/V15-2018-03-29-1615utc.mp3

3320kHz
1615z 12/04 AM (via S Korean web sdr) Ary THU

North Korean intelligence via PBS Pyongyang Pansong.
Message in Korean

http://www.numbersoddities.nl/V15-2018-04-12-1615utc.mp3

V24

5290kHz1430z 07/04 AM (AB-KOR) Ary SAT
Popmusic followed by a message in Korean

6215kHz1500z 07/04 AM (AB-KOR) Ary SAT
Popmusic followed by a message in Korean

V26

4243kHz1210z 05/03/18[(From M95 sked - USB - Chinese - Female - // 9054) (Remote tuner China)] JPL MON

9054kHz1210z 05/03/18[(From M95 sked - USB - Chinese - Female - // 4243) (Remote tuner China)] JPL MON

4243kHz1210z 12/04/18[(From M95 sked - USB - Chinese - Female - // 9054) (Remote tuner China)] JPL THU
4243kHz1201z 13/04/18[(From M95 sked - USB - Chinese - Female - // 9054) (Remote tuner China)] JPL FRI
4243kHz1225z 15/04/18[(From M95 sked - USB - Chinese - Female - // 9054) (Remote tuner China)] JPL SUN
4243kHz1216z 17/04/18[(From M95 sked - USB - Chinese - Female - // 9054) (Remote tuner China)] JPL TUE
4243kHz1200z 19/04/18[(From M95 sked - USB - Chinese - Female - // 9054) (Remote tuner China)] JPL THU
4243kHz1207z 24/04/18[(From M95 sked - USB - Chinese - Female - // 9054) (Remote tuner China)] JPL TUE

9054kHz1210z 12/04/18[(From M95 sked - USB - Chinese - Female - // 4243) (Remote tuner China)] JPL THU
9054kHz1201z 13/04/18[(From M95 sked - USB - Chinese - Female - // 4243) (Remote tuner China)] JPL FRI
9054kHz1225z 15/04/18[(From M95 sked - USB - Chinese - Female - // 4243) (Remote tuner China)] JPL SUN
9054kHz1216z 17/04/18[(From M95 sked - USB - Chinese - Female - // 4243) (Remote tuner China)] JPL TUE
9054kHz1200z 19/04/18[(From M95 sked - USB - Chinese - Female - // 4243) (Remote tuner China)] JPL THU
9054kHz1207z 24/04/18[(From M95 sked - USB - Chinese - Female - // 4243) (Remote tuner China)] JPL TUE

Polytones

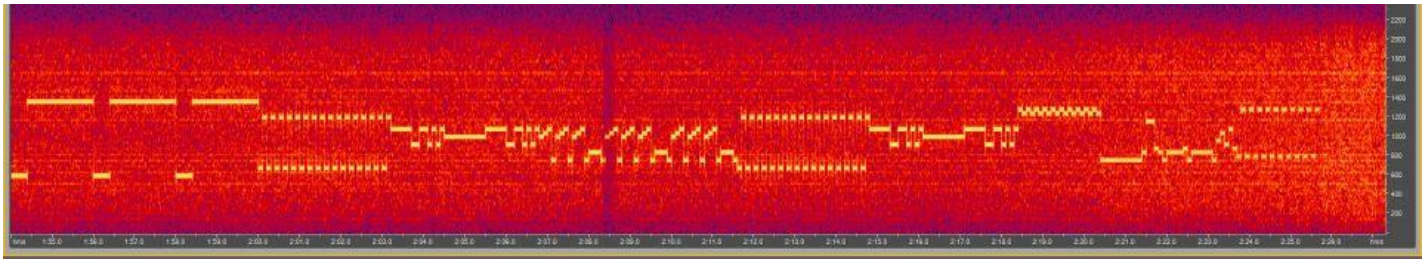
Some unscheduled transmissions 14/03 at

0900z 12141kHz [a] 0910z 13418kHz [a] 0930z 11477kHz [b] 0940z 12122kHz [b] [a Ary] [b RNGB]

[a] decoded as:

09550 00091 34892 34142 57438 98876 22131 41220 78837 73399
41291 21864 63288 02587 22844 69161 54871 09118 23583 36946
48517 23845 30258 14468 11495 86901 99696 69698 61654 11092
82364 34669 64735 44281 17471 04843 76982 76943 22002 24300
78170 08544 85131 94917 85759 97359 61846 95171 91404 61692
84222 10581 34958 77672 42108 70702 71420 18524 89358 51827
84878 52245 03564 10746 82433 49613 51433 23635 86073 44716
43458 69534 66019 88121 83397 11798 02548 27957 27398 26974
62498 10476 42543 31527 19648 00305 52942 77567 13183 02854
11603 65918 06321 71676 *Courtesy Ary*

XPA c



Null message as sent 19/03

Monday/Wednesday

March 2018

0700z	**11409kHz**	**0720z**	**13509kHz**	**0740z**	**14609kHz**	
05/03	456 000 01626 00001 00000 ... 37253					Very strong
07/03	456 000 06987 00001 00000 ... 41266					Strong
12/03	456 1 00249 00079 90556 … 70246					Very strong

456 456 456 1 456 456 456 1 456 456 456 1

00249 00079 90556 05512 71438 62627 78188 37181 23879 65488
18368 92264 30029 82282 04022 16911 35155 23465 78154 27890
71788 10284 61551 20096 07832 94165 79695 95878 43660 88391
59052 08915 18808 78270 58466 35628 62779 71985 69188 56418
26243 47936 63458 46235 87678 06380 33496 19753 62156 79841
75782 52651 92848 08601 56001 76488 49893 57418 00666 15340
43160 06846 79363 24740

13446 71660 80388 15583 56390 14440 69250 76773 26877 17753
38497 77594 27210 62400 44616 98454 16124 70246+++++++++
++++++++++ *Courtesy PLdn*

14/03	456 1 00249 00079 90556 ... 70246					Fair
19/03	456 000 08810 00001 00000 ... 35261				[0720/0740z NRH [weak Twente]	Strong
21/03	456 000 07422 00001 00000 ... 34261					Weak
26/03	456 1 06951 00089 73347 … 33552					Fair

456 456 456 1 456 456 456 1 456 456 456 1

06951 00089 73347 20168 33415 02513 30140 53044 48721 28943
82555 13596 88273 03162 10730 15496 77082 76734 37187 14021
15492 35513 52607 52760 87721 80262 71870 89260 93613 31090
75425 95942 05646 05999 98292 23401 93204 12721 40779 59567
21146 70327 01593 23217 98637 93496 28020 40750 16185 24404
48034 57880 45220 81072 54329 98759 04711 73870 32027 49641
81320 59855 76549 12066

76922 09932 71616 15702 73064 38903 90954 54736 15440 86455
23415 81209 58765 62113 80209 20456 46017 34751 34949 62826
06391 84581 23892 85609 91594 17872 40611 33552
Courtesy PLdn

28/03	456 1 06951 00089 73347 ... 33552					Strong

April 2018

0600z	**10359kHz**	**0620z**	**11559kHz**	**0640z**	**13559kHz**	
02/04	355 1 00100 00099 72267 ... 57260				[0700z Fair]	Very strong

355 355 355 1 355 355 355 1 355 355 355 1

00100 00099 72267 09788 30638 29804 10264 06289 15186 36327
28312 84104 88629 32804 03863 21875 58457 45469 77121 34270
17031 14019 80460 87352 86903 62646 03447 26020 64690 93372
45872 26346 67261 63644 80830 00453 12997 30782 51656 33437
95059 05912 97697 05065 92647 88081 72277 63274 67445 77102
36268 28328 93699 97080 52022 46485 11653 68085 93863 23242
88665 67771 68291 17901

14113 46119 37693 61264 18490 80045 98230 73363 95831 05851
89496 09183 28626 99351 51637 49336 66412 66726 55437 85784
72727 98970 06626 50987 63982 59034 79502 69644 72200 06983
96680 19132 50806 93636 03798 51794 61669 57260
Courtesy PLdn

04/04	355 1 00100 00099 72267 ... 57260					Fair
09/04	355 000 07125 00001 00000 ... 34261				[0640z PulseQRM3]	Fair
11/04	355 000 05606 00001 00000 ... 37255					Very strong
16/04	355 1 07775 00139 43285 ... 46533					Fair
18/04	355 1 07775 00139 43285 ... 46533					Fair

355 355 355 1 355 355 355 1 355 355 355 1

07775 00139 43285 16788 20457 80568 15861 59733 89192 49378
70857 55814 33753 22334 98731 83489 65357 04259 83000 51880
76573 44961 21801 79762 21820 99025 28255 05269 07909 65969
98010 06250 88983 03278 02052 22985 32426 12807 93103 74029
89529 82002 14837 19587 43067 56501 62759 90078 80424 61131
04109 38965 01309 01393 33375 86291 87492 66116 78001 94849
06732 18329 11135 85515

18044 43236 82539 23212 12564 21838 45830 63527 54014 38942
10065 39993 50639 86919 84800 16008 36715 70326 52359 89413
10285 62674 50221 94511 11357 73720 54131 05588 73958 32814
51431 02529 52422 77280 35093 28752 52913 27256 15462 40469
64512 90465 08830 51532 73058 56541 28226 43985 95245 71599
45478 90125 03031 20118 43153 25739 36880 97137 95942 66878
06013 82014 90993 36636

72077 88756 51306 03989 54525 71617 03803 04696 80150 68061
59418 88495 08940 46533 *Courtesy PLdn*

23/04	355 1 06358 00127 88241 ... 66435				[0600z Unworkable]	Weak

355 355 355 1 355 355 355 1 355 355 355 1

06358 00127 88241 96747 51961 29955 61704 97121 35334 06329
70355 44741 80532 68859 90504 04840 23772 72064 70495 44545
38053 95570 59734 66861 47648 86107 16754 41345 42465 38832
01167 62131 74992 68431 86610 28670 13491 18571 62783 61410
09936 67932 06541 01813 40269 88587 77882 97708 94903 97987
14519 08091 51890 52519 64011 57350 16324 71797 24377 35669
05472 79389 68298 14304

51891 25220 54756 08762 17469 94011 04096 55143 32851 23569
43874 67760 33632 87626 74704 03835 55154 09950 15710 11821
47926 11743 31096 41471 07355 32552 46839 53226 03819 02761
77381 37597 44952 29874 61731 08458 77716 76120 04367 80186
20980 92375 48172 92213 58537 12757 02911 52150 58702 83006
19057 31600 14618 09930 54663 14043 26588 33682 86790 68780
33651 87170 62872 90819

06418 66435 *Courtesy PLdn*

25/04	355 1 06358 00127 88241 ... 66435				[0640z QRM2]	Weak
30/04	355 000 06812 00001 00000 ... 36257					Very strong

XPA2 m

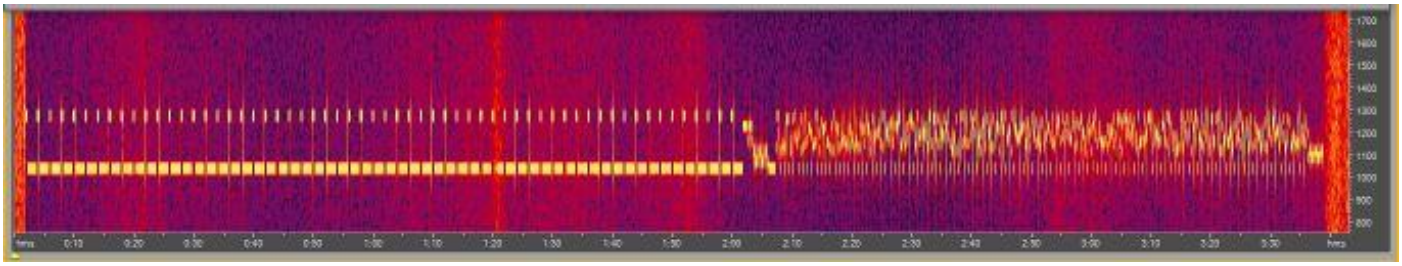
Sunday/Tuesday

March 2018

1500z	**16138kHz**	**1520z**	**14438kHz**	**1540z**	**13438kHz**	
04/03	05260 00001 00000 ... 32263					Very strong
06/03	05790 00071 21239 ... 52201					Strong
11/03	05790 00071 21239 ... 52201				[1500z Weak]	Very strong
13/03	05790 00071 21239 ... 52201					Very strong

18/03	02385 00001 00000 ... 35262		Very strong
20/03	07397 00123 71578 ... 46102	[1500/1520z Unworkable]	Weak
25/03	07397 00123 71578 ... 46102		Very strong
27/03	01026 00001 00000 ... 34253	[1500/1500z NRH, poor condx]	Fair

April 2018



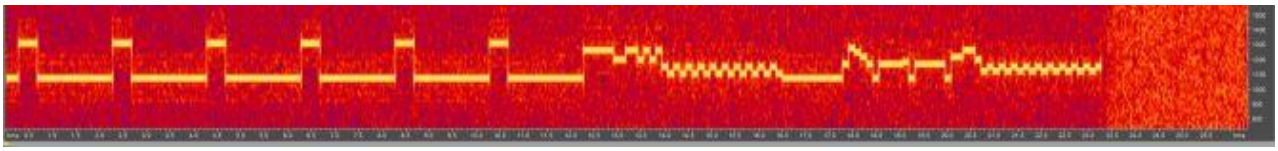
XPA2 m 12138kHz 1840z 03/04/2018

1800z 14538kHz 1820z 13538kHz 1840z 12138kHz

01/04	05542 00001 00000 34661	[1800z Fair]	Very strong
03/04	09949 00113 08078 ... 21764	[1800z Weak]	Fair

09949 00113 08078 02281 39531 34886 01592 86545 10291 39943
75556 12011 66499 36506 03712 82015 50813 90207 06405 91585
56033 28307 46541 89083 45326 47174 65868 90139 03526 38798
64209 34246 40563 40938 18883 81826 42583 46389 13003 00880
99491 82186 13497 49499 24004 47084 80540 60842 65885 69588
93425 39997 58432 63596 65517 34078 38571 42016 74303 96543
13820 85758 29836 28473 24396 60721 68084 44225 43855 86369
15632 10232 51025 54138 33798 17768 72947 83275 72033 91242
88235 98649 08523 41362 79625 91198 64033 33220 51907 36329
47793 69287 22318 05973 81127 82128 25999 66222 84215 40036
67239 91156 22474 08420 67151 43030 24079 04682 59739 45370
45381 08327 21032 20171 91525 21764 *Courtesy dmhz*

08/04	09949 00113 08078 ... 21764	[1800z Weak]	Very strong
10/04	06133 00001 00000 ... 33261	[1840z Very strong PLdn auto-intercept]	Weak DanAr
15/04	04906 00001 00000 ... 40654		Weak
17/04	07198 00105 85837 ... 56721	[Weak in Argentine]	Fair [UK]
22/04	07198 00105 85837 ... 56721	[1800z Weak]	Strong

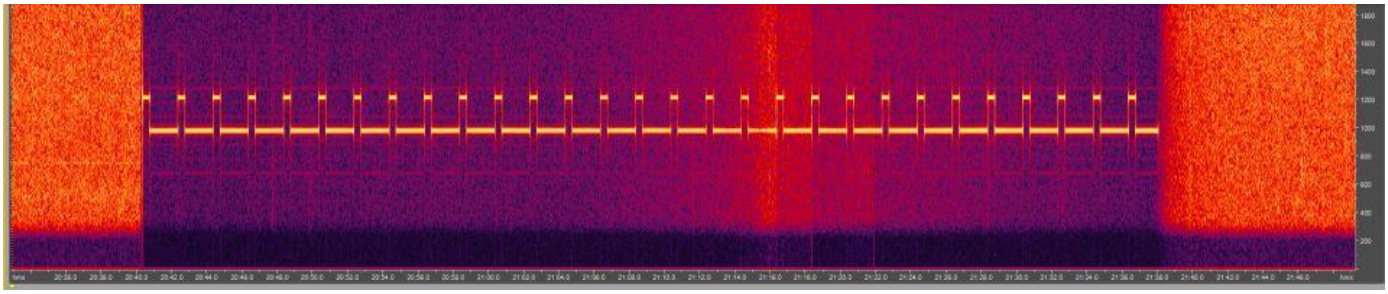


12138kHz 1840z 25/04/2018

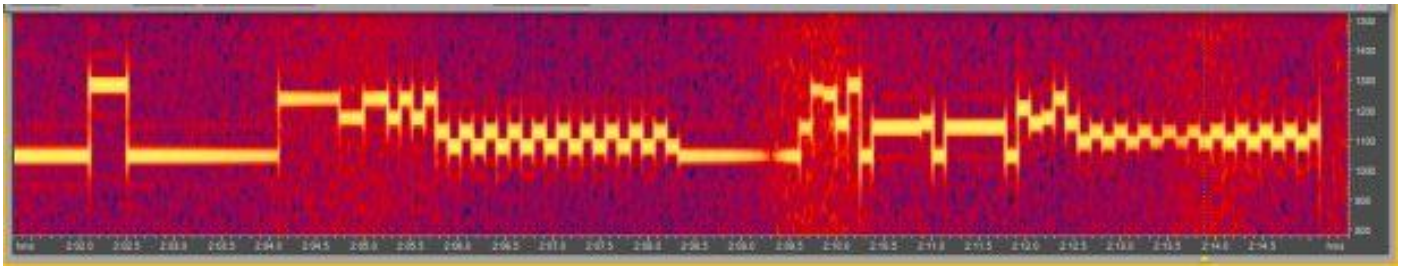
24/04	07530 00001 00000 ... 33662	[1800/1820z Unworkable]	Fair
29/04	01958 00001 00000 ... 41656		Very strong

XPA2 p

This station under investigation. New frequencies copied so far are changing from the previous chart day/times.[Thanks KW].



The 0840z frequency in the March schedule [14892kHz] saw a failure 58s into the sending [a null message 04793 00001 00000 … 36265] with no recovery – see above.



The April 2018 frequency [Thanks KW] and seen on Monday [KW] / Wednesday [KW/PLdn] 04/04 illustrates the change from the expected schedule [below]; certainly simpler to follow if this continues as seen. This null message: 08719 00001 00000 … 41261 and fair to strong across the three sendings.

XPA2 p Russian Intelligence Multitone Systems [Radiogramma] Transmission Schedules

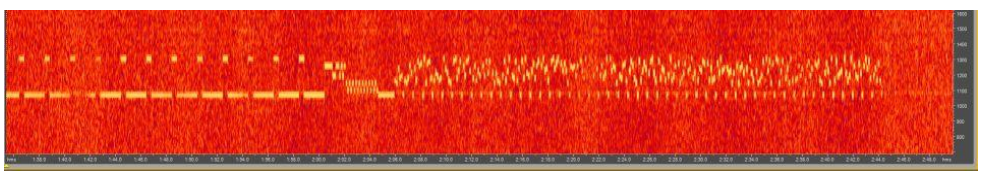
ARCHIVE

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				15986	14986	13986				15986	14986	13986									
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

05/09/2014



KW reports, "April freq did not change from its 0700etc Mon/Wed slot as thought and used 11167/12167 and 13567kHz. Signal strengths are variable to say the least – doubtless another casualty of the poor solar activity. The week of 23/04 produced weak but useable signals albeit affected by QSB[4] in places on all slots. Condx much improved for the resend on 25/04 but the 0700z sending ceased suddenly at 2m44s into its sending [see above]. The remaining slots were fair with the message being a repeat of Monday's: 00512 00163 50867 … 40333. May's freqs carrying the 0700z Mon/Wed variant on and not as suggested from the above obsolete and archived chart .

XPA2 r

Friday/Saturday

March 2018

1400z	**18667kHz**	**1420z**	**17419kHz**	**1440z**	**16212kHz**	
02/03		07646 00101 58220 ... 22344			[1400z NRH]	Fair
03/03		07646 00101 58220 ... 22344			[1400z Missed - PC shutdown]	Strong
10/03		1400z NRH, rest unworkable				
16/03		00380 00nn3 42012 … 27319* *Decode unreliable			[1400/1420z NRH]	Weak, unworkable
17/03		00380 00123 42102 ... 27317			[1400z Weak, readable]	Very strong
23/03		05781 00001 00000 ... 35265			[1400z Weak]	Strong
24/03		03955 00001 00000 ... 40260				Fair
30/03		00228 00115 97463 ... 72326			[1400z Weak]	Strong
31/03		00228 00115 97463 ... 72326			[1400z NRH, 1420z Weak]	Very strong

April 2018

1900z	**17462kHz**	**1920z**	**16114kHz**	**1940z**	**14828kHz**	
06/04		06178 00001 00000 35665			[1900/1920z NRH]	Weak
07/04		07715 00001 00000 37260			[1900/1920z NRH with PLdn, All slots weak with DanAr]	Weak
13/04		00416 00093 75663 ... 60723			[Heard in Argentine, NRH UK]	Weak
14/04		00416 00093 75663 ... 60723			[Heard in Argentine, Only 1940z unworkable in UK]	Weak

00416 00093 75663 52374 94567 00733 43254 92873 21236 96676
32430 15079 85402 81515 81226 70023 46111 17481 30388 59696
25214 36548 72919 13887 11225 98327 18942 23441 22470 87570
31751 32761 22012 58020 17692 75558 73270 16600 22490 60334
55751 16938 19436 72709 58572 50038 25679 74850 65475 08327
46042 98338 62249 40471 87239 87310 98340 38745 18566 03994
82604 81839 51787 87791 72108 35917 12389 77138 02383 97463
53711 32736 58470 16976 37062 78130 90534 57205 74340 25673
98570 72997 99630 34124 34709 01549 96596 56524 88637 43705
82933 07901 75519 88405 08509 60723 *Courtesy DanAr.*

20/04		NRH Poor Condx				
21/04		NRH, poor condx				
27/04		00528 00065 53321 ... 36162			[From DanAr]	Weak
28/04		00528 00065 53321 ... 36162			[1800/1820z Unworkable]	Weak

XPA2 t

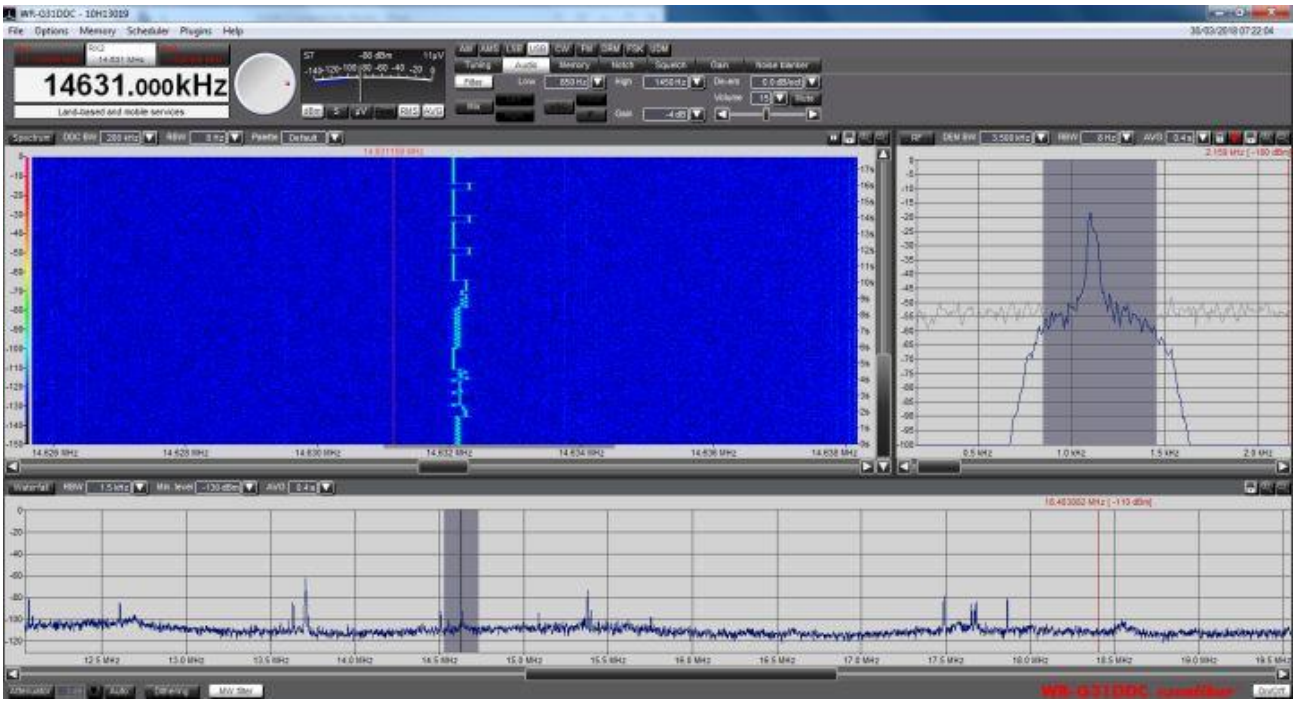
Tuesday/Friday

March 2018

0700z	**13431kHz**	**0720z**	**14631kHz**	**0740z**	**15931kHz**	
02/03		06129 00101 99177 ... 06005				Weak
06/03		00212 00129 24971 ... 33547				Fair

00212 00129 24971 02199 65919 15902 71587 53592 54732 05461
40871 01150 06152 13845 28572 88069 87451 59008 27492 80646
50112 39661 89587 25142 51867 61452 48806 86052 03110 65945
51668 1554678999266229 88884 84681 07666 92281 36464 82628
33626 26782 11428 01325 11279 25408 12594 59109 97503 78882
42145 05933 05904 71561 13098 06208 41872 25847 83296 57431
55028 97356 73113 95976 26817 97596 56575 48706 49137 72818
06240 33260 11587 68305 56722 48431 48824 89435 77997 82909
16998 05204 46930 99919 51139 60162 15909 42010 73130 34837
83918 10782 66687 70192 18246 70505 10050 74862 52147 67401
83686 97013 24770 90109 84250 50117 63779 81054 76128 84811
09597 05126 54248 40171 66656 15330 51888 95663 58583 74706
78039 55131 20969 34671 18353 31007 47515 83521 38172 90831
90092 33547 *Courtesy PLdn*

09/03	00212 00129 24971 ... 33547		Fair
13/03	06522 00001 00000 ... 34660		Fair
16/03	03746 00001 00000 ... 37657		Fair
20/03	00474 00141 89046 ... 05411		Weak
23/04	00474 00141 89046 ... 04511		Weak, QSB3
27/03	04892 00001 00000 ... 36265	[0740z NRH; very poor condx]	Very weak



30/03	05017 00001 00000 ... 34656	[0740zWeak]	Fair

April 2018

0700z	**16347kHz**	**0720z**	**17447kHz**	**0740z**	**18747kHz**		
03/04	05596 00117 63648 ... 520(73)				[0720/0740z NRH]		Weak, QSB3
06/04	05596 00117 nnnnn ... 52073				[0720z Unworkable, 0740z NRH]		Very weak, QSB3
10/04	Poor condx/Propagation				[0700z Weak, unworkable]		NRH
13/04	Poor condx/Propagation						NRH
17/04	Poor condx/Propagation						NRH
20/04	Poor condx/Propagation						NRH
24/04	Poor condx/Propagation				[0700z Weak, unworkable]	Msg 3m07s lg	NRH
27/04	Weak, unworkable				[0720/0740z NRH]		

Tones, Hybrids and FSK

X06 Mazielka (1c) logs section

Date	Day	UTC	Freq	Scale	Monitor	Comments
20180302	Fri	0936	12094		PoSW	No scale ID, S9+, gone before 0947
20180302	Fri	1002-1004	12215	361245	PoSW	S6, G53
20180304	Sun	1403	16138	1--6--	LU5EMM	Fair X06b before XPA2
20180307	Wed	0807-0811	12186	214356	Ary/NL	In progress, G24
20180311	Sun	1401/1404	16138	1--6--	LU5EMM	X06b before XPA2m (QSA4 to QSA2)
20180313	Tue	1111-1119	11125	216354	RNGB	I. p., G388
20180314	Wed	0812-0840	14655	164253	Ary	G395
20180314	Wed	0836-0844	11483	412356	Ary, PoSW	S9+ in UK, G97
20180314	Wed	1734-1742	5785	645321	Schorschi	S9, G103
20180315	Thu	0936-0940	16103	645321	RNGB	G417
20180315	Thu	1705	5818	612534	RNGB	G182 (end time missing)
20180316	Fri	1240	18667	1--245	LU5EMM	X06b before XPA2r
20180316	Fri	1251	18667	161616	LU5EMM	X06a before XPA2r
20180316	Fri	2051-2100	6875	645321	Danix/PL	G194
20180317	Sat	1305	18667	1--245	LU5EMM	Weak X06b before XPA2r (30 secs)
20180317	Sat	1312/1317	18667	1--245	LU5EMM	Again
20180319	Mon	1635-1641	10270	532614	Danix	G147
20180321	Wed	1936-1937	4653	1-616-	Schorschi	X06b i. p.
20180322	Thu	0947-1001	16223	164532	Danix	G252 (66-tone MFSK start at 0959)
20180322	Thu	1202-1205	14440	564213	Peter/UK	Fair, G263
20180323	Fri	0929-0933	12177	356412	PoSW	S7-8, G271
20180325	Sun	1400/1406	16138	1--6--	LU5EMM	X06b with QSA2 before XPA2m
20180325	Sun	1745	10114	145632	tiNG	I. p., S9, G284 (end time missing)
20180326	Mon	0903	9135	1--6--	PoSW	X06b with 6-7, gone after 0925
20180326	Mon	1341	10779	1--6--	tiNG	X06b with S9+20
20180326	Mon	1502-1544	10779	1--6--	Edd Smith	X06b i. p.
20180326	Mon	1551	10776	1--6--	Peter	X06b (gone after 1638)
20180326	Mon	1601	12155	1--6--	tiNG, Edd, PoSW	X06b i. p. (gone after 1850)
20180327	Tue	0833-0842	14861	542136	PoSW	S7, G88
20180328	Wed	0630/0632	12153	6--4-3	Ary	X06b
20180328	Wed	0637	12153	1--6--	Ary	X06b
20180328	Wed	0642	12153	1--6--	Ary	X06b again (interfering with E11)
20180328	Wed	0737-0742	10814	412356	Edd	G245
20180403	Tue	1730/1732	14538	1--6--	LU5EMM	X06b before XPA2m
20180408	Sun	1732	14538	1-6-1-	LU5EMM	Fair X06b before XPA2m
20180408	Sun	1734	14538	1-6-1-	LU5EMM	Weak X06b before XPA2m
20180409	Mon	0901	10372	431625	PoSW	S7-8, gone before 0908, G75
20180411	Wed	1318-1323	12320	1--6--	PoSW	X06b with S4-5
20180417	Tue	0700-0702	5770	1-6---	Ary	X06b
20180417	Tue	0751-0754	12157	165423	PoSW	Fair, G151
20180417	Tue	0801-0804	14615	125643	PoSW	S5, G383
20180417	Tue	0838-0847	13401	154263	PoSW	Weak, G148
20180418	Wed	0827-0829	12138	362154	PoSW	Weak, G170
20180420	Fri	1413-1414	12174	43435-	Ary	X06b before E07a
20180420	Fri	1418.1420	12174	43435-	Ary	Again
20180421	Sat	1838/1839	17462	1--6--	LU5EMM	X06b before XPA2r, QSA2, hum(1)
20180425	Wed	0652	12153	1--2--	Ary	X06b
20180425	Wed	0654-0655	12153	1--6--	Ary	X06b
20180425	Wed	0732-0743	9061	4123556	PoSW	G245
20180425	Wed	0758-0807	13419	465132	PoSW	S6, G246
20180429	Sun	1754/1756	14538	6--5-6	LU5EMM	Weak X06b before XPA2m
20180429	Sun	1815/1818	13538	6--5-6	LU5EMM	Weak X06b before XPA2m
20180430	Mon	0506	11167	1--6--	Ary	X06b before XPA2
20180430	Mon	0516	13567	6--1-6	Ary	X06b before XPA2
20180430	Mon	0518	11167	6--1-6	Ary	X06b before XPA2
20180430	Mon	1816	15819	6--5-6	LU5EMM	Fair X06b before E07
20180430	Mon	1823	15819	1--6--	LU5EMM	Weak X06b w/ diff. scale before E07

1) Again: 1840/1842

Many thanks to all contributors.

Till next time good-bye, best 73&55

Jochen Numbers- and X06 Teamkopf

HM01

HM01 has continued transmissions steadily over the past two months with few issues of note. A broadcast station came up before the TX at 1600 on 2/3 followed by some windows XP dings at the start of the HM01 transmission. The callups stagnated a couple of times over the period but only for a day or two.

Five new callups were noted on 7/4 and this seemed unusual given that on 5/4 several of the callups had low numbers for their last digits. Unfortunately a recording problem meant that we missed what happened on 6/4. On 24/4 a new callup appeared ending with a zero which is unusual and it was replace two days later with a callup containing a 9 which is also unusual. These have been taken to be special messages so may be related to the Cuban leadership change on 19/4 although nothing unusual was noted on the day itself.

Three files were sent with extensions not ending in TXT, these were 50047666.F1C, 50050101.F1C, 36677468.F1G, 50383646.F1C and 50571016.F1C. As always file names beginning 50 end in F1C and 36 end in F1G.

Logs

HM01 11435kHz 1600z 1/3 [15213 86101 55765 40731 38366 28651] THU
HM01 11435kHz 1600z 2/3 [15213 86101 55765 40731 38366 28651] started with Broadcast station then two windows dings before the TX started. Echo evident on the voice also. FRI
HM01 11435kHz 1600z 3/3 [15213 86101 55765 40731 38366 28651] SAT
HM01 11435kHz 1600z 4/3 [15213 86101 55765 40731 38366 28651] SUN
HM01 11635kHz 1800z 5/3 [15213 86101 55765 40731 38366 28651] MON

HM01 11635kHz 1800z 12/3 [66016 17244 10807 16175 68181 31643] All new callups since last heard. 17244 = 20511724.TXT, 31643 = 28563164.TXT, 68181 = 57406818.TXT
HM01 11435kHz 1600z 13/3 [66017 17245 28431 16176 68181 31644] New callup position 3, 28431 = 82442843.TXT TUE
HM01 11435kHz 1600z 14/3 [07311 17246 28431 16177 68182 31645] New callup position 1, 07311 = 47000731.TXT. WED
HM01 11435kHz 1600z 16/3 [07312 17248 28433 63041 68184 31647] New callup position 4, 63041 = 28756304.TXT. FRI
HM01 11435kHz 1600z 17/3 [07313 53031 28434 63042 68185 38421] New callups positions 2 and 6, 53031 = 53525303.TXT , 38421 = 87603842.TXT. SAT
HM01 11635kHz 1800z 18/3 [07314 53031 28435 63043 68186 38421] SUN
HM01 11435kHz 1600z 19/3 [07315 53032 28436 63044 68187 38422] MON
HM01 11635kHz 1800z 20/3 [07316 53033 28437 63045 68188 38423] TUE
HM01 11435kHz 1600z 21/3 [07316 53033 28437 63045 68188 38423] Same callups as yesterday. WED
HM01 11635kHz 1800z 22/3 [07316 53033 28437 63045 68188 38423] Same callups as yesterday. THU
HM01 11435kHz 1600z 23/3 [07317 53034 28438 63046 68189 38424] FRI
HM01 11635kHz 1800z 24/3 [07318 53035 28439 63047 85261 38425] New callup position 5, 85261 = SAT
HM01 11635kHz 2100z 25/3 [71871 53036 86321 63048 85261 38426] New callups position 1 and 3, 71871 = 74857187.TXT, 86321 = SUN
HM01 11435kHz 1600z 26/3 [71872 53037 86321 63049 85262 38427] MON
HM01 11435kHz 1600z 29/3 [71874 36551 86324 55632 85265 35552] New callup positions 2, 4 and 6, 36551 = 45173655.TXT, 55632 =, 35552 = 85153555.TXT. THU
HM01 11435kHz 1600z 30/3 [71875 36551 86325 55633 85266 35553] FRI
HM01 11435kHz 1600z 31/3 [71876 36552 86326 55634 67460 35554] New callup position 5, 67460 = 63806746.TXT , unusual in that last digit is a 0. SAT
HM01 11435kHz 1600z 1/4 [71877 36553 86327 55635 67461 35555] SUN
HM01 11435kHz 1600z 2/4 [71878 36554 86328 55636 67462 35556] MON
HM01 11435kHz 1600z 3/4 [76661 36555 61021 55637 67463 35557] New callups positions 1 and 3, 76661 = 50047666.F1C, 61021 = 10376102.TXT TUE
HM01 11435kHz 1600z 4/4 [76661 36556 61021 16501 67464 35558] New callup position 3, 16501 = 48251650.TXT. WED
HM01 11435kHz 1600z 5/4 [76662 36557 61022 16501 67465 01011] New callup position 6, 01011 = 50050101.F1C Too weak to copy. THU
HM01 11435kHz 1600z 7/4 [02034 35521 04714 42363 67467 53482] 5 new callups since 2 days ago that appear out of sequence, wondering what happened yesterday. 02034 = 75610203.TXT, 35521 =, 04714 =, 27010471.TXT, 42363 = 11314236.TXT, 53482 = ???????? SAT
HM01 11435kHz 1600z 8/4 [02035 35522 04715 42364 45781 53483] New callup position 5, 45781 = 27034578.TXT. SUN
HM01 11435kHz 1600z 9/4 [02036 35523 04716 42365 45781 53484] MON
HM01 11435kHz 1600z 10/4 [02037 35524 04717 42366 45782 53485] TUE
HM01 11435kHz 1600z 11/4 [02038 35525 04718 42367 45783 53486] WED
HM01 11435kHz 1600z 13/4 [74681 35527 36461 61611 45785 53488] New callups positions 1, 3 and 4 74681 = 36677468.F1G, 36461 = 50383646.F1C, 61611 = 68746161.TXT. FRI
HM01 11435kHz 1600z 14/4 [74681 35528 36462 61611 45786 58611] New callup position 6, 68611 = 24255861.TXT. SAT
HM01 11435kHz 1600z 15/4 [74682 11231 36463 61612 45787 58611] New callup position 2, 11231 = 25421123.TXT SUN
HM01 11435kHz 1600z 16/4 [74683 11231 36464 61613 10161 58612] New callup position 5, 10161 = 50571016.F1C. MON
HM01 11435kHz 1600z 17/4 [74684 11232 36465 61614 10161 58613] TUE
HM01 11435kHz 1600z 18/4 [74685 11233 36466 61615 10162 58614] WED
HM01 11435kHz 1600z 19/4 [74686 11234 36467 61616 10163 58615] THU
HM01 11435kHz 1600z 20/4 [74687 11235 08271 61617 10164 58616] New callup position 3, 08271 = 04370827.TXT. FRI
HM01 11435kHz 1600z 21/4 [63641 11236 08271 61618 10165 58617] New callup position 1, 63641 = 31416364.TXT. SAT
HM01 11435kHz 1600z 22/4 [63641 11237 08272 61619 10166 58618] SUN
HM01 11435kHz 1600z 23/4 [63642 11238 08273 11341 10167 43001] New callups positions 4 and 6, 11341 = 77521134.TXT, 43001 = 24464300.TXT , MON
HM01 11435kHz 1600z 24/4 [63643 60580 08274 11341 03531 43001] New callups positions 2 and 5, 60580 = 73086058.TXT, 03531 = 14350353.TXT. Unusual to see a callup ending with a 0. TUE
HM01 11435kHz 1600z 25/4 [63644 60581 08275 11342 03531 43002] WED
HM01 11435kHz 1600z 26/4 [63645 60581 08276 11343 03532 43003] THU
HM01 11435kHz 1600z 27/4 [63647 64911 08278 11345 03534 43005] New callup position 2, 64911 = 80776491.TXT. Interesting in that it replaced a message with a low last digit FRI
HM01 11435kHz 1600z 28/4 [63647 64911 08278 11345 03534 43005] Same callups as yesterday. SAT
HM01 11435kHz 1600z 29/4 [63648 64912 32031 11346 03535 43006] New callup position 3, 32031 = 06513203.TXT SUN
HM01 11435kHz 1600z 30/4 [84871 64913 32031 11347 03536 43007] New callup position 1, 84871 = 14188487.TXT. MON

Tnx maleAnon

Britain's HM01 experience from PoSW:

It was well into March before signals from HM01 strong enough to give reasonable copy were heard:-

11-Mar-18, Sunday:- 0825:25s UTC, 9065 kHz, starting up after the break, "66014 17242 10805 16173 10127 31641", S9 with the usual annoying fading up and down.

12-Mar-18, Monday:- 0855 UTC approx, 9240 kHz, "66015 17243 10806 16174 10128 31642", S7 with QSB.

14-Mar-18, Wednesday:- 0857 UTC, 9240 kHz, start-up routine in progress when tuned in, "66017 17245 28431 16176 68181 31644", S9 with QSB.

26-Mar-18, Monday:- 0755 UTC, 9065 kHz, "71871 53036 86321 63048 85261 38426", peaking S8 to S9, best signal from Cuba for almost a fortnight. Stays on UTC so appears one hour later by the clock now that British Summer Time has started.

30-Mar-18, Friday:- 0703 UTC, 9330 kHz, transmission in progress, peaking S9 with the usual deep fading, heard 5Fs, "71874 36551 86324 55632 85265 35552".

4-Apr-18, Wednesday:- 0734 UTC 9330 kHz, in progress, S8 with deep QSB, 5Fs "76661 36555 61021 55637 67463 35557".

11-Apr-18, Wednesday:- 0757 UTC, 9065 kHz, weak signal, sounded like, "02037 35524 04717 42366 45782 53485", only just readable, data sounds at 0758:20s UTC, was sinking further down into the noise by 0803 UTC.

13-Apr-18, Friday:- 0726 UTC. 9330 kHz, starting up after the break, "02039 35526 36461 42368 45784 53487", peaking S9 at times.

23-Apr-18, Monday:- 0726 UTC, 9330 kHz, "63641 11237 08272 61619 10166 58618", S7 with deep QSB.

25-Apr-18, Wednesday:- 0734 UTC, 9330 kHz, transmission in progress, S7 with deep QSB, heard 5Fs "63643 60580 08274 11341 03531 43001". Transmission stopped at 0747 UTC, carrier went off 0748:40s.

From Ary [Netherlands] and DanAr [Argentine].

March 2018

9240kHz 0857z	08/03[66012 17241 10803 16171 10125 67090]	Ary	THU
16180kHz 2100z	06/03[15213 86101 55765 40731 38366 28651] QSA3	DanAR	TUE
2100z	15/03[17247 28432 63041 68183 31646 07311] QSA3	DanAR	THU
2100z	24/03(07318 53035 28439 63047 85261 38425) QSA3	DanAR	SAT
	Radio Habana Cuba in Portuguese from 2045z to 2050z		
17480kHz2200z	08/03[15213 86101 55765 40731 38366 28651] QSA3	DanAR	THU

Before transmission a series de numbers 2 , 1 and computer error sound with hum.
Then mixed numbers a while with distorted audio.

April 2018

16180kHz2100z	03/04 (76661 36555 61021 55637 67643 35557) QSA3	DanAR	TUE
2100z	07/04 (02034 35521 04714 42363 67467 53482) QSA3	DanAR	SAT
	At 2155z started with numbers again on frequency until 2156z then switched to 17480kHz		
17480kHz2200z	14/04 (74681 35528 36462 61611 45786 58611) QSA2	DanAR	Sat

FSK: F01, F06 and F11

F01 [Ia]

Monday	**0025/0035/0125/0135z**	**16023/13555kHz**	**Link ID 00117**
05/03	No reports		
12/03	No reports		
19/03	No reports		
26/03	No reports		
	0025/0035/0125/0135z	**15820/13405kHz**	
02/04	No reports		
09/04	No reports		
16/04	No reports		
23/04	No reports		
30/04	No reports		

1st Wednesday **1940/1950/2000z** **10467/8094/6779kHz**

07/03 Null message

1840/1850/1900z **12194/10581/8112kHz**

04/04 Null message

Friday **2230/2240/2330/2340z** **20700/18726kHz** **Link ID 00116**

02/03 **11177 00116 82915 01009 01719** 25801 69705 13299 96064 30541 45851 99679 05976 68189 29546 27671 71868 … 09169 00000
09/03 No reports
16/03 **11177 00116 37527 15015 02429** 00000 92023 75922 89736 12931 94784 50361 06320 61554 76569 37452 54744 … 15240 00000
(the serial number has increased by six in two weeks?…)
23/03 **11177 00116 27384 22016 01939** 06022 84311 19000 25769 19876 51148 57669 14367 69760 90766 87766 53769 … 16191 00000
30/03 No reports

2230/2240/2330/2340z **22953/19405kHz**

06/04 **11177 00116 23756 05018 01879** 23759 22897 36129 31947 84503 61063 20615 54765 69374 52547 44307 86884 … 76911 18185
(yet another omission of the trailing 00000)
13/04 No reports
20/04 No reports
27/04 No reports

F06 [Ia]

Sunday **1530/1540/1550z** **16245/14356/12138kHz** **Link ID 10053**

04/03 Null message
11/03 Null message
18/03 Null message
25/03 Null message

1530/1540/1550z **18626/16325/13458kHz**

01/04 Null message
08/04 Null message
15/04 Null message
22/04 Null message
29/04 Null message

1st/3rd Monday **0500/0510/0520z** **10249/8137/5948kHz** **Link ID 70059**

05/03 Null message
19/03 Null message

0400/0410/0420z **10686/8184/6773kHz**

02/04 Null message
16/04 Null message

Tuesday **0030/0040/0050z** **9068/7844/6939kHz** **Link ID 60070**

06/03 Null message
13/03 Null message
20/03 Null message
27/03 Null message

0030/0040/0050z **9216/7948/6833kHz**

03/04 Null message
10/04 Null message
17/04 Null message
24/04 Null message

Tuesday **1500/1510/1520z** **17428/15646/12153kHz** **Link ID 00052**

06/03 Null message
13/03 Null message
20/03 Null message
27/03 Null message

1500/1510/1520z **17534/15626/12214kHz**

03/04 Null message
10/04 Null message
17/04 Null message
24/04 Null message

Tuesday	**1650/1700/1710z**	**16359/13986/11523kHz**	**Link ID 10053**
06/03	Null message		
13/03	Null message		
20/03	Null message		
27/03	Null message		
	1650/1700/1710z	**18726/16238/13378kHz**	
03/04	Null message		
10/04	Null message		
17/04	Null message		
24/04	Null message		
Wednesday	**0600/0610/0620z**	**20154/18304/16156kHz**	**Link ID 40122**
07/03	**11166 40122 85241 03063 03379** 50667 52829 54517 53005 99027 38779 19348 24352 50605 65331 67600 03913 … 63335 00000		
14/03	**11166 40122 35796 10064 03029** 98058 15089 49718 10506 78957 00258 09296 28914 32877 75627 96932 30726 … 64300 00000		
	11166 40122 41209 10065 02279 23136 31048 21154 19741 54643 72424 69789 84469 50000 27607 36800 70626 … 65225 00000		
21/03	Null message		
28/03	**11166 40122 85243 24066 03779** 76298 19332 72231 59998 13139 65250 57195 95558 14075 32765 44764 62575 … 66375 00000		
	0600/0610/0620z	**20072/18291/16071kHz**	
04/04	**11166 40122 90874 31067 03469** 39317 15480 38081 63954 02324 87436 45673 56882 21368 52648 11419 32776 … 67344 00000		
11/04	**11166 40122 32670 07068 03039** 04819 00173 64210 41671 44937 14158 15081 70557 11181 00045 45886 71585 … 68301 00000		
	11166 40122 41209 07069 02779 78697 45177 22038 18505 36013 96109 67896 50960 49941 03227 86853 42576 … 69275 00000		
	(303 groups in the first message instead of expected 302)		
18/04	Null message		
25/04	**11166 40122 32671 21070 04289** 54790 72383 75261 88078 88571 19363 71534 31292 88756 15405 99890 76603 … 70426 00000		
Wednesday	**0800/0810/0820z**	**18038/16344/14563kHz**	**Link ID 70048**
07/03	Null message		
14/03	Null message		
21/03	Null message		
28/03	Null message		
	0800/0810/0820z	**16064/14367/12208kHz**	
04/04	Null message		
11/04	Null message		
18/04	Null message		
25/04	Null message		
2nd/4th Wednesday	**0900/0910/0920z**	**20386/18215/16061kHz**	**Link ID 00052**
14/03 & 28/03	**11166 00052 38097 13026 01889** 16350 86123 44866 22078 27077 44818 68404 40426 49459 36290 03392 97356 … 26186 00000		
	0800/0810/0820z	**19138/17545/15626kHz**	
11/04 & 25/04	**11166 00052 43016 10027 01589** 58180 26120 45866 22078 69807 84815 69404 40426 81289 76297 04392 97356 … 27156 00000		
2nd/4th Wednesday	**1015/1025/1035z**	**20138/17428/14983kHz**	**Link ID 10031**
14/03	Null message		
28/03	Null message		
	0915/0925/0935z	**17538/14576/11639kHz**	
11/04	Null message		
25/04	Null message		
Thursday	**1330/1340/1350z**	**16054/13471/11162kHz**	**Link ID 80214**
01/03	Null message		
08/03	Null message		
15/03	Null message		
22/03	Null message		
29/03	Null message		
	1330/1340/1350z	**16351/14367/11483kHz**	
05/04	Null message		
12/04	Null message		
19/04	Null message		
26/04	Null message		

2nd/4th Saturday **0900/0910/0920z** **14354/12206/10293kHz** **Link ID 70147**

10/03 **11166 70147 38950 07077 01609** 74785 62683 95686 60463 50351 42460 88488 06641 66145 36891 83742 96247 … 77158 00000
24/03 **11166 70147 50172 23078 00689** 62645 53109 95688 58128 48211 33986 88480 94306 54005 27317 83744 84902 … 78066 00000

0800/0810/0820z **12168/10186/8193kHz**

14/04 **11166 70147 29045 13079 01749** 57555 53199 96688 58128 33121 33976 89480 94306 49915 27307 84744 84902 … 79172 00000
28/04 **11166 70147 68351 27080 00749** 48754 13902 94559 60463 24320 93789 87351 06641 30114 87110 82615 96247 … 80072 00000

2nd/4th Saturday **1000/1010/1020z** **18948/16223/14639kHz** **Link ID 70004**

10/03 & 24/03 **11166 70004 90135 07005 00539** 67216 42701 49584 57756 22405 36044 70197 95452 05516 46618 84245 04425 … 05051 00000

0900/0910/0920z **17481/15946/13543kHz**

14/04 **11166 70004 17384 13006 01229** 93742 55343 33649 88009 53202 52357 26887 03723 81088 79047 77463 99306 … 06120 00000
28/04 Null message

Saturday **1100/1110/1120z** **17414/15605/13444kHz** **Link ID 50046**

03/03 **11166 50046 48312 02028 01589** 48749 49079 90913 40530 05816 33684 55106 63673 43964 90165 78912 82228 … 28156 00000
10/03 **11166 50046 36201 07029 01069** 27929 19174 90911 52875 84096 03789 55104 75918 22144 60260 78910 94563 … 29104 00000
17/03 **11166 50046 84731 16030 02249** 15529 65283 90913 52875 72696 59898 55106 75918 10744 16379 78912 94563 … 30222 00000
24/03 **11166 50046 97631 23031 01549** 32889 09090 90913 40530 99956 93605 55106 63673 37004 50186 78912 82228 … 31152 00000
31/03 **11166 50046 34271 30032 00689** 48568 39007 90913 40530 05635 23612 55106 63673 43783 80193 78912 82228 … 32066 00000

1100/1110/1120z **14986/13366/11050kHz**

07/04 **11166 50046 92586 06033 01369** 42729 79073 91913 40530 09896 63688 56106 63673 47944 20169 79912 82228 … 33134 00000
14/04 **11166 50046 93547 13034 00849** 46799 09080 91913 40530 03866 93695 56106 63673 41914 50176 79912 82228 … 34082 00000
21/04 **11166 50046 75139 20035 01309** 66089 79097 91913 40530 23156 63602 56106 63673 61204 20183 79912 82228 … 35128 00000
28/04 **11166 50046 35821 27036 01269** 22968 64493 99884 52875 89035 58008 54077 75918 27183 15589 77883 94563 … 36124 00000

Saturday **1500/1510/1520z** **22913/20374/18406kHz** **Link ID 40133**

03/03 Null message
10/03 Null message
17/03 Null message
24/03 Null message
31/03 Null message

2100/2110/2120z **20386/18509/16251kHz**

07/04 Null message
14/04 Null message
21/04 Null message
28/04 Null message

F11 [III]

Monday/Wednesday **0845/0850z** **9339kHz** **ID 0353**

05/03 & 07/03 Null message
12/03 & 14/03 Null message
19/03 & 21/03 Null message
26/03 & 28/03 **88888 88888** 20666 13368 00374 89894 55903 42553 52320 22936 14848 47893 37646 09039 38080 13553 37195 37291 18829 04163 45942 95521 04652 96785 07523 66932 06176 72712 13417 95242 04099 90266 10886 14576 37451 83584 **88888 88888 00038 00038**

02/04 & 04/04 Null message
09/04 & 11/04 Null message
16/04 & 18/04 **88888 88888** 01129 30700 40518 64617 74186 93872 88630 60434 55768 13059 64747 11634 59404 28683 47376 79525 06326 60368 00976 87636 94187 01390 81943 13569 75041 17120 90775 75459 26589 48967 39282 92188 11576 71537 32197 08761 **88888 88888 00040 00040**
23/04 & 25/04 Null message
30/04 & 02/05 Null message

Tuesday/Wednesday **1150/1155z** **7670kHz** **ID 0325**

06/03 & 07/03 **88888 88888** 99486 20315 41542 83430 00806 46555 17167 42297 91971 40764 23147 29644 92901 53948 81922 44500 32547 92329 05001 52683 79760 67281 70059 55987 77196 77718 71054 82038 84530 21555 86586 11422 90620 87744 49565 94088 **88888 88888 00040 00040**
13/03 & 14/03 Null message
20/03 & 21/03 Null message
27/03 & 28/03 Null message

03/04 & 04/04 Null message
10/04 & 11/04 Null message
17/04 & 18/04 Null message

24/04 & 25/04 **88888 88888** 52816 59106 57242 81731 30864 20520 80521 33794 82548 37284 61366 68291 13507 55990 16072 17101 91571 65849 17566 23588 75409 88969 11345 89452 35117 54404 02138 78481 68421 64632 86814 **88888 88888 00035 00035**

Logs sent by: Ary, Danix

Thanks Danix

THE BERLIN WALL, MY PART IN its FALL!

Concluded ….

Part 4

Berlin Blockade.

The **Berlin blockade** (24 June 1948 – 12 May 1949) was one of the first major international crises of the Cold War. The Russians, who occupied Berlin at the end of the war, had agreed to allow Britain the USA and France to occupy parts of the city under a treaty. They changed their mind and tried to force them to leave. They did this by closing all land routes into Berlin. The USA and Britain supplied the city and its inhabitants by air. This was a time at which another war could easily have broken out, and there is little doubt that the fact that the USA was, at this time, the ONLY nation to possess a nuclear weapon stopped hostilities breaking out. Eventually, the Russians gave in and lifted the blockade. Below are two photos and a sketch of the border and its crossing points shown to give an idea of how things were changing. (And NOT for the better!)

Figure 1 Border crossing point in the 1950s.

Figure 2 Same post in 1962.

Below is a sketch of how the border looked in 1984. Remember, this went ALL the way across Germany. And Berlin was INSIDE that. What are not shown are the dogs on chains fastened to posts to keep them from attacking each other, but not from attacking anyone who was trying to cross the border. Also not shown are the minefields which guarded the border as well. Another box of delights guarding the border were the mines attached to the fence which were activated by trip wires, and the little beauties planted below ground.

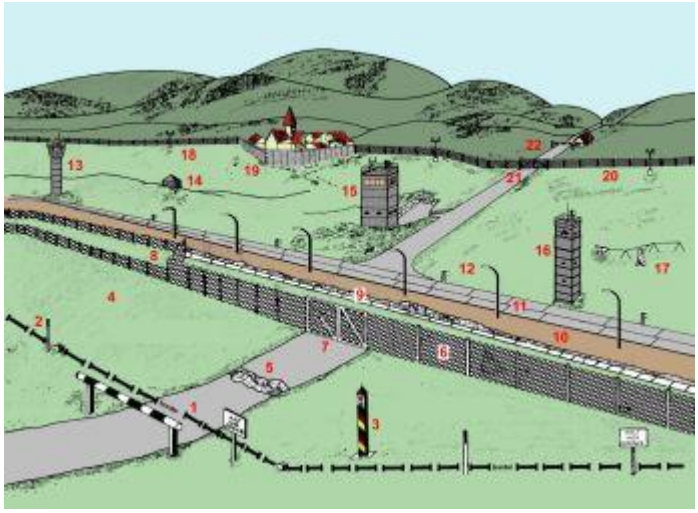


Figure 3 Border in 1984 (Makes the others look SO last year!

Figure 4 GERMANY: SECTORS OF OCCUPATION. Air routes into Berlin shown in white with black arrows

Figure 7 BERLIN ZONES OF OCCUPATION

Now, we go back to that big word I used earlier, PROXY WARS. The biggest was the Korean War. This lasted from 1950 to 1953, and was a very bitterly fought war. In short, Korea was divided into two, North Korea which was, and still is, communist. South Korea which was then and still is, due to this war, democratic or capitalist, you choose. North Korea, backed and supplied by Russia (or USSR) and Communist China, also known as the People's Republic of China, or Red China. You decide! Red China supplied ground troops the numbers of which far exceeded those of the Americans, who were, at first, the only ones opposing them. This is the ONLY time that the United Nations did what it was supposed to do in the event of an invasion such as this. It actually fought a war. Many different countries supplied soldiers, sailors and airmen to fight in it. Thousands died, and, as is so often the case, at the end they all ended the war back where they had begun that same war from! That border, between North and South Korea is still there today. It consists of heavily built steel and wire fences. Also, in the strip of land between, which is known as no-man's land, are very extensive minefields. As if that were not enough, the whole length of the border is extensively patrolled by the armed forces of both nations. The US Army and Air Force also have a very big force stationed in South Korea, to deter an attack by North Korea, which is the last communist state in the world. Obviously, there have often been fought other wars all over the world. These have been small wars, of limited duration, and never involving the number of counties that fought in the first and second world wars. However, if you die in one, this is NO consolation!!

CUBAN MISSILE CRISIS.

D,ooohhh! Nearly left that one out! A very big hiccup in the Cold War, very nearly turning it REALLY hot, was the Cuban Missile Crisis. If you said "Was it in Cuba?" you win a cigar! (No pun intended!)This happened in 1962, and the following is a timeline. Without exaggeration, I would say, and better educated people than I will agree, that the world has not been closer to nuclear war, before or since. Fidel Castro had seized power In Cuba following an armed, hard fought revolution. He was a hard line communist and accepted aid from the Russians. Nikita Khrushchev was in charge of USSR / Russia at that time. The Russians placed nuclear armed missiles in Cuba. Obviously, this was top secret. They were seen by a spy plane during a reconnaissance flight. Many tense meetings followed, especially between Russia and USA. Look at the map, and you will see why the USA was so concerned. See how close to USA the island of Cuba is. Following much debate about what to do, the USA President, John F Kennedy, declared an exclusion zone around Cuba. This meant that all shipping in or out of Cuba would be stopped and searched for missiles or any other weaponry or personnel. (Obviously the Russians were doing all the installation work. The average Cuban has trouble with a Guy Fawkes Special come November 5!!!) The Russians sent ships carrying missiles, the US Navy were following and were preparing to stop them short of Cuba, when, on orders from Khrushchev, the Russians turned back. The Russian Navy had submarines in the area following their ships. These submarines' captains had orders to fire if they thought fit. Now think about that! They did NOT have to get clearance from their government!! These submarines were armed with torpedoes with NUCLEAR warheads. Had just one been fired, the war would have started and I would probably not be writing this. In the USA, Britain, and every other NATO country, all armed Forces were expecting the worst, and on the highest alert. It did not happen, because of Khrushchev's decision to turn back, and Kennedy's determination to call his bluff! It has since been admitted, even by Khrushchev's own son, that Khrushchev did not think the USA would go as far as they did! Thankfully, war was averted. The world lived to sweat again! There were obviously other incidents over the years, but none of this magnitude.

As we all now know, the Cold War continued for many years with the by now commonplace Proxy wars being fought out all over the world. But there were no more world wars. I firmly believe that Britain, the USA, USSR/Russia, and all other big nations, now realized that no-one could win a nuclear war, due to the massive destruction caused by nuclear warheads and the associated radioactive fallout which would probably cover the whole world and kill us all. Nor should we forget Biological and Chemical warfare, which in my Army days, and long after, REALLY scared me. Simply put, you filled a bomb or shell fired from a field gun with enough germs to kill people. Anthrax, Rican, Sarin, and other nasties spring to mind. The only time this was used in a war was during World War One, when the Germans used it and shortly afterwards so did we and the French. My maternal grandfather was one of the many thousands who were gassed. Mustard Gas I believe it was called, and attacked the lungs. Since then, the only instance which springs to mind of large scale use of this is in the 80s when Sadaam Hussein used it against his own people after they had risen up against him. I may be a Homer Simpson look and think alike, but I think that qualifies as him having the weapons of mass destruction that everyone else says he did not! Proxy wars worth mentioning are the war in Viet-Nam in the 60s and 70s, where the Russians and Communist Chinese supplied armed and trained the Communist North Vietnam against the American backed South Vietnam. It also scarred a generation, but here is no place to discuss that. Later, the Russians went into Afghanistan, at the request of the communist government in power in that country at that time. The USA supplied and armed the rebels, who were then, I believe, known as the Mujahedeen. The Russians later withdrew, as had the Americans from Vietnam, and life went on much as before, save for the many thousands of servicemen and civilians who had died on both sides, to say nothing of the mental scarring similar to that suffered by the Vietnam veterans. Today, much the same situation exists in Afghanistan and Iraq. Ain't life grand!!!

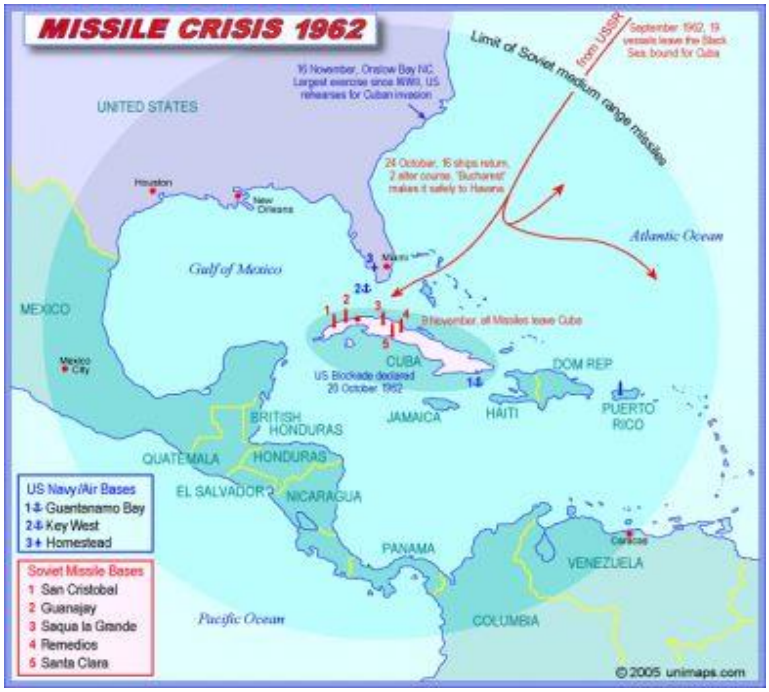


Figure 5 Map Showing Russian Missile Bases on Cuba circa 1962 [Read Wynne and Penkovsky]

My part in this little potted history ended on a regular basis in January 1971, when I was demobilised from the British Army. (Their AND my gain!)Entering the civil police force I was exempt from call up, to which I was otherwise, like every ex-regular soldier, liable at the outbreak of war, or any pathetic excuse they could use to drag me back into uniform!. (A camouflaged one that is, as a cop I wore a natty blue one which suited my eyes SO much better!) In a moment of madness, I voluntarily joined the Military Police Army Reserve. This lasted until 1984 when I finally grew up! The plus side was that I got paid whilst on duty and we trained in Germany, which was where we would have served had war broken out. In 1989, as we all know, the Berlin Wall came down, without a war, for which we should ALL be very grateful!!! See my little explanation at the end, for which you are all now doubtless longing!!! Here is as good a point as any to mention the fact that just because the Cold war was not a shooting war, as we understand it, it does not mean that no-one died. They did, on all sides. East Germans were shot trying to cross to a better life in the West, on the orders of the East German government of the time. And those mundane things known as accidents claimed several thousand lives of civilians and soldiers. Bear in mind that we, the Canadians, West Germans, and US Army, and the rest of NATO, spent most of the year in the field in training for the war which we all prayed and hoped would not come. You could call them casualties, I surely do!

NEAR and MIDDLE EAST.

No missive of this nature is complete without a comment or sixty, most of them swear words, about that bubbling cess pit, the Near, Middle, and Far East. It must be said that the troubles in the Middle East have been largely made possible by the arming and equipping of Israel and her Arab neighbours/enemies (you guys decide!)The vast amount of oil in that region is the main factor for everyone's interest in it! As I and many others see it, the USA backs and equips Israel, which has only existed since 1947 as a sovereign nation. This is, chiefly, I think because of the large amount of Jewish voters living in USA! Britain has also supplied Israel, as has France.

Under the old USSR, all manner of arms and equipment was supplied to Israel's opponents, chiefly Egypt, Jordan, Lebanon and Syria. For reasons which no-one seems to be able to explain, the Arab nations are unable to get along with the Israelis, who, as you know, are Jewish. Still, the Arabs cannot get along with us Christians either, so nothing new there then!!! (My time in Aden taught me that they cannot get along with each other either!) Yet another example of a war by proxy. You guys must be getting pretty smart at this stuff by now! Communism started to fail with the coming to power in Russia/USSR of Mikhail Gorbachov in 1989. He has, in my humble opinion, never received the credit due to him for ending the cold war. He turned the whole attitude of Russian government around. In 1990, he was awarded the Nobel Peace Prize, but also deposed from the Presidency in a coup led by Boris Yeltsin.Very poor way to show gratitude!! In November 1989, the Berlin wall was broken down by the East German people. Shortly before, Gorbachov had visited East Germany and is on record as saying that under no circumstances should the East German government use force on the people if they wished to change. Remember, this was at a time when the East German Border guards were under orders to shoot anyone trying to cross into the West from the East. They could also shoot anyone coming INTO the East, but no-one was that stupid as to want to go there anyway!!! I watched the wall come down, courtesy of the miracle of TV, and could not believe it. I rang my long time German friend in Germany, Haki, and he had the same difficulty. As you know, the remainder of the Communist states fell not long after. The Cold War is said to have ended in 1989, and I think I should too. Bet you guys are bored already!!! So, there you go, Sophie and Carys, Darren and Sharon. How we knocked down the Wall. I have no doubt left out some things which other, more expert, people would consider important. But I always say that EX is a has been, and SPURT is a little dribble, so you figure it out! Anyway, I had a lot of help. Many thousands of West German Bundeswehr (Armed Forces) dudes, US Armed Forces, a lot of Dutch Forces, Belgian Forces, the Canadians, oh , and the rest of the British Army of the Rhine Would it have fallen anyway, without my intervention? Damn right it would, because that is what the East German people wanted. And who better to ask? Your Dad/ Granddad!

Thanks HJH

From my time in Aden it was obvious there were other participants than just the Egyptian supported NLF and FLOSY. The Aden workers Trades Unions caused problems and although the date was set for British withdrawal others interfering in our dissolution of Empire .. one being named as a special relation which any free thinking Brit knows as bullshit other than the intel sharing capabilities. When Britain is wanted its here, when it's not, it's in the way.

Gizza Job ……


Keeping Britain Safe
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GCHQ


GCHQ
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Get 66,000,000 likes without sharing anything
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These days it feels so natural to share everything about your life. But imagine if you had to keep your working world a secret? No comments. No messages. No updates. Because discretion plays a key role in our ability to protect 66 million people in the country. You'll use your administrative skills across a range of departments, keeping everything running smoothly. If you're a great communicator and organiser what's not to like? Learn more at www.mi5.gov.uk/careers/admin
SECURITY SERVICE MI5


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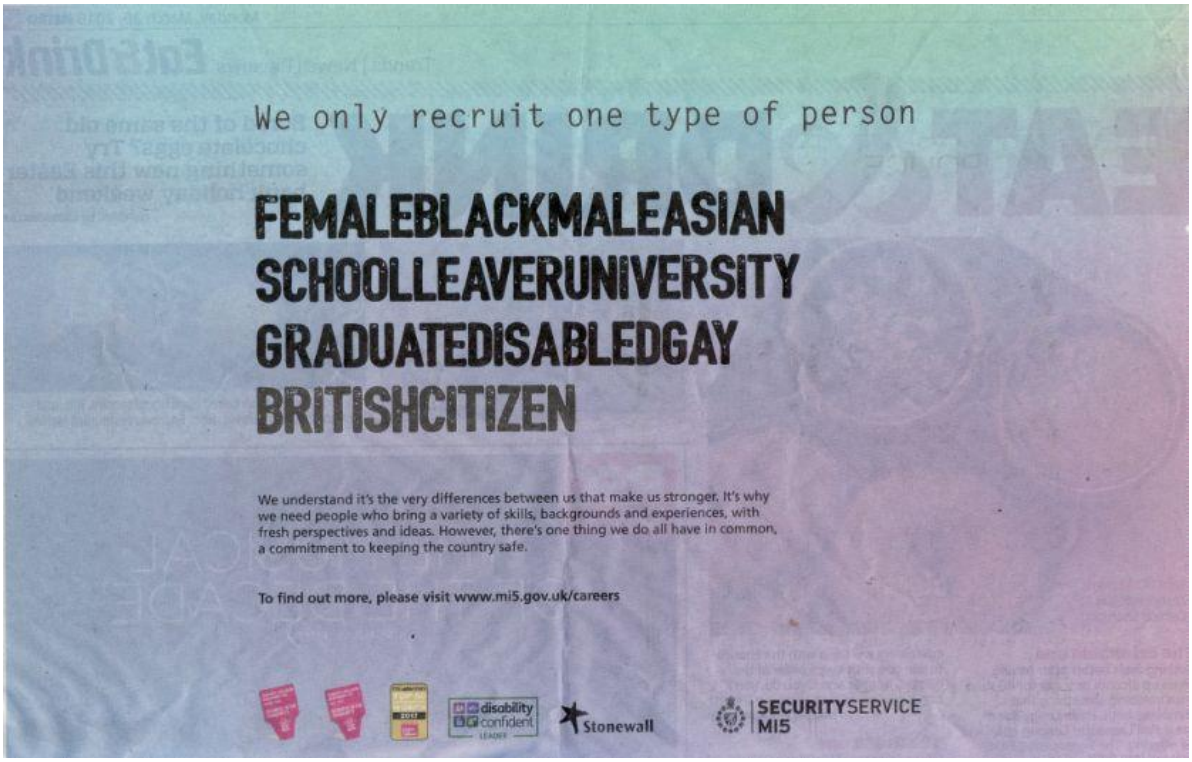

Look! They left out agéd old buggers like me!

PoSW's Items of Interest in the Media:-

Items of Interest in the Media:-

First off, some electronic gadgetry at work in Havana, allegedly:- from *The Times* newspaper of March 7 comes a piece written by Stephen Gibbs, reporting from Caracas probably the closest he could get to Havana, with the headline, "Bugging caused 'sonic injury' to CIA in Cuba", which says, "Poorly placed bugging devices may have caused a series of 'sonic attacks' that forced the withdrawal of US diplomats and CIA officers from Cuba a year ago.

Researchers at the University of Michigan have proved that clashing ultrasound devices of the type sometimes used by intelligence agencies can cause the sort of effects that forced the departure of 21 staff and family members from the US embassy in Havana. Some of those forced out reported symptoms resembling brain injuries.

After studying a recording of the alleged attacks the scientists managed to reproduce a similar effect using listening devices, motion detectors and signal jammers. They said their experiments demonstrated that a side effect of ultrasound devices installed too close to one another was that their normally inaudible sound waves could clash, and could be heard.

Some of the diplomats and undercover agents described hearing unusual, painful noises or vibrations in their private residences and hotel rooms before experiencing nausea, and in a few cases permanent hearing damage. The incidents occurred from December 2016 to January 2017.

The Cuban government has consistently denied any wrongdoing and describes suggestions that it has a dangerous sonic weapon as 'science fiction'.

Experts were baffled by the initial reports: a weapon which could emit targeted and damaging sounds as described but was not easily detectable was not known to exist. Ultrasonic or microwave attacks were considered a possible explanation, but they would be typically silent.

The lack of a reasonable explanation led to speculation as to who might have been behind the 'attacks'. One theory suggested that Russia, North Korea or a rogue Cuban faction was testing a new weapon; another was that the diplomats were suffering from a virus or even mass hysteria.

The Michigan scientists suggest instead that secondary listening devices placed inside US diplomats' homes may have clashed with other equipment. 'A malfunctioning device that was supposed to inaudibly steal information or eavesdrop on conversation with ultrasonic transmission seems more plausible than a sonic weapon,' Kevin Fu, the lead author of the report, told the Michigan News Centre.

US diplomats who have previously been posted to Cuba say it was widely assumed that all their homes, which were usually rented directly from the government, were bugged.

The Cuban government has not commented on the report. It has, however, denied that 'any deliberate action against diplomats of the United States may have occurred in Cuba'."

So who used a nerve agent against that double agent Sergei Skripal and his daughter Yulia down there in Salisbury in early March? The generally accepted explanation is that it was the Russians, or at least that is what the Political Class have been shouting about for the past weeks and is being used as the excuse for all kinds of sanctions against Russia. A few commentators have had the courage to point out that Salisbury is only a few miles away from Britain's own chemical weapons research establishment which may or may not be significant. Suggestions of a "false flag" operation by some agency or other connected with British interests have been the subject of some speculation. There are those who have been expecting some kind of spectacular event either in the UK or in some part of the world where the UK has interests - although this business in Salisbury is not it - which would give the government the excuse they are so desperate to find to cancel "Brexit", and overturn the result of the referendum of a couple of years ago in which the nation voted - although by the smallest of margins - to leave the European Union. On the day after the referendum, when those who voted leave were full of joyous ecstasy, the thought occurred that this is never going to happen - at least not on the way that the leavers wanted, a total break with the EU and all of its rules, regulations and institutions. British businesses both large and small have become so used to having a massive pool of cheap labour from the newer EU members in post-communist eastern Europe where wages are low, unemployment is high and there is minimal welfare provision compared with western countries such as the UK, that those businesses could not survive if that cheap labour was no longer available.

And so some have been half-expecting some earth-shattering event such as a terrorist outrage somewhere in the UK with huge numbers of casualties, far more than for example the 7/7 bombings on the London transport system a few years ago, a flare-up between North and South Korea which would mean Britain having to send large numbers of troops, looking less likely now that Mr Kim seems to have calmed down a bit, or closer to home some kind of trouble with Russia, or some other really serious situation which would give the Prime Minister a reason to go on TV and address the nation with something along the lines of, "In view of these events, Her Majesty's Government no longer considers it wise for the UK to leave the European Union. A state of emergency now exists, the United Kingdom Independence Party has been declared to be illegal and its leading membership have been placed under arrest. I have asked the EU in Brussels to make available large numbers of troops of the European Union Army; this has been agreed and they are at this moment taking up positions in various parts of this country".

Well, it could happen. In the meantime there has been no shortage of stories in the press with an anti-Russian angle.

For example, a short piece in the *"i"* newspaper of 31-March with the headline, "US wary of Russian ships 'targeting undersea cables' ", written by Deb Riechmann, which says, "Russian ships are skulking around underwater communications cables causing the US and its allies to worry the Kremlin might be considering a new way to fight information wars, a senior US commander said.

US and other Western officials are increasingly troubled by their rival's interest in the 400 fibre-optic cables that carry most of the world's calls, emails and texts, as well as $10 trillion (£700bn) worth of daily financial transactions. 'We've seen activity in the Russian navy, and particularly undersea in their submarine activity, that we haven't seen since the Eighties,' General Curtis Scaparrotti, commander of the US European Command, told Congress.

Without undersea cables, a bank in Asian countries could not send money to Saudi Arabia to pay for oil and US military leaders would struggle to communicate with troops fighting extremists in Afghanistan and the Middle East.

All this information is transmitted along tiny glass fibres encased in undersea cables that, in some cases, are little wider than a garden hose. All told, there are 620,000 miles of fibre fibre-optic cable running under the sea, enough to loop around the earth nearly 25 times.
The Russians are 'doing their homework' and, in the event of a crisis or conflict with them, they might do rotten things to us', said Michael Kofman, a military expert at the non-profit research group CNA Corporation".

On 17-April, the headline on the front page of *The Times* said, "Russia has hacked into millions of computers" …. "Britain and US issue unprecedented warning", and three of the paper's journalists, Deborah Haynes, Defence Editor; Mark Bridge, Technology Correspondent and Patrick Maguire informed us that, "A global Russian hacking offensive has targeted millions of computers to spy on governments and lay the foundation for an attack on infrastructure, Britain and the United States warned last night. Tens of thousands of devices in British homes including wifi boxes are in the sights of Kremlin-backed cyber-experts who are searching for weaknesses such as easy-to-guess passwords and expired anti-virus software.

Security officials said yesterday that Russian hackers were seeking to find ways to sit invisibly within networks enabling them to launch a cyberattack should the order be given.
Businesses have also been targeted as hackers have sought to steal intellectual property.

In an unprecedented warning, the UK's National Cyber Security Centre, the US Department of Homeland Security, the FBI and the White House said that the extent of the penetration was so deep and widespread that it had given President Putin a 'tremendous weapon'.
The public attack on Moscow's 'malicious cyberactivity' by the two allies was an attempt to deter President Putin from unleashing his full cyber potential. It comes at a time of escalating tensions between Moscow and the West after Britain, the US and France launched air strikes on Syria, a close ally of Russia, following the suspected use of chemical weapons by President Assad's regime.....Ciaran Martin, head of the NCSC, part of GCHQ, said that the warning over Russia's activities was a 'significant moment in the transatlantic fight-back against Russian aggression in cyberspace'. Russian-backed cyber-attacks have directly targeted the UK government and elements of the country's critical national infrastructure, he said in the briefing with US officials.

Rob Joyce, the White House's outgoing cybersecurity co-ordinator, signalled that the United States was ready to hit back against Russia with offensive cyber-operations. 'All elements of US power are available to push back on these types of intrusions,' he said.

It can also be revealed that Labour MP s were warned of an attempt to hack parliamentary emails. It was not immediately clear whether the hack had been successful or whether it was linked to Russia. The emailed warning went out on Sunday night. The first UK-US 'technical alert' was released to the public, governments and private firms, including internet service providers and other communications companies.
The alert revealed that:
Tens of thousands of British devices have been scanned by Kremlin-backed hackers looking for soft targets.
Routers, including some made by Cisco, one of the largest internet infrastructure companies, have been penetrated by Russia.
Hackers are sitting invisibly in networks and routers, spying on private communications and positioning themselves if needed for a wider assault.
Spoofing 'man-in-the-middle' attacks are being conducted whereby a hacker is able to intercept messages passing between two people and delete or distort the content.

'Once you own the router you own all the traffic that flows through the router, to include the ability to harvest credentials, passwords, essentially monitor all traffic,' Mr Joyce said. 'It is a tremendous weapon in the hands of an adversary.'
Russia has been targeting Britain's networks and those of other countries for the past 20 years but this is the first time that the UK has publicised its actions so aggressively.

Mr Putin is also using disinformation and other forms of fake news as a weapon on social media and via state-sponsored media outlets to sow dissent among countries, including Britain, as part of a goal to undermine European unity and the NATO alliance.

Britain led a multinational move in February to blame President Putin's military for the crippling global Not-Petya cyberattack a year ago. 'Russia is our most capable hostile adversary in cyberspace,' Mr Martin said.

The ability to control networks and household devices that connect to the internet means Russia can launch denial-of-service attacks, potentially knocking out services such as healthcare, energy supplies and water supplies.
A British government spokesman said: 'The attribution of this malicious activity sends a clear message to Russia - we know what you are doing and you will not succeed.'"

Point to ponder:- "If liberty means anything at all it means the right to tell people what they do not want to hear." :- George Orwell, from "*The Freedom of the Press"*, 1944.

Thanks Peter

The Spectre's News articles

Miami Herald 02/03/2018

http://www.miamiherald.com/news/nation-world/world/americas/cuba/article203221919.html

Computer scientists may have solved the mystery behind the 'sonic attacks' in Cuba

A team of computer scientists from the University of Michigan may have solved the mystery behind strange sounds heard by American diplomats in Havana, who later suffered a variety of medical disorders.

Professor Kevin Fu and members of the Security and Privacy Research Group at the University of Michigan say they have an explanation for what could have happened in Havana: two sources of ultrasound — such as listening devices — placed too close together could generate interference and provoke the intense sounds described by the victims.

And this may not have been done intentionally to harm diplomats, the scientists concluded in their study, first reported by the Daily Beast.

Those who have followed the case closely say the new theory makes sense.

"This is a variation of what I have always thought," James Cason, a former top U.S. diplomat in Havana, told el Nuevo Herald. "It explains the sonic part, that no one was spotted planting new devices inside the homes and doing it from the outside would require something huge."

The health incidents — which took place between November 2016 and August 2017 at homes and two Havana hotels — were initially blamed on "sonic attacks." The cause has perplexed the Department of State, the FBI and other U.S. agencies that have been trying to figure out just what made 24 intelligence officers, diplomats and relatives based in Havana ill. Many reported a variety of symptoms such as hearing loss, headaches, cognitive problems and other ailments that doctors said correlate with concussions.

University of Miami Dr. Michael Hoffer, who led the initial team of physicians who examined the victims, did not immediately respond to a request for comment on the Michigan report. The State Department said: "We still do not have a cause or source of the attacks. The investigation is ongoing."

Most of the victims said they heard a shrill sound coming from a specific direction before experiencing the ailments.

Fu and his team used recordings of the sound obtained by The Associated Press and applied reverse-engineering to replicate what was heard by diplomats. By combining various ultrasound signals, they discovered that the resulting distortion produced an audible sound similar to what was heard in the original recording.

"When a second inaudible ultrasonic source interfered with the primary inaudible ultrasonic source, intermodulation distortion created audible byproducts that share spectral characteristics with audio from the AP news," the university report said.

The Cuban government, which has independently investigated the incidents, has said that it found nothing suspicious in the recordings provided by U.S. agencies and that the sounds are similar to those produced by crickets and cicadas.

At first, Fu and his team did not find anything notable in the recording.

"We wondered for a moment if someone might be playing a joke on us," they wrote in their report. But then they performed a procedure known as "AM demodulation," and the resulting signal "sounds like an F1 engine."

Fu's theory, focused on ultrasound waves, would help explain why the victims described that the sound came from a specific direction. That is what 21 victims told a University of Pennsylvania medical team, according to an article published in the Journal of American Medical Association (JAMA).

"Ultrasound is more directional than audible sound and infrasound. Ultrasound can be focused on a certain area," says the University of Michigan report.

So far, the United States has not found what caused the incidents that it has labeled "attacks on the health" of its diplomats. Cuba, for its part, has vehemently denied that it has attacked American personnel and has called the alleged attacks "science fiction." If Fu's theory is correct, Cuba's response may be based on the premise that malfunctioning spy technology is not a form of aggression.

Several Canadian diplomats and their families also experienced similar symptoms, which generated more questions about why Cuba would venture to attack officials from Canada, the No. 1 source of tourism on the island.

Cason, who was in charge of the former U.S. Interests Section in Havana between 2002 and 2005, said that U.S. diplomats have lived for years in the same houses provided by the Cuban government and are aware that there are listening devices in them.

The theory that the incidents were due to malfunctioning devices and not staged attacks could explain why they only occurred in the homes of some diplomats and at two hotels in Havana, while not at the embassy.

"That cannot happen at the embassy in Havana because Cuban personnel are forbidden to enter higher floors," where many diplomats have their offices, Cason said.

However, many questions remain unanswered: The most important is whether the ultrasound, the resulting sound distortion or both can cause the symptoms presented by the victims.

The doctors from the University of Pennsylvania could not explain the origin of the concussion symptoms, which several of the victims presented, although they ruled out other causes such as poisoning, a virus or collective hysteria.

More explanations on the cause are sure to surface.

"The JAMA report represents a collection of data from a partial sample of individuals seen at random times after an exposure, but not acutely. Our University of Miami team has provided a detailed description of how these individuals presented acutely," Lisa Worley, a spokesperson at UM's Miami Miller School of Medicine, said in a statement.

“This data is currently under peer review by a high-impact journal,” Worley said. “As the primary acute care providers in this case, we believe our work represents a high level of comprehensive detail that has not yet been reported. We look forward in the very near future to sharing our findings.”

In the JAMA article, doctors speculated that a new unknown source of “directional” character could cause brain damage. The authors also said there is no evidence that audible sounds could cause the symptoms. Although they did not speculate on what kind of technology may have caused the symptoms, they mentioned that microwaves can cause brain damage.

Many experts and American politicians have pointed to microwaves and to Russia as possible culprits for the attacks. This would imply that the Cuban government must have known whether foreign actors were involved. Other theories have suggested that a faction within the Cuban government could have acted on its own, which many observers believe is unlikely.

The Michigan report notes the lack of consensus and research on damage caused by ultrasound.

“The devices put in by the Cubans could have caused problems that no one knew could happen,” Cason said. “If this finally solves the mystery of sonic attacks, it is likely that Cubans will never admit it. They would have to recognize that they have eavesdropping devices everywhere, and that they will never say.”

Diplopundit 05/03/2018

https://diplopundit.net/2018/03/05/can-sound-be-used-as-a-weapon-4-questions-answered-usembassyhavana/

Can sound be used as a weapon? 4 questions answered #USEmbassyHavana

Government and academic investigators continue to probe reports from Cuba that, starting in 2016 and continuing through 2017, U.S. and Canadian diplomats and tourists may have been subjected to a “sonic weapon,” damaging their hearing, causing nausea, speech problems and potentially even mild brain injuries.

Electrical engineering and computer science professors Wenyuan Xu from Zhejiang University and Kevin Fu from the University of Michigan explain their research, which suggests a more likely scenario of sloppy engineering, and what ultrasound frequencies (which can be used to transmit information gathered by listening devices) traveling through the air can – and can’t – do.

1. What is ultrasound useful for?
The most commonly known use for ultrasound – high-frequency sound waves human ears can’t hear – is a medical device used for examining a fetus during pregnancy. But there are plenty of other uses. Many offices have occupancy sensors that use ultrasound to detect movement and keep the lights on when someone is in a space, and off when nobody is around. These sensors operate at frequencies such as 32 kilohertz, far above what the human ear can hear – which is a range from 20 hertz to 20 kilohertz. Other products use ultrasound to deliver targeted sound, for instance allowing a museum to play a recording for visitors in one area of an exhibit without disturbing others nearby. Electronic pest repellents use ultrasound to keep rodents or insects at bay. A similar product can even be used to disperse teenagers; aging tends to reduce people’s ability to hear higher frequency sounds, so a noisemaker can annoy young people without adults even noticing. (This has also let teens create smartphone ringtones their elders can’t hear.)

2. What can go wrong with ultrasound?
Airborne ultrasound is not inherently bad. But things can go wrong. A former colleague of Kevin’s used to hear strange sounds from his hearing aid when in rooms with occupancy sensors, likely because the hearing aid’s electronics improperly converted the ultrasound into audible noises. These noises were annoying, but not harmful. A similar problem tainted one of our students’ research, conducted in a room that, unbeknownst to him, had an ultrasonic room occupancy sensor in the ceiling.

Both ultrasound and human-audible sound can also affect electronics. For instance, one of us has conducted research in which carefully crafted ultrasonic signals secretly activate voice-control systems, even unlocking an iPhone with a silent “Hey Siri” command, and telling it to make a FaceTime call. Sound can also affect the physical world, as when a singer shatters a wine glass. Microelectrical mechanical sensing chips – such as accelerometers used in car airbag systems and smartphones, and gyroscopes in drones – are susceptible to the same interference. Those systems can be attacked with sound, crashing a drone mid-flight, or fooling a smartphone about whether it’s moving.

3. Should people worry about ultrasound causing bodily harm?
It’s well-known that sounds that are too loud can damage people’s ears and hearing. However, there’s little evidence of ultrasound causing bodily harm without prolonged, direct physical contact at high intensity. If you are accidentally subjected to extremely intense ultrasound (such as when holding an ultrasonic arc welder), you could experience an annoyance like a headache or temporary loss of balance. Academics disagree about safe levels of airborne ultrasound. The U.S. Occupational Safety and Health Administration warns of potential health risks from audible subharmonic byproducts of ultrasound, more so than the ultrasound itself. Many animals can hear higher frequencies than humans. Dogs can hear higher-pitched whistles, for instance. One of our students noticed that his pet turtles would begin to dance rhythmically when he performed ultrasound experiments!

4. What might have happened in Cuba?
In early 2017, U.S. diplomats in Cuba reported hearing strange metallic sounds, and suffering hearing loss and other neurological harm. Later reports of similar effects came from Canadian diplomats and tourists from both Canada and the U.S. Possible explanations have varied: Some have alleged Cuba used an unknown sonic weapon, while others have blamed “mass hysteria.”

Our research offers a new explanation not previously considered by others: The true cause could have been equipment trying to listen in on the diplomats’ and visitors’ conversations. We were able to use ultrasonic tones to create sounds like those that were described and recorded in Cuba. No single ultrasonic tone would do this, but as with musical combination tones, combining more than one can create audible byproduct sounds, including by accident.

Further, we created a proof-of-concept eavesdropping device that would record audible conversations and transmit the recordings to a nearby surveillance team over an inaudible ultrasonic link. When we placed a second inaudible ultrasonic device in the area, we were able to create interference – technically called “intermodulation distortion” – between the two signals that made similar sounds to those recorded in Cuba. We were even able to control the volume of the audible sounds by varying the strength of the ultrasonic signals. The ConversationWithout additional evidence, our research does not identify what actually happened in Cuba, but it provides a plausible explanation for what might have happened, even if the eavesdroppers were not trying to harm people.

Kevin Fu, Associate Professor of Electrical Engineering and Computer Science, University of Michigan and Wenyuan Xu, Professor of Electrical Engineering, Zhejiang University

The Drive 05/03/2018

http://www.thedrive.com/the-war-zone/19015/one-of-us-special-operations-commands-newest-spy-planes-is-hunting-terrorists-in-libya

One of US Special Operations Command's Newest Spy Planes Is Hunting Terrorists In Libya

A pair of de Havilland Dash-8-based aircraft appear to have taken over directly from two older, shadowy surveillance aircraft.

With two other mysterious spy planes now retired, U.S. Special Operations Command appears to have fully transitioned to using newer, modified de Havilland Canada Dash-8s for certain discreet persistent surveillance missions. At least one of these planes is already becoming a regular feature over Libya, where American special operators continue a secretive hunt for terrorists, including individuals with links to the infamous Benghazi attack.

According to the U.S. military's latest budget request for the 2019 fiscal year, which it released in February 2018, U.S. Special Operations Command (SOCOM) operates at least two of the twin engine Dash-8s as part of a fleet of aircraft known as SOCOM Tactical Airborne Multi-Sensor Platforms, or STAMP. That program also oversees at least three smaller twin engine Beachcraft King Air B300s.

We don't know the exact configuration of these Dash-8s. Federal Aviation Administration records only shows SOCOM as having registered one aircraft of this type, which carries the U.S. civil registration code N8200L, so the exact status of the other plane is unclear.

But we do know that N8200L's previous owner was Dynamic Aviation, a contractor that had operated the plane as a surveillance platform on contract to the U.S. Army. Dynamic flew a number of Dash-8s for the Army in two configurations, known by their program names Desert Owl and Saturn Arch.

Desert Owl's primary sensor was a PedRad 7 synthetic aperture radar capable of creating images across an area nearly two miles wide depending on the aircraft's altitude. It also had a sensor turret with electro-optical and infrared cameras.

The Saturn Arch aircraft carried a "Mission Sensor System," as well as another sensor called "Big Green." We don't know exactly what these pieces of equipment did, but at least one of them could have been a laser imaging system.

Those aircraft also carried a secondary camera turret, as well as another hyperspectral camera, which could create pictures based on an object's electromagnetic signature, and compact wide-area optical camera system.

It is possible that the Desert Owl planes had additional sensor suites, as well. All of the aircraft, which looked similar externally regardless of configuration, featured satellite data links to transmit information back to ground exploitation stations or share it with troops on the ground in near real time.

With this equipment on board, both types of planes had the mission of performing persistent surveillance missions across relatively wide areas, using their sensors to build larger maps of entire regions. From there, analysts could examine the imagery for items of interest, potentially establishing so-called "patterns of life" for specific terrorists or small groups of militants.

The Army primarily employed them to hunt for improvised explosive devices and, by extension, to trace insurgent movements back to bomb workshops or other base camps. That same wide-area surveillance information can help U.S. forces determine when the best most might be to try and kill or capture a particular individual with as little risk to nearby innocent civilians as possible.

It seems very likely that SOCOM's Dash-8s have a similar combination of wide-area sensors given that the U.S. military routinely tasks special operations forces with tracking small groups of terrorists across vast areas where the enemy might be able to use the terrain or local populations to otherwise hide their movements. The aircraft may also have additional signals intelligence equipment to detect and monitor enemy communications, especially cell phone signals, in order to help refine their search areas.

The Pentagon's 2019 fiscal year budget request includes $5 million for SOCOM's STAMP aircraft, but all for upgrades to the smaller B300s, including the addition of a piece of equipment nicknamed "Tincup." It is entirely possible the Dash-8s may also carry that system, whatever it is.

We already know that from details regarding the Army's future Dash-8-based RO-6A spy planes that the platform is big enough to carry a robust combination of cameras, radars, and signal grabbing systems, which you can read about in more detail here. That service bought a number of the other Desert Owl and Saturn Arch aircraft from Dynamic in order to turn them into the RO-6As.

These aircraft will eventually replace all of the Army's older EO-5C intelligence gathering aircraft, which use the de Havilland Canada DHC-7 airframe. The Canadian planemaker, now part of Bombardier, stopped making the aircraft in 1988 and built less than 120 of them to begin with, meaning they've been steadily more expensive to operate and difficult to support.

Bombardier continues to make versions of the Dash-8 family, meaning there is more ready source of common spare parts and support services. And though it only has two engines, each one of the Pratt & Whitney Canada PW100 turboprops on the newer aircraft is twice as powerful as that company's older PT6s found on the DHC-7, giving them better range and endurance.

It seems that SOCOM came to a similar conclusion and when it decided to send two DHC-7s of its own to the Bone Yard at Davis-Monthan Air Force Base in Arizona in August and September 2017. Pictures of those aircraft also suggested they carried a diverse combination of sensors.

The FAA's online database says SOCOM formally took ownership of N8200L in September 2017. As of February 2017, however, plane spotters and online flight trackers had begun picking up that aircraft, now wearing a more discreet civilian-style paint scheme, flying missions over eastern Libya from Souda Bay on the Greek island of Crete in the Mediterranean. The island is home to a U.S. Navy base, which serves as a common base of operations for American forces in the region.

This isn't particularly surprising. Before then, SOCOM's two shadowy DHC-7s – often mistaken for Army EO-5Cs – had made regular flights in the same areas of Libya.

We don't know who the planes may be looking for, but it's very possible they are a continuing the search for individuals who participated in the attack on the U.S. consulate in Benghazi on the night of Sept. 11-12, 2012. Militants killed U.S. Ambassador to Libya Christopher Stevens, as well as three CIA contractors – Glen Doherty, Sean Smith, and Tyrone Woods – setting off a manhunt, dubbed at least in part Operation Jukebox Lotus, that continues to this day.

In June 2014, U.S. special operators captured Abu Khattala, who the U.S. government accuses of being instrumental in planning the attack, in Benghazi. In October 2017, another raid into Libya bagged Mustafa Al Imam, in connection with the incident. Persistent aerial surveillance would have been essential in planning both of those missions.

It is also possible that N8200L could be supporting continued American operations focused on preventing ISIS-linked militants from establishing a firm foothold in Libya. In 2016, the United States launched a brief aerial campaign to help Libyan government forces retake the eastern city of Sirte, with special operators on the ground reportedly helping coordinate those air strikes and monitor enemy movements.

Since then, the U.S. military has continued to launch sporadic targeted strikes against ISIS-affiliated terrorists in Libya. Between September and November 2017, U.S. Africa Command publicly announced 10 separate strikes in the country, which could have been the product of intelligence from special operations elements in the air or on the ground.

Whatever the case, it seems safe to assume that we'll be seeing more of N8200L, as well as the other STAMP aircraft, flying discreetly over Libya, or perhaps other hotspots, in the near future.

The New York Times 05/03/2018

https://www.nytimes.com/2018/03/05/opinion/china-espionage.html

America's Other Espionage Challenge: China

With all the focus on Russian meddling in the 2016 election, the damage done by China's vigorous and continuing espionage against the United States has taken a back seat.

The preoccupation with Russia, in fact, has obscured the significant inroads made by Chinese intelligence and cyberspies. In some cases, China has proved more skillful than Russia in infiltrating American intelligence.

A case involving a former C.I.A. officer named Jerry Chun Shing Lee is a perfect example. Beginning in 2010, C.I.A. sources in China began disappearing; a dozen were reported executed and several more imprisoned. What had seemed a major success in establishing a network of C.I.A. spies inside China had been turned into a devastating intelligence failure. The C.I.A. and F.B.I., suspecting a mole, went on a secret hunt.

Mr. Lee, who had been stationed in Beijing, emerged as a prime suspect. When he stepped off a flight in New York on Jan. 15, he was arrested by the F.B.I. and charged with unlawfully retaining documents related to the national defense. But there is still no certainty that he was responsible for the loss of the agents.

The Chinese government approaches its spycraft differently from either Russia or the United States. It is often much more patient. The Chinese may take years to develop a source and plant one inside American intelligence organizations. But they have managed to do just that inside the F.B.I., the C.I.A., the Pentagon and the State Department.

Some analysts attribute Beijing's successes to an American lack of understanding of China's approach. Paul Moore, a former China analyst for the F.B.I., explains the difference this way:

"If a beach were a target, the Russians would send in a sub, frogmen would steal ashore in the dark of night and collect several buckets of sand and take them back to Moscow. The U.S. would send over satellites and produce reams of data. The Chinese would send in a thousand tourists, each assigned to collect a single grain of sand. When they returned, they would be asked to shake out their towels. And they would end up knowing more about the sand than anyone else."

In other words, the Chinese have infinite patience. A real-life example is China's attempt to plant a man named Glenn Shriver as a mole in the C.I.A. Mr. Shriver grew up in a Michigan suburb, learned Mandarin in college and, while a student in Shanghai in 2004, answered an ad inviting an essay on United States-China relations. A woman who called herself Amanda paid him a small fee and later introduced him to a "Mr. Wu" and "Mr. Tang." All three were agents of China's Ministry of State Security.

They asked him to apply for a State Department job. He flunked the Foreign Service examination twice but was paid $30,000 for trying. He was then paid $40,000 more to apply to the C.I.A.'s clandestine service. By then, the Americans were on to him. Lured back to America in 2010 for what he thought was a final screening, he was arrested, convicted and sentenced to four years in prison after accepting a plea deal.

China's most startling and disturbing coup in penetrating American intelligence agencies occurred after the F.B.I. recruited Katrina Leung, a prominent Chinese-American in Los Angeles, because she was known to have extensive contacts in the Chinese government. But later, it turned out, she had affairs with two top F.B.I. counterintelligence agents in California, James J. Smith and William Cleveland Jr., and became a double agent for some 18 years, starting in 1984.

Ms. Leung was accused of feeding F.B.I. secrets to the highest level of the Ministry of State Security after filching them from Mr. Smith's briefcase. She was in jail or under house arrest for 21 months before accepting a plea deal that punished her with probation, community service and a fine.

China also somehow acquired the design of the W-88, a thermonuclear warhead that sits atop Trident submarine missiles. Despite a four-year investigation, led by the F.B.I., that used 300 people in 11 agencies, the mystery of how China got the plans was never solved.

In the case of Mr. Lee, he was long suspected of helping China destroy the C.I.A.'s network there. But for reasons still unexplained, he was not arrested when two small books were discovered in his hotel room and luggage as he traveled back with his family in 2012 to settle in Northern Virginia. According to court documents, the books had handwritten notes of meetings with C.I.A. sources in China, their true names and their phone numbers.

Whatever the outcome of his case, why did it take five years to arrest him? When the potentially incriminating material was discovered in 2012, the mole hunters were divided on whether to act. Counterintelligence agents prefer to catch a suspected spy in the act of passing secrets to a foreign power. They also often prefer to wait to see whether one suspect leads to others. And in this case some were leery of arresting the wrong man.

In addition, the investigators argued that there might have been causes for the damage other than a mole, like poor tradecraft by C.I.A. officers in China or a communications breach.

There is a history of intelligence agencies being penetrated by dangerous moles — notably Aldrich Ames in the C.I.A., whose betrayal led the Russians to execute 10 sources, and Robert Hanssen in the F.B.I., who spied for the Soviet Union and later Russia for 18 years and contributed to the deaths of three United States sources. Both are serving life terms.

Within the F.B.I., Chinese counterintelligence has not been the best career path. For decades, the bureau's spy-catching resources were almost entirely concentrated on Russia. Now, meddling by Russian intelligence in the 2016 election reveals a clear threat to American democracy that overshadows Chinese spying and much else.

Still, China today is arguably a greater rival for superpower status than Russia. The C.I.A.'s shattered network in China will take years to rebuild. And despite the arrest of Mr. Lee, the counterspies have so far not explained what happened.

Spaceflight Now 18/03/2018

https://spaceflightnow.com/2018/03/18/fourth-satellite-in-new-chinese-reconnaissance-fleet-successfully-launched/

Fourth satellite in new Chinese spy fleet successfully launched

A Long March 2D rocket launched with the LKW-4 reconnaissance satellite Saturday. Credit: Xinhua
China launched the fourth in a series of high-resolution Earth-imaging satellites Saturday, expanding an orbiting fleet of reconnaissance craft that likely serve the Chinese military.

The LKW-4 satellite lifted off at 0710 GMT (3:10 a.m. EDT) Saturday on top of a Long March 2D rocket from the Jiuquan launch base, a military-operated facility in the Gobi Desert situated in northwestern China's Inner Mongolia region.

China's state-run Xinhua news agency reported the "land exploration satellite" was successfully delivered to its planned orbit by the two-stage Long March 2D booster.

"The satellite is the fourth of its kind and mainly used for exploration of land resources by remote sensing," Xinhua reported.

Chinese media did not provide details of the satellite's design or capabilities, or which Chinese organizations will use the imagery collected by the spacecraft's optical camera.

Tracking data collected and published by the U.S. military indicated the LKW-4 satellite was deployed into an orbit nearly 310 miles (500 kilometers) above Earth. The satellite's orbital track is inclined 97.3 degrees to the equator.

Three previous satellites, designated LKW-1, 2 and 3, were launched into the same type orbit from Jiuquan aboard three Long March 2D rockets in December and January.

The satellites are presumably part of a new Chinese military reconnaissance fleet, carrying high-resolution imaging instruments.

Saturday's mission was China's eighth space launch of the year, and the 25th orbital launch worldwide so far in 2018.

The Times Of Israel 31/03/2018

https://www.timesofisrael.com/hezbollah-tv-says-israeli-spy-drone-crashed-in-lebanon/

Israeli drone crashes in Lebanon due to malfunction

Army says no sensitive info lost in incident; according to Al-Manar, spy plane was destroyed by second aircraft after going down in country's south

An Israeli drone on Saturday crashed in Lebanese territory due to a technical malfunction, the Israeli army said.

The IDF said the incident was being investigated, and added that no sensitive information had been lost due to the crash.

Hezbollah's Al-Manar television had reported on the crash earlier. It said the unmanned aircraft went down between the villages of Beit Yahoun and Baraachit in southern Lebanon.

A second Israeli aircraft then fired at the downed drone and destroyed it, according to the Lebanese report.

On Sunday, Arabic media outlets reported that Israeli jets struck a number of Hezbollah positions along the Lebanon-Syria border, in reports that were not confirmed by either Hezbollah or the IAF.

The reports said the attacks were said to have occurred near the eastern Lebanese town of Baalbek, near the Syrian border.

The Iran-backed Hezbollah terrorist group denied the airstrikes took place. A spokesperson for the Israeli military said she was aware of the reports in Arabic media, but could not comment further.

Lebanese media outlet al-Jadeed news reported the loud sounds heard by residents of the area were not explosions, but Israeli planes breaking the sound barrier, causing sonic booms.

In statements to Hezbollah-affiliated media, the terrorist group said neither it nor the Syrian army were bombed by Israel "in Baalbek or in Syria."

In general, the Israeli army does not discuss its airstrikes in foreign countries.

However, Israel has said repeatedly that it will thwart attempts by the Iran-backed Hezbollah terrorist group to acquire advanced weaponry.

War Is Boring

https://warisboring.com/a-short-history-of-north-koreas-long-mini-submarine-spy-campaign/

A Short History of North Korea's Long Mini-Submarine Spy Campaign

In 1998, South Korean president Kim Dae-jung came to power with a "Sunshine Policy" attempting to reconcile with North Korea. That policy included providing badly needed economic aid to relieve North Korea as it recovered from a devastating famine.

However, on the eve of a key peace conference in Panmunjom, a North Korean submarine on a spying mission got entangled in fishing nets and its crew committed suicide when South Korean ships began towing it back to port. Surely, given the overture and assistance provided by President Kim, the regime in Pyongyang would tamp down on its armed infiltration missions on South Korean soil?

But the North Korean government has always operated by its own unique internal logic, and just six months later, its political insecurities would lead to the deaths of several men in a flash of cannon fire off the southern coast of Korea?—?exposing another curious tale of espionage and subversion.

North Korea had lost two submarines in September 1996 and June 1998 while attempting to insert or exfiltrate Special Forces agents on espionage missions in South Korea, both incidents ending in tragedy.

If there had been any hope that the embarrassment provoked these incidents would bring an end to the submarine missions, it should have been tempered by the discovery on July 13 of the body of a North Korean diver washed up on the beach at Donghae, South Korea. Apparently having suffered a heart attack, the diver was packing a Czech submachine gun, an underwater camera and a radio transmitter. An aluminum submersible vehicle was found nearby.

Then in November, South Korean patrol boats spotted a mini-submarine off the coast of Ganghwa Island, on the northwestern border between North and South Korea. The submarine withdrew when South Korean ships attempted to intercept it.

But whereas these earlier incidents occurred relatively close to the demilitarized zone separating the two Koreas, 1998 would end with an exchange of fire off the Yeosu peninsula, at the southern end of South Korea. At 11:15 p.m. on the evening of Dec. 16, a guard post spotted with infrared cameras a low-riding vessel with an "antenna" gliding through the water.

Five minutes later, two ROK Navy patrol boats were dispatched to the area while harbor traffic was brought to a standstill. But the patrol boats could not locate the stealthy vessel.

Abruptly, at 1:40 a.m., radar detected a ship zooming at around 50 miles per hour only five miles away from shore. As many as a dozen South Korean vessels moved in pursuit of the contact, soon joined by three navy P-3 Orion maritime patrol planes.

Finally, at 4:38 a.m., the Pohang-class anti-submarine corvette Gwangmyeong identified the vessel as a North Korean I-SILC semi-submersible.

The 10-ton Improved Submersible Infiltration Landing Craft looks like it belongs in a James Bond movie. Basically a nearly 13-meter-long low-riding motorboat coated in anti-radar paint, it can submerging three meters deep while under power, exposing just the crew cab and a folding snorkel mast (likely the "antenna" observed by the guard post).

Unlike an earlier predecessor captured in the 1980s, however, the I-SILC can fully submerge 20 to 25 meters deep to avoid detection, but lacks an electric motor to swim underwater. Though later types can fire lightweight 324-millimeter torpedoes, the boat intercepted off Yeosu had no other weaponry other than the small arms carried by the crew.

One of the orbiting P-3 patrol planes dropped flares in the vicinity of the boat, allowing four pursuing South Korean corvettes to close in upon it. As the spy craft fled south, approaching Japanese waters, the South Korean Navy notified the Japanese Self-Defense Force, which mobilized its own patrol vessels to observe the chase.

An hour later, the boat slowed down when it was roughly 60 miles south of Geoje Island. Perhaps it was running out of fuel, as it is estimated to have a range of 230 miles, implying it required pickup by a mother craft.

One of the South Korean corvettes fired warning shots off the semi-submersible's bow. The infiltrators on board opened fire with a machinegun at their pursuers. One of the 1,300-ton corvettes then raked the motor boat with its 40-millimeter antiaircraft guns and blasted a chunk out of its port side with a 76-millimeter rapid-fire cannon, causing the ruptured submersible to sink in waters 300 feet deep. You can see the damage inflicted on the small craft in this photo.

The body of a single diver in a wetsuit was recovered at sea. South Korea issued a red alert order and searched for possible infiltrators deposited on its soil, as had occurred in the Gangneung incident. The Defense Minister demanded Pyongyang apologize, but North Korea denied any involvement.

The typically caustic North Korean Central News Agency said, "Now the South Korean are trying hard to find a pretext for unleashing a war against the north in line with the U.S. imperialists' moves for war against the DPRK. It goes without saying that the 'north's submarine infiltration incident' is a farce cooked up for that purpose … We will take resolute measures so that the provokers may drink a bitter cup. We seriously warn the South Koreans not to act rashly."

Observers on the South Korean side could only speculate why North Korea continued to send armed infiltrators on obviously risky missions into South Korean soil, despite the Sunshine Policy. Some speculated that factions in North Korea were looking for ways to make the policy fail. Another theory was that North Korea favored submarine insertion over safer methods of infiltration because it helped its military refine infiltrations tactics it planned on using in the event of a full-scale war.

The wreck of the semi-submersible craft was finally located on Jan. 20, 1999, and salvaged in mid-March.

The bodies of two more crew members were found inside, one of whom bore a South Korean identity card and passport naming identifying him as Won Jin-wu. He also had computer diskettes, a million Japanese yen, ampoules of poison, rolls of film and a bag of cookies from a bakery in the Bongcheon district of Seoul, along with a rental contract for an apartment in that area.

They also found a journal that listed the names and phone numbers of 12 South Koreans in touch with North Korean intelligence.

According to Han Ki Hong of Daily NK, Won Jin-wu was an experienced spy with a record of posing as a Southeast Asian businessman. He had been dispatched to make contact with a group of South Korean supporters of the government in Pyongyang known as the National Democratic Revolutionary Party, after the group's former leader, Kim Young-hwan, had publicly turned against North Korea.

Won Jin-wu had appointed South Korean Ha Young-ok to assume Kim's responsibilities, and trained him on how to stay in contact with his handlers.

The submarine detected in November, it turned out, had actually been attempting to bring Ha to North Korea for training before it was chased away. Instead, Ha and his colleague Sim Jae-chun helped reconnoiter a pickup spot off of Yeosu and delivered Kim Jon Wu for exfiltration the next month.

What had been the main objective of Kim's mission in South Korea? Reportedly, to ask Ha to persuade their former leader Kim Young-hwan back into the fold with Pyongyang, thus reinforcing the image of a Kim Jong-il who had only recently fully established his control of the North Korean state.

Yet again, North Korean spies had chosen to go down guns blazing rather than surrender. The incident of Yeosu also indicated how deeply naval infiltration and covert operations were integral to North Korean military and political doctrine.

As usual, the loss of life at Yeosu did not seem to inhibit future aggressive actions.

Indeed, six months after the "Battle" of Yeosu, a more sizable battle would be fought between South and North Korean patrol boats off Yeonpyeong Island that would leave more than a dozen dead, followed by an even costlier second battle in the same area three years later.

Task & Purpose 10/04/2018

https://taskandpurpose.com/spy-planes-dangerous-missions/

5 Of The Most Dangerous Spy Plane Missions In US Military History

Since the United States entered World War II, the Department of Defense has engaged in the systematic surveillance of other nations by air to glean valuable intelligence on weapons capabilities and military movements. These missions are quite dangerous and often ended in disaster, but the risks endured by these aircrews aboard the Pentagon's beloved spy planes are often overlooked due to the sensitive nature of their assignments.

Here are five instances from the past that illustrate why these pilots were not flying the friendly skies.

1. A tense shoot-down over the Baltic Sea

As the Iron Curtain descended across Europe, the United States was desperately trying to gather intelligence on Soviet activities across the continent. On April 8th, 1950, a PB4Y-2 Privateer — a modified B-24 Liberator fitted with electronic gear for signals intelligence — left West Germany for the Baltic Sea to gather intel on Soviet naval forces and possibly to monitor early naval missile tests.

The aircraft was intercepted by four Soviet La-11 "Fang" fighters over the Baltic Sea off of the coast of Latvia. According to documentary filmmaker Dirk Pohlmann, the entire sequence of events was pre-planned by the Soviets to attempt to capture the aircraft and crew, or at least shoot the aircraft down if it could not be captured. The aircraft was shot down over the Baltic; none of the ten crewmembers were recovered.

2. A SIGINT mission goes off-course in Armenia

In September 1958, a modified C-130A was shot down over Armenia during signals gathering mission in support of the Armed Forces Security Agency, the predecessor to the modern-day National Security Agency. The C-130 had taken off from Turkey, and the flight plan kept the aircraft on the Turkish side of the border with Armenia; however the C-130 strayed across the border and was promptly intercepted by several Soviet MiG-17 Frescos.

Like most Cold War shootdowns over (or near) Soviet-controlled territory, there exists a vacuum of information on what exactly happened. The Soviets initially claimed that the plane had crashed in Armenia, but later records revealed gun camera footage of a MiG-17 shooting down the C-130, as well as an unearthed 1958 Soviet report detailing the shootdown and recovery operations. None of the 17 crew on board survived.

3. The cold arctic becomes a firestorm in Murmansk

One of the lesser-known Cold War incidents involved an Air Force RB-47 shootdown on a reconnaissance mission off of the northern coast of Russia. Shortly after reaching the Murmansk area, Soviet fighters were scrambled to intercept the aircraft with fatal results: Four of the six crewmen died, and the two surviving crewmen that survived were fished out of the frigid ocean and interrogated in Moscow before their eventual release in January 1961.

The Soviets maintained that the aircraft violated its airspace; however, Oleg Penkovskiy, a spy for the United States, claimed other otherwise., "The U.S. aircraft RB-47 shot down on Khrushchev's order was not flying over Soviet Territory; it was flying over neutral waters." When the facts of the shootdown were reported to Khrushchev, he said: "Well done boys, keep them from even flying close."

Despite the tragic incident, U.S. SIGNIT missions kept flying closer and closer, flying hundreds of near border surveillance flights over the course of the cold war.

4. The final flight of DeepSea 129

After the Korean War, the North Korean government continued to harass and attack ROK and U.S. forces across the peninsula, including the infamous U.S.S. Pueblo incident, where the U.S.S. Pueblo was captured by North Korean forces while operating in international waters.

But overshadowed by the Pueblo affair is is the shootdown of an EC-121 Warning Star (callsign DeepSea 129) over the Sea of Japan on April 15th, 1969. While performing their SIGINT mission off the coast of North Korea, two North Korea MiG-21 Fishbeds were scrambled on a heading towards the EC-121.

U.S. forces tracked the MiG-21's, however even with warning, there was nothing that could have been feasibly done to help the doomed Warning Star. Two Delta Dart interceptors were scrambled, but it was too late, as the EC-121 was destroyed by the North Korean MiGs.

5. A collision course with China; Hainan Island

One of the most well-known spy plane encounters happened in the perpetually-contentious South China Sea. A Chinese pilot in a J-8 Finback fighter aircraft, previously known by the U.S. Navy due to his overly aggressive flying style, lost control over his aircraft while intercepting an EP-3 Orion on a SIGINT mission near Hainan Island. The J-8 pilot was killed, and the crippled EP-3 was forced to land on Chinese territory.

After attempting to destroy as much of their equipment as possible, the crew surrendered to Chinese authorities and became pawns in a political chess match over the incident. After ten days of political wrangling between the Chinese and U.S. governments, the crew was released unharmed.

CNN News 12/04/2018

https://edition.cnn.com/2018/04/12/europe/china-sweden-tibet-spying-intl/index.html

Man charged in Sweden for spying on Tibetans on behalf of China

Sweden has charged a 49-year-old Tibetan man with spying on fellow exiles on behalf of Beijing.

The man -- who has not been named -- is suspected of gathering information about exiles' family relationships, addresses, political affiliations and meetings with the intent to "pass this information to representatives of the Chinese state," authorities said Wednesday, according to CNN affiliate Expressen.

Prosecutor Mats Ljungqvist said the man's alleged spying occurred between July 2015 and February 2017, and the information was transmitted to Chinese officials in Poland and Finland.

Ljungqvist said the man was himself of Tibetan descent and had been spying "for a long time, and may have caused or may cause a large number of persons serious harm."

China's Ministry of Foreign Affairs said in a statement Thursday it was "not aware of the situation." Swedish authorities did not immediately respond to a request for comment.

Jamyang Choedon, president of the Tibetan Community in Sweden organization, told CNN many in the community were left feeling "very, very scared" by the news.

"We were all shocked," she said. "There are only about 140 Tibetans in Sweden. That the (Chinese government) is sending a spy for just 140 people is almost comical."

But many exiles still have family in Tibet, she added, and they could be at risk if they were deemed to be engaged in activities critical of Beijing.

But many exiles still have family in Tibet, she added, and they could be at risk if they were deemed to be engaged in activities critical of Beijing.

Swedish citizen Gui Minhai was abducted by Chinese police while traveling with Swedish diplomats in China.

Swedish citizen still in custody

Alleged spying by China on Swedish residents could further damage relations between Stockholm and Beijing, which were already damaged by the continued detention of Swedish citizen Gui Minhai.

Gui, one of several Hong Kong-based booksellers detained by China since 2014, was seized by plainclothes police on a train in January in front of Swedish diplomats.

"The brutal intervention in January against a Swedish support operation was conducted in spite of repeated assurances from the Chinese authorities that Mr. Gui was free at that time," Swedish Foreign Minister Margot Wallstrom said in February after Beijing confirmed it had detained Gui.

"The current situation also raises questions about the application of the rule of law, including the prohibition of arbitrary deprivation of liberty. We demand that our citizen be given the opportunity to meet Swedish diplomatic and medical staff, and that he be released so that he can be reunited with his daughter and family."

Gui, 53, who wrote and published numerous titles critical of the Communist leadership, was traveling to Beijing to be examined by a Swedish doctor at the embassy when he was taken, his daughter Angela told Radio Sweden last month.

Cyber espionage

Swedish media reported on the arrest of a man last year for similar spying activities.

Tibetan exiles in Sweden have long complained of surveillance and harassment from China, which regards the community with suspicion, accusing them of supporting separatists within Tibet.

The Tibetan community in India -- where the majority of exiles live -- has been targeted for over a decade by cyber espionage operations most analysts link to China.

In January, the Toronto-based Citizen Lab uncovered a hacking operation that "ran for 19 months, and which targeted the Tibetan community, and potentially other groups including ethnic minorities, social movements related to China, a media group, and government agencies in South and Southeast Asia."

Choedon said she was aware of the hacking risk, but said it was just one element in a broader intimidation campaign against Tibetans abroad.
"Even though they are living in a free country, still they cannot really enjoy their full free democratic rights," she said.

South China Morning Post 16/04/2018

http://www.scmp.com/news/china/policies-politics/article/2141910/china-launches-website-report-foreign-spies-corrupt

China launches website to report foreign spies, corrupt officials

Informants offered rewards for discovering espionage equipment, providing tip-offs on anyone suspected of trading state secrets

China has stepped up its campaign against foreign espionage with a website in Mandarin and English encouraging people to report national security threats such as bids to “overthrow the socialist system”.

The website, 12339.gov.cn, launched by the Ministry of National Security on Sunday, also urges anyone to report attempts by Chinese nationals or foreigners to bribe state or military officials, instigate armed riots or incite ethnic separatism.

Potential problematic behaviour includes foreigners meeting “any person within China who has conducted activities endangering state security or is strongly suspected of doing so” – raising concerns that any interaction with dissidents would be frowned upon.

Informants will be rewarded for discovering espionage equipment or for tip-offs on anyone suspected of buying or selling state secrets, according to the website, which allows users to lodge complaints in both Chinese and English.

The website did not offer details on the rewards. The Beijing City National Security Bureau was offering 10,000 to 500,000 yuan (US$1,600 to US$79,700) for information on spies, the official Beijing Daily reported last April.

The ministry also released a cartoon, titled “a friend with a mask”, to illustrate possible questionable behaviour, as part of its campaign to mark China’s National Security Education Day, which fell on Sunday.

The cartoon tells the story of a foreigner from an international non-governmental organisation, who is promoting “Western-style” workers’ rights in China.

The foreigner allegedly “bribes” a Chinese representative to organise seminars and mobilise workers to stand up for their rights. According to the cartoon, such public protests are illegal and a vigilant worker reports the foreigner behind “the unrest”.

In 2016, another series of cartoons published by the ministry warned Chinese nationals against entering into romantic relationships with foreigners, since this could be a possible means of eliciting state secrets.

The Drive 19/04/2018

http://www.thedrive.com/the-war-zone/20250/one-of-saudi-arabias-re-3a-spy-planes-now-looks-just-like-a-u-s-air-force-rc-135

One of Saudi Arabia's RE-3A Spy Planes Now Looks Just Like a U.S. Air Force RC-135

The unique signals intelligence aircraft now has an elongated nose and other features that appear almost identical to the American Rivet Joint.

During a ceremony to mark the end of its multi-national Joint Gulf Shield training exercise, Saudi Arabia has revealed that one of its airliner-sized RE-3A spy planes has received some extensive modifications. The aircraft now features a distinctive "hog nose," similar to the U.S. Air Force's RC-135V/W Rivet Joint, as well as other notable visual changes.

This particular RE-3A, also known as a Tactical Airborne Surveillance System (TASS), with the serial number 1901, is one of three RE-3 aircraft the Royal Saudi Air Force operates. This fleet reportedly consists of two RE-3A TASS types and a single RE-3B Improved Tactical Airborne Surveillance System (ITASS) aircraft, the latter of which carries the serial 1902.

All of these aircraft started life as KE-3As, an aerial refueling tanker that Boeing derived from the E-3A Sentry Airborne Warning and Control System, or AWACS. Saudi Arabia acquired a number of E-3A and KE-3A aircraft in the 1980s with help from the U.S. Air Force as part of the Peace Sentinel program.

The U.S. Air Force's 645th Aeronautical Systems Group, a special projects office better known by the nickname Big Safari, helped manage the subsequent RE-3A and RE-3B conversions. According to U.S. Air Force records, there may be or have been a less intensive KE-3B TASS conversion that that retained some of the KE-3A's aerial refueling capability. Saudi E-3 and KE-3 types were also present during the aerial review following the end of Joint Gulf Shield earlier in April 2018, which also included representatives from 24 other countries.

E Systems, which defense contractor Raytheon purchased in the 1990s, performed the initial RE-3 conversions. Based on a 2009 announcement from the Defense Security Cooperation (DSCA), the main Pentagon office charged with facilitating foreign military assistance, it appeared that L-3 had taken over responsibility for the program. Big Safari was still managing the program on Saudi Arabia's behalf as of 2014, according to separate documents we at The War Zone obtained via the Freedom of Information Act.

The newest iteration of 1901, with its elongated nose and "chipmunk cheeks" on either side of the forward fuselage, appears almost identical to the latest RC-135V/Ws. On the Rivet Joint, at least in the past, these fairings on the side contain the powerful Automatic Electronic Emitter Locating System (AEELS), which the crew can use to geolocate signal emitters. The additional vents seen on the most recent versions, as well as the new Saudi RE-3A, could indicate they have an updated version of this equipment.

Thanks Spectre 3000!

Quick one from 'E'

Highgate Russian Trade Centre

Highgate Russian Trade Centre as taken by member the late JoA

The Highgate Russian Trade Centre was also targeted in a bugging drive when its windows were changed. It also suffered the expulsion of 105 diplomats some years back [1971] in 'Operation Foot.'

When John Harris [JoA] took this, along with two other images showing cctv at the entrance he was chased off by 'officials' at the gate. Whilst the original image is now lost [PLdn's poor filing system] JoA and myself thought the antenna had coaxial cable disappearing into it.

Read on …….

Highgate spy war spills onto Heath
Monday 9 April 2018 11:51

https://www.standard.co.uk/news/londoners-diary/highgate-spy-war-spills-onto-heath-a3809246.html

So WHAT exactly is behind the presence of the police helicopter that has been hovering every day, at the same time for the past few weeks, over Highgate Hill? The area, largely Georgian villas and tea shops, is not exactly one of London's crime hotspots. It is, however, where the Russian Trade Mission to the UK, headed by Boris Abramov, is located — the same Trade Mission that a government source described before Easter as a "den of spies".

A high-ranking source confirms that the Government is indeed loudly letting the Russians know we've got our eyes on them. It is the latest move in the new Cold War sparked by the attempted murder of Russian double agent Sergei Skripal in Salisbury.

Edward Lucas, journalist and author of Spycraft Rebooted: How Technology is Changing Espionage, says: "That's been a long-standing irritant. Give how little Russia exports to Britain it's clearly not just a trade mission.

"It's a puzzle to me what you can do with a helicopter that you can't do with other means. In the modern day you can do most things from the next-door building. I wonder if it's a way of saying 'Hello we're here', like sitting outside in a car with the engine running."

Russian and British governments have been busy chucking out each others' diplomats in past weeks: 23 Russians were waved off from Stansted airport on March 20. In turn, the Russians sent home 23 British diplomats — and then threw out an extra 27 for good measure.

The tit-for-tat has not stopped there. Over the weekend Russia issued a warning for its citizens travelling to the UK: "Given the Russophobia in British society artificially imposed by the authorities it is necessary to avoid conflict situations with the local population."

But as tension escalates, won't someone spare a thought for the residents of Highgate caught up in the geopolitical jockeying?

One Highgate resident says: "It may have been intended to annoy the Russians but the dog-walkers on Hampstead Heath were the really irate ones.

Monday 9 April 2018 11:51

https://www.standard.co.uk/news/londoners-diary/highgate-spy-war-spills-onto-heath-a3809246.html

The trade delegation in Highgate is one of Russia's four government bases in the UK Credit: rustrade.org.uk

Britain threatens to close Russia's 'den of spies' trade mission in north London
By Christopher Hope Martin Evans Steve Bird

https://www.telegraph.co.uk/politics/2018/03/30/exclusive-britain-threatens-close-russias-den-spies-trade-mission1/

30 March 2018 • 9:30pm

Britain has threatened to shut down the Russian trade mission in north London, describing it as a “den of spies” as diplomatic tensions between the two countries reached a new height.

London escalated the row between the two countries after Moscow said more British embassy staff would have to be expelled from Russia as the fallout from the Salisbury poisoning intensified.

That came after Russian officials accused Britain of "provocation" following an enhanced search by a "rummage team" of UK border officials of an Aeroflot flight from Moscow.

The Russian government has four bases in the UK: its embassy, a consulate and a trade mission in London and a sprawling country estate in the Home Counties.

British government sources on Friday night told The Telegraph that the UK was looking at shutting down the trade mission in Highgate, north London.

The mission is a base for many Russian officials. One source said losing the trade mission “is something we will look at”, adding: “The Highgate one is a den of spies.”

Shutting the trade mission in Highgate would be seen as evidence of Prime Minister's Theresa May’s pledge to consider more measures after Russian closed down the British Council earlier this month in the wake of the tit for tat diplomatic expulsions.

The UK has blamed Russia for the nerve agent attack on Sergei Skripal and his daughter Yulia in Salisbury, a claim Vladimir Putin has vehemently denies.

Britain expelled 23 Russian diplomats, prompting 29 countries, including the US, to expel 145 Russian diplomats, a move Theresa May described as a concerted effort to dismantle their western spy network.

In response, the Kremlin announced it would expel 150 western diplomats, including 23 from the British embassy, and close the US consulate in St Petersburg.

The foreign ministry in Moscow on Friday gave Britain one month to reduce its entire diplomatic staff to match that of Russia’s team in the UK.

The latest development could see scores of employees in the British embassy in Moscow, and consulates in St Petersburg and Ekaterinburg sent home.

Laurie Bristow, Britain’s ambassador to Moscow, was summoned to the foreign ministry and told his staff should mirror the exact number of Russia’s diplomatic teams remaining in the UK.

Although the Foreign Office refused to say whether this meant Russia was effectively increasing the 23 diplomats it had already expelled, a spokeswoman described the move as “regrettable” but “anticipated”.

In a statement, the Russian ministry said it had handed the British ambassador a note of protest, adding that Britain's "provocative actions" had led to the decision by numerous Western governments to expel scores of Russian diplomats.

On Friday, a steady stream of ambassadors from Western countries, including Germany, Poland, Canada, Ireland and Australia, arrived at the Russian foreign ministry to be told some of their diplomats were being ordered to leave in retaliation.

A spokesman for the Foreign and Commonwealth Office said: “Russia is in flagrant breach of international law and the Chemical Weapons Convention and actions by countries around the world have demonstrated the depth of international concern.”

The Aeroflot airbus A321, carrying 236 passengers, landed at Heathrow Airport at 3.37pm on Friday where it was met by border officials who undertook a standard enhanced examination of the cabin.

Whitehall sources made clear that the enhanced search and a “rummage” of the plane was a routine check for an inbound flight from a high risk jurisdiction country like Russia, and was not linked to the Salisbury investigation.

The Russian embassy in London dispatched representatives to the scene and described the actions as "extraordinary".

"The Embassy has sent a diplomatic note demanding the British side to provide explanations of the incident," the embassy said in a statement.

A short time later, Maria Zakharova, director of information at Russia’s foreign affairs, appeared on Russian state television pouring fuel on the row.

She said: "The behaviour of the British police is clear evidence of the desire to carry out some kind of manipulation on board without witnesses.

https://www.telegraph.co.uk/politics/2018/03/30/exclusive-britain-threatens-close-russias-den-spies-trade-mission1/

Looking at some of the increase in message lengths one could imagine the Cold War years are back again --- assuming of course they ever really disappeared?

Chart Section Index

May 2018

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
x							0000		M14	01A	5825 376	5825 376
x	x	x	x	x			0000		M42C	01C	17471	17471
x							0025		M42C	01C	14941	16218
x							0035		M42C	01C	12221	13949
x	x	x	x	x			0100		M42C	01C	14421	14421
x							0125		M42C	01C	14941	16218
x							0135		M42C	01C	12221	13949
x	x	x	x	x	x	x	0200		V13	0	15388	15388
			x	x			0300/0400		E06	01A	361, **search**	14932/12212 361
x	x	x	x	x	x	x	0300		V13	0	15388	15388
		x	x				0315		E11	03	8565 25#	8565 25#
x	x	x	x	x	x	x	0400		V13	0	15388	15388
x	x	x	x	x			0400		S06	01A	15721 480	15721 480
			x				0430/0450/0510		E07A	01B	7933/ 9133/10233 741	7933/ 9133/10233 741
x	x	x	x	x	x	x	0440 (var)		HM02	01C	4761	4761
x							0450		E11	03	7469 41#	7469 41#
	x			x			0455		S11A	03	x5149 32#, **check**	x5149 32#
x	x	x	x	x	x	x	0500		V13	0	11430	11430
x		x		x		x	0500		HM01	18	5855	5855
	x		x		x		0500		HM01	18	11462	11462
x	x	x	x	x			0500		M14	01A	18041 952	18041 952
					x		0500/0520/0540		M12	01B	9167/10267/11567 125	9282/10982/12182 291
						x	0500/0520/0540		V07	01B	...../12182/..... 511, search	
			x	x			0500/0600	1/3	E06	01A	14565/16125 460	13985/15830 328
	x						0530		M01A	14	9441 751	9441 751
		x					0530		M01A	14	9129 498	9129 498
			x				0540		M01A	14	7692 536	7692 536
x	x	x	x	x	x	x	0600		V13	0	11430	11430
x				x			0600		E11	03	**15800** 18#	15800 18#
x		x		x		x	0600		HM01	18	10345	10345
	x		x		x		0600		HM01	18	14375	14375
	x						0600/0610		S06S	01A	15945/16945 438	15945/16945 438
					x	x	0600/0620/0640		E07	01B	9064/10264/11464 024	9064/10264/11464 024
x		x					0600/0620/0640		XPAc	01B	10868/12168/13368	11409/13509/14609
						x	0600/0700		M14	01A	7590/ 8162 382	7590/ 8162 382

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
	x			x			0620		M01A	14	10233 354/458	10233 354/458
		x					0620		M01A	14	9421 135	9421 135
	x			x			0630		M01A	14	9447 143/792	9447 143/792
			x				0630		M01A	14	8111 902	8111 902
						x	0630/0640		S06S	01A	16320/14875 524	16320/14875 524
x		x					0640		E11	03	15800 94#	15800 94#
	x		x				0645		E11	03	13424 51#	13424 51#
x		x		x		x	0657		HM01	18	9330	9330
	x		x		x		0657		HM01	18	13435	13435
	x						**0700**		E11	03	x13873 57#, **search**	x13873 57#
x	x	x	x	x	x	x	0700		V13	0	15388	15388
						x	0700		M01	01B	6780 025	6780 025
	x						0700/0710(15)		S06S	01A	5430/ 6780 374	5430/ 6780 374
						x	0700/0720/0740		V07	01B		12182/11182/10282 112
x		x					0700/0720/0740		XPA2	01B	search	search
	x			x			0700/0720/0740		XPA2t	01B	19667/18767/17467	19514/18214/16314
					x	x	0710		E11	03	6480 49#	6480 49#
	x			x			0710		M01A	14	10651 297	10651 297
		x					0710		M01A	14	9175 146	9175 146
	x			x			**0715**		E11	03	10429 63#	10429 63#
	x						0720		M01A	14	9151 728	9151 728
	x						0730/0740		S06S	01A	7245/12080 7365/11655 427	7245/12080 7365/11655 427
		x					0730/0740		S06S	01A	12110/14977 745	12110/14977 745
	x		x				0735		S11A	03	38#, **search**	38#
x							0745		E11	03	9610 26#	9610 26#
		x		x			0745		E11	03	15720 34#	15720 34#
x		x		x		x	0757		HM01	18	9065	9065
	x		x		x		0757		HM01	18	11365	11365
x	x	x	x	x	x	x	0800		V13	0	15388	15388
x							0800	1/3	G06	01A	7320 329	7320 329
			x				0800/0810		E17Z	01A	16780/12850/ 674	16780/12850/ 674

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
	x						0800/0810		S06S	01A	14373/12935 352, check **cf. Fri 0830**	14373/12935 352
					x		0800/0810	1	S06S	01A	12460/10250 254	12460/10250 254
					x		0800/0820/0840		E07A	01B	12177/13477/14877 148	13373/14373/14873 338
					x	x	0805		E11	03	9079 31#	9079 31#
x			x				0820		E11	03	5371 43#	5371 43#
	x	x					0820		E11	03	18168 13#	13911 13#
		x					0820/0830		S06S	01A	9485/11085 471	9485/11085 471
x							0830/0840		S06S	01A	8221/ 9353 371	8221/ 9353 371
		x					0830/0840		S06S	01A	11565/12560 464	11565/12560 464
				x			0830/0840		S06S	01A	x14373/12935 352, search **cf. Fri 0830**	x14373/12935 352, search
			x	x			0830/0930		S06	01A	17475/14736 842	16022/13925 842
	x		x				0845		E11	03	12202 15#	12202 15#
x		x		x		x	0857		HM01	18	9240	9240
	x		x		x		0857		HM01	18	11462	11462
x		x					0900		E11	03	13427 53#	13427 53#
x							0900/0910		S06S	01A	16380/14835 872	16380/14835 872
				x			0900/0910		S06S	01A	6844/ 7161 624	6844/ 7161 624
x	x	x	x	x	x	x	0930		M14	01A	x16347 search 617, only 10.,	x16347 search 617, only 10.,
		x	x				0930		E11	03	6304 27#	6304 27#
			x				0930/0940		S06S	01A	9255/10325 314	9255/10325 314
				x			0930/0940		S06S	01A	10290/ 9655 516	10290/ 9655 516
x		x		x		x	0957		HM01	18	5855/ 9155	5855/ 9155
	x		x		x		0957		HM01	18	12180	12180
	x			x			1000		E11	03	12397 30#	12397 30#
	x						1000/1010		S06S	01A	4820/ 5660 893	4820/ 5660 893
		x					1000/1010		S06S	01A	14580/16020 729	14580/16020 729
x			x				1015		S11A	03	10210 47#	10210 47#
	x			x			1020		S11A	03	8800 42#	8800 42#

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
	x						1100/1110		S06S	01A	6810/ 7560 754	6810/ 7560 754
	x			x			1100/1120/1140		E07	01B	18659/17459/16159 641	18637/17437/15837 648
x	x	x	x	x	x	x	1200		V13	0	9725	9725
		x					1200/1300	?	G06	01A	x6930, 7368 938, **search**	x6930, 7368 938, **search**
x							1200/1210		S06S	01A	10230/12165 831	10230/12165 831
			x				1200/1210		S06S	01A	13145/14535 425	13145/14535 425
	x	x					1205		E11	03	6304 46#	6304 46#
x				x			1225		E11	03	13537 52#	13537 52#
x	x	x	x	x	x	x	1300		V13	0	9725	9725
			x				1300	1/3	G06	01A	5890 329	5890 329
			x		x		1300		E11	03	11581 58#	11581 58#
			x		x		1310/1330/1350		M12	01B	13926/12126/10926 919	13873/13373/11473 834
	x				x		1345		E11	03	15825 91#	15825 91#
x	x	x	x	x	**x**	x	1400		M08A	18	8096	8096
x		x					1400/1420/1440		M12	01B	17451/15951/14451 494	16117/14717/13417 174
	x	x	x				1500		S06	01A		13944 387
	x	x	x				1500		S06	01A		11496 387
					x		1500		M01	14	6435 025	6435 025
	x						1500/1510		S06S	01A	6766/ 7744 537	6766/ 7744 537
				x			1510/1530/1550		E07A	01B	12182/11082/10182 101	12182/11082/10182 101
			x				1530		E11	03	10356 26#	10356 26#
		x			x		1540		S11A	03	11092 56#	11092 56#
x	x	x	x	x	x	**x**	1557		HM01	18	11435	11435
	x	x					1600	1/3	M14		x5361 725, search	x5361 725, search
	x					x	1605		E11	03	4783 23#	4783 23#
				x			1610/1630/1650		E07A	01B	11435	11435
		x				x	1625		E11	03	15795 97#	15795 97#
	x		**x**				1645		E11	03	14575 33#	14575 33#
				x		x	1650		E11	03	14940 92#	14940 92#
x							1700/1800	1/2	G06	01A	x5471, 5764 938, **search**	x5471, 5764 938, **search**

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
x	x	x	x	x	x	**x**	1657		HM01	18	11530	11530
		x				x	1700/1720/1740		E07	01B	14763/13363/12163 731	14842/13442/12142 841
			x				1700/1720/1740		M12	01B	14377/13461/12114 317	14377/13461/12114 317
				x			1700/1800	1/3	M14	01A	7485/ 6891 382	7485/ 6891 382
		x			x		1705		E11	03	14865 39#	14865 39#
		x			x		1730		E11	03	7984 40#	7984 40#
			x				1730		E11	03	8088 41#, **check**	8088 41#
	x		x				1800		M01	14	5280 025	5280 025
x	x	x	x	x	x	**x**	1757		HM01	18	11635	11635
		x					1800/1820/1840		M12	01B	9176/ 7931/ 6904 257	9176/ 7931/ 6904 257
x							1810		M01B	14	5125, 5735 364	5125, 5735 364
	x						1820	2/4	M14	01A	6856 163	6856 163
			x				1830	2/4	G06	01A	6887 842	6887 842
			x				1832		M01B	14	5095, 5760 815	5095, 5760 815
	x			x			1840/1850/1900	1	F01	01A	14363/12189/10346	14621/12206/10465
		x			x		1850		S11A	03	12457 28#	12457 28#
x			x				**1900**		E11	03	7600 64#, **check**	7600 64#
x		x					1900/1920/1940		E07	01B	17472/15872/13372 483	16328/14828/13428 384
		x					1900/1920/1940		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
			x				1900/1920/1940		M12	01B	10343/ 9264/ 8116 463	10343/ 9264/ 8116 463
				x	x		1900/1920/1940		XPA2r	01B	17462/16114/14828	
				x			1900/2000	1/3	S06	01A	x9943/ 7951 483, **check**	
					x		1900/2000	1/3	S06	01A	x6801/ 5931 263, **search**	x6801/ 5931 263
				x			1902		M01B	14	5075, 5465 336	5075, 5465 336
				x		x	1910		E11	03	9510 61#	9510 61#
x							1910/1930/1950		M12	01B	11435/10598/ 9327 938	11435/10598/ 9327 938
x							1915		M01B	14	5150, 5475 858	5150, 5475 858
		x					1920	2/4	M14	01A	5938 417	5938 417
	x		x				1925		E11	03	11581 55#	11581 55#
				x			1930	2/4	G06	01A	5935 218	5935 218

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
			x				1942		M01B	14	5065, 5805 936	5065, 5805 936
		x		x			1950/2010/2030		M12	01B	search	16217/14817/ 284, search
		x		x			1955		S11A	03	4870 37#	4870 37#
	x		x				2000		M01	14	4905 025	4905 025
x	x	x	x	x	x	x	2000		M08A/ V02A	18	7554	7554
x							2000/2020/2040		M12	01B	10343/ 9264/ 8116 463	10343/ 9264/ 8116 463
		x					2000/2020/2040		E07A	01A	12166/10766/ 9266 172	12166/10766/ 9266 172
	x					x	2000/2020/2040		XPA2m	01B	14538/13538/12138	
				x			2000/2100	1/3	S06	01A		x9943/ 7951 483
					x	x	2005		E11	03	9130 36#	9130 36#
				x			2010		M01B	14	4895, 5340 467	4895, 5340 467
			x				2010/2030/2050		E07	01B	11539/10547/ 9388 553	12213/10714/ 9347 273
			x				2030	1/3	E06	01A	5948 724	5948 724
		x				x	2050		S11A	03	x8530 48#, **search**	x8530 48#
x		x		x		x	2057		HM01	18	11635	11635
	x		x		x		2057		HM01	18	16180	16180
		x					2100/2120/2140		M12	01B	9241/ 7541/ 6841 258	9986/ 9086/ 7386 903
	x					x	2100/2120/2140		XPA2m	01B		14738/13438/12138
				x	x		2100/2120/2140		XPA2r	01B		16167/14663/13923
		x			x		2110/2130/2150		M12	01B	14869/13569/12179 851	16269/14669/13369 263
				x			2130	1/3	E06	01A	5731 315	5731 315
x		x		x		x	2157		HM01	18	10715	10715
	x		x		x		2157		HM01	18	17480	17480
					x		2230		F01	01C	20206	19224
					x		2240		F01	01C	18031	17491
						x	2300		M14	01A	5240 376	5240 376
	x		x		x		2300		M08A	18	8135	8135
					x		2330		F01	01C	20206	19224
					x		2340		F01	01C	18031	17491

M01 FREQUENCY LIST

Frequencies may vary by a few kHz

JAN FEB NOV DEC M01/1 197

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

MAR APRIL SEPT OCT M01/2 463

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

MAY JUNE JULY AUG M01/3 025

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

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Mar kHz, ID, ...	Apr kHz, ID, ...	May kHz, ID, ...	Jun kHz, ID, ...	Remarks
		x	x				0315		E11	03	7850 25#	5779 25#	8565 25#	8565 25#	since 01/14, last log 04/17
x							0450		E11	03	5371 41#	5371 41#	7469 41#	7469 41#	since 02/10, last log 03/18 2nd transmission Thu 1730z
	x			x			0455		S11A	03	**5358** 32#	5358 32#	x5149 32#, **check**	x5149 32#	since 09/14, last lof 03/18
x				x			0600		E11	03	13470 18#	13470 18#	**15800** 18#	15800 18#	since 07/15, last log 04/18
x		x					0640		E11	03	12153 94#	12153 94#	15800 94#	15800 94#	since 07/17, last log 04/18
	x		x				0645		E11	03	10800 51#	10800 51#	13424 51#	13424 51#	since 07/09, last log 04/18
	x						**0700**		E11	03	**5082** 57#	5082 57#	x13873 57#, **search**	x13873 57#	since 01/12, last log 04/18 until 01/18 tue 1045z
					x	x	0710		E11	03	8102 49#	8102 49#	6480 49#	6480 49#	since 08/17, last log 04/18 07/15-04/17 Thu/Sat
	x			x			**0715**		E11	03	9963 63#	9963 63#	10429 63#	10429 63#	since 02/11, last log 04/18 until 12/17 0710z
	x		x				0735		S11A	03	**13537** 38#	13537 38#	38#, **search**	38#	since 01/18, last log 04/18 until 04/17 mon/wed at 0715z
x							0745		E11	03	10213 26#	10213 26#	9610 26#	9610 26#	since 03/14, last log 04/18 2nd transmission Thu 1530z
		x		x			0745		E11	03	17410 34#	17410 34#	15720 34#	15720 34#	since 06/17, last log 04/18
					x	x	0805		E11	03	9200 31#	9200 31#	9079 31#	9079 31#	since 07/14, last log 04/18
x			x				0820		E11	03	**5371** 43#	5371 43#	5371 43#	5371 43#	since 10/09, last log 04/18
	x	x					0820		E11	03	12530 13#	12530 13#	18168 13#	13911 13#	since 08/13, last log 04/18
	x		x				0845		E11	03	10246 15#	10246 15#	12202 15#	12202 15#	since 07/17, last log 04/18
x		x					0900		E11	03	9399 53#	9399 53#	13427 53#	13427 53#	since 10/05, last log 04/18
		x	x				0930		E11	03	6807 27#	6807 27#	6304 27#	6304 27#	since 02/14, last log 04/18
	x			x			1000		E11	03	7840 30#	7840 30#	12397 30#	12397 30#	since 11/16, last log 04/18
x			x				1015		S11A	03	11493 47#	11493 47#	10210 47#	10210 47#	since 04/10, last log 02/18 **d e l e t e d ?**
	x			x			1020		S11A	03	9960 42#	9960 42#	8800 42#	8800 42#	since 02/10, last log 04/18
	x	x					1205		E11	03	7727 46#	7727 46#	6304 46#	6304 46#	since 03/10, last log 04/18 2nd transmission Mon 0450z
x				x			1225		E11	03	20286 52#	20286 52#	13537 52#	13537 52#	since 05/15, last log 03/18
			x		x		1300		E11	03	10302 58#	10302 58#	11581 58#	11581 58#	since 02/16, last log 04/18
	x				x		1345		E11	03	13046 91#	13046 91#	15825 91#	15825 91#	since 10/15, last log 04/18
			x				1530		E11	03	10330 26#	10330 26#	10356 26#	10356 26#	since 06/14, last log 04/18 2nd transmission Mon 0745z
		x			x		1540		S11A	03	10800 56#	10800 56#	11092 56#	11092 56#	since 03/16, last log 04/18
	x					x	1605		E11	03	6397 23#	6397 23#	4783 23#	4783 23#	since 11/15, last log 04/18
		x				x	1625		E11	03	10448 97#	10448 97#	15795 97#	15795 97#	since 02/15, last log 04/18
	x		**x**				1645		E11	03	10800 33#	10800 33#	14575 33#	14575 33#	since 06/17, last log 04/18
				x		x	1650		E11	03	13873 92#	13873 92#	14940 92#	14940 92#	since 05/16, last log 04/18
		x			x		1705		E11	03	10213 39#	10213 39#	14865 39#	14865 39#	since 02/14, last log 04/18
		x			x		1730		E11	03	5844 40#	5844 40#	7984 40#	7984 40#	since 06/16, last log 04/18
			x				1730		E11	03	7864 41#	7864 41#	8088 41#, **check**	8088 41#	since 03/10, last log 03/18 2nd transmission Mon 0450z
		x			x		1850		S11A	03	10213 28#	10213 28#	12457 28#	12457 28#	since 06/17, last log 04/18
x			x				**1900**		E11	03	7317 64#	7317 64#	7600 64#, **check**	7600 64#	since 05/16, last log 04/18 until 10/17 mon/thu 0530z
				x		x	1910		E11	03	8530 61#	8530 61#	9510 61#	9510 61#	since 04/17, last log 04/18
	x		x				1925		E11	03	10620 55#?	10620 55#?	11581 55#	11581 55#	since 07/15, last log 04/18
		x		x			1955		S11A	03	4016 37#	4016 37#	4870 37#	4870 37#	since 02/14, last log 04/18
					x	x	2005		E11	03	8186 36#	8186 36#	9130 36#	9130 36#	since 03/14, last log 04/18 2nd transmission Thu 1530z
		x				x	2050		S11A	03	**5344** 48# **58#**	5344 48#	x8530 48#, **search**	x8530 48#	since 01/10, last log 04/18 until 12/17 tue/fri 0915z

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Mar kHz, ID, ...	Apr kHz, ID, ...	May kHz, ID, ...	Jun kHz, ID, ...	Remarks
x							0800	1/3	G06	01A	6810 329	6810 329	7320 329	7320 329	since 07/10, last log 04/18 repeat at Thu 1300Z
		x					1200/1300	?	G06	01A	**5903, 5422** 938	5903, 5422 938	x6930, 7368 938, **search**	x6930, 7368 938, **search**	since 10/14, last log 03/18 yearly changing frequencies + id
			x				1300	1/3	G06	01A	4598 329	4598 329	5890 329	5890 329	since 09/11, last log 04/18 repeat from Mon 0800Z
x							1700/1800	1/2	G06	01A	**4645, 5362** 938	4645, 5362 938	x5471, 5764 938, **search**	x5471, 5764 938, **search**	since 04/10, last log 04/18 yearly changing frequencies + id
			x				1830	2/4	G06	01A	5934 579	5934 579	6887 842	6887 842	since 05/01, last log 04/18 repeat at Fri 1930Z
				x			1930	2/4	G06	01A	5442 947	5442 947	5935 218	5935 218	since 04/01, last log 04/18 repeat from Thu 1830Z

F06 Schedules (May 5, 2018) Yellow schedules indicate message-only repeats of other schedules, not always present.

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Mon - Fri	**02:00**	16321												60146
		03:00	14881												
New message every day, no repeats the following days. Parallels F01 at 0000/0100z, S06 at 0400z, and M14 at 0500z.															

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
1st, 3rd	Monday	**04:00**				10686	11414	12064	11049	10748	9437	9354			70059
		04:10				8184	10169	10926	9126	9139	7923	7956			
		04:20				6773	8169	9049	8137	7424	6776	6774			
		05:00	6926	7328	10249								7658	6788	
		05:10	5945	6778	8137								6778	5384	
		05:20	4816	5126	5948								5361	4454	
Repeats messages the following Wednesday at 21:00 or 22:00 instead of the following day.															

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Tuesday	**00:30**	?	9058	9068	9216	10548	?	?	?	?	?	?	?	60070
		00:40	?	8176	7844	7948	9144	?	?	?	?	?	?	?	
		00:50	?	6773	6939	6833	7978	?	?	?	?	?	?	?	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Tuesday	**15:00**	10856	12116	17428	17534	17488	16266	15733	14984	14973	13546	10844	12133	00052
		15:10	8174	10275	15646	15626	15623	14453	13376	13378	13589	11535	8164	10274	
		15:20	6988	8176	12153	12214	12226	12075	11154	10946	11643	9256	6773	8148	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Tuesday	**16:50**	10383	13374	16359	18726	19214	19936	19535	17534	14828	12215	10536	9313	10053
		17:00	9046	11165	13986	16238	17419	16354	16348	15613	12214	10814	8174	7928	
		17:10	7313	9219	11523	13378	14443	13955	13588	12215	10536	9046	7318	6783	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Wednes.	**06:00**	20154	20072	18189	16325	17420	17512	17419	16346	15930	19268	20082	20157	40122
		06:10	18304	18291	16046	14724	15673	15930	15707	14847	13503	17548	18207	18241	
		06:20	16156	16071	14459	12172	13361	13503	13446	12223	11109	15779	16141	16204	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Wednes.	**08:00**	18334	18923	18038	16064	14694	14368	13994	14976	16023	19448	19104	18039	70048
		08:10	16346	17414	16344	14367	12223	12204	12058	13373	14378	17503	17428	16204	
		08:20	14418	14949	14563	12208	10163	10309	10174	11168	12158	15619	15603	14363	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Wednes.	**08:00**				19138	17488	16330	15795	16319	18178	20018			00052
		08:10				17545	15823	14367	13428	14378	15613	18325			
		08:20				15626	13459	12141	11060	11636	13459	16248			
		09:00	20735	20916	20386								20476	20875	
		09:10	18037	18730	18215								18915	18747	
		09:20	16250	16165	16061								16328	16316	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Wednes.	**09:15**				17538	14638	15629	14948	17434	16146	19476			10031
		09:25				14576	12156	13376	12176	14369	13385	17458			
		09:35				11639	10164	11544	10177	11163	11434	15884			
		10:15	19433	20639	20138								20349	18046	
		10:25	16048	17539	17428								18573	16326	
		10:35	14976	15644	14983								16245	14944	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID

1st, 3rd	Wednes.	**12:30**	16329	18235	18563	18476	17430	16286	16244	17455	18517	19363	18191	17478	90073
		12:40	14826	16144	16314	16168	15814	14517	14649	15923	16309	17476	15963	15838	
		12:50	12166	14519	14723	14643	13487	12179	12206	13388	14464	15873	13436	13387	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Follows 1st, 3rd Mon,	Wednes.	**21:00**				10636	?	12218	?	13548	?	9948			70059
		21:10				8163	?	11164	?	11516	10161	8115			
		21:20				6854	?	9418	?	8145	8184	6826			
		22:00	6828	?	10164								?	?	
		22:10	5129	5938	8076								?	?	
		22:20	4534	4989	6769								?	?	
Message-only repeat slot of 1st & 3rd Monday 04:00 or 05:00.															

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Thursday	**13:30**	12186	14983	16054	16351	16328	14565	13814	14978	15709	15607	11162	10968	80214
		13:40	10243	12196	13471	14367	14358	12169	11643	12216	13541	13376	9915	9354	
		13:50	8175	9917	11062	11483	11146	9981	9925	10164	10529	11108	8187	7963	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Saturday	**08:00**				12168	?	?	?	?	?	?			70147
		08:10				10186	?	?	?	?	?	?			
		08:20				8193	?	?	?	?	?	?			
		09:00	13805	13979	14354								?	?	
		09:10	11644	11649	12206								?	?	
		09:20	9474	9499	10293								?	?	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Saturday	**09:00**				17481	17426	16314	16089	16186	16341	18919			70004
		09:10				15946	15818	14569	14384	14571	14706	16268			
		09:20				13543	13396	12191	12173	12195	12217	14486			
		10:00	20973	20894	18948								20868	20951	
		10:10	18736	18429	16223								18259	18643	
		10:20	16328	16153	14639								16113	16314	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Saturday	**11:00**	16356	17434	17414	14986	13598	?	?	?	?	?	?	?	50046
		11:10	14359	15625	15605	13366	11524	?	?	?	?	?	?	?	
		11:20	12079	13496	13444	11050	9479	?	?	?	?	?	?	?	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Saturday	**15:00**	20564	22878	22913							22963	22871	20648	40133
		15:10	18471	20216	20374							20461	20629	18483	
		15:20	16308	18253	18406							18356	18553	16196	
		21:00				20386	18751	18323	17436	16289	15928				
		21:10				18509	16174	15886	15789	14461	13396				
		21:20				16231	14563	13581	13473	12176	11143				

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Saturday	**15:30**	20868	22986	22874							20806	22984	20741	40133
		15:40	18689	20363	20634							18441	20719	18368	
		15:50	16156	18669	18751							17463	18348	16343	
		21:30				20589	18663	18521	18246	17429	?				
		21:40				18371	16344	16256	16149	15861	13498				
		21:50				16108	14869	14641	14474	13486	11054				

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Sunday	**15:30**	10378	13464	16245	18626	19323	19838	19466	17428	14455	12189	10644	9416	10053

		15:40	9169	11548	14356	16325	17536	16238	16189	15786	12065	10734	8159	7836
		15:50	7419	9323	12138	13458	14356	13546	13576	12228	10164	9129	7438	6785

F01 Schedules (May 5, 2018)

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Every	Mon - Fri	**00:00**	17471											
		01:00	14421											
New message every day. Parallels F06 at 0200/0300z, S06 at 0400z, and M14 at 0500z.														

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Every	Monday	**00:25** **01:25**	13452	15803	16023	15820	14941	16218	14878	16023	15672	14434	12101	10884
		00:35 **01:35**	11106	12195	13555	13405	12221	13949	12185	14373	13892	11439	9215	8157
Doesn’t repeat the following days.														

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1st	Wednesday	**18:40**				12194	14363	14621	14829	15854	13467	11136		
		18:50				10581	12189	12206	12214	13543	11084	9074		
		19:00				8112	10346	10465	10932	11126	9052	7723		
		19:40	7629	8156	10467								8172	7684
		19:50	6783	6844	8094								6791	5326
		20:00	4034	4527	6779								4546	4029
Repeats messages the following Friday (same times and frequencies) instead of the following day.														

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Every	Friday	**22:30** **23:30**	17411	20741	20700	22953	20206	19224	18562	20823	20618	20966	20741	18169
		22:40 **23:40**	15956	18401	18726	19405	18031	17491	16218	18397	18048	18954	18702	15765
Doesn’t repeat the following days.														

F11 Schedules (March 3, 2018)

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Monday Wednes.	**08:45** **08:50**	9370		9339		13424				9339		9370		0353
Every	Tuesday Wednes.	**11:50** **11:55**	6807		7670		6280				7670		6807		0325

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

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

Notes:

XPA c 0600/0700z schedule appears to be robust with reasonably strong signals into UK. Day changed, Sat to Wed 02/082017
XPA2 m Repetitive frequency triplets, appears robust, generally strong into UK
XPA2 r Schedule appears robust; generally very strong signals to UK
XPA2 t Weak in UK

XPA2 p Under investigation …. Believed new frequencies but times still followed

Null Messaage: Long tones used in place of repeat character [15Hz below 0] whilst ending of 10140 is now variable.

Updated 01/03/2018

SPECIAL MATTERS

Thanks to all our contributors:
Ary, Edd, BR, CC, CQ, Danix, DanAr, DoK, E, F5, HH, HJH, JkC, Jochen, KW, Malc, MaleAnon, PoSW, QSP55, PLdn, RNGB, Spectre,

Operation Jallaa: Nil Return. **Contact from members on fate of the results of this Op please.**

MESSAGES:

E: Thanks for Logs etc. Saw Gordon Corera's Number offering. Said nothing we don't already know. Looked at Bush's book; overpriced and not for me. Bush doing something with NS since 2015. Leg slowly improving tnx. Long job. Hope summer gd for you also…P

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