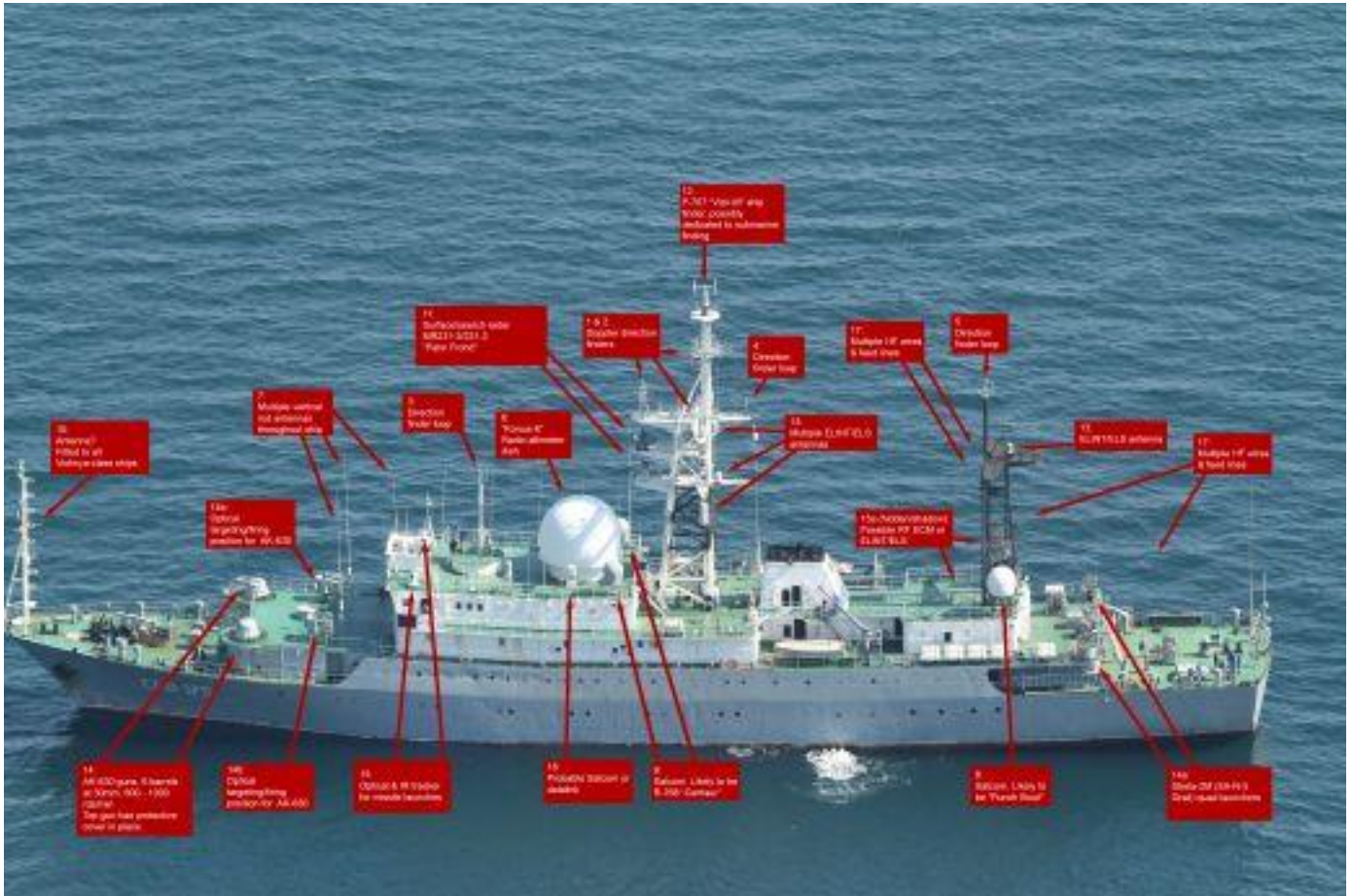


ENIGMA 2000 NEWSLETTER



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



Russian Navy Vishnya class AGI “Viktor Leonov”

[Many thanks to contributing member]

ISSUE 124
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<http://www.enigma2000.org.uk>

Editorial

On 3rd March Malc [M8] was prompted to write the following, "... The Radio conditions... Poor..... for over a week now the earth has/is being battered by Solar Winds, coming from a southern hole in the Sun's atmosphere, with speeds of up to 700km/s. These conditions are expected to last a few more days before returning to a more settled period...."

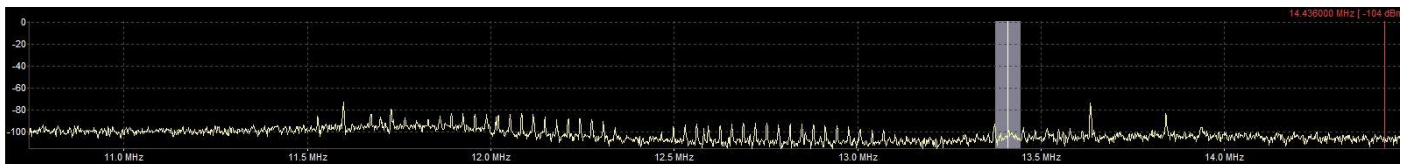
Very changeable conditions indeed. These remarks made following his log for the E07a Wednesday 2100z schedule. Usually a strong or better signal the 2100z was unworkable whilst its Thursday morning 0430z repeat was only slightly better.

The effects were already being seen on previous sendings of the XPA1 and 2 series on 02/03 and again on Thursday 04/03. Very poor condx indeed. Perhaps the worst experience at my QTH was reception of the Wednesday/Friday schedules of XPA1 and XPA2.

XPA1 has been very difficult to receive, finding the initial frequencies at the beginning of the month a poor chance and thanks to both Daniel E and KW for their help here. As of Friday 11/03 the stations are both receivable at least. Like those the E07a schedules 2100z et al on Wednesday and its repeat at 0530z the next day have displayed the effects of this unwanted solar event; like the XPA1 and 2 as of Wed 10/03 and Thursday 11/03 signal strength really perked up to the usual and gave the expected strong/very strong result. For April things became bad yet again.

Noise of course knows no limits. It's everywhere and unabated. Take a look at this spectral scan from my SDR. See the comb like curves – that is from Broadband distribution probably due to the unbalanced nature of the copper pairs that carry it. The noise floor is at -125dBm yet this *allowed* noise peaks at -80dBm. Elsewhere its just noise everywhere!

Now read on



What riles is that OFCOM now require a forensic approach to transmitting from radio amateurs in case someone is near to your antenna and experiences a less than safe power density. That doesn't include the amateur operator but anyone else. Guidance is there but we all have to convert from PEP to EIRP it seems. I've prepared interim docs at my station [*no transmitting anyway as its all in bits*] but for me its laughable; the nearest anyone can easily get to my feed point is 2 metres; they'll be trespassers if they do and face a walloping with a pick axe handle if they don't leave when asked extremely nicely. Other than that 16m distant. At the front of my property it's circa 42m.

I've never liked using much over 25/50w but now with the noise that is still allowed the receiving end often asks for more power so they can get a half decent copy.

I thought I'd listen on the Medium Wave at night using my late father's radio the other night as I relished the days of Radio Moscow that could be found just beyond Radio Luxembourg's stylish transmissions [K E Y N S H A M for those that know]. Instead all I received was noise, noise, noise and more noise.

I understand the need for Health and Safety to rear its head on RF powers, especially for professionals as well as amateurs to protect the public; a suggestion something like this justifies OFCOM's existence was mentioned to me and discounted, but what would justify its existence would be waving its regulatory arm and stopping the import of and using of noise making devices. If something pumps RF up an unbalanced pair, can be received at distance that is a transmitter causing interference if it affects what others receive. Not so OFCOM. The RSGB would have us believe they are representing the amateur

Other than that this Risk Assessment is just like the UK Paracetamol story Buy 16 or 32 because somebody *might* attempt suicide with a bottle of 100! The UK caring society at its best, buggingger all for everyone on behalf of the one who might and now its overflowed into Amateur Radio.

Anglers next? Blunt hooks please, you might hurt the fish.

Recommended Read or Not!

"Secret Spy Radio Stations" Series 1 book by Ronald Milone

Review by: Token

This is a book I have been looking forward to since I first heard it was in work. Spy Numbers stations have been a secondary listening hobby of mine since I first heard such broadcasts in the late 1960's. Books on the subject are few and far between, and so I look forward to any new non-fiction publications related to Spy Numbers.

I ordered this book as soon as I was aware it was available, and had it in hand 2 days later. I was especially jazzed when I saw the "Series 1" in the title, hopeful that this was the first installment in a series of books on the subject.

To call the book a disappointment is to be kind. It has much outdated and incorrect information, and it appears to be, in large part, copy / paste from various web sites and prior publications.

The book is a large paperback, about 8.5" by 11", and with roughly 220 pages of large type text, single picture per page illustrations, and various tables / charts. I say roughly 220 pages because there is not a single page number in the entire book, so I have no idea how many pages it really is.

There is also no Table of Contents and no Index.

The first page is titled "Why this book series? Here is why...." and then launches directly into the body of Simon Mason's publication "Secret Signals - The Euronumbers Mystery" (<https://labyrinth13.com/Secret%20Signals.pdf>), minus the original title or author. The first 12 pages of the book are word-for-word identical to the first 6 pages of Simons publication. And no indication, at all, in those pages, as to the source. There is no acknowledgment of Simons work until near the very end of the book, when it generically lists Simons publication as a source, with no definition of what parts of this book were related to Simons work.

The next 5 pages start with a two sentence paragraph which appears to be original text, and then launches into a word-for-word cut and paste from the Wikipedia entry on the Warrenton Training Center. Several pictures are interspersed with the Wiki text that were not originally part of the Wiki entry. The next several pages are primarily word-for-word copies from the Wiki entry on the Voice of Korea, although that segment does appear to contain several paragraphs of original text, interspersed with the Wiki copy.

Aside from added pictures, mostly from Google Earth, in the first 30 pages of the book there are less than 2 pages of original text, the rest is direct copy and paste, without cite, from sources such as Simon Masons "Euronumbers Mystery" paper, or from something like Wikipedia. This is a theme that is repeated throughout the book, copy some source word-for-word, do not cite the original source, throw in a sentence or paragraph here and there with original text, and add some pictures from public sources.

Because so much of the book is copy / pasted from other sources, without editing, it often contains information that is incorrect today. For example, it discusses various past numbers stations, like G02, Swedish Rhapsody, in the present tense, and calls them "active", despite the fact that particularly station may not have been active for years. It was active when the copied paper or web site was published, but there appears to have been no effort to fact check, or bring up to date, any of the information presented.

For example, the section on the Yosemite Sam oddity is written in the present tense, the book says "it transmits on four frequencies:" and then lists the Sam freqs. For those not aware, Yosemite Sam was an oddity station that was active in 2004 and 2005, and the text in the book comes from an old write-up on the web, found here <http://www.spynumbers.com/YosemiteSam.html> The books entry on this station is word-for-word from that web page, including the colored text (light gray in the book) for the hypertext link to the .wav sound sample.

In one of the few more-or-less well cited entries in the book the author copied, word-for-word, the description text from a YouTube video of the Chinese Robot, VC01. Including the YT channel disclaimer "Disclaimer: Many of the radio reception recordings on this Youtube channel pertain to unusual, uncommon, unknown, or mystery signals that might be found on radio, both shortwave and VHF/UHF. Among the subjects covered are numbers stations, utility stations, military transmissions (both in the clear and encrypted / encoded), aviation, maritime, ham radio, CB radio, radars, ionosodes, propagation beacons, ditters, dashers, whistlers, and just about anything else that might transmit, in any mode, USB, LSB, CW, Morse Code, FM, AM,FMCW, LFMCW, etc. Think of it as SIGINT (signals intelligence) / COMINT (communications intelligence) / ELINT (electronic intelligence) lite, the hobby version. All the recordings are made by me, most often at my home. Although there are a few mysterious things to be found here, you will not find anything paranormal, extraterrestrial, spiritual, or mystic. However, everyone can have their own interpretations of the sounds heard, make of it what you will."

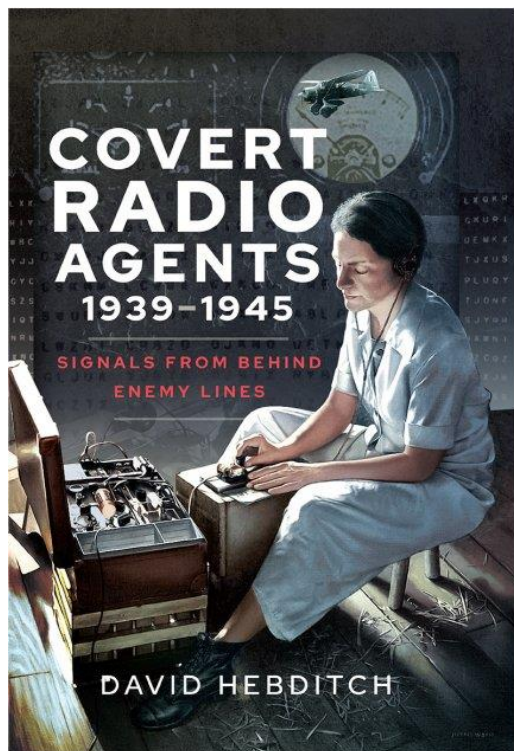
Not sure what all that extra text has to do specifically with VC01, or why it would be valuable in the context of this book.

The author uses ENGIMA IDs, such as E05, V07, V15, etc, as well as common nicknames, "Cynthia", "The Cuban Babbler", etc. But never explains how such names or designations came to be, or, in the case of the IDs, what they mean. Many of the basic concepts of the hobby are missing or glossed over.

All-in-all, the book "Secret Spy Radio Stations", by Ronald Milione, is a disappointment, at best. It rambles, the format shifts around section to section, and there is no new or interesting data that cannot be found with a Google search. Such a paper presented in highschool would garner an F based on the blatant plagiarism alone. This book is little more than a collection of web pages, bound and printed. Interesting web pages, to be sure, but nothing more.

THANKS Token; an excellent review.

Recommended Read



Covert Radio Agents 1939 – 1945 by David Hebditch

Review by: BR.

'Clandestine radio operators had one of the most dangerous jobs of World War 2. Those in Nazi-occupied Europe for the SOE, MI6 and the OSS had a life-expectancy of just six weeks. In the Gilbert Islands the Japanese decapitated 17 New Zealand 'Coastwatchers!'

So begins the introduction to this enthralling book. Profusely illustrated, this book manages to combine a wealth of detail with a smooth, very readable style. A wealth of information, but not bogged down in technical detail. There are also occasional gems of wit & humour.

Chapters cover the use & experiences of agents in the Solomon Islands, Norway & Sweden as well as those in France and Germany as well as a separate chapter on Soviet agents working in Nazi Germany.

Ends with a series of appendices which don't disappoint either, covering everything from Morse code to methods of coding / encrypting along with details some of the radios & other equipment used. Again, these sections are accompanied by a large number of photographs & illustrations.

The only minor quibble I have is that a few of the photographs of original documents are unreadable on the Kindle version, however, this only applies to very few of the illustrations & is not a major issue – especially given the much reduced cost of the Kindle version, which makes the book very affordable.

I personally found this a fascinating read & would recommend it to anyone interested in the subject.

Two UK Broadband ISPs Trial New Internet Snooping System

Thursday, March 11th, 2021 (9:27 am) - Score 42,240

<https://www.ispreview.co.uk/index.php/2021/03/two-uk-broadband-isps-trial-new-internet-snooping-system.html>

Two unnamed broadband or mobile ISPs are reportedly helping the UK Home Office and the National Crime Agency (NCA) to trial a new internet snooping system on their customers, which is being conducted as part of the controversial 2016 UK Investigatory Powers Act (aka – snoopers charter).

The act introduced a new power that, among many other things, could force ISPs – upon being ordered to do so by a senior judge – into logging the Internet Connection Records (ICR) of all their customers for up to 12 months (e.g. the IP addresses of the servers you’ve visited and when), which can be accessed without a warrant and occurs regardless of whether or not you’re suspected of a crime.

NOTE: Obtaining the content of a communication still requires a warrant, but ICRs aren’t deemed to contain content. The Communications Data Code of Practice, which was finalised in 2018, largely indicated that an ICR would “only identify the service that a customer has been using” and this is likely to involve the retention of various different pieces of data (varying between ISPs/networks).

However, the core ICR data should include a customer’s account reference, source IP address, destination IP address + port and the date/time of the start and end of the event or its duration. Other data may additionally be added if available (e.g. volume of data transferred and partial URLs – i.e. only that which contains communications data, not content).

Simplified Interpretation of an ICR Log

Account ID	Date (Time)	Source IP (You)	Destination IP:Port	Data Volume	URL
1	19/01/2017 (12:01)	84.56.232.71	123.45.62.86:80-HTTP	800KB	omgfakeballz.com
1	19/01/2017 (13:12)	84.56.232.71	65.123.45.90:21-FTP	0.2KB	ftp.faketest.co.uk
65	19/01/2017 (13:14)	84.79.130.47	190.45.62.86:80-HTTP	1700KB	icanhasyourdata.net

The IPAct effectively prohibits ISPs from talking about much of this, which makes it difficult to verify the details (it also makes it difficult for ISPs to share experiences when developing best practices for the code), but a new article on Wired has provided the first useful update on this work in some years and confirms that two ISPs are helping to develop the system (BT seem like a fair bet to be one of those, but this is not confirmed).

A spokesperson for the Investigatory Powers Commissioner’s Office (IPCO) confirmed the trial is ongoing and that it is conducting regular reviews to “ensure that the data types collected remain necessary and proportionate”. At this stage the trial is described as being “small scale,” which we’d surmise to mean that it hasn’t yet been enabled for the entire customer base of each ISP.. yet.

Recent court challenges mean that, technically speaking, such data can only be stored (or ordered to be stored) if it is considered necessary and proportionate to do so, such as in the course of helping to fight serious crime. But the Government’s definition of what is and is not a “serious” crime has sometimes been called into question, while the IPAct has also faced some related legal challenges (here).

Meanwhile it’s reported that the NCA has spent at least £130,000 on two external contracts, which are being used to commission companies to build the underlying technical systems to run trials. Assuming all goes well then the Government will want to see this system being rolled out nationally and that could be a real burden for some ISPs.

The IPAct is due for its first 5-year review in the next year, which some hope could be an opportunity to improve its transparency. On the other hand, there may be fears that, without the protection of the EU’s charter, the UK government may seek to make the law even more intrusive and thus to the detriment of personal privacy. Well.. we’re sure nobody would ever want to abuse a mass national snooping system, no not at all (*tongue firmly in cheek*).

<https://www.ispreview.co.uk/index.php/2021/03/two-uk-broadband-isps-trial-new-internet-snooping-system.html>

China represents ‘generational threat’, former MI6 chief warns

By Emma Bowden, PA 56 mins ago

<https://www.msn.com/en-gb/news/uknews/china-represents-generational-threat-former-mi6-chief-warns/ar-BB1eDiRk>

A former MI6 chief has said China represents a “generational threat” as he warned the UK’s relationship with Beijing could become more strained.

Sir Alex Younger, who left the UK’s foreign intelligence service last year, said the pandemic had “closed the gap” between the two countries as he urged the UK to regain its technological and scientific advantage.

Speaking ahead of the publication of the Government’s Integrated Review of security, defence, development and foreign policy, Sir Alex said there would be an “ideological divergence” between the UK and China in the future.

He told BBC Radio 4’s Today programme: “There’s no doubt that China represents the generational threat, and the reason for that is that the idea that China will become more like us as it gets richer, or as its economy matured, is clearly for the birds.

“That’s not going to happen. On the contrary I expect China’s Communist Party to double down on its ideology in the future.

“There’s going to be an ideological divergence between us in the future, that’s going to generate rivalry and reduce trust.”

Asked if China will become the world’s biggest power, he added: “There’s no doubt that China feels advantage at the moment and the pandemic has closed the gap between us in some important ways.

“The language China understands is strength and we need to generate that strength through technological innovations and stewarding our alliances.”

Boris Johnson will set out the findings of the year-long review – billed as the most radical reassessment of Britain’s place in the world since the end of the Cold War – in the Commons on Tuesday.

Alex Younger wearing a suit and tie: Sir Alex Younger (Andrew Milligan/PA)© Provided by PA Media Sir Alex Younger (Andrew Milligan/PA)
The review says Russia under Vladimir Putin represents an “active threat”, but the language on China is more measured, saying Beijing poses a “systemic challenge”, according to a leaked copy obtained by the Guardian.

Sir Alex said Russia was “implacably hostile” to the UK and allied countries, and warned of weapons “they have quite successfully modernised that could do us enormous damage”.

“Russia, of course, or at least the Russian government, is implacably hostile to us and our allied countries, and I think that’s as a matter of their political legitimacy,” he told the Today programme.

“It’s in the Russian government’s interest for there to be a narrative of external threat to underpin the types of measures that they take to keep themselves in power.

“They have not been a constructive presence internationally, they have been highly disruptive and, of course, pretty uniquely, they have got weapons they have quite successfully modernised that could do us enormous damage.”

The review is said to warn there is a “realistic possibility” that a terrorist group will launch a successful chemical, biological, radiological or nuclear (CBRN) attack by 2030, according to the Times.

Sir Alex said he was not aware that a terrorist dirty bomb attack was an “imminent issue”, but added that the UK should “clearly” be prepared for the threat.

<https://www.msn.com/en-gb/news/uknews/china-represents-generational-threat-former-mi6-chief-warns/ar-BB1eDiRk>

China is major threat, but UK will keep up trade links, says defence review

Patrick Wintour and Dan Sabbagh

<https://www.msn.com/en-gb/news/uknews/china-is-major-threat-but-uk-will-keep-up-trade-links-says-defence-review/ar-BB1eDxPN>

a group of people walking in front of a building: Photograph: VCG/Getty Images© Provided by The Guardian Photograph: VCG/Getty Images
The UK will maintain a positive trading and economic relationship with China while recognising Beijing represents the biggest state-based threat to the UK, the UK foreign and defence review will say.

The foreign secretary, Dominic Raab, said China was here to stay and pointed out no other country was taking the kind of strident economic measures against China that hawks were advocating. “It would not be feasible to go into some old, outdated, cold war with China,” he said

He said China was sensitive about its reputation, but admitted there was no firm evidence yet that it had been influenced by criticism from abroad, save at the margins. He insisted the UK was not seeking a free trade agreement with China any time soon, but that it was essential for the UK to cooperate with China on issues such as climate change, described in the review as the number one security threat facing the world.

The balance in the approach to China, reflecting the Sinophile views of the prime minister, Boris Johnson, is likely to attract Tory backbench criticism, with a cross-party alliance on China claiming the strategy is “full of contradictions, dual standards and inconsistencies”. The parliamentarians claim the review’s call for closer trade and economic links is in direct contradiction to the report’s claim that China represents the biggest state-based threat to UK security.

The review’s authors insist the report is not one long apology for Brexit, but an attempt to site Britain as a nimble, agile problem-solving nation supporting open democracy and working closely with Nato, the US and aware of the continuing threat posed by Russia. “We will sit at the heart of a network of like-minded countries and flexible groupings, committed to protecting human rights and upholding global norms. Our influence will be amplified by stronger alliances and wider partnerships – none more valuable to British citizens than our relationship with the United States.”

a group of people standing in front of a building: Soldiers and armed police walk into the Great Hall of the People in Beijing.© Photograph: VCG/Getty Images
Soldiers and armed police walk into the Great Hall of the People in Beijing.

In a sign of the perceived growing threats, the review will lift the cap on the number of Trident nuclear warheads Britain can stockpile by more than 40%, reversing 30 years of gradual disarmament since the collapse of the Soviet Union. The lifting of the cap paves the way for a controversial £10bn rearmament, in response to perceived threats from Russia and China.

Asked why the UK might increase its warhead count, Raab said: “Because, over time as the circumstances change and the threats change, we need to maintain a minimum credible level of deterrent.

“Why? Because it is the ultimate guarantee, the ultimate insurance policy against the worst threat from hostile states.”

The review also warns of the “realistic possibility” that a terrorist group will “launch a successful CBRN [chemical, biological, radiological or nuclear] attack by 2030”, although there is little extra detail to back up this assessment.

Campaigners warned the UK was at risk of starting a “new nuclear arms race” at a time when the world was trying to emerge from the Covid pandemic. Kate Hudson, the general secretary of the Campaign for Nuclear Disarmament (CND), said: “With the government strapped for cash, we don’t need grandiose, money-wasting spending on weapons of mass destruction.”

The review pledges to return to the commitment to spend 0.7 % of gross national income on overseas income, but sets no timetable for doing so. In interviews, Raab repeatedly avoided giving a commitment to hold a Commons vote on the cut, as some say he is legally obliged to do, saying only that ministers would not break the law or else they would be subject to judicial review. The pledge to return to 0.7% at a later date is not new, although it has been presented by Downing Street as a concession to rebels.

Overall the review mentions China 29 times, Russia just 14 times, North Korea eight times and Iran four.

Sir Alex Younger, the former head of MI6, said China represented a “generational threat”. He told BBC Radio 4’s Today programme: “There’s no doubt that China represents the generational threat and the reason for that is that the idea that China will become more like us as it gets richer or as its economy matures is clearly for the birds.

<https://www.msn.com/en-gb/news/uknews/china-is-major-threat-but-uk-will-keep-up-trade-links-says-defence-review/ar-BB1eDxPN>

SBU exposes espionage activities of Belarusian KGB agent

11:15, 24.03.2021

<https://en.interfax.com.ua/news/general/732476-amp.html?>

The counterintelligence service of the Security Service of Ukraine on the territory of Volyn region exposed and stopped intelligence activities of a citizen of Belarus to the detriment of the state security of Ukraine.

According to the SBU press center, it was established that the agent was recruited by the KGB of the Republic of Belarus and purposefully sent to the territory of Ukraine to carry out intelligence tasks and organize other illegal activities.

So, it is documented that the employees of the foreign special services worked out the tasks for the agent to collect up-to-date information about the situation in the border area; the state of protection of the state border of Ukraine; the order of its protection; technical equipment, the number of personnel involved in the State Border Guard Service of Ukraine; compromising data on border guards and customs officers, etc.

"To this end, the agent of the KGB of Belarus tried to involve the servicemen of the State Border Guard Service of Ukraine in confidential cooperation [...] In addition to receiving intelligence information, the curators demanded that the agent establish channels for the transfer of weapons and dual-use goods across the state border," the message said.

In addition, the agent's goal was to organize provocations and create information reasons for accusing Ukraine of allegedly supplying weapons to destabilize the internal political situation in the Republic of Belarus.

Now the citizen of Belarus has been announced on suspicion of committing a crime under Part 1. Article 114 (espionage) of the Criminal Code of Ukraine.

<https://en.interfax.com.ua/news/general/732476-amp.html>

Bulgaria expels two Russian diplomats as spy scandal escalates

By Denitsa Koseva in Sofia March 22, 2021

<https://www.intellinews.com/bulgaria-expels-two-russian-diplomats-as-spy-scandal-escalates-206163/>

Bulgaria declared two Russian diplomats personae non grata on March 22 following the arrest of six Bulgarians suspected of being involved in espionage for Moscow, the foreign ministry said in a statement.

These were the latest in a series of arrests by the Bulgarian authorities of people suspected of spying for Russia. But despite the recent deterioration in relations between the two countries, Russia is carrying out several significant energy infrastructure projects in EU and Nato member Bulgaria.

On March 19, the prosecution said it had arrested six persons led by a former senior military intelligence officer, who built an intelligence network committing espionage for Russia.

The ministry noted that it received information from the prosecution that the two diplomats were involved in the case. They were given 72 hours to leave the country. The ministry provided no further details.

Russia's embassy in Sofia warned of possible Russian reprisals following the expulsions.

"We have to state with regret that this yet another groundless demarche of the Bulgarian authorities will not contribute to the further building of a constructive Russian-Bulgarian dialogue. The Russian side reserves the right to retaliate," the embassy said in a statement posted on social media.

Also on March 22, a Bulgarian court left in custody five out of the six people who were arrested on suspicion of spying for Russia, Dnevnik news outlet reported on March 22. One of those initially arrested was released on bail after providing information to investigators.

Chief prosecutor Ivan Geshev said at press conference on March 19 that the operation infiltrated the defence ministry, Military Intelligence Service and parliament. One of the group members was a former military attaché abroad and current head of the registry for classified information at parliament.

Other members of the group included military personnel employed or formerly employed at the Military Intelligence Service. One was an employee of the defence ministry, involved in planning the budget of the institution.

The group includes also the wife of the officer, dubbed The Resident. She is suspected of gathering information and transmitting it to the Russian embassy, for which she was allegedly paid.

According to news outlet Mediapool, Defence Minister Krassimir Karakachanov said the group was mainly gathering information about the plans to modernise the army.

The suspects photographed secret files on the monitors of their computers, which was documented by security cameras.

The operation was hailed by US and UK officials.

"The UK stands with Bulgaria against Russia's malign activity which seeks to undermine the sovereignty of our Nato ally. We fully support Bulgaria's efforts in disrupting an alleged spy ring & taking steps to tackle Russia's hostile actions in its territory," UK Foreign Secretary Dominic Raab wrote on Twitter.

The US State Department also issued a statement supporting Bulgaria's operation.

"Bulgaria is a friend, Nato ally, and partner. We are attentively watching the Bulgarian investigation into an alleged Russian spy ring. The US strongly supports Bulgaria's sovereignty and stands with Bulgarians against these malign activities on their territory," State Department spokesman Ned Price wrote on Twitter.

Sofia has expelled several Russian diplomats in the last two years. In October 2019, the country expelled a Russian diplomat also allegedly involved in spying, and refused to issue a visa to an incoming defence attaché at the Russian embassy due to a negative opinion provided by one of the bodies in charge of the procedure for issuance of long-term visas.

In January 2020, Bulgaria declared a Russian diplomat persona non grata and a technical staff member unacceptable over alleged espionage. One of the Russians was suspected of gathering information on the electoral process in Bulgaria since 2017, while the other one was believed to have been gathering information concerning Bulgaria's energy and energy security since October 2018, some of which were state secrets.

Relations between Bulgaria and Russia have become increasingly controversial in recent years. While the government in Sofia claims to be pro-EU and not related to Moscow, it is carrying out significant energy projects related to Russia, which has angered the US. In January 2020, then assistant secretary for energy resources Francis Fannon said that the US was maintaining its position against the construction of the Bulgarian section of the Turkish Stream (TurkStream) pipeline and of the Belene nuclear power plant (for which Russia's Atomstroyexport supplied equipment), as it considers they would not give the country energy diversification and security.

According to Aleksey Petrov, former head of the Bulgarian intelligence service, the latest arrests indicate that Bulgaria might be turning into arena of clashes between the special services of Russia and the US. However, there are other theories about the recent arrests. Some believe they might be intended to divert attention from the recent scandal that broke after the EU chief prosecutor Laura Kovesi rejected seven out of ten Bulgarian candidates for the European Public Prosecutor's Office (EPPO). Bulgaria's justice system — of the main targets of mass protests last summer — has come in for criticism from EU institutions recently.

<https://www.intellinews.com/bulgaria-expels-two-russian-diplomats-as-spy-scandal-escalates-206163/>

New ITV drama **The Ipress File** looks amazing - get the details

Joe Cole, Lucy Boynton and Tom Hollander are set to star in the spy thriller
MARCH 10, 2021 - 16:34 GMT BY EVE CROSBIE

https://www.hellomagazine.com/film/20210310108611/itv-the-ipress-file-everything-you-need-to-know-new-spy-drama/?viewas=amp&_twitter_impression=true

We love nothing more than an ITV drama, and brand new spy thriller **The Ipress File** is one we can't wait to watch.

The new series, which will hopefully hit screens later this year, looks like it's going to be an utterly gripping watch from start to finish and has a stellar cast too.

What is **The Ipress File** about?

Based on Len Deighton's best-selling novel of the same name, **The Ipress File** follows Harry Palmer, a British army sergeant in post-war Berlin. As the synopsis from ITV reads: "In this newly partitioned city, a sharp working-class young man with sophisticated tastes can make a lot of money. Wholesaler, retailer, fixer, smuggler, Harry's varied interests bring him into contact with everything and everyone – until the law catches up and it all comes crashing to a halt.

The series will follow spy Harry Palmer, played by Joe Cole

"Harry finds himself sentenced to eight years in a grim military jail in England, all his prospects abruptly torn away. But his impressive network and efficiency have not gone unnoticed, and a gentleman from British intelligence has a proposal. To avoid prison, Harry Palmer will become a spy."

The one-off series will consist of six episodes, although ITV Studios' Managing Director Ruth Berry teased that the show "has potential to run and run" given that **The Ipress File** is the first of seven novels about the spy.

Who stars in **The Ipress File**?

Taking on the lead role of Harry is **Peaky Blinders'** Joe Cole, while **Bohemian Rhapsody** actress Lucy Boynton plays his assistant, Jean Courtney. BAFTA award-winning actor Tom Hollander stars as Major Dalby, who heads up the counter-espionage unit.

Tom Hollander stars as Major Dalby

Other cast members include Ashley Thomas, Joshua James, David Dencik and **Avengers** star Tom Vaughan-Lawlor.

Is there a trailer for **The Ipress File**?

Sadly, no. The series has only just commenced filming in Liverpool and Croatia, so it seems like it will be a while before ITV release a trailer but watch this space

https://www.hellomagazine.com/film/20210310108611/itv-the-ipress-file-everything-you-need-to-know-new-spy-drama/?viewas=amp&_twitter_impression=true

They'll have to go some to better Messrs Caine, Green and Doleman performances in the 1965 film of the same name irrespective of it following the book storyline. 'Funeral in Berlin' was good too, but Billion Dollar Brain?' See what happens when Hollywood gets hold of an idea. The director states the potential to run and run but lets hope if it does it doesn't become another boring soap [or cooking programme given Palmer's propensity as a gourmet of sorts].

For the flight buffs:

New British 'Mosquito' fighter aircraft to fly in 2023

By George Allison - March 25, 2021

<https://ukdefencejournal.org.uk/new-british-mosquito-fighter-aircraft-to-fly-in-2023/>

The uncrewed fighter aircraft demonstrator, known as **Mosquito**, will begin a flight-test programme in 2023. Minister for Defence Procurement, Jeremy Quin, gave a keynote speech at the RUSI Combat Air Power conference outlining the plan.

"Our £30m contract to design and manufacture the prototype for an uncrewed fighter aircraft, known as **Mosquito**, is supporting more than 100 jobs in Belfast. In 2023 we will be looking to conduct a flight-test programme for the demonstrator."

Known as a 'loyal wingman', these aircraft will be the first uncrewed platforms able to target and shoot down enemy aircraft and intercept surface to air missiles.

“The uncrewed combat aircraft will be designed to fly at high-speed alongside fighter jets, armed with missiles, surveillance and electronic warfare technology to provide a battle-winning advantage over hostile forces. Known as a ‘loyal wingman’, these aircraft will be the UK’s first uncrewed platforms able to target and shoot down enemy aircraft and survive against surface to air missiles.”

Team MOSQUITO, which also includes Northrop Grumman UK, will mature the designs and manufacture a technology demonstrator to generate evidence for the LANCA programme.

If successful, Project Mosquito’s findings could lead to this revolutionary capability being deployed alongside the Typhoon and F-35 Lightning jets by the end of the decade.

“The Project will deliver a demonstration of a capability that the RAF may wish to develop further in the future,” a spokesperson from the RAF said.

“It is not intended to output an operational capability at this stage, but it will inform future decisions for the future UK combat air capability. We are exploring the optimum way in which such capabilities could complement platforms such as Typhoon, F-35, and Tempest.”

<https://ukdefencejournal.org.uk/new-british-mosquito-fighter-aircraft-to-fly-in-2023/>

Morse Stations

All frequencies listed in kHz. Freqs are generally +/- 1k

This is a representative sample of the logs received, giving an indication of station behaviour and the range of times/freqs heard. These need to be read in conjunction with any other articles/charts/comments appended to this issue.

Morse - Number Stations

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

Variant formats continue to be used on an irregular but frequent basis. Four variant formats have been identified

Standard Format:	197 (R4m) 117 117 30 30 == 93447 20478 == 117 117 30 30 000	(Still the most commonly used format)
Variant Format 1:	197 (R4m) 147/30 147/30 78902 ... 86083 147/30 000	(Not in use)
Variant Format 2:	197 (R4m) 521=30 == 521=30 == 46547 ... 88305 = 521=30 == 521=30 0=0=0	(Not in use)
Variant Format 3:	463 (R4m) 127 30 == == 84820 ... LG 82607 == == 127 127 30 30 000	(Not used at all in 2020)
Variant Format 4:	197 (R4m) 589 589 = 30 30 == 40728 58918 == = 589 589 = 30 30 000	(Logged only once in Jan / Feb)

March 2021:

5020	2000z	02 Mar	'463' 399 30 == 26962 ... 36470 ==	Fair, very fast. Excellent Morse. No errors	BR/HFD	TUE
	2000z	04 Mar	'463' 862 30 == 37614 ... 45793 ==	Fair, fast. No errors noted, but only two zeros sent at EOT	BR	THU
	2000z	11 Mar	'463' 526 30 == 08998 ... 69541 ==	Fair/Good, fast. Numerous errors noted	BR	THU
	2000z	18 Mar	'463' 837 30 == 99156 ... 66266 ==	Good, fast. Multiple errors & jumbled towards EOM	BR	THU
5475	1800z	02 Mar	'463' 843 30 == 09743 ... 66132 ==	Fair, very fast. Excellent Morse. No errors	BR	TUE
	1800z	04 Mar	'463' 078 30 == 64882 ... 26307 ==	Fair, fast. No errors noted	BR	THU
	1800z	09 Mar	'463' 398 30 == 43576 ... 20276 ==	Fair, slow. No errors noted. Moderate data mode QRM	BR/HFD	TUE
	1800z	11 Mar	'463' 285 30 == 19709 ... 01726 ==	Fair. Slow to very fast before settling on fast. Many errors	BR	THU
	1800z	16 Mar	'463' 333 30 == 90267 ... 74511 ==	Fair/Good, fast. No errors (excepting a few in call-up)	BR	TUE
	1800z	18 Mar	'463' 834 30 == 44866 0659 ==	Weak, fast. Heavy noise. Poor copy	BR	THU
	1800z	23 Mar	'463' 137 30 == 47168 ... 46199 ==	Fair/Good, fast. Numerous errors noted	BR	TUE
	1800z	25 Mar	'463' 876 30 == 26314 ... 74453 ==	Good, fast. One noted error. grp14 551550 51550	BR	THU
6260	1500z	13 Mar	'463' 486 30 == 93434 ... 13520 ==	Fair, fast. One noted error. Grp12 52154 52145	BR	SAT
	1500z	20 Mar	'463' 318 30 == 65014 ... 66822 ==	Fair, fast. One noted error. Grp17 944776 94776	BR	SAT

April 2021:

5020	2000z	01 Apr	'463' 270 30 == 47845 ... 15119 ==	Fair, fast. Excellent Morse. Long zeros for ending GC	BR	THU
	2020z	27 Apr	'463' 163 30 == 85520 ... 74069 ==	Good/Strong, fast. One error. Grp18 627020 62720	BR	TUE
5475	1800z	06 Apr	'463' 362 30 == 44256 ... 99522 ==	Fair, fast. Excellent Morse. No errors	BR	TUE
	1800z	08 Apr	'463' 724 30 == 80866 ... 44818 ==	Fair, fast. Numerous errors. Poor copy at times	BR	THU
	1800z	15 Apr	'463' 353 30 == 41089 ... 50492 ==	Fair, fast. Excellent Morse. No errors	BR	THU
	1800z	20 Apr	'463' 529 30 == 10113 ... 45268 ==	Fair, fast. High noise level. Excellent Morse. No errors	BR	TUE
6260	1500z	03 Apr	'463' 345 30 == 23213 ... 88257 ==	Weak/Fair, Very fast. No noted errors	BR/HFD	SAT
5260	1500z	10 Apr	'463' 517 30 == 03326 ==	Found in progress. Note incorrect freq. used	AB	SAT
6260	1500z	17 Apr	'463' 444 30 == 55937 ... 60900 ==	Fair/Good, fast. Excellent Morse. No errors. Pause grp29	BR	SAT

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

A number of regular schedules have been reported & Logged by Edd Smith – See ENIGMA 2000 Newsletter 116 for details.

Logs are shown as continuous. In practice there are often pauses between lines – Often quite lengthy pauses.

6847	398	0825z	19 Mar	398 (x2) 81949 (x3)		F5JBR	FRI
5878		0848z	19 Mar	31101 23029 53455 32628 35847 111 35847 52095 65665 64587 79590 = 721 24 111 000		F5JBR	FRI
5431		Hand keyed - various speeds					
		1825z (IP) 02 Apr		333 29489 29489	(x3)	AB	FRI
		1830z		333 29257 29257	(x6)		
		1834z		217 217 217 333 29481 29481	(x6)		
		1839z		217 217 217 333 19629 19629 217 217 217 000			

M08a XVIII ICW / CW, some MCW

No reports

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

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

Asiatic M12 Schedules

17463/16263/15863	0100/20/40z	16 Mar	428 1		(Via SDR Japan)	HFD	TUE
10904/10204/9304	0700/20/40z	01 Apr	923 1		(Via SDR Japan)	HFD	THU
	0700/20/40z	22 Apr	923 1 (499 106)	99324 99553 ... 80053 06277 000 000	(Via SDR Japan)	Gert	THU
	0700/20/40z	27 Apr	923 1 (7189 194)	41699 36683 ... 64246 02051 000 000	(Via SDR Japan)	Gert	TUE

European M12 Logs

March 2021: New scheds in bold type

5863/7463/8163	0030/0050/0110z	12 Mar	841 1 (528 83)	39222 88946 ... 39748 61042 000 000		Gert	FRI
	0030/0050/0110z	16 Mar	841 000			HFD	TUE
	0030/0050/0110z	19 Mar	841 000			Gert	FRI
	0030/0050/0110z	23 Mar	841 1 (6100 74)	35344 22767 ... Too weak to copy		Gert	TUE
	0030/0050/0110z	26 Mar	841 1 (6100 74) Too weak to copy		Gert	FRI
8126/7526/6826	2200/20/40z	05 Mar	178 1 (2096 102)	11562 34099....		BR	FRI
	2200/20/40z	12 Mar	178 1 (2096 102)	11652 34099 ... 15923 60954 000 000		BR/Gert/HFD	FRI
	2200/20/40z	19 Mar	178 1 (6880 88)	60273 22001 ... 05566 47146 000 000		BR/Gert	FRI
	2200/20/40z	20 Mar	178 1 (6880 88)	60273 22001 ... 05566 47146 000 000		Gert	SAT
	2200/20/40z	26 Mar	178 1 (6880 88)	60273 22001 ... 05566 47146 000 000		BR/E.SMITH	FRI
8164/6964/5764	2210/30/50z	08 Mar	197 1 (6508 68)	71530 43194....		BR/HFD	MON
	2210/30/50z	11 Mar	197 1 (6508 68)	71530 43144 ... 65973 78347 000 000		BR/Gert	THU
	2210/30/50z	18 Mar	197 000			BR/Gert	THU
	2210/30/50z	22 Mar	197 1 (7 .83 83)	92495 5031 .		BR	MON
	2210/30/50z	25 Mar	197 1 (537 83)	92492 5 . .10....		BR	THU
9157/7957/6857	2300/20/40z	11 Mar	917 000			Gert	THU
	2300/20/40z	18 Mar	917 1 (396 87)	76388 48670 ... 27422 86660 000 000		Gert/HFD	THU
	2300/20/40z	25 Mar	917 000			Gert	THU
9317/10484/11552	0530/0550/0610z	09 Mar	135 1			HFD	TUE
	0530/0550/0610z	16 Mar	135 1 (7470 107)	62635 04987 ... 89533 69393 000 000		Gert	TUE
	0530/0550/0610z	23 Mar	135 1 (2296 107)	10921 40351 ... 12613 07314 000 000		Gert	TUE
	0530/0550/0610z	30 Mar	135 1 (7564 107)	47934 10052 ... 08544 22335 000 000		Gert	TUE
10172/9072/---	2050/2110/2130z	03 Mar	105 000			HFD	WED
	2050/2110/2130z	10 Mar	105 000			BR	WED
	2050/2110/2130z	12 Mar	105 000			BR/Gert	FRI
	2050/2110/2130z	19 Mar	105 000			BR/Gert	FRI
	2050/2110/2130z	26 Mar	105 000	Malfunctioning machine occasionally speeding through fives, Fair		E.SMITH	FRI
10267/9267/8067	0110/30/50z	11 Mar	229 1 (8376 64)	19877 60376 ... 96700 02812 000 000		AB	THU
	0110/30/50z	14 Mar	229 1			HFD	SUN
	0110/30/50z	21 Mar	229 1	Too weak to copy...		Gert	SUN

12162/11566/10711	1710/30/50z	03 Mar	546 1		(Via SDR Russia)	HFD	WED
	1700/20/40z	04 Mar	546 1 (3249 107)	29327 58103....		BR	THU
	1800/20/40z	04 Mar	546 1 (6169 109)	69 .28 27160....		BR	THU
	1710/30/50z	10 Mar	546 1 (8695 104)	28298 56183....		BR	WED
	1700/20/40z	11 Mar	546 1 (1651 106)	82480 14435 ... 99482 43733 000 000		Gert/HFD	THU
	1800/20/40z	11 Mar	546 1 (8167 112)	12162 44237 ... 67229 72828 000 000		Gert/HFD	THU
	1710/30/50z	17 Mar	546 1 (7491 109)	42650 09717 ... 21885 29212 000 000		AB/BR	WED
	1800/20/40z	18 Mar	546 1 (3653 113)	72800 13388 ... 22249 78605 000 000		BR/Gert	THU
	1710/30/50z	24 Mar	546 1 (3013 112)	32792 72295....		BR	WED
	1700/20/40z	25 Mar	546 1 (4252 104)	67685 55491 ... 28206 17650 000 000		Gert	THU
	1800/20/40z	25 Mar	546 1 (3301 106)	76724 99070....		BR	THU
	1710/30/50z	31 Mar	546 1 (8789 109)	37111 80909 ... 02719 91183 000 000		Gert	WED
14377/13461/12114	1300/20/40z	01 Mar	317 1 (324 98)	84202 41801 ... 34814 22954 000 000		Gert	MON
	1200/20/40z	09 Mar	317 1 (4495 95)	77868 68951 ... 48289 81529 000 000	Clearly readable	E.SMITH/HFD	TUE
	1300/20/40z	15 Mar	317 1 (6281 100)	16048 15216....		BR/HFD	MON
	1200/20/40z	16 Mar	317 1 (9455 96)	57441 32859....		BR	TUE
	2000/20/40z	18 Mar	317 1			HFD	THU
	1300/20/40z	22 Mar	317 1 (7665 104)	91904 85053 ... 63291 65851 000 000		BR/Gert	MON
	1200/20/40z	23 Mar	317 1 (7980 100)	26374 81699 ... 60803 89273 000 000		Gert	TUE
	2000/20/40z	25 Mar	317 1 (7346 104)	25806 23664 ... 92180 17943 000 000		Gert	THU
	1200/20/40z	30 Mar	317 1 (6783 101)	09396 14128 ... 25227 04107 000 000		Gert	TUE
15848/17448/19148	0800/20/40z	10 Mar	841 000			HFD	WED
	0800/20/40z	21 Mar	841 1 (9688 92)	28783 28466 ... 52188 16202 000 000		Gert	SUN
April 2021:							
6854/8154/9354	0030/0050/0110z	06 Apr	813 1 (2320 121)	83685 75644 ... 10932 67765 000 000		Gert	TUE
	0030/0050/0110z	09 Apr	813 1 (2320 121)	83685 75644 ... 10932 67765 000 000		Gert	FRI
	0030/0050/0110z	13 Apr	813 000			Gert	TUE
	0030/0050/0110z	16 Apr	813 000			Gert	FRI
	0030/0050/0110z	27 Apr	813 000		(Via SDR Russia)	HFD	TUE
	0030/0050/0110z	30 Apr	813 000			E.SMITH/Gert	FRI
7575/8175/9175	2100/20/40z	02 Apr	511 1 (179 126)	62668 04851 ... 70824 04617 000 000		Gert/HFD	FRI
	2100/20/40z	02 Apr	511 1 (179 126)	62668 04851....		BR	SAT
	2100/20/40z	09 Apr	511 1 (179 126)	62668 04851 ... 70824 04617 000 000		BR/Gert	FRI
	2100/20/40z	10 Apr	511 1 (179 126)	62668 04851 ... 70824 04617 000 000		BR/E.SMITH/Gert	SAT
	2100/20/40z	16 Apr	511 1 (4754 116)	31429 44665 ... 77600 16160 000 000		BR/Gert	FRI
	2100/20/40z	23 Apr	511 1 (4754 116)	31429 44665....		BR	FRI
	2100/20/40z	24 Apr	511 1 (4754 116)	31429 44665 ... (The 9175kHz, 2140z call lasted 4m)		BR/Gert	SAT
9371/10484/11552	0530/0550/0610z	06 Apr	135 1 (7796 113)	39840 02711 ... 10241 69311 000 000		Gert	TUE
	0530/0550/0610z	13 Apr	135 1 (2949 112)	90459 23908 ... 85790 15428 000 000		Gert	TUE
	0530/0550/0610z	20 Apr	135 1 (8906 109)	09156 83486 ... 48504 67020 000 000		Gert	TUE
	0530/0550/0610z	27 Apr	135 1 (7940 113)	14470 92756 ... 77793 53629 000 000		Gert	TUE
10572/9372/8172	2110/30/50z	01 Apr	531 000			BR	THU
	2110/30/50z	12 Apr	531 000			BR/Gert	MON
	2110/30/50z	15 Apr	531 000			Gert	THU
	2110/30/50z	19 Apr	531 1 (. 55 81)	77 .6		BR/HFD	MON
	2110/30/50z	22 Apr	531 1 (355 81)	77766 82457 Signal too weak		BR/Gert	THU
	2110/30/50z	29 Apr	531 000			E.SMITH/Gert	THU
11012/10212/9312	2210/30/50z	10 Apr	923 1 (4967 66)	73876 85130 ... 58928 68273 000 000		E.SMITH/Gert/HFD	SAT
	2210/30/50z	14 Apr	923 1 (9975 90)	Too weak to copy		Gert	WED
12139/11139/---	2000/20/40z	01 Apr	234 1			HFD	THU
	2000/20/40z	05 Apr	234 000			Gert	MON
	2000/20/40z	12 Apr	234 1 (9550 54)	45224 48701 ... 18949 76594 000 000	V.Strong	Gert	MON
	2000/20/40z	15 Apr	234 1 (9550 54)	45224 48701 ... 18949 76594 000 000		Gert	THU
	2000/20/40z	19 Apr	234 000			Gert	MON
	2000/20/40z	22 Apr	234 000			Gert	THU
	2000/20/40z	29 Apr	234 1 (4438 96)	76211 70732 ... 31437 70558 000 000		Gert	THU
12162/11566/10711	1700/20/40z	01 Apr	546 1 (9754 113)	57428 20428....		BR	THU
	1800/20/40z	01 Apr	546 1 (2612 105)	64432 08637....		BR	THU
	1700/20/40z	08 Apr	546 1 (7633 111)	38527 06954 ... 89895 89469 000 000		BR/Gert	THU
	1800/20/40z	08 Apr	546 1 (9994 110)	28026 79420 ... 03145 69884 000 000		Gert	THU
	1710/30/50z	14 Apr	546 1 (8759 109)	87646 48275 ... 47053 64457 000 000		BR/Gert	WED
	1700/20/40z	15 Apr	546 1 (2113 108)	92233 11477....		BR	THU
	1800/20/40z	15 Apr	546 1 (2460 105)	35030 02535....		BR	THU
	1710/30/50z	21 Apr	546 1 (9390 104)	05863 47562 ... 32926 16355 000 000		Gert	WED
	1700/20/40z	22 Apr	546 1 (7658 107)	80863 42577 ... 19640 65272 000 000		Gert	THU
	1800/20/40z	22 Apr	546 1 (8143 108)	29672 40162 ... 19473 76042 000 000		BR/Gert	THU
	1710/30/50z	28 Apr	546 1 (5455 109)	26270 43828 ... 71701 47792 000 000		Gert	WED
	1800/20/40z	29 Apr	546 1 (7716 110)	23158 85630 ... 22042 15621 000 000		Gert	THU
13386/12189/11491	1300/20/40z	30 Apr	725 1 (4346 75)	75252 80218 ... 45443 76964 000 000		AB	FRI

13453/12153/---	1950/2010/2030z	02 Apr	414 000			Gert/HFD	FRI
	1950/2010/2030z	09 Apr	414 000			BR	FRI
	1950/2010/2030z	14 Apr	414 000			BR/Gert	WED
	1950/2010/2030z	23 Apr	414 000			BR	FRI
14377/13461/12114	1300/20/40z	05 Apr	317 1 (7701 104)	83438 43691 ... 90307 68901 000 000		Gert	MON
	1200/20/40z	06 Apr	317 1 (1424 95)	80744 47741 ... 09511 39999 000 000		Gert	TUE
	1300/20/40z	12 Apr	317 1 (7825 99)	03730 05132....		BR	MON
	1300/20/40z	19 Apr	317 1 (4631 99)	90868 27332 ... 89831 17447 000 000		Gert	MON
	1200/20/40z	20 Apr	317 1 (7108 98)	39553 73837....		BR	TUE
	1300/20/40z	26 Apr	317 1 (1444 97)	60535 97954 ... 28501 67168 000 000		Gert	MON
	1200/20/40z	27 Apr	317 1 (1169 101)	37275 12123 ... 09971 61230 000 000		BR/Gert	TUE
16321/15821/14721	1600/20/40z	11 Apr	387 1			HFD	SUN
	1600/20/40z	14 Apr	387 000			Gert	WED
	1600/20/40z	25 Apr	387 1 (481 77)	43033 69710 ... 49453 26017 000 000		Gert	SUN
	1600/20/40z	28 Apr	378 000			Good/Poor E.SMITH	WED

M12 14377/13461/12114kHz 1200/1220/1240z 09 March 2021
317 317 317 1 (R2m) 4495 95 4495 95
77868 68951 12549 08505 86013 37851 21001 64216 17070 22020
60141 06725 80339 02523 66444 16200 17645 19680 06967 13670
06794 96609 33623 13877 06612 96763 79500 49706 53587 60725
74900 49564 28972 48529 26811 70846 89505 30405 53063 73862
75433 06882 31195 23818 44563 85274 42119 34275 61672 32100
34778 30894 44038 19902 70152 27730 64260 94336 36321 21290
43172 22156 52498 91328 65638 17949 04735 33447 63860 01431
08004 87781 53765 04135 67951 37928 03538 24787 65522 36100
59084 38581 07400 18473 57359 11628 75822 12685 49977 80521
52474 86593 11294 48289 81529 000 000
<i>Courtesy E.SMITH</i>

M12 8126/7526/6826kHz 2200/2220/2240z 012 March 2021
178 178 178 1 (R2m) 2096 102 2096 102
11562 34099 61080 33627 16257 46308 95509 33153 27550 76089
75084 68803 22033 61495 50676 18588 64756 01551 32824 76927
04217 44044 20083 17588 40163 26459 38591 32217 93854 09523
05304 31645 98187 40079 63650 72665 39139 41576 15898 95179
12971 21635 38892 07768 07058 75757 20634 26130 82805 49400
47788 42223 52712 29242 53372 87218 35720 49032 90412 46058
45100 27712 14457 80994 13002 10283 25665 49251 42374 03839
98683 66285 95773 89159 06642 58357 83517 21871 63118 19722
47133 93985 76078 37698 05668 86636 70209 07962 58611 15528
31522 50035 45434 70569 29001 03634 49531 10024 82407 76984
15293 60954 000 000
<i>Courtesy Gert</i>

M12 12162/11566/10711kHz 1710/1730/1750z 17 March 2021
546 546 546 1 (R2m) 7491 109 7491 109
42650 09717 78332 51074 69605 70911 74996 82978 97105 85848
44418 45603 00500 39474 31294 98656 12536 20811 26948 92101
91005 22569 69031 75237 30361 62805 66637 01474 05214 35520
40828 98488 93412 93760 60487 87118 16500 58447 26584 60195
98924 45940 17307 28306 19288 94631 76168 27366 98936 53412
86023 05034 99523 55724 54746 29823 69412 05928 76916 02601
06266 39650 07808 95403 95437 95576 92813 96749 19417 97837
58671 41997 83880 78778 27901 90257 16201 15098 77860 71519
00144 78652 39326 11768 17791 58294 74156 05763 39564 84609
63928 32139 95614 88756 63125 12143 02208 45873 73464 83416
97042 31666 01708 62520 39928 28487 87983 21885 29212
000 000
<i>Courtesy AB</i>

M12 7575/8175/9175kHz 2100/2120/2140z 09 & 10 April 2021
511 511 511 1 (R2m) 179 126 179 126
62668 04851 53176 82070 04842 59850 83056 82108 74517 48281
15821 45664 71884 11147 95478 67071 83850 14864 22689 25844
32445 85897 20137 62131 84094 49690 09969 28617 87733 66679
96009 24104 92219 67805 76307 05503 30349 56089 59928 55749
24018 76220 23788 90410 12223 82124 88235 75524 35050 98646
23174 72562 80730 75958 08300 95548 95215 21775 73086 82363
96784 07047 12252 46495 06557 54786 32209 03543 40296 79277
19967 98682 55502 82838 29159 51227 51496 34598 83813 53319
09036 84757 88848 85329 22441 37869 22990 80792 28081 66388
36938 09375 98743 15143 85992 05229 26783 02292 47930 70583
50995 31175 56373 71898 75086 34651 50608 33180 73278 20402
59749 95188 74853 35943 97542 72003 04798 56147 61165 95387
23897 73531 23834 74887 70824 04617 000 000
<i>Courtesy Gert & E.SMITH</i>

M14 IA MCW / ICW Short 0

March 2021:

10755 0830z ?	01 Mar	975 (138 42) =	... 11512 28254 138 42 00000 (Heard In Progress 0840z)	RNGB	MON
9073 0900z	01 Mar	975 (138 42) = 08431 37638 ...	11512 28254 138 42 00000	RNGB	MON
10423 1000z	03 Mar	534 (129 45) = 91618 33381 ...	82673 50363 = 129 45 00000	RNGB	WED
8167 1030z	03 Mar	534 (129 45) = 91618 33381 ...	82673 50363 = 129 45 00000	RNGB	WED
4731 0800z	06 Mar	523 (757 20) = 77881 34589 ...	00075 00156 = 757 20 00000	AB	SAT
4651 0900z	06 Mar	523 (757 20) = 77881 34589 ...	00075 00156 = 757 20 00000	AB	SAT
17458 0930z	10 Mar	617 (428 165) = 79381 32735 ...	89689 77212 = 428 165 00000 Echo on signal	AB/ER/RNGB	WED
15994 0930z	11 Mar	617 (428 165) = 79381 32735 ...	89689 77212 = 428 165 00000	AB/HFD	THU
17485 0930z	25 Mar	617 (428 165) =	Repeat of 10 March message	ER/HFD	THU
15994 0930z	26 Mar	617 (428 165) = 79381 32735 02179 ...	77212 = 428 165 00000	HFD/RNGB	FRI

April 2021:

17458 0930z 10 Apr 617 0000 (SDR Utwente) RNGB SAT
 0930z 25 Apr 617 0000 ER SUN

<p>M14 10423kHz 1000z 03 March 2021</p> <p>534 (R4m) 129 129 45 45 ==</p> <p>91618 33381 95932 76831 44211 31516 24867 24813 60722 97376 72161 58563 52497 54461 64171 29176 46558 70671 79341 98573 76028 04177 46292 73705 69872 45869 24824 55297 15389 25577 05758 80840 91897 74245 90575 66501 99050 59257 36769 77645 28217 35085 79859 82673 50363 ==</p> <p>129 129 45 45 00000</p> <p style="text-align: right;"><i>Courtesy RNGB</i></p> <p>M14 4731kHz 0800z 06 March 2021</p> <p>523 (R4m) 757 757 20 20 ==</p> <p>77881 34589 14882 55353 12480 99199 88903 14797 22076 13288 70179 89033 55789 80041 66890 34567 09003 39399 00075 00156 ==</p> <p>757 757 20 20 00000</p> <p style="text-align: right;"><i>Courtesy AB</i></p>
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<p>M14 15994kHz 0930z 11 March 2021</p> <p>617 (R4m) 7428 428 165 165 ==</p> <p>79381 32735 02179 33324 96239 56638 17334 08237 89914 97709 99636 37760 99066 07860 13728 33125 61284 31568 62777 45689 62042 97672 12181 80567 77983 80914 00373 45343 94244 25979 99859 74335 99608 17905 77031 04152 73179 96576 40866 36314 55073 01991 61538 27569 64458 53056 47150 73165 49929 91290 71102 09421 98451 29564 19463 68535 32702 47882 07117 16676 99007 27724 13262 69066 43568 55553 60255 73006 60511 12233 20232 56150 31803 57649 84523 56511 70829 45802 92029 93597 65720 44393 28384 93526 94108 73912 16649 26923 50985 00380 94368 07603 49682 07587 03809 08110 13119 75112 53781 56415 74970 42478 67496 07786 24175 67728 92896 72259 54596 99054 41686 77311 86569 14969 96991 74118 99659 63291 66199 32158 87351 32203 82132 24916 95329 09220 08414 93773 96281 56219 81697 92666 94450 83805 47398 29633 52782 91746 97290 59707 68051 52681 16713 13656 38019 93132 87236 04710 33451 28755 73517 17043 11222 20305 86204 65554 79979 10010 33235 25827 23260 81411 61297 89689 77212 ==</p> <p>428 428 165 165 00000</p> <p style="text-align: right;"><i>Courtesy AB</i></p>

M23 O ICW

Yet more activity from M23. Moving slightly down the band, M23 was logged, in progress, at 1605z on Thursday, 18 March on 5340kHz – 5kHz down from their favoured frequency of 5345kHz – sending a call of 505. Ary, (AB), was able to confirm a starting time for the transmission of 1320z.

5340	1320* – 1735z	18 Mar	505 (R 4hr 15m)	Long zero [* Reported start time]	Very strong	THU
5340	0800 – 1215z	19 Mar	505 (R 4hr 15m)			FRI
	1459 – 1504z	19 Mar	505 (R5m)			FRI
	1544 – 1920z	19 Mar	505 (R 3hr 36m)			FRI
5340	0800z – 1215z	20 Mar	505 (R 4hr 15m)			SAT
	1309z – 1724z	20 Mar	505 (R 4hr 15m)			SAT

No transmissions on Sunday, 21 March, but a return to the favoured frequency of 5345kHz for Monday, 22 March,

5345	1330 – 1343z	22 Mar	000 (R13m)	Long zero		MON
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No transmissions on Tuesday, 23 or Wednesday, 24 March – Although the characteristic 'dit' was heard prior to 1700z on Tuesday, no transmission followed.

On Thursday, 25 March transmissions moved to another of M23's preferred frequencies. Now sending 555

6961	0810 – 1222z	25 Mar	555 (R 4hr 12m)			THU
	1244 – 1700z	25 Mar	555 (R 4hr 16m)			THU
	1712 – 2127z	25 Mar	555 (R 4hr 16m)			THU

It was interesting to note that in S.E. England that whilst M23 was weak – readable, M51 was not able to be heard at all at this time, although on the Twente SDR in the Netherlands, both were audible, but with M23 definitely the stronger signal.

6961	0712 – 0857z	26 Mar	555 (R 1hr 45m)			FRI
	1512 – 1838z	26 Mar	000 (R 3hr 26m)	Long zero		FRI
	1847 – 2121z	26 Mar	000 (R 2hr 34m)	Long zero		FRI
	2140 – 2358z*	26 Mar	000 (R 2hr 18m)	Long zero	* Radar QRM for 1hr+ M23 gone when radar ended Weak	FRI
6961	0234 – 0408z	27 Mar	000 (R 1hr 34m)	Long zero		SAT
	0450 – 0504z	27 Mar	000 (R14m)	Long zero	Weak	SAT
	2113 – 2300z	27 Mar	000 (R 1hr 47m)	Long zero		SAT

8134	(Various)	21/22 Apr	5260 (R)	On and off from Wed 21 April (or before). Ended 0810z Thu 22		WED/THU
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Thanks to those monitoring M23 – AB, BR, E.SMITH, F5JBR, PLdn, tiNG Special thanks to Ary, (AB), for his constant monitoring of the station & logs – (Particularly the early morning starts!)

M23 from PoSW

Peter has, once again, also been following M23. This is his log;

M23 Morse had been heard on 5345 kHz in February sending a slow "OOO" & appeared to cease on the 25th of that month;

M23 showed up again in March, not on 5345 but "five lower" i.e. 5340 kHz:-

18-Mar-21, Thursday:- 1524 UTC, 5340 kHz, slow CW sending, "505", long, i.e. five-dash "zero", strong signal. This was on for a long time, still going when checked at 1545, 1600, 1630 & 1700 UTC, gone when checked at approx. 1750 UTC.

19-Mar-21, Friday:- 0827 UTC, "505" again, strong, still on at 0930, 1000, 1015 & 1100 UTC. Out shopping at this point, gone on my return at 1225z.
1459 UTC:- starting up with "505", a quick "blip" had been heard about three minutes before this time. Must have been a short transmission, not heard when checked at 1510z.
1544 UTC:- back on, in progress with "505", still on when checked at 1740 & 1830 UTC, not on at 1920.

20-Mar-21, Saturday:- 0759:30s UTC, starting up with "505", checking every once in a while was still on, eventually stopped before 1215z.
1320 UTC, in progress with "505", strong signal, still on when checked at 1440, 1535 & 1650 UTC, not on when monitored at 1727z.

Not heard on Sunday 21-March, not heard since on either 5340 or 5345.

[Thanks for the report, Peter – The 'blip' has been noted by other members & is one of the interesting characteristics of the station].

Morse Stations - Not Number Related

M51 XIX

3881//6825 100 grp 5-ltr messages with headers

No reports – M51b format in use

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

3881//6825

1230 - 1302z	23 Mar	Mardi-Leçon	22-2/1 Codé	22-2/2 Clair,	22-2/3 Codé,	22-2/4 Clair (600 grps/hr)	BR	TUE
1230 - 1305z	24 Mar	Mercredi- Leçon	23-2/1 Codé,	23-2/2 Clair,	23-2/3 Codé,	23-2/4 Clair (720 grps/hr)	BR	WED
1130 - 1156z	25 Mar	Jeudi- Leçon	24-2/1 Codé,	24-2/2 Clair,	24-2/3 Codé,	24-2/4 Clair (840 grps/hr)	BR	THU
1130 - 1203z	26 Mar	Vendredi- Leçon	25-2/1 Codé,	25-2/2 Clair,	25-2/3 Codé,	25-2/4 Clair (960 grps/hr)	BR	FRI

M51b Non-stop 5-character groups composed of M51a messages on 3881//6825kHz

3881//6825

1617z	19 Apr	Non-stop 5-character groups composed of M51a messages	BR	MON
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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).

3819	4079	5206	7556	8100	10335	11123
	4122	5454	7602	8223		
	4222	5660	7770	8633		
	4223					
	4245					
	4344					
	4356					
	4524					
	4639					
	4679					
	4700					
	4831					
	4858					
	4874					

New Scheds for Mar/ Apr 2021:

From logs submitted from JPL & F5JBR

3823	New frequency for this Round Slip	First heard 02 April	V 8RVF (x3) DE CV4K (x2)
4620	New frequency for this Round Slip	First heard 16 March	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K (R5)
4658	New frequency for this Round Slip	First heard 01 April	V IW6S (x3) DE 5D6T(x2)
4658	New frequency for this Round Slip	First heard 02 April	V N72H (x3) DE 8SM4(x2)
		First heard 20 April	V N72H (x3) DE 8HM4 (x2)

4658	New frequency for this Round Slip	First heard 19 April	V KP8W (x3) DE AMG7 (x2)
7676	New frequency for this Round Slip	First heard 01 April	V 8RVF (x3) DE CV4K (x2)

Chart of M89 Freq & Call signs heard in Mar / Apr 2021 New Scheds shown in Bold Type From logs submitted from JPL & F5JBR.

<u>Freq in KHz</u>	<u>Call Slip</u>
3565//4718	V BSA5 (x3) DE TP4C (x2)
3823//NRH	V 8RVF (x3) DE CV4K (x2)
3850// 4620 //4860//5640//6320//6840	Q2M (x3) DE NYZ (x2) (R5) QSA ? K (R5)
3850//4860//5640//6320//6840	Q2M (x3) DE NYZ (x2) (R5) QSA ? K (R5)
4043	V IW6S (x3) DE 5D6T(x2)
4043	V L5S3 (x3) DE Z4Y6 (x2)
4043	V LS53 (x3) DE Z4Q6 (x2) (In Error?)
4658//NRH	V IW6S (x3) DE 5D6T(x2)
4658//NRH	V N72H (x3) DE 8SM4(x2)
4658//NRH	V KP8W (x3) DE AMG7 (x2)
4718//NRH	V BSA5 (x3) DE TP4C (x2)
4718//6378//7045	V BSA5 (x3) DE TP4C (x2)

<u>Freq in kHz</u>	<u>Call Slip</u>
4720//5150	V WNF(x3) DE FXM (x2) (Hand sent)
4860//5640//6320//6840//8290//8360	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA
4860//5640//6320//6840//8290//8360//10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA
5640//6320//6840//8290//10640	Q2M (x3) DE NYZ (x2) (R5) QSA ? K (R5)
6140//NRH	V IW6S (x3) DE 5D6T(x2)
6378//7045	V BSA5 (x3) DE TP4C (x2)
7620//8350	V WNF(x3) DE FXM (x2) (R5) (Hand Sent)
7653//NRH	V 8RVF (x3) DE CV4K (x2)
7676//NRH	V 8RVF (x3) DE CV4K (x2)

Courtesy JPL

3819	1026z (IP) 17 Mar	NR 47/EX 1826 RMKS CQ BT K8C5/A9S8 AR R DE KFHB QSA TIME 1827 HR WK NR 523 AR R DE F..5 QSL TIME 1828 HR WK NR 52 AR NR DE 8UP. QS. TIME 1828 HR WK NR 454 AR R DE ZCKA QSL TIME 1828 HR WK NR 158 K R DE L... QSL TIME 1.. ... (1029z) VVV (1029z)	(Remote tuner Hong Kong)	JPL	WED
4079	4KQZ 1201z 01 Mar	V CP7U DE 4KQZ QSY 2 QSY 2 K	(Remote tune Novosibirsk)	JPL	MON
4122	1201z 01 Mar	NR 1.36/EX 2008 RMKS 9008 TO 9368 BT NR 1037 CK 200 50 0301 2000 RMKS 9008 TO 9368 BT	(Remote tune Novosibirsk)	JPL	MON
4222	1142z (IP) 30 Apr	NR 1202/EX 1942 RMKS 7914 TO 7314 BT AC31/BF49 AR NR 1520 CK 61 81 0430 1946 RMKS 7314 TO 7914 K	(Remote tuner Taiwan)]	JPL	FRI
4223	1148z (IP) 01 Mar	TO 2792 K (Appears to be Exercise traffic) BT HFLJ/OAQ4 AR BT	(Remote tuner Hong Kong)	JPL	MON
4321	1203z (IP) 16 Mar	MSG NR 3319 CK 49 78 69 034794 91	(Remote tuner Hong Kong)	JPL	TUE
4663	1215z (IP) 16 Mar	MSG NR 011MX C NR 3959/EX 2014 RMKS 5827 TO 5825 BT CL4/K2 AR K MSG NR 6695 CK 200 31 0316 2000 RMKS 5825 TO 5809 K	(Remote tuner Hong Kong)	JPL	TUE
4679	1127z (IP) 19 Apr	NR 1037/EX 1927 BT	(Remote tuner Hong Kong)	JPL	MON
4874	1155z (IP) 23 Apr	NR 1120 CK 61 81 0423 2000 RMKS 7915 TO 73.6 K	(Remote tuner Hong Kong)	JPL	FRI
5206	1155z (IP) 23 Apr	NR 1931 CK 201 06 0423 1930 RMKS 8364 TO 83.2 K	(Remote tuner Hong Kong)	JPL	FRI
5500	1205z (IP) 10 Apr	R 5 IEC BT G3 AR K (Exercise related) NR IEC BT .W CS K K NR ? NR FF NR ..35/EX UTTT BT BT NR 7. NR 2.42 CK 18 50 0410 2018 K (Weak/fading)	(Remote tuner Chongqing)	JPL	SAT
8223	1038z (IP) 26 Mar	NR 2070 K BT BT N6A3 UT56 4753 7ADU 6TND etc.	(Remote tuner South Korea)	JPL	FRI
6378//10335	0848z (IP) 27 Apr	NR 060 CK 191 59 0427 1510 RMKS 5542 TO 4155 K	(Remote tuner Khabarovsk)	JPL	T

M89 4223kHz 1148 (IP) - 1149z 01 March 2021

TO 2792 K (IP – 1148z)
 BT HFLJ/OAQ4 AR BT
 HFLJ/OAQ4 AR BT (Appears to be Exercise traffic)
 HFLJ/ORQ4 AR K (1149z)

M89 4663kHz 1215 - 1218z 16 March 2021

BT O8T/WJY AR K (IP – 1215z)
 R QSL 2013 K (Both stations on this frequency)
 R OK RH F GA K
 R GA K
 R HR F NR NR 3959/EX 2014 RMKS 5827 TO 5825 BT
CL4/K2N AR BT BT CL4/K2 AR
NR 3959/EX 2014 RMKS 5827 TO 5825 BT BT
CL4/K2 AR K
 R QSL 2015 K OK K
 R HR MSG GA K
 R GA K
 R MSG NR 6695 CK 200 31 0316 2000 RMKS 5825 TO 5809 K R
 GA K (1217z)
 R MSG 1P BT ATU5 3N7A 6D34 ND6T U7NA AD5U 5T43 3U65
 76DA 4D67 N476 D7TN 3TU7 (Cont'd – 1218z)

Courtesy JPL

M89 4122kHz 1201 (IP) - 1214z 01 March 2021

AR F NR 1036/EX 2008 RMKS 9008 TO 9368 BT (IP – 1210z)
 Z./YT. AR K (1211z)
 R F GA K (Other station N/H – 1211z)
 R QSL 2011 K (1213z)
 HR 7G GA K
 R 7G NR 1037 CK 200 50 0301 2000 RMKS 9008 TO 9368 BT
 BT A3NT UD45 A7UN 543D (Cont'd – 1214z)

M89 4222kHz 1142 (IP) - 1149z 30 April 2021

FF NR 1202/EX 1942 RMKS 7914 TO 7314 BT (IP – 1142z)
AC31/BF49 AR
F NR 1202/EX 1942 RMKS 7914 TO 7314 BT
AC31/BF49 AR K (1143z)
 R OK QSL 1945 1945 K (Other station also on this frequency)
 R OK K
 R 7G NR K
 R GA K
 R 7G NR 1520 CK 61 81 0430 1946 RMKS 7314 TO 7914 K
 R OK GA K
 R BT BT 643U 34N7 57TT 53UT 45UA 456A 344T 34U7 4NDA
 4U7T 47D6 DTA6 UA3D (Cont'd – 1146z)

Courtesy JPL

M95 O XSV, XSV70, XSV85

M95 Morse Logs (Bold type indicates new logging)

3642//NRH	Call Sign 3A7D	(Active daily - only first marker log has been included)			
3642//7602	Call Sign 3A7D	(Active daily - only first marker log has been included)			
3968//NRH	Call Sign SAQC (Previously 3A7D)	Suspect change in frequency and Round Slip for DKG6 DE 3A7D			
	2003z	25 Mar V YHXD (x3) DE SAQC (x2)	(Remote tuner Novosibirsk)	JPL	THU
3968//6936	Call Sign SAQC (Previously 3A7D)	Suspect change in frequency and Round Slip for DKG6 DE 3A7D			
	1925z	16 Mar V YHXD (x3) DE SAQC (x2)	(Remote tuner Novosibirsk)	JPL	TUE
	1857z	10 Apr V YHXD (x3) DE SAQC (x2)	(Remote tuner Irkutsk)	JPL	SAT
4110	1206 (IP) - 1209z	01 Mar IEC BT 3870 AR K IEC BT 981. AR K (Exercise related) NR 006/CCK CK 3169 0301 2005 RMKS 5964 TO 5431 K	(Remote tuner Novosibirsk)	JPL	MON
4122	1136 (IP) - 1159z	01 Mar 05 05 (Long zero – Associated with M95 family)	(Remote tuner Novosibirsk)	JPL	MON
4243//NRH	Message number differs from current XSV70 and XSV85 message numbers.				
	1146 (IP) - 1153z	01 Mar NR 02 CK 201 35 0301 1532 BT	(Remote tuner Hong Kong)	JPL	MON
	1143 (IP) - 1158z	03 Apr NR 037 CK 52 35 0403 1516 BT NR 61 CK 21 35 0403 1604 BT NR 06 CK 190 35 0403 1635 BT	(Remote tuner South Korea)	JPL	SAT
	1145 (IP) - 1151z	19 Apr NR 069 CK 38 35 0419 1530 BT NR 38 CK 142 35 0419 1600 BT	(Remote tuner Quzhou)	JPL	MON
	1143z (IP) – 1155z	23 Apr NR 077 CK 70 35 0423 1550 BT NR 46 CK 181 35 0423 1555 BT	(Remote tuner Hong Kong)	JPL	FRI
4243//9054	Message number differs from current XSV70 and XSV85 message numbers.				
	1143 (IP) - 1159z	05 Mar NR 078 CK 40 35 0305 1533 BT NR 71 CK 15 35 0305 1552 BT NR 10 CK 211 35 0305 1605 BT	(Remote tuner Hong Kong)	JPL	FRI
	1142 (IP) - 1156z	06 Mar NR 080 CK 42 35 0306 1511 BT NR 12 CK 151 35 0306 1610 BT	(Remote tuner Hong Kong)	JPL	SAT
	1141 (IP) – 1200z	07 Mar NR 082 CK 45 35 0307 1522 BT NR 069 CK 17 35 0307 1600 BT NR 14 CK .09 35 0307 1627 BT	(Remote tuner Hong Kong)	JPL	SUN
	1142 (IP) - 1155z	12 Mar NR 092 CK 35 35 0312 1516 BT NR 24 CK 164 35 0312 1602 BT	(Remote tuner Hong Kong)	JPL	FRI
	1141 (IP) - 1201z	15 Mar NR 098 CK 52 35 0315 1539 BT NR 30 CK 195 35 0315 1607 BT	(Remote tuner Hong Kong)	JPL	MON
	1140 (IP) - 1157z	16 Mar NR 001 CK 29 35 0316 1525 BT NR 096 CK 15 35 0316 1600 BT NR 32 CK 129 35 0316 1617 BT	(Remote tuner Hong Kong)	JPL	TUE

	1144 (IP) - 1145z	18 Mar	NR 005 CK 27 35 0318 1519 BT NR 36 CK 138 35 0318 1537 BT	(Remote tuner Hong Kong)	JPL	THU
	2340 (IP) - 2355z	18 Mar	NR 004 CK 17 35 0319 0558 BT NR 006 CK 47 35 0319 0700 BT NR 37 CK 073 35 0319 0..9 BT	(Remote tuner Hong Kong)	JPL	THU
	1150 (IP) - 1159z	23 Mar	NR 015 CK 57 35 0323 1529 BT NR 46 CK 154 35 0323 1614 BT	(Remote tuner Hong Kong)	JPL	TUE
	1143 (IP) - 1153z	25 Mar	NR 024 CK 20 35 0325 1... BT NR 50 CK 178 35 0325 1615 BT	(Remote tuner Hong Kong)	JPL	THU
	1140 (IP) - 1200z	26 Mar	NR 026 CK 71 35 0326 1525 BT NR 52 CK 177 35 0326 1549 BT	(Remote tuner Hong Kong)	JPL	FRI
	1147 (IP) - 1201z	02 Apr	NR 035 CK 51 35 0402 1534 BT NR 048 CK 24 35 0402 1540 BT NR 05 CK 126 35 0402 1600 BT	(Remote tuner South Korea)	JPL	FRI
	1145 (IP) - 1154z	10 Apr	NR 20 CK 191 35 0410 1600 BT	(Remote tuner Taiwan)	JPL	SAT
4364//8073	Call Sign XSV85					
	1130 - 1145z	01 Mar	NR 0193 CK 401 35 0301 1603 BT	(Remote tuner Hong Kong)	JPL	MON
	1133 (IP) - 1142z	05 Mar	NR 0201 CK 297 35 0305 1631 BT	(Remote tuner Hong Kong)	JPL	FRI
	1130 - 1140z	06 Mar	NR 0203 CK 332 35 0306 1611 BT	(Remote tuner Hong Kong)	JPL	SAT
	1130 - 1141z	07 Mar	NR 0205 CK 301 35 0307 1616 BT	(Remote tuner Hong Kong)	JPL	SUN
	1140 (IP) - 1141z	12 Mar	NR 0215 CK 330 35 0312 1635 BT	(Remote tuner Hong Kong)	JPL	FRI
	1130 - 1140z	15 Mar	NR 0221 CK 217 35 0315 1637 BT	(Remote tuner Hong Kong)	JPL	MON
	1130 - 1139z	16 Mar	NR 0223 CK 154 35 0316 1542 BT	(Remote tuner Hong Kong)	JPL	TUE
	1130 - 1143z	18 Mar	NR 0227 CK 256 35 0318 1625 BT	(Remote tuner Hong Kong)	JPL	THU
	1137 (IP) - 1149z	23 Mar	NR 0245 CK 26 35 0323 1555 BT NR 0246 CK 426 35 0323 1600 BT	(Remote tuner Hong Kong)	JPL	TUE
	1130 - 1140z	25 Mar	NR 0250 CK 254 35 0325 1612 BT	(Remote tuner Hong Kong)	JPL	THU
	1130 - 1138z	26 Mar	NR 0252 CK 210 35 0326 1648 BT	(Remote tuner Hong Kong)	JPL	FRI
	1130 - 1141z	02 Apr	NR 0266 CK 271 35 0402 1615 BT	(Remote tuner Hong Kong)	JPL	FRI
	1130 - 1140z	03 Apr	NR 0268 CK 292 35 0403 1604 BT	(Remote tuner Hong Kong)	JPL	SAT
	1137 (IP) - 1145z	10 Apr	NR 0282 CK 226 35 0410 1639 BT	(Remote tuner Taiwan)	JPL	SAT
	1131 - 1142z	19 Apr	NR 0300 CK 329 35 0419 1555 BT	(Remote tuner Taiwan)	JPL	MON
	1130 - 1142z	23 Apr	NR 0308 CK 273 35 04U3 1617 BT	(Remote tuner Hong Kong)	JPL	FRI
4642	(Message format indicates M95 family)			(Remote tuner Novosibirsk)		
	1116 (IP) - 1125z	17 Mar	NR 021/CCK CK 91 34 0318 1920 RMKS 0860 TO 4433 K		JPL	THU
5479//10722	Call Sign SAQC 1155z	(Active daily - only first marker log has been included) 01 Mar	V YHXD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	MON
	1117z	03 Apr	V YHXD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	SAT
5566	Message format indicates M95 family					
	1201 (IP) - 1208z	25 Mar	NR 001/CCK CK 91 34 0927 113	(Remote tuner Hong Kong)	JPL	THU
7612	1033 (IP) - 1041z	03 Apr	05 (Long zero)	(Remote tuner Hong Kong)	JPL	SAT
7746	0413z (IP)	08 Mar	HR 7G GA NR 007/CCK CK 299 19 0308 1210 RMKS CQ BT		JPL	TUE
8784	Message format indicates M95 Family					
	1039 (IP) - 1052z	01 Apr	/CCK CK 51 24 0U01 NR 0003/CCK CK 49 24 0401 1840 RMKS 02 TO 0 (Did not finish) NR /CCK CK 124 0 EEEEE	(Remote tuner Novosibirsk)	JPL	THU
9054//NRH	(See also 4243//9054)					
	1200 (IP) - 1201z	30 Apr	NR 60 CK .07 35 0430 1730 BT	(Remote tuner South Korea)	JPL	FRI
10180	Call Sign 3A7D	(Active daily - only first marker log has been included)				
10722//NRH	Call Sign 3A7D 1048z	01 May	YHXD (x3) DE SAQC (x2)	(Remote tuner Khabarovsk)	JPL	FRI

M95 4243/9054kHz 1140z 16 March 2021

Into voice USB 1140z Female operator
 Chinese digital 4+4 QPSK 75/3000 LSB 1142z
 V Switched to CW Hand sent 1148z

VV HR 7G TO YR PSE CY (1148z)
NR 001 CK 29 35 0316 1525 BT
 5AA UTT TA6 3U6 3A4 5T7 5TD 75U 35U 4TA
 445 3DA 4D6 5TN 75U 35U 4TA 446 3DU 4D6
 5AA 75U 35U 4T3 NAT 4T7 445 3DA 4D6 AR 7G AGN
NR 001 CK 29 35 0316 1525 BT (Repeats msg – 1151z)
 AR A HR 7G GA
NR 096 CK 15 35 0316 1600 BT
 UT5 TA6 3U6 3A4 TTA TTU TT3 773 35U U4T
 353 4UT 445 4D6 3DA AR 7G AGN
NR 096 CK 15 35 0316 1600 BT (Repeats msg – 1154z)
 AR A HR 7G GA
NR 32 CK 129 35 0316 1617 BT
 UTU TA6 3U6 3A4 TTU 773 353 4TN 336 N3D
 (Cont'd – 1157z)

Courtesy JPL

M95 4364/8073kHz 1230z 19 April 2021

In Progress - In Chinese digital 4+4 QPSK 75/3000 USB vice LSB 1131z
 Switched to CW Handsent 1140z

V BNGC (x3) DE XSV85 (x2) (IP - 1140z)
 HR MSG GA PSE CY (1140z)
NR 0300 CK 329 35 0419 1555 BT
 TAN 3U6 3AN 3U7 TAU 773 353 4T3 NN3 436 (Cont'd – 1142z)

M95 4364/8073kHz 1230z 19 April 2021

Into voice USB Male Chinese 1130z
 Switch to Chinese digital 4+4 QPSK 75/3000 USB vice LSB 1131z
 Switched LSB 1132z Switched to CW Handsent 1129z

V BNGC (x3) DE XSV85 (x2) (IP - 1139z)
 HR MSG GA PSE CY (1140z)
NR 0308 CK 273 35 04U3 1617 BT
 TU3 3U6 3AN 3U7 TAU 773 353 35N 4T3 NNC (Cont'd – 1142z)

Courtesy JPL

Marker Beacons (MX MXI)

5156.7	1438z	23 Mar	MX	CW Beacon "L"	St Petersburg	Excellent	chpa	TUE
7508.7	1303z	15 Apr	MXI	CW Beacon "D"	Sevastopol		BR	THU
7508.8	1302z	15 Apr	MXI	CW Beacon "P"	Kaliningrad		BR	THU
8494.8	1304z	15 Apr	MXI	CW Beacon "P"	Kaliningrad		BR	THU
8495	1305z	15 Apr	MXI	CW Beacon "C"	Moscow		BR	THU
8497.8	0509z	20 Apr	MX	CW Beacon "L"	St Petersburg		BR	TUE
10871.7	1308z	15 Apr	MXI	CW Beacon "D"	Sevastopol		BR	THU
10871.8	1308z	15 Apr	MXI	CW Beacon "P"	Kaliningrad		BR	THU
10872.1	1309z	15 Apr	MXI	CW Beacon "A"	Astrakhan		BR	THU
10872.7	2110z	28 Mar	MXI	CW Beacon "D"	Sevastopol		DanAR	SUN
13527.7	1310z	15 Apr	MXI	CW Beacon "D"	Sevastopol		BR	THU
13527.9	1311z	15 Apr	MXI	CW Beacon "S"	Sevoromorsk		BR	THU
13528	1311z	15 Apr	MXI	CW Beacon "C"	Moscow		BR	THU
16331.7	1312z	15 Apr	MXI	CW Beacon "D"	Sevastopol		BR	THU

Oddities

Two additional entries of interest for this newsletter;

7039.6kHz Mystery Morse Transmissions

Ary, (AB), copied a Morse station on 7039.6 kHz that sends every 20 minutes for 1 minute repeating the same group. It seems to be on the air since Nov 2020;

7039.6	28 Mar	AB	SUN
1402z	136V		
1422z	135V		
1442z	136V		
1502z	136V		
1522z	135V		
1542z	132V		
1602z	131V		
1622z	129V		
1642z	127V		
1702z	126V		
1722z	126V		
1742z	126V		
1802z	126V		
1822z	125V		
1842z	125V		
1902z	124V		

Ary speculates that this appears to be transmitting some form of status update, probably a pirate beacon giving its battery status 136v = 13.6 Volts,

12194kHz Intermittent Carrier

Another odd transmission found by Edd, (E.SMITH), consists of a carrier being repeatedly switched on & off over a half hour period. Discovered at 1131z, it transmits, stops then returns periodically. The timing is not single tone X06b nor similar to M12 test tones.

12194 1131z E.SMITH THU

We believe this is most likely a marker to keep the frequency clear from other users – Although the origin of the transmissions remains unidentified & no traffic was noted on the frequency.

Now onto our 'regular' oddities;

'The Goose'

4310	1327z	07 Mar	Normal sound from the Goose	Moderate	USB	chpa	SUN
3243	1743z	11 Mar	The Goose sounds loud and clear	Good	USB	chpa	TUE
	1744z	11 Mar	Goose sounds stop - Russian male voice 1745z	Good	USB	chpa	TUE
	1745z	11 Mar	The Goose sounds loud and clear	Good	USB	chpa	TUE
3243	1718z	22 Mar	The Goose sounds loud and clear	Excellent	USB	chpa	MON
3110	1451z	23 Mar	The Goose sounds with QRM from BC transmitters & some QSB	Good	USB	chpa	TUE

3510kHz 'The Air Horn'

3510	1739z	11 Mar	The Air Horn sounds loud and clear, minor QRM	Good	USB	chpa	TUE
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4524kHz Marker

4770kHz 'The Alarm'

4770	1725z	11 Mar	The Alarm sounding	Moderate	USB	chpa	TUE
4770	1707z	22 Mar	The Alarm is on with minor QSB and QRM	Good	USB	chpa	MON

S28 'The Buzzer'

4625	1310z	07 Mar	S28 The Buzzer buzzes as usual	Moderate	USB	chpa	SUN
4625	0820z	08 Mar	S28 The Buzzer buzzes as usual	Moderate	USB	chpa	TUE
4625	1723z	11 Mar	S28 The Buzzer buzzes as usual	Good	USB	chpa	TUE
4625	1710z	22 Mar	S28 The Buzzer buzzes loud and clear	Excellent	USB	chpa	MON
4625	0605z	23 Mar	S28 The Buzzer buzzes loud and clear	Good	USB	chpa	TUE

S30 'The Pip'

5448	1320z	07 Mar	S30 The Pip sound. QRM from adjacent St Eval VOLMET 5450 kHz	USB	chpa	SUN	
3756	1728z	11 Mar	S30 The Pip is heard with various QRM	Moderate	USB	chpa	TUE
3756	1715z	22 Mar	S30 The Pip is heard clearly	Good	USB	chpa	MON

S32 'Squeaky Wheel'

3828	1732z	11 Mar	S32 The Squeaky Wheel is heard with various QRM	Moderate	USB	chpa	TUE
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Contributors: AB, BR, chpa, Daniel/AR, E.SMITH, ER, F5JBR, Gary, Gert, HFD, JPL, PoSW, RNGB, tiNG *Thank you all for your logs.*

Voice, Polytone, Tones, Hybrids and FSK

E06

E06 Mar/Apr log:

Monday	0210z	11454kHz	0310z	14456kHz
26/04	'537' 192 40 54458.....etc] via KiwiSDR RUS		Thanks HfD	
Thursday (repeats Friday)	0300z	15726kHz	0400z	13384kHz
19/03	'361' 257 48 = 34778.....etc} via KiwiSDR RUS		(Thanks HfD)	
First /Third Thursday (repeats Friday)	0600z	16230kHz	0700z	19325kHz
04/03	'864' 372 50 22668 25198 41517 80431 81542 44523 95209 95863 01666 00479 54325 01314 44181 18977 24373 79080 69389 20540 78055 18145 24510 27862 36833 40723 70214 67223 21722 75017 38113 24679 78019 97592 36390 42983 03646 93815 45769 70160 35777 09807 72997 95688 75480 94326 54039 35202 55011 54043 24163 49680 372 50 00000			
18/03	'864' 791 52 95753 82757 62816 18703 53074 09506 88979 70106 05517 11247 07338 70241 48186 36045 95893 72468 39666 10672 32816 64188 74735 72971 02023 13508 11493 76199 58633 15237 95051 76271 08966 09629 45011 37864 84772 72315 98886 20294 16403 98871 28672 29125 34583 32450 72752 44433 55487 07909 50319 61670 28810 10892 791 52 00000			
	0500z	15645kHz	0600z	17470kHz
01/04	'951' 248 60 94072 89986 34523 17038 28675 06859 45891 47483 41802 41314 84060 76679 23977 55327 80661 46548 78637 10203 37791 20480 62265 60973 68778 30911 41017 33326 51544 89885 62304 75230 55503 67302 64746 00465 27932 66513 74942 66216 50751 51979 64497 51965 03654 08667 65735 31812 94520 37865 69547 57455 43053 19118 53804 94003 28575 92956 15771 75801 37922 44123 248 60 000000			
15/04	'951' 407..... 59131 02662 00453 12684 28148 91580 37178 21717 24068 43601 52643 42180 73609 85158 18265 02326 48874 05942 03358 28092 51402 47898 63917 05791 19364 09962 10028 37860 00090 79448 06559 65129 55120 26039 86856 54016 89955 19308 84112 72107 25709 55712 10089 00556 54836 407 62 00000 (missed start)			
Thursday (1st & 3rd)	2030z	5186kHz		
04/03	'891' 501 20 73555 37916 86854 52599 88433 91194 37982 71162 74151 70521 40296 58769 40658 02210 60676 84837 20941 59138 09874 89703 501 20 00000			
18/03	NRH			
Friday	2130z	5197kHz		
05/03	'634' 501 20 73555 37916 86854 52599 88433 91194 37982 71162 74151 70521 40296 58769 40658 02210 60676 84837 20941 59138 09874 89703 501 20 00000			
19/03	NRH			

PoSW's take on E06:

As was the case with the related G06 the first + third Thursdays in the month E06 appeared to vanish in late 2020 but was heard in the first week of March:-

4-Mar-21:- 2030 UTC, 5186 kHz, calling "891", DK/GC "501 501 20 20", reasonable signal, peaking around a 7 on the S-meter, became weaker towards the end at just before 2039 UTC.

5-Mar-21, Friday:- 2130 UTC, 5197 kHz. Calling "634", DK/GC "501 501 20 20", same message as on the previous day, weak signal.

Nothing heard on Thursday the 18th or Friday the 19th on these expected times and frequencies; if they were there they were pretty damn weak.

Likewise, nothing heard on Thursday 1-Apr-21 or on Friday 2-Apr-21, or on Thursday the 15th or Friday the 16th.

E07

PoSW writes:

Unable to find the expected Monday + Wednesday 2000 UTC start schedule in March, frequencies in that month in the past few years were 10651 + 9151 + 7651 kHz but nothing heard.

Nothing found on the predicted frequencies for April.

The other E07 schedules which are well received in the UK showed up as expected:-

Sunday + Wednesday Schedule, 1800 UTC Start in March, 1700 UTC in April:-

7-Mar-21, Sunday:- 1800 UTC, 10321 kHz, "318 318 318 000", strong signal.
1820 UTC, 9121 kHz, also strong.

10-Mar-21, Wednesday:- 1800 UTC, 10321 kHz and 1820 UTC, 9121 kHz, both around S5, "318 318 318 000".

14-Mar-21, Sunday:- 1800 UTC, 10321 kHz, "318 318 318 000", weak.

1820 UTC, 9121 kHz, much stronger, S9 with QSB.

17-Mar-21, Wednesday:- 1800 UTC, 10321 kHz, and a full message, "318 318 318 1", DK/GC "504 103" x2, weak signal.
1820 UTC, 9121 kHz, slightly stronger.
1840 UTC, 7821 kHz, much stronger, S9.

21-Mar-21, Sunday:- 1800 UTC, 10321 kHz, "318" and "504 103" again, strong signal.
1820 UTC, 9121 kHz and 1840 UTC, 7821 kHz, both slightly weaker.

24-Mar-21, Wednesday:- 1800 UTC, 10321 kHz, "318 318 318 000", back in the old routine, S5 to S6.
1820 UTC, 9121 kHz, stronger.

4-Apr-21, Sunday:- 1700 UTC, 13417 kHz, "417 417 417 000", strong signal.
1720 UTC, 12117 kHz, slightly weaker.

7-Apr-21, Wednesday:- 1700 UTC, 13417 kHz, a "full message", "417 417 417 1", DK/GC "9514 73" x 2, good signal.
1720 UTC, 12117 kHz, strong.
1740 UTC, 10717 kHz, much weaker than the first two transmissions.

11-Apr-21, Sunday:- 1700 UTC, 13417 kHz, "417" and "9514 73" again, strong signal.
1720 UTC, 12117 kHz, also strong.
1740 UTC, 10717 kHz, much weaker.

14-Apr-21, Wednesday:- 1700 UTC, 13417 kHz, "417 417 417 000", good signal, strong FSK/RTTY type signal on very close frequency.
1720 UTC, 12117 kHz, strong.

18-Apr-21, Sunday:- 1700 UTC, 13417 kHz, "417 417 417 000", surprisingly weak, only just readable.
1720 UTC, 12117 kHz, stronger.

21-Apr-21, Wednesday:- 1720 UTC, 12117 kHz, missed 1700z sending, full message, "417 417 417 1", DK/GC "290 81" x 2, strong signal, well over S9.
1740 UTC, 10717 kHz, weaker.

25-Apr-21, Sunday:- 1700 UTC, 13417 kHz, "417" and "290 81" again, weak signal.
1720 UTC, 12117 kHz, much stronger, over S9 and 10717 kHz, back down to S6, repeats.

Saturday Schedule, 1400 UTC Start in March, 1300 UTC in April:-

13-Mar-21:- 1400 UTC, 12143 kHz, a full message, "114 114 114 1", DK/GC "946 40" x 2, strong signal.
1420 UTC, 11143 kHz, slightly weaker.
1440 UTC, 10443 kHz, strong, well over S9.

27-Mar-21:- 1400 UTC, 12143 kHz. Still "114" and "946 40", good signal.
1420 UTC, 11143 kHz, over S9.

1440 UTC, 10443 kHz, interference from an extremely strong wide-band pulse/buzz signal extending from about 10437 to 10460 kHz, someone's over-the-horizon radar earning its keep, perhaps.

3-Apr-21:- 1300 UTC, 12176 kHz, "152 152 152 000", very strong signal.
1320 UTC, 11576 kHz, weaker.

10-Apr-21:- 1300 UTC, 12176 kHz and 1320 UTC, 11576 kHz, both around S7, "152 152 152 000".

17-Apr-21:- 1300 UTC, 12176 kHz, strong signal, "152 152 152 000".
1320 UTC, 11576 kHz, slightly weaker.

24-Apr-21:- 1300 UTC, 12176 kHz, "152 152 152 000", strong signal.
1320 UTC, 11576 kHz, weaker.

Sunday Schedule, 0700 UTC Start in March, 0600 UTC in April:-

7-Mar-21:- 0700 UTC, 10268 kHz, "201 201 201 000", weak.
0720 UTC, 11068 kHz, also weak.

14-Mar-21:- 0700 UTC, 10268 kHz, "201 201 201 1" for a full message, DK/GC "946 40" x 2 - same as heard from yesterday's 1400z schedule. S6 to S7.
0720 UTC, 11068 kHz, S7.
0740 UTC, 12168 kHz, very strong.

21-Mar-21:- 0700 UTC, 10268 kHz, "201" and "946 40" again, S5 to S6.
0720 UTC, 11068 kHz, S6.
0740 UTC, 12168 kHz, strongest of the three transmissions, S9 with QSB.

28-Mar-21:- 0700 UTC, 10268 kHz. "201" and "946 40" again as expected since we have established that this Sunday morning E07 is always a repeat of the previous day's 1400z sending.
0720 UTC, 11068 kHz and 0740 UTC, 12168 kHz, repeats good signals.

4-Apr-21:- 0600 UTC, 9261 kHz, "224 224 224 000", weak signal.
0620 UTC, 10261 kHz, also weak.

11-Apr-21:- 0600 UTC, 9261 kHz, "224 224 224 000", strong signal this morning.
0620 UTC, 10261 kHz, strong.

18-Apr-21:- 0600 UTC, 9261 kHz, weak, "224 224 224 000".
0620 UTC, 10261 kHz, stronger.

25-Apr-21:- 0600 UTC, 9261 kHz and 0620 UTC, 10261 kHz, both around a "6" on the S-meter, "224 224 224 000".

Others' Logs:

Sunday

April 2021

0600z	9261kHz	0620z	10261kHz	0640z	11461kHz	
25/04	224 000					0600z Strong, 0620z Weak

Sunday/Wednesday

March 2021

1800z	10321kHz	1820z	9121kHz	1840z	7821kHz	
03/03	318 000					Weak Dutch SDR
07/03	318 000				[1820z QSB4]	Strong
10/03	318 000					Weak
14/03	318 000					Weak
17/03	318 1 504 103 16044 ... 90311 000 000				[1840z Strong]	Weak
21/03	318 1 504 103 16044 ... 90311 000 000					Weak
24/03	318 000					Weak
28/03	318 000					1800z Weak, 1820z Strong
31/03	318 000					Weak

April 2021

1700z	13417kHz	1720z	12117kHz	1740z	10717kHz	
04/04	417 000					1700z Strong, 1720z Fair
07/04	417 1 9514 73 12201 ... 99729 000 000				[1740z Fair]	Strong
11/04	417 1 9514 73 12201 ... 99729 000 000					1700z Strong, 1720z Fair, 1740z Weak
18/04	417 000			Difficult conditions	[1700z Dutch SDR]	Weak
21/04	417 1 290 81 08442 ... 49922 000 000				[1700z Weak]	Fair
25/04	417 1 290 81 08442 ... 49922 000 000				[1720z Strong]	Weak
28/04	417 000					Strong

Sunday/Saturday

March 2021

0700z	10268kHz	0720z	11068kHz	0740z	10168kHz	
07/03	201 000					Weak
14/03	201 1 946 40 22758 ... 39150 000 000					Weak
28/03	201 1 946 40 22758 ... 39150 000 00					0720z Weak, 0740z Fair

Monday/Wednesday

March 2021

2000z	10651kHz	2020z	9151kHz	2040z	7651kHz	
01/03	616 1 599 92 75552 ... 71370 000 000					2000z NRH, 2020z Unworkable, 2040z Weak via Dutch SDR
03/03	616 1 599 92 75552 to 71370 000 000					[2000z NRH, 2040z Unworkable]Weak Dutch SDR

08/03 NRH
 10/03 NRH

April 2021

1900z 15819kHz 1920z 14419kHz 1940z 12219kHz

Not heard to date

Tuesday/Friday

March 2021

0700z 14942kHz 0720z 16142kHz 0740z 18042kHz

02/03 310 000 [0700z NRH] Weak Dutch SDR
 05/03 310 000 [via KiwiSDR RUS] H-FD FRI
 09/03 Unworkable
 12/03 310 1 8208 93 85940 to 26419 000 000 Weak
 16/03 310 000 [0720z Dutch SDR] Weak
 19/03 910 000 [0720z only] Weak, Dutch SDR
 30/03 310 000 0700z strong, 0720z Weak

April 2021

0700z 17453kHz 0720z 18453kHz 0740z 19653kHz

02/04 446 000 Weak, DutchSDR
 09/04 Unworkable, 0740z NRH
 13/04 NRH
 16/04 NRH/Unworkable
 23/04 1700/1740z NRH, 1720z Unworkable
 27/04 446 000 Weak, Dutch SDR
 30/04 446 000 Weak Dutch SDR

Thursday/Saturday

March 2021

1410z 16268kHz 1430z 14854kHz 1450z 13384kHz

04/03 328 1 103 100 15948 ... 21199 000 000 [1410z Unworkable] Weak
 06/03 328 1 103 100 15948 ... 21199 000 000 [1410z Dutch SDR] Weak
 11/03 328 000 Weak
 13/03 328 000 Weak
 18/03 328 1 541 152 87668 ... 69567 000 000 [1410z Fair] Weak
 20/03 328 1 541 152 81668 ... 69567 000 000 [1410z QSB3] Weak
 25/03 328 000 [1410z DutchSDR] Weak
 27/03 328 000 Fair

Thursday/Saturday

April 2021

1410z	16331kHz	1430z	15831kHz	1450z	kHz	
03/04	893 1 348 35 04002 ... 66781 000 000					Weak DutchSDR
08/04	893 000					1410z Weak 1430z Fair
10/04	893 000					Weak
15/04	893 1 1996 35 82381 ... 13061 000 000					1410z Unworkable. 1430z Weak, 1450z Fair
17/04	893 1 1996 35 82831 ... 13061 000 000				[1430/1450z Unworkable]	Weak, via Dutch SDR
22/04	893 000				[1410z Dutch SDR]	Weak
29/04	893 1 8529 117 80108 ... 21207 000 000				[1450z Fair]	Weak

893 1 8629 117
80108 33075 53392 01303 21086 36399 68048 68425 74729 69300
30492 86749 56211 33785 21946 37271 65965 01581 12674 83019
71334 46471 62234 88686 13736 53478 11968 32409 75431 20872
72012 89390 55155 28779 10862 94741 74878 72387 05468 41411
81680 26355 82626 26875 22926 76909 66455 17416 05744 26360
86166 94446 54018 15542 39832 66028 92198 11067 66066 68682
22598 34158 44362 67733 16941 54765 63029 69164 09897 93436
93298 89966 67263 85605 36449 80577 23849 73957 96825 25435
54791 17792 83865 11055 23691 66818 90092 69342 69389 01903
56204 69629 74120 81840 55850 61431 07085 14323 74358 41952
51509 63308 06614 61564 15327 94897 84404 37828 27452 71076
50430 12550 29137 41086 82318 25001 21207 000 000.
Starting weak then suddenly becoming strong after six mins.
Courtesy E.SMITH THU. SDR: Enschede.

Saturday

March 2021

1400z	12143kHz	1420z	11143kHz	1440z	10443kHz	
06/03	114 000					Weak
13/03	114 1 946 40 22758 ... 39150 000 000				[1440z Fair]	Weak
20/03	114 1 946 40 22758 ... 39150 000 000					Weak
27/03	114 1 946 40 22758 ... 39150 000 000				[1420z Strong]	Fair

April 2021

1300z	12176kHz	1320z	11576kHz	1340z	
03/04	152 000				1300z Strong 1320z Fair
10/04	152 000				Weak
17/04	152 000				Fair
24/04	152 000				Strong

E07a

PoS leads us into Other's logs with his analysis:

Wednesday Schedule, 2100 UTC Start in March, 2000 UTC in April:-

3-Mar-21:- 2100 UTC, 5877 kHz, "825 825 825 1 62588" for a "full message". DK/GC "338 87" x 2. Unusually for this schedule a weak signal, not the S9+ and then some we expect from this one.

2120 UTC, 5277 kHz, second sending, also much weaker than usual.

2140 UTC, 4577 kHz, third sending also weak, something strange going on this evening.

10-Mar-21:- 2120 UTC, 5277 kHz, missed 2100z sending, "825 825 825 000", strong.

17-Mar-21:- 2100 UTC, 5877 kHz and 2120 UTC, 5277 kHz, both strong, "825 825 825 000".

24-Mar-21:- 2100 UTC, 5877 kHz, strong and 2120 UTC, 5277 kHz, slightly weaker, "825 825 825 000".

7-Apr-21:- 2000 UTC, 8144 kHz, "197 197 197 000", strong signal, has now shifted by one hour with the start of British Summer Time, as is the general rule with E07a and E07 schedules, so still on at 9 pm.

2020 UTC, 6944 kHz, very strong.

14-Apr-21:- 2000 UTC, 8144 kHz, strong and 2020 UTC, 6944 kHz, very strong, "197 197 197 000".

21-Apr-21:- 2000 UTC, 8144 kHz, "197 197 197 000", strong signal.
2020 UTC, 6944 kHz, very strong.

Friday Schedule, 1610 UTC in March, 1510 UTC in April:-

5-Mar-21:- 1610 UTC, 11473 kHz, "413 413 413 1 63699", full message, DK/GC "9360 96" x 2, same as on Friday 26-Feb. Weak signal.
1630 UTC, 10173 kHz, second sending, also weak.
1650 UTC, 9373 kHz, weak again.

12-Mar-21:- 1610 UTC, 11473 kHz, "413 413 413 000", weak.
1630 UTC, 10173 kHz, much stronger.

19-Mar-21:- 1610 UTC, 11473 kHz and 1630 UTC, 10173 kHz, both weak, "413 413 413 000".

26-Mar-21:- 1610 UTC, 11473 kHz, weak and 1630 UTC, 10173 kHz, stronger, "413 413 413 000".

2-Apr-21:- 1510 UTC, 12174 kHz, "102 102 102 000", strong signal.
1530 UTC, 11074 kHz, much weaker, only just readable.

9-Apr-21:- 1510 UTC, 12174 kHz, "102 102 102 000", S6 to S7.
1530 UTC, 11074 kHz, weak.

23-Apr-21:- 1510 UTC, 12174 kHz, "102 102 102 000".
1530 UTC, 11074 kHz, weak signal.

Saturday Schedule, 0900 UTC start in March, 0800 UTC in April:-

6-Mar-21:- 0900 UTC, 11133 kHz, "114 114 114 1 63699", as expected based on past observations, the same message as yesterday's 1610z, DK/GC "9360 96" x 2, signal strength up and down.
0920 UTC, 12133 kHz, good signal, S8 or so.
0940 UTC, 13433 kHz, slightly weaker.

13-Mar-21:- 0920 UTC, 12133 kHz, missed 0900z sending, "114 114 114 000", good signal.

20-Mar-21:- 0900 UTC, 11133 kHz and 0920 UTC, 12133 kHz, both around S5, "114 114 114 000".

27-Mar-21:- 0900 UTC, 11133 kHz, weak and 0920 UTC, 12133 kHz, stronger, "114 114 114 000".

3-Apr-21:- 0800 UTC, 12218 kHz, "244 244 244 000", S6 to S7.
0820 UTC, 13418 kHz, slightly weaker.

10-Apr-21:- 0800 UTC, 12218 kHz and 0820 UTC, 13418 kHz, both S6 to S7, "244 244 244 000".

17-Apr-21:- 0800 UTC, 12218 kHz, "244 244 244 000", S5.
0820 UTC, 13418 kHz, also around S5.

24-Apr-21:- 0800 UTC, 12218 kHz, good signal and 0820 UTC, weaker, "224 224 224 000".

Others' Logs

Wednesday

March 2021

2100z	5877kHz	2120z	5277kHz	2140z	4577kHz	
03/03		825 1 62588 338 87 21445 ... 82538 000 000				[2100z Unworkable] Weak Dutch SDR
10/03		825 000				Very strong
17/03		825 000				{2100z QRM2} Strong
24/03		825 000				Very strong
31/03		825 000				Very strong

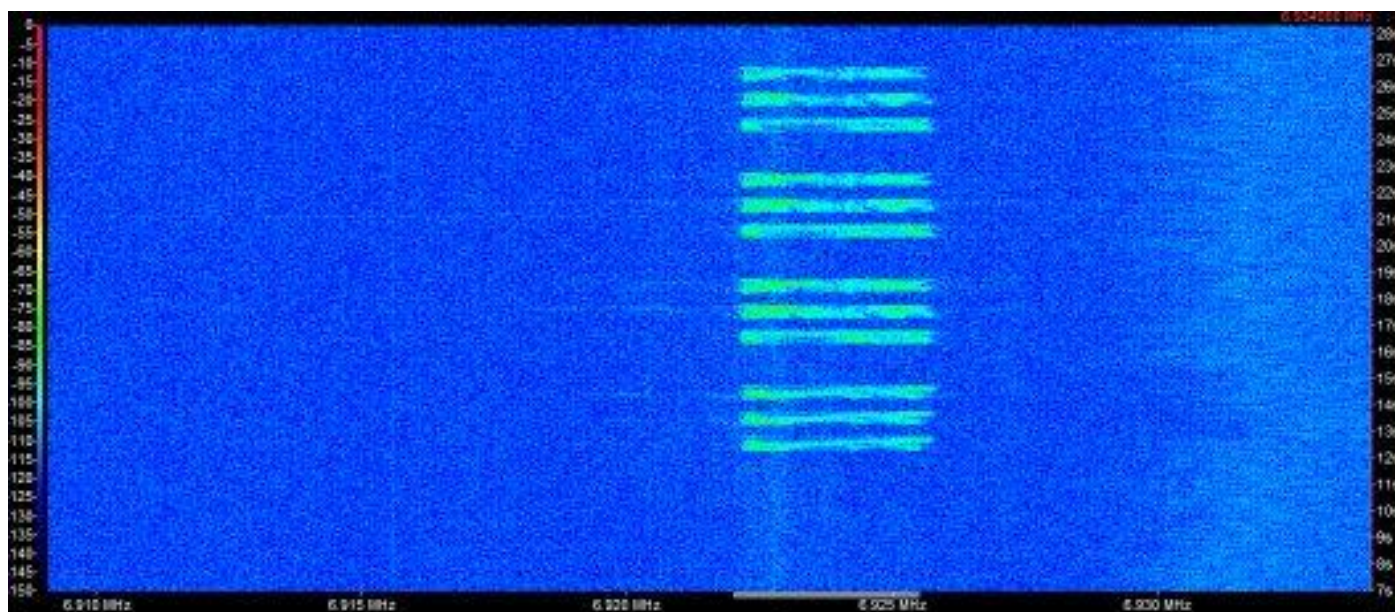
April 2021

2000z	8144kHz	2020z	6944kHz	2040z	5744kHz	
07/04		197 000				Very strong
14/04		197 000				Very strong
21/04		197 000				Very strong
28/04		197 000				Very strong

Thursday

March 2021

0530z 6922kHz 0550z 8122kHz 0610z 9322kHz



913 913 913 000 6922kHz 0530z 11th March 2021

04/03	913 1 62588 338 87 21445 ... 82538 000 000		Weak, QRM2/3
11/03	913 000	[See image above]	Very strong
18/03	913 000		Very strong
25/03	913 000	[0550z QRM3]	Very strong

April 2021

0430z 6788kHz 0450z 7488kHz 0510z 8188kHz

01/04	741 000		0430z Very strong, 0450z Weak
08/04	741 000		Very strong
15/04	741 000		Very strong
22/04	741 000		Very strong
29/04	741 000		Very strong

Friday

March 2021

1610z 11473kHz 1630z 10173kHz 1650z 9373kHz

05/03	413 1 63699 9360 96 63740 ... 20501 000 000		Weak
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413 1 63699
 9360 96
 63740 28375 14040 80726 79689 88497 60107 80660 91989 89912 77202 07563
 91666 63467 20582 26653 47959 83839 74725 20714 54957 98959 29183 43145
 62279 43317 50498 26689 69666 70008 09513 44315 60492 62127 77819 42255
 16604 47678 69965 19547 24449 89151 31462 29238 81401 88789 17932 02254
 70358 16660 98544 96878 34780 84726 99344 48957 81285 23975 58028 66560
 01411 12819 28168 55482 98046 80046 56650 33278 55334 59631 24130 85274
 30473 64829 33641 38960 76455 63780 49205 93185 20120 49835 99645 87552
 10167 39460 33747 72675 50096 33782 12026 00456 49008 15577 62185 20501
 000 000
 Courtesy dMHz

12/03	413 000		1610z Weak, 1630z strong
19/03	413 000		Weak
26/03	413 000		Weak

April 2021

1510z	12174kHz	1530z	11074kHz	1550z	10274kHz	
02/04	102 000					1510z Fair, 1530z Weak
09/04	102 000					Weak, QRM3
16/04	102 000					1510z Strong, 1530z Fair
23/04	102 000					Weak
30/04	102 000					Weak

Saturday

March 2021

0900z	11133kHz	0920z	12133kHz	0940z	13433kHz	
06/03	114 1 63699 9360 96 63740 ... 20501 000 000					Weak
13/03	114 000				[0900z QRM3]	Weak
20/03	114 000					Weak
27/03	114 000					Weak

April 2021

0800z	12218kHz	0820z	13418kHz	0840z	14418kHz	
03/04	244 000					0800z Fair. 0820z Weak, QRM4
10/04	244 000					Weak
17/04	244 000					0800z Weak, 0820z Fair
24/04	244 000					Weak

E11 log March/April

4181kHz	1910z	03/03 9393/00]			Daniel	WED
	1910z	06/03 [393/00] Out 1913z S9			Malc, RNGB, hfD	SAT
	1910z	10/03 [392/38 09507.....17357] Out 1920z S9			Malc	WED
	1910z	13/03 [392/38 09507.....etc] Repeat of Wednesday			Malc	SAT
	1910z	17/03 [396/00] Out 1913z S9			Malc	WED
	1910z	20/03 [396/00] Out 1913z S7			Malc	SAT
	1910z	24/03 [394/00] Out 1913z S9			Malc	WED
	1910z	27/03 [392/00] Out 1913z S9			Malc	SAT
	1910z	31/03 [390/00] Out 1913z S8			Malc	WED
	1910z	03/04 [390/00] Out 1913z S9			Malc	SAT
	1910z	07/04 [399/00] Out 1913z S9			Malc	WED
	1910z	10/04 [390/00] Out 1913z S9			Malc	SAT
	1910z	14/04 [399/31 15057.....75701] Out 1920z S9+10			Malc	WED
	1910z	17/04 [399/31 15057.....etc] Repeat of Wednesday			Malc	SAT
	1910z	24/04 [390/00] Out 1913z S9			Malc	SAT
1910z	28/04 [399/00] Out 1913z S9+10			Malc	WED	
4505kHz	1530z	07/03 [369/00]			Daniel	SUN
	1530z	13/03 [360/00] Out 1533z S2+QRM (Dutch SDR)			Malc, hfD	SAT
	1530z	14/03 [366/00] Out 1533z S2+QRM			Malc	SUN
	1530z	20/03 [365/37 60434.....77009] Out 1540z S3 + QRM			Malc	SAT
	1530z	21/03 [365/37 60434 63437 33856 21830 51050 19010 58413 29338.....32327 77009] Out 1540z			RNGB, Malc	SUN
	1530z	27/03 [368/00] Out 1533z S2+QRM (Dutch SDR)			Malc	SAT
	1530z	28/03 [360/00] Out 1533z S2+QRM			Malc	SUN
	1530z	03/04 [364/31 36447.....24357] Out 1539z S3+QRM (Dutch SDR)			Malc	SAT
	1530z	04/04 [364/31 36447.....etc] Repeat of Saturday			Malc	SUN
	1530z	10/04 [365/00] Out 1533z S2+QRM (Dutch SDR)			Malc, RNGB	SAT
	1530z	17/04 [363/00] Out 1533z S2+QRM (Dutch SDR)			Malc	SAT
	1530z	18/04 [368/00] Out 1533z S3+QRM (Dutch SDR)			Malc	SUN
	1530z	24/04 [360/00] Out 1533z S2+QRM (Dutch SDR)			Malc	SAT
	1530z	25/04 [363/00] Out 1533z S2+QRM			Malc	SUN

5082kHz	1605z	02/03 [238/00] Out 1608z S9	Malc, HfD	TUE
	1605z	07/03 [232/00]	dMHz	SUN
	1605z	09/03 [237/00] Out 1608z S5	Malc	TUE
	1605z	14/03 [232/00] Out 1608z S6	Malc	SUN
	1605z	16/03 [237/37 44053.....58927] Out 1615z S3	Malc	TUE
	1605z	21/03 [237/37 44053.....etc] Repeat of Tuesday	Malc	SUN
	1605z	23/03 [235/00] Out 1608z S4	Malc	TUE
	1605z	28/03 [230/00] Out 1608z S5	Malc	SUN
	1605z	04/04 [235/00] Out 1608z S3	Malc	SUN
	1605z	06/04 [231/00] Out 1608z S4	Malc	TUE
	1605z	13/04 [231/32 92117.....68964] Out 1615z S5	Malc	TUE
	1605z	18/04 [231/32 92117.....etc] Repeat of Tuesday	Malc	SUN
	1605z	20/04 [233/00] Out 1608z S3	Malc	TUE
	1605z	25/04 [235/00] Out 1608z S5	Malc	SUN
1605z	27/04 [233/00] Out 1608z S2	Malc	TUE	
5371kHz	0805z	06/03 [312/00] Out 0808z S2	Malc, RNGB, HfD	SAT
	0805z	07/03 [312/00] Out 0808z S2	Malc	SUN
	0805z	14/03 [312/38 06149 66517 81720 78928 44807 26830 10663 55464.....70584 91212] Out 0816z	RNGB, Malc	SUN
	0805z	20/03 [310/00]	RNGB	SAT
	0805z	21/03 [311/00] Out 0808z S2	Malc	SUN
	0805z	27/03 [315/00] Out 0808z S2	Malc	SAT
	0805z	28/03 [311/00] Out 0808z S2	Malc	SUN
	1300z	08/04 [316/00] Out 1303z S2	Malc, RNGB, HfD	THU
	1300z	12/04 [316/34 93921.....24385] Out 1310z S3	Malc	MON
	1300z	15/04 [316/34 93921.....etc] Repeat of Monday	Malc	THU
	1300z	19/04 [313/00] Out 1303z S2	Malc	MON
	1300z	22/04 [312/00] Out 1303z S2 (Dutch SDR)	Malc	THU
	1300z	26/04 [312/00] Out 1303z S2 (Dutch SDR)	Malc	MON
5737kHz	1530z	01/03 [522/00] Out 1533z S2	Malc, HfD	MON
	1530z	05/03 [528/00]	dMHz	FRI
	1530z	08/03 [525/00] Out 1533z S6	Malc	MON
	1530z	12/03 [528/00] Out 1533z S4	Malc, dMHz	FRI
	1530z	15/03 [521/00] Out 1533z S3	Malc	MON
	1530z	22/03 [522/35 33314 93950 28374 86299 08619 22006 32233.....06484 96632] Out 1540z S4	RNGB, Malc	MON
	1530z	26/03 [522/35 33314.....etc] Repeat of Monday	Malc, RNGB	FRI
	1530z	29/03 [522/00] Out 1533z S3	Malc	MON
	1530z	02/04 [524/00] Out 1533z S3	Malc	FRI
	1530z	09/04 [520/00] Out 1533z S3	Malc	FRI
	1530z	12/04 [520/37 86188.....50397] Out 1541z S5	Malc	MON
	1530z	16/04 [520/37 86188.....etc] Repeat of Monday	Malc	FRI
	1530z	19/04 [521/00] Out 1533z S4	Malc	MON
	1530z	23/04 [524/00] Out 1533z S3	Malc	FRI
	1530z	26/04 [520/00] Out 1533z S2	Malc	MON
	1530z	30/04 [520/00] Out 1533z S4	Malc	FRI
5779kHz	0435z	12/03 [351/00]	HfD	FRI
	0435z	30/04 [359/00]	HfD	FRI
5941kHz	0820z	04/03 [438/00] Out 0823z S2	Malc, RNGB	THU
	0820z	05/03 [439/00] Out 0823z S3	Malc, RNGB, HfD	FRI
	0820z	11/03 [439/32 85359 05192 26438 56267 44666 90138 67919 41007.....78459 23388] Out 0830z	RNGB, Malc,	THU
	0820z	12/03 [439/32 85359etc] Repeat of Thursday	Malc	FRI
	0820z	18/03 [432/00] Out 0823z S2	Malc, RNGB	THU
	0820z	19/03 [436/00] Out 0823z S2	Malc	FRI
	0820z	25/03 [432/00] Out 0823z S3	Malc	THU
	0820z	26/03 [432/00] Out 0823z S4	RNGB, Malc	FRI
	0820z	01/04 [435/00] Out 0823z S2	Mal, RNGB	THU
	0820z	02/04 [432/00] Out 0823z S2	Malc	FRI
	0820z	08/04 [436/33 40064.....21976] Out 0830z S2	Malc	THU
	0820z	09/04 [463/33 40064.....etc] Repeat of Thursday	Malc	FRI
	0820z	15/04 [439/00] Out 0823z S3	Malc, RNGB	THU
	0820z	16/04 [432/00] Out 0823z S4	Malc	FRI
	0820z	22/04 [438/00] Out 0823z S2	Malc	THU
	0820z	23/04 [431/00] Out 0823z S3	Malc	FRI
	0820z	30/04 [432/00] Out 0823z S2	Malc	FRI
6923kHz	1205z	02/03 [461/00] Out 1208z S2	Malc, RNGB, HfD	TUE
	1625z	03/03 [970/39 20397.....05786] Out 1636z S5	Malc	WED
	1625z	07/03 [970/39 20397.....etc] Repeat of Wednesday	Malc	SUN

1205z	09/03 [461/00] Out 1208z S2		Malc	TUE
1205z	10/03 [464/00] Out 1208z S3		Malc	WED
1625z	10/03 [974/00] Out 1625z S6		Malc, dMHz	WED
1625z	14/03 [976/00] Out 1628z S9		Malc	SUN
1205z	16/03 [464/00] Out 1208z S2		Malc	TUE
1205z	17/03 [469/00] Out 1208z S2		Malc	WED
1625z	17/03 [974/00] Out 1628z S6		Malc	WED
1625z	21/03 [977/00] Out 1628z S3		Malc, GaryH	SUN
1205z	23/03 [463/32 42564.....48446] Out 1215z S2		Malc	TUE
1205z	24/03 [463/32 42564....etc] Repeat of Tuesday		Malc	WED
1625z	24/03 [975/00] Out 1533z S6		Malc	WED
1625z	28/03 [970/00] Out 1628z S7		Malc	SUN
1205z	31/03 [461/00] Out 1208z S2		Malc	WED
1625z	31/03 [970/00] Out 1628z S4		Malc	WED
1625z	04/04 [970/00] Out 1628z S7		Malc	SUN
1205z	06/04 [465/35 68588.....27064] Out 1216z S3		Malc	TUE
1205z	07/04 [465/35 68588.....27064] Out 1216z S2		Malc	WED
1625z	07/04 [978/35 20853.....75014] Out 1635z S6		Malc	WED
1205z	13/04 [466/00] Out 1208z S3		Malc	TUE
1205z	14/04 [460/00] Out 1208z S2		Malc	WED
1625z	14/04 [977/00] Out 1628z S4		Malc	WED
1625z	18/04 [972/00] Out 1628z S6		Malc	SUN
1205z	20/04 [463/00] Out 1208z S2		Malc	TUE
1625z	25/04 [976/00] Out 1628z S3		Malc	SUN
1625z	28/04 [970/00] Out 1628z S3		Malc	WED
1205z	27/04 [464/00] Out 1208z S2		Malc	TUE
6940kHz	0930z	03/03 [279/37 46728 61554 09590 87377 60793 38435 19674 93614.....04979 25153] Out 0941z	RNGB, Malc, HfD	WED
	0930z	04/03 [279/37 46728.....etc] Repeat of Wednesday	Malc, RNGB	THU
	0930z	10/03 [273/00] Out 0933z S3	Malc, RNGB	WED
	0930z	11/03 [278/00] Out 0933z S3	Malc	THU
	0930z	17/03 [275/00] Out 0933z S3	Malc, RNGB	WED
	0930z	18/03 [271/00]	dMHz, RNGB	THU
	0930z	24/03 [277/00] Out 0933z S4	Malc	WED
	0930z	25/03 [273/00] Out 0933z S2	Malc	THU
	0930z	31/03 [275/00] Out 0933z S3	Malc	WED
	0930z	01/04 [276/00] Out 0933z S3	Malc, RNGB	THU
	0930z	07/04 [271/00] Out 0933z S2	Malc	WED
	0930z	08/04 [276/00] Out 0933z S3	Malc, RNGB	THU
	0930z	14/04 [278/00] Out 0933z S3	Malc	WED
	0930z	15/04 [273/00] Out 0933z S2	Malc	THU
	0930z	22/04 [270/00] Out 0933z S2	Malc	THU
	0930z	28/04 [276/36 59109.....77141] Out 0940z S3	Malc	WED
7317kHz	1045z	01/03 [693/36 59881.....17280] Out 1055z S5 (Dutch SDR)	Malc	MON
	1900z	01/03 [644/00] Out 1903z S2 (Dutch SDR)	Malc	MON
	1000z	02/03 [307/00] Out 1003z S2	Malc, RNGB	TUE
	1045z	03/03 [696/36 59881.....17280] Out 1048z S4	Malc	WED
	1900z	04/03 [646/00] Out 1903z S4	Malc	THU
	1000z	05/03 [309/00] Out 1003z S2	Malc	FRI
	1045z	08/03 [698/00] Out 1048z S3	Malc	MON
	1900z	08/03 [641/3 30280.....19283] Out 1909z S8	Malc	MON
	1000z	09/03 [309/00] Out 1003z S2	Malc	TUE
	1045z	10/03 [698/00] Out 1048z S3	Malc	WED
	1900z	11/03 [641/31 30280.....19283] Out 1909z S7 QSB3	Malc	THU
	1000z	12/03 [304/00] Out 1003z S2	Malc	FRI
	1045z	15/03 [692/00] Out 1048z S2	Malc	MON
	1900z	15/03 [649/00] Out 1903z S2	Malc	MON
	1000z	16/03 [300/00] Out 1003z S2	Malc, RNGB	TUE
	1045z	17/03 [696/00] Out 1048z S2	Malc	WED
	1900z	18/03 [648/00] Out 1903z S5	Malc	THU
	1000z	19/03 [305/00] Out 1003z S2	Malc	FRI
	1045z	22/03 [693/00] Out 1048z S2	Malc	MON
	1900z	22/03 [641/00] Out 1903z S9	Malc	MON
	1045z	23/03 [305/20 77064.....05381] Out 1007z S2	Malc	TUE
	1900z	25/03 [640/00] Out 1903z S3	Malc	THU
	1000z	26/03 [305/20 77064.....05387] Out 1007z S3	Malc	FRI
	1900z	29/03 [647/00] Out 1903z S7	Malc	MON
	1045z	31/03 [690/00] Out 1048z S3	Malc	WED
	1900z	01/04 [648/00] Out 1903z S9	Malc	THU
	1000z	02/04 [302/00] Out 1003z S3	Malc	FRI
	1045z	07/04 [696/00] Out 1048z S2	Malc	WED

	1900z	08/04 [648/31 52917.....94087] Out 1910z S4	Malc	THU
	1000z	09/04 [304/00] Out 1003z S4	Malc	FRI
	1045z	12/04 [696/00] Out 1048z S3	Malc	MON
	1900z	12/04 [641/00] Out 1903z S7	Malc	MON
	1000z	13/04 [304/00] Out 1003z S3	Malc	TUE
	1045z	14/04 [694/00] Out 1048z S2	Malc	WED
	1000z	16/04 [306/00] Out 1003z S3	Malc	FRI
	1045z	19/04 [691/23 55941.....84702] Out 1053z S3	Malc	MON
	1000z	20/04 [302/00] Out 1003z S2	Malc, RNGB	TUE
	1000z	23/04 [304/00] Out 1003z S5	Malc	FRI
	1045z	26/04 [690/00] Out 1048z S2	Malc	MON
	1900z	26/04 [640/00] Out 1903z S9	Malc, Gary H	MON
	1000z	27/04 [302/34 54843.....32785] Out 1010z S3	Malc	TUE
	1045z	28/04 [698/00] Out 1048z S4	Malc	WED
	1000z	30/04 [302/34 54843.....32785] Out 1010z S4	Malc	FRI
7850kHz	0315z	11/03 [258/00]	HfD	THU
	0315z	28/04 [256/00]	HfD	WED
	0315z	29/04 [259/00] QRM by CHU	HfD	THU
7864kHz	1730z	04/03 [411/40 99101..... 71832] Out 1741z S4	Malc, HfD	THU
	1730z	11/03 [418/00] Out 1733z S3	Malc	THU
	1730z	18/03 [415/00] Out 1733z S4	Malc	THU
	1730z	25/03 [410/00] Out 1733z S3	Malc, Gary H	THU
	1730z	01/04 [412/00] Out 1733z S9	Malc	THU
	1730z	08/04 [411/00] Out 1733z S7	Malc	THU
	1900z	15/04 [646/00] Out 1903z S7	Malc	THU
	1730z	22/04 [410/34 53849.....60874] Out 1740z S4	Malc	THU
8102kHz	0710z	06/03 [496/00] Out 0713z S8	Malc, RNGB	SAT
	0710z	07/03 [496/00] Out 0713z S3	Malc	SUN
	0700z	12/03 [576/00] Out 0703z S4	Malc	FRI
	0710z	13/03 [491/00] Out 0713z S4	Malc	SAT
	0710z	14/03 [496/00] Out 0713z S4	Malc	SUN
	0710z	03/04 [497/00] Out 0713z S7	Malc	SAT
	0710z	04/04 [472/00] Out 0713z S3	Malc	SUN
	0710z	10/04 [491/40 54258.....01285] Out 0721z S3	Malc	SAT
	0710z	17/04 [492/00] Out 0713z S4	Malc	SAT
	0710z	18/04 [497/00]	RNGB	SUN
	0710z	25/04 [497/00] Out 0713z S3	Malc	SUN
8180kHz	0900z	01/03 [530/00] Out 0903z S2	Malc, RNGB, HfD	MON
	0700z	02/03 [576/00] Out 0703z S5	Malc, RNGB	TUE
	0900z	03/03 [536/00] Out 0903z S4	Malc, RNGB	WED
	0900z	08/03 [538/00] Out 0903z S2	Malc, RNGB	MON
	0700z	09/03 [571/00] Out 0703z S4	Malc, RNGB	TUE
	0900z	10/03 [533/00] Out 0903z S2	Malc	WED
	0900z	15/03 [532/35 67556 63848 28919 97856 72815 72684.....76516 21982] Out 0910z S2	RNGB, Malc	MON
	0700z	16/03 [579/31 33377 46338 18182 35522 56705 88724 24709 54694.....62579 43553] Out 0710z	RNGB, Malc	TUE
	0900z	17/03 [532/35 67556.....etc] Repeat of Monday to	Malc	WED
	0900z	22/03 [535/00] Out 0903z S2	Malc	MON
	0700z	23/03 [576/00] Out 0703z S3	Malc	TUE
	0900z	24/03 [532/00] Out 0903z S9	Malc, RNGB	WED
	0900z	29/03 [536/00] Out 0903z S2	Malc	MON
	0900z	31/03 [533/00] Out 0903z S4	Malc	WED
	0700z	02/04 [574/00] Out 0703z S3	Malc	FRI
	0700z	06/04 [576/00] Out 0703z S3	Malc, RNGB	TUE
	0900z	07/04 [536/00] Out 0903z S4	Malc	WED
	0700z	09/04 [577/00] Out 0703z S3	Malc	FRI
	0900z	12/04 [534/39 48631.....95981] Out 0911z S3	Malc	MON
	0700z	13/04 [571/00] Out 0703z S3	Malc	TUE
	0900z	14/04 [534/39 48631.....95981] Out 0911z S3	Malc	WED
	0700z	16/04 [576/00] Out 0703z S3	Malc, RNGB	FRI
	0900z	19/04 [536/00] Out 0903z S3	Malc	MON
	0700z	20/04 [573/33 66424.....95206] Out 0710z S4	Malc	TUE
	0700z	23/04 [573/33 66424.....etc] Repeat of Tuesday	Malc	FRI
	0900z	26/04 [530/00] Out 0903z S4	Malc	MON
	0700z	27/04 [573/00] Out 0703z S4	Malc	TUE
	0900z	28/04 [536/00] Out 0903z S4	Malc	WED
	0700z	30/04 [575/00] Out 0703z S3	Malc	FRI

8423kHz	0645z	06/04 [511/00]		Ary	TUE
	0645z	08/04 [510/00] Out 0648z S6		Malc, RNGB, HfD	THU
	0645z	13/04 [515/00] Out 0648z S3		Malc	TUE
	0645z	15/04 [517/00] Out 0648z S3+QRM		Malc, RNGB	THU
	0645z	20/04 [510/40 40636 37152 77933 83329 64624 40628 65868 78056.....38891 63211] Out 0657z		RNGB, Malc	TUE
	0645z	22/04 [510/40 40636.....etc] Repeat of Tuesday		Malc	THU
	0645z	27/04 [519/00] Out 0648z S3		Malc	TUE
8530kHz	1910z	05/03 [612/00] Out 1913z S2		Malc, RNGB, HfD	FRI
	1910z	07/03 [616/00]		dMHz, Malc, HfD	SUN
	1910z	12/03 [612/37 42325.....85030] Out 1921z S5		Malc	FRI
	1910z	14/03 [612/37 42325.....etc] Repeat of Friday		Malc	SUN
	1910z	19/03 [611/00] Out 1913z S6		Malc, RNGB	FRI
	1910z	21/03 [614/00] Out 1913z S7		Malc	SUN
	1910z	26/03 [612/00]		Gary H, Malc	FRI
	1910z	28/03 [616/00] Out 1913z S5		Malc	SUN
	1910z	02/04 [613/34 32877.....57630] Out 1920z S9		Malc	FRI
	1910z	04/04 [613/34 32877.....etc] Repeat of Friday		Malc	SUN
	1910z	09/04 [617/00] Out 1913z S5		Malc	FRI
	1910z	16/04 [612/00] Out 1913z S2		Malc	FRI
	1910z	18/04 [617/00] Out 1913z S2		Malc	SUN
	1910z	23/04 [618/00] Out 1913z S5		Malc	FRI
	1910z	25/04 [614/00] Out 1913z S2		Malc	SUN
	1910z	30/04 [614/00] Out 1913z S5		Malc	FRI
9963kHz	0715z	02/03 [633/00] Out 0718z S2		Malc, RNGB	TUE
	0715z	05/03 [634/00] Out 0718z S5		Malc	FRI
	0715z	09/03 [634/36 35189 52767 66963 81649 76615 36818 6670881838.....24344] Out 0726z S2		RNGB, Malc	TUE
	0715z	12/03 [634/36 35189.....etc] Repeat of Tuesday		Malc	FRI
	0715z	16/03 [630/00] Out 0718z S3		Malc, RNGB	TUE
	0715z	19/03 [634/00] Out 0718z S3		Malc	FRI
	0715z	23/03 [637/00] Out 0718z S6		Malc	TUE
	0715z	26/03 [639/00] Out 0718z S3		Malc	FRI
	0715z	02/04 [634/00] Out 0718z S3		Malc	FRI
	0715z	06/04 [633/00] Out 0718z S4		Malc, RNGB	TUE
	0715z	09/04 [630/00] Out 0718z S7		Malc	FRI
	0715z	13/04 [636/33 50964.....69237] Out 0725z S5		Malc	TUE
	0715z	16/04 [636/33 50964.....etc] Repeat of Tuesday		Malc	FRI
	0715z	20/04 [636/00] Out 1718z S3		Malc, RNGB	TUE
	0715z	23/04 [636/00] Out 0718z S3		Malc	FRI
	0715z	30/04 [635/00] Out 0718z S3		Malc	FRI
10213kHz	0745z	01/03 [264/00] Out 0748z S2 (Dutch SDR)		Malc, RNGB	MON
	0745z	08/03 [262/00] Out 0748z S9		Malc	MON
	0745z	15/03 [268/34 68383.....67638] Out 0755z S3		Malc	MON
	0745z	22/03 [269/00] Out 0748z S7		Malc	MON
	0745z	29/03 [260/00] Out 0748z S9		Malc	MON
	0745z	12/04 [260/32 58785 08874 21316 85306 15069 99858 76621 29174.....11320 60549] Out 0755z		RNGB, Malc	MON
	0745z	19/04 [260/00] Out 0748z S9		Malc	MON
	0745z	26/04 [264/00] Out 0748z S3		Malc	MON
10330kHz	1530z	04/03 [262/00] Out 1533z S3		Malc	THU
	1530z	11/03 [268/00] Out 1533z S9		Malc	THU
	1530z	18/03 [268/34 68383 34634 42567 80210 76423 67174 38072 98454.....47332 67638] Out 1540z		Gary H, Malc	THU
	1530z	25/03 [266/00] Out 1533z S9		Malc, Gary H, dMHz	THU
	1530z	01/04 [268/00] Out 1533z S9		Malc	THU
	1530z	08/04 [264/00] Out 1533z S9		Malc	THU
	1530z	15/04 [260/32 58785.....60549] Out 1540z S9		Malc	THU
	1530z	22/04 [264/00] Out 1533z S4		Malc	THU
11116kHz	1650z	05/03 [929/00] Out 1653z S2		Malc	FRI
	1650z	07/03 [925/00]		dMHz	SUN
	1650z	12/03 [922/00] Out 1653z S6		Malc, Gary H	FRI
	1650z	14/03 [925/00] Out 1653z S2		Malc	SUN
	1650z	19/03 [927/00] Out 1653z S5		Malc	FRI
	1650z	21/03 [926/00] Out 1653z S6		Malc, Gary H	SUN
	1650z	26/03 [920/40 06680 32975 30376 06974 94609 68220 98967 12402.....15353 70122]		Gary H, Malc	FRI
	1650z	28/03 [924/40 06680.....etc] Repeat of Friday		Malc	SUN
	1650z	02/04 [922/00] Out 1653z S2		Malc, RNGB	FRI
	1650z	04/04 [926/00] Out 1653z S2		Malc	SUN
	1650z	09/04 [927/38 68040.....57631] Out 1701z S7		Malc	FRI
	1650z	16/04 [921/00] Out 1653z S7		Malc	FRI

	1650z	18/04 [925/00] Out 1653z S2		Malc	SUN
	1650z	23/04 [927/00] Out 1648z S6		Malc	FRI
	1650z	25/04 [927/00] Out 1653z S3		Malc	SUN
12153kHz	0830z	01/03 [189/00] Out 0833z S2 (Dutch SDR)		Malc	MON
	0830z	05/03 [185/00] Out 0833z S2		Malc	FRI
	0830z	08/03 [180/37 66586 39009 86057 53409 70706 92146 38490.....20482 72475] Out 0840z S2		RNGB, Malc	MON
	0830z	12/03 [180/37 66586.....etc] Repeat of Monday		Malc	FRI
	0830z	15/03 [180/00] Out 0833z S2		Malc, RNGB	MON
	0830z	19/03 [188/00] Out 0833z S3		Malc	FRI
	0830z	22/03 [188/00] Out 0833z S2		Malc	MON
	0830z	26/03 [183/00]		RNGB, Malc	FRI
	0640z	29/03 [945/23 83737.....59112] Out 0648z S2 (Dutch SDR)		Malc	MON
	0830z	29/03 [183/00] Out 0834z S5		Malc	MON
	0640z	05/04 [944/00]		RNGB	MON
	0830z	09/04 [188/00] Out 0833z S3		Malc	FRI
	0640z	12/04 [949/00] Out 0743z S2 (Dutch SDR)		Malc	MON
	0830z	12/04 [181/00] Out 0833z S4+QRM		Malc, RNGB	MON
	0640z	14/04 [949/00] Out 0643z S2		Malc, HfD	WED
	0830z	16/04 [183/00] Out 0833z S7		Malc	FRI
	0640z	19/04 [946/00] Out 0643z S2		Malc, RNGB	MON
	0830z	19/04 [183/30 15786 35931 47473 05442 47225 16462 05542 18769.....62431 26104] Out 0839z		RNGB, Malc	MON
	0830z	23/04 [183/30 15786.....etc] repeat of Monday		Malc	FRI
	0640z	26/04 [946/39 99931..... 27159] Out 0651z S3		Malc	MON
	0830z	26/04 [181/00] Out 0833z S5		Malc	MON
	0640z	28/04 [946/39 99931 29324 24593 57390 02988 65692 62479 83844.....37817 27159] Out 0651z		RNGB, Malc	WED
	0830z	30/04 [180/00] Out 0833z S3		Malc	FRI
12202kHz	0845z	01/03 [716/00] Out 0848z S2		Malc, RNGB	MON
	0845z	02/03 [152/38 25334.....15188] Out 0856z S2		Malc	TUE
	0845z	03/03 [716/00] Out 0848z S2		Malc	WED
	0845z	08/03 [714/00] Out 0848z S3		Malc, RNGB	MON
	0845z	09/03 [151/00] Out 0848z S3		Malc	TUE
	0845z	10/03 [714/00] Out 0848z S5		Malc	WED
	0845z	11/03 [150/00] Out 0848z S3+QRM		Malc	THU
	0845z	15/03 [715/00] Out 0848z S2		Malc, RNGB	MON
	0845z	16/03 [152/00] Out 0848z S2		Malc, RNGB	TUE
	0845z	17/03 [714/00] Out 0848z S2		Malc, RNGB	WED
	0845z	18/03 [154/00] Out 0848z S2		Malc	THU
	0845z	22/03 [715/40 34034.....85877] Out 0856z S2+QRM		Malc	MON
	0845z	23/03 [155/00] Out 0848z S3		Malc	TUE
	0845z	24/03 [715/40 34043 72994 30932 97503 51290 88492 08965 40549.....85877] Repeat of Monday		RNGB, Malc	WED
	0845z	25/03 [155/00] Out 0848z S3		Malc	THU
	0845z	29/03 [716/00] Out 0848z S7		Malc	MON
	0845z	31/03 [711/00] Out 0848z S4		Malc	WED
	0845z	01/04 [151/00] Out 0848z S2		Malc, RNGB	THU
	0845z	07/04 [713/00] Out 0848z S4		Malc	WED
	0845z	08/04 [151/32 41714 89456 36057 74518 36276 12104 54796 56229.....23231] Out 0855z S2		RNGB, Malc	THU
	0845z	12/04 [718/00] Out 0848z S5		Malc	MON
	0845z	13/04 [159/00] Out 0848z S3		Malc	TUE
	0845z	14/04 [711/00] Out 0848z S5		Malc	WED
	0845z	15/04 [157/00] Out 0848z S3		Malc, RNGB	THU
	0845z	19/04 [715/34 53454.....69216] Out 0855z S5		Malc	MON
	0845z	20/04 [155/00] Out 0848z S6		Malc	TUE
	0845z	22/04 [156/00] Out 0848z S3		Malc	THU
	0845z	26/04 [715/00] Out 0848z S4		Malc	MON
	0845z	27/04 [159/00] Out 0848z S3		Malc	TUE
	0845z	28/04 [719/00] Out 0848z S4		Malc	WED
12530kHz	1230z	16/03 [335/39 79369 32455 52354 29045 66621 17596 18148.....00620 68512] Out 1241z S4		RNGB, Malc	TUE
	1230z	18/03 [335/39 79369.....etc] Repeat of Tuesday		Malc	THU
	1230z	23/03 [330/00] Out 1233z S2		Malc	TUE
	1230z	25/03 [332/00] Out 1233z S3		Malc	THU
	1230z	01/04 [335/00] Out 1233z S5 QSB3		Malc	THU
	1230z	06/04 [338/00] Out 1233z S6		Malc	TUE
	1230z	08/04 [335/00] Out 1233z S3		Malc, HfD	THU
	1230z	13/04 [334/39 10383 41360 69825 42242 21673 51271 87649.....00565 26628] Out 1241z S8		RNGB, Malc	TUE
	1230z	15/04 [334/39 10383.....etc] Repeat of Tuesday		Malc	THU
	1230z	20/04 [335/00] Out 1233z S3		Malc	TUE
	1230z	22/04 [337/00] Out 1233z S3		Malc	THU
	1230z	27/04 [334/00] Out 1233z S5		Malc	TUE

13470kHz	1745z	01/03 [242/31 46981.....96326] Out 1754z S2 (Dutch SDR)	Malc	SUN
	1745z	14/03 [249/00] Out 1748z S2 (Dutch SDR)	Malc	SUN
	1745z	21/03 [240/00] Out 1748z S2 (Dutch SDR)	Malc	SUN
	1745z	22/03 [242/00] Out 1748z S2 (Dutch SDR)	Malc	MON
	1745z	28/03 [240/00] Out 1748z S2	Malc	SUN
	1745z	29/03 [246/00] Out 1748z S2	Malc	MON
	1745z	04/04 [242/00] Out 1748z S2	Malc	SUN
	1745z	12/04 [248/00] Out 1748z S3 (Dutch SDR)	Malc	MON
	1745z	18/04 [248/00] Out 1748z S2 (Dutch SDR)	Malc	SUN
	1745z	19/04 [247/36 58247.....55431] Out 1756z S2 (Dutch SDR)	Malc	MON
	1745z	25/04 [247/36 58247.....etc] Repeat of Monday	Malc	SUN
	1745z	26/04 [248/00] Out 1748z S7	Malc	MON
14865kHz	0745z	02/03 [227/00] Out 0748z S2 (Dutch SDR)	Malc, RNGB	TUE
	0745z	04/03 [224/00] Out 0748z S2 (Dutch SDR)	Malc, RNGB	THU
	0745z	09/03 [221/00] Out 0748z S2	Malc	TUE
	0745z	11/03 [227/00] Out 0748z S2	Malc, RNGB	THU
	0745z	16/03 [229/00] Out 0748z S2 (Dutch SDR)	Malc	TUE
	0745z	18/03 [221/00] Out 0748z S2 (Dutch SDR)	Malc	THU
	0745z	23/03 [229/31 95261.....18676] Out 0755z S2 (Dutch SDR)	Malc	TUE
	0745z	01/04 [220/00] Out 0748z S2 (Dutch SDR)	Malc	THU
	0745z	06/04 [227/38 14461 02222 31186 16018 80952 75388 29746.....56532 42898] Out 0756z S2	RNGB, Malc	TUE
	0745z	08/04 [227/38 14461.....etc] Repeat of Tuesday	Malc	THU
	0745z	13/04 [227/00] Out 0748z S2	Malc	TUE
	0745z	15/04 [224/00] Out 0748z S2	Malc, RNGB	THU
	0745z	20/04 [224/00] Out 0748z S4	Malc	TUE
	0745z	22/04 [227/00] Out 0748z S5	Malc, RNGB	THU
	0745z	27/04 [223/00] Out 0748z S2	Malc	TUE
14972kHz	1345z	02/03 [915/36 56360 31893 02231 39878 51157 1§3760 66278.....20670 43832] Out 1355z	RNGB, Malc	TUE
	1345z	09/03 [919/00] Out 1248z S2 (Dutch SDR)	Malc	TUE
	1345z	13/03 [918/00] Out 1348z S2	Malc, RNGB	SAT
	1345z	16/03 [919/00] Out 1348z S2 (Dutch SDR)	Malc	TUE
	1345z	20/03 [910/00] Out 1348z S2 (Dutch SDR)	Malc	SAT
	1345z	23/03 [910/00] Out 1348z S2 (Dutch SDR)	Malc	TUE
	1345z	27/03 [918/00] Out 1348z S2	Malc	SAT
	1345z	03/04 [912/00] Out 1348z S2 (Dutch SDR)	Malc	SAT
	1345z	10/04 [917/32 64535.....77923] Out 1355z S2 (Dutch SDR)	Malc	SAT
	1345z	13/04 [915/00] Out 1348z S2	Malc	TUE
	1345z	20/04 [917/00] Out 1348z S5	Malc	TUE
17410kHz	0745z	03/03 [347/40 43823 96399 84525 71187 41036 53759 66311 03070.....58820 27879]	RNGB	WED
	0745z	05/03 [346/00] Out 0748z S1 (Dutch SDR)	Malc	FRI
	0745z	12/03 [346/00] Out 0748z S2 (Dutch SDR)	Malc	FRI
	0745z	31/03 [348/00] Out 0748z S1 (Dutch SDR)	Malc	WED
	0745z	09/04 [347/00] Out 0748z S2 (Dutch SDR)	Malc	FRI
	0745z	16/04 [346/37 90033 60511 51682 2367516983 22682 85393 00631.....26540]	RNGB	FRI
	0745z	23/04 [346/00] Out 0748z S2 (Dutch SDR)	Malc	FRI
	0745z	28/04 [341/00] Out 0748z S3 (Dutch SDR)	Malc	WED
	0745z	30/04 [348/00] Out 0748z S2 (Russian SDR)	Malc	FRI
19184kHz	0820z	02/03 [136/00]	RNGB	TUE
	0820z	03/03 [132/00]	RNGB	WED
	0820z	09/03 [135/35 35393 90837 79429 61209 00938 39658 68043 04892.....88793 92871]	RNGB	TUE
	0820z	17/03 [133/00]	RNGB	WED
	0820z	24/03 [131/00]	RNGB	WED
	0820z	13/04 [130/00]	RNGB	TUE
	0830z	20/04 [133/38 80493 93388 76891 43588 79610 07354 05662 62585.....93329 44941]	RNGB, HfD	TUE
	0820z	28/04 [135/00] Out 0823z S4 (Russian SDR)	Malc	WED

E17z

March 2021

Thursday

0800z	14260kHz	0810z	12930kHz		
04/03	217 845 6 04537 87875 47152 23846 80331 17613 845 6 00000			[0800z Unworkable]	Weak
11/03	217 845 6 04537 87875 47152 23846 80331 17613 845 6 00000			[0800z QSB3]	Weak
18/03	217 430 5 60196 68094 59162 07574 95647 430 5 00000			[0800z Unworkable]	Weak
25/03	217 430 5 60196 68094 59162 97574 95647 430 5 00000				Weak Dutch SDR

April 2021

01/04	217 954 6 13621 26252? 83205? 44817 89106 34937 954 6 00000	[0800z NRH]			Weak, QRM DutchSDR
08/04	217 954 6 13621 26252 82057 (Grp 3 Correction) 44817 89106 34937 954 6 00000		[0800z Unworkable]		Weak DutchSDR
15/04	217 804 5 20205 64336 95534 09446 87636 804 5 00000		[0800z QRM]		Weak
22/04	217 804 5 20205 64336 95534 08446 87636 804 5 00000				Weak
29/04	217 000				Weak

E25

No Reports

G06

Thursday

March 2021

1830z	5934kHz		
11/03	579 348 20 rest unworkable		Very weak
25/03	NRH		

April 2021

1830z 5937kHz

Friday

March 2021

1930z	5442kHz
12/03	NRH
26/03	NRH

April 2021

Nil Reports Read on:

PoSW's analysis:

The second plus fourth Thursdays in the month 1830 UTC G06 appeared to cease towards the end of 2020 but has shown up in March:-

11-Mar-21:- 1830 UTC, 5934 kHz, surprised to find the G06 YL in progress with "579" call, strong signal neatly positioned inside the 49 metre band. DK/GC "348 348 20 20", ended before 1839z.

Nothing found on the following day, Friday 12-Mar at 1930z on 5442 the expected frequency. Nothing heard on the fourth Thursday, the 25th at 1830z on 5934, +/-, or on Friday 26-Mar on 5442. If they were there they must have been very weak; perhaps someone with a better antenna and a lower noise level than mine heard something.

Nothing heard on Thursday 8-Apr-21 at 1830 UTC on 5934, +/- or on Friday 9-Apr at 1930 UTC on 5442 and the same goes for Thursday the 22nd and Friday the 23rd

S06

S06 log March 2021

Thursdays (Repeats Friday)	0830z	19415kHz	0930z	16268kHz
04/03	'842' 631 45 88883 88018 64228 86541 22422 38366 00619 48695 18859 72241 45154 30655 42564 47702 44149 19153 77956 15628 70925 50395 29082 86365 02778 13666 31403 57407 03124 80814 92973 88046 38514 10060 07205 31934 85194 97544 04396 63493 04904 75084 34224 59113 94600 77544 96377 631 45 00000			
11/03	'842' 975 46 39367 27163 00649 57546 9...69 63726 65597 39710 30781 97185 52073 03822 89206 74636 45921 05941 63692 64088 66074 10133 96618 62663 99283 30899 39171 94730 84566 24132 49900 23428 64536 12557 65636 23993 45830 56565 99456 92353 35788 06414 45389 87401 47603 96697 94550 30407 975 46 00000			
18/03	'842' 613 47 46705 64907 83172 31804 91583 49110 32434 65338 25373 98539 31509 67921 12109 90285 25402 37297 79157 29415 55618 36934 98529 24298 80599 16921 85093 46424 18511 46673 53872 85619 67085 32895 03599 36611 80202 21237 18745 77875 05899 05073 07181 28721 15485 89856 15671 95512 78464 613 47 00000			

Fridays (1st & 3rd)	2000z	9056khz	2100z	6825kHz
05/03	'768' 00000			
19/03	'768' 00000			

Saturday	1300z	10755kHz	1330z	9073kHz repeats	Sunday	0930z	12093kHz	1000z	10212kHz
06/03	'480' 279 41 68128 53518 23246 76308 38133 29892 12160 63004 98610 77027 77900 36871 19030 84327 99556 48826 40681 18838 64157 50440 33147 78759 64791 17214 63791 24926 19009 37644 43254 57917 06973 93248 07056 26795 68612 38242 46045 16619 94601 82040 46795 279 41 00000								
13/03	'480' 153 44 64950 21574 35374 12960 46909 92803 54055 87610 92227 73725 26084 47466 34377 10233 10401 79513 57755 49501 13643 28472 84385 02233 32666 02585 01921 66086 88729 54680 04965 79335 25984 41166 70541 92449 13303 85017 16590 36384 51092 13958 72436 47109 34818 96901 153 44 00000								
20/03	'480' 796 42 49563 01154 35760 43827 70133 41841 91351 23807 46730 26195 36508 65502 07278 88195 63001 89482 40690 02059 14403 02084 54905 99393 82853 77357 69779 24274 23272 32630 13025 36453 01089 48475 62523 89342 52755 47781 00930 72731 53277 31812 31821 27269 796 42 00000								
27/03	'480' 251 43 73995 85328 87650 23576 55716 52066 01630 66200 57401 84853 00773 88198 03406 11905 45671 09335 66502 84676 22763 63948 35769 95824 79412 98651 94441 68080 27822 77305 23843 95883 08867 73626 67677 92924 75241 15470 32175 64478 75710 14096 55206 60429 13963 251 43 00000								

S06s March log:

Monday

1st/8th	0630/0640z	22185/20050	'462' 9?0 72539.....too weak to copy
15th/22nd			'462' 850 7 06123 22536 88280 84116 53718 78927 34694
1st/8th	0830/0840z	9220/8270	'764' 913 5 04537 87875 47152 23486 80331
15th/22nd			'764' 923 5 96320 36793 53038 76342 15009
1st/8th	0900/0910z	14580/13165	'232' 974 5 06376 48057 13361 19474 34978
15th/22nd			'232' 807 5 04537 87875 47152 23486 80331
1st/8th	1200/1210z	9145/11460	'149' 830 5 22174 82024 08127 51012 43764
15th/22nd			'149' 265 7 33796 13577 74526 46647 79302 53516 25616

Tuesday

2nd/9th	0600/0610z	15855/16485	'438' 970 5 22192 27868 19761.....(faded out)
16th/23rd			'438' 571 6 26634 14690 95590 60386 03009 81413
2nd/9th	0700/0710z	5760/6930	'452' 930 6 21015 82225 23414 73599 34332 60430
16th/23rd			'452' 913 6 52401 63919 92699 14600 74248 48754
2nd/9th	0730/0740z	7425/11560	'427' 816 5 17613 74220 56381 16458 39354
16th/23rd			'427' 915 6 60322 17613 64220 56381 16458 39354
2nd/9th	0800/0810z	11635/10420	'127' 480 5 83630 93731 58291 64212 67195
16th/23rd			'127' 869 5 51621 26252 82057 55817 37082
2nd/9th	1000/1010z	6410/7340	'427' 806 5 58825 26990 68923 04709 77274
16th/23rd			'427' 836 5 15587 46287 66092 35786 39354
2nd/9th	1100/1110z	6190/7230	'265' 410 7 73943 36679 06555 60982 08338 47373 40174
16th/23rd			'265' 937 8 89228 91857 37528 60403 43764 60255 21687 01727

Wednesday

3rd/10th	0830/0840z	9082/9952	'464' 827 5 13621 26252 82057 44817 89106
17th/24th			'464' 209 5 58825 26990 68230 04709 84174

Thursday

4th/11th	(E17z)	0800/0810z	14260/12930	'217' 845 6 04537 87875 47152 23486 80331 17613
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18th/25th			'217' 430 5 60196 68094 59162 07574 95647
4th/11th	0830/0840	11530/12140	'172' 953 6 83630 93731 58291 74212 67195 31960
18th/25th			'172' 489 5 06376 48057 13361 19474 34978
4th/11th	0930/0940z	9081/10514	'698' 234 5 22174 82024 08127 51012 43764
18th/25th			'698' 415 7 25534 14589 85589 59375 93998 71413 84963
4th/11th	1200/1210z	12415/14212	'175' 923 6 58825 26990 68923 04709 84174 38448
18th/25th			'175' 240 6 21767 53672 11824 81022 36983 41412

Friday

5th/12th	0830/0840z	12140/13515	'156' 294 7 87030 68010 61121 42077 34605 02105 79322
19th/26th			'156' 902 7 46062 68672 97478 39685 30485
5th/12th	0900/0910z	5744/6524	'239' 406 5 22689 33082 67708 26025 35786
19th/26th			'239' 481 5 21767 53672 11834 81022 36903

Saturday

6th	0800/0810z	10350/8520	'132' 476 5 73943 36679 05666 60982 08338
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Unknown S06 variant: 5071kHz Thurs 25th March 1005z S06s YL voice but ended 0 0 0 instead of 0 0 0 0 0 (From fellow Dxr Via Ary)

'124' 987 50 83525 70335 43158 15526 47256 81561 23142 45910 55459 45155 64745 76122 20876 46561 54531 64594 78665 42899 13951 56954
 93474 44174 33083 13833 95254 92087 36704 49976 49029 10467 56816 45708 86928 30194 28344 83370 34968 88988 95727 74754
 33504 88923 43348 (44348) 99969 54999 82332 89796 48363 98092 15965 987 50 000

S06 log April 2021

Thursdays (Repeats Friday) **0830z** **19078kHz** **0930z** **16318kHz**

01/04	'842' 791 50 49885 82588 53922 64443 85179 48776 87640 17946 32211 56432 62936 52045 53606 31851 52064 06998 20535 55368 54155 40637 08092 07021 67205 07089 82567 71656 57434 22280 22808 14474 80685 89725 42836 62896 35573 84987 07941 55734 53048 22273 61397 45578 52083 51594 04031 65337 16155 59939 93795 94891 791 50 00000
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08/04	'842' 561 30 25323 81819 89353 33260 13879 96939 09749 74731 96351 73054 49997 78943 55195 70947 31576 16044 30001 07792 11415 01034 22497 00892 94367 24856 95782 82616 01640 65286 72494 09969
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15/04	'842' 907 31 15386 27007 51887 90194 76271 29475 85210 15510 65394 33041 18866 93304 53792 31441 89292 19508 64840 35173 92119 62972 71287 25445 95666 51695 20134 47284 50238 38051 52515 77742 72905 907 31 00000
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29/04	'842' 790 33 91827 79615 49464 63329 31187 65218 44464 88000 76635 71572 15047 51288 26486 95585 47486 68227 49240 21441 46069 52119 45765 00227 75007 42852 84614 95295 28967 78279 52683 04278 86892 82101 88377 790 33 00000
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Fridays (1st & 3rd) **1900z** **9056khz** **2000z** **6825kHz**

02/04	'768' 00000
16/04	'768' 00000

Saturday **1300z** **11487kHz** **1330z** **9412kHz repeats** **Sunday** **0930z** **13945kHz** **1000z** **11128kHz**

03/04	'480' 379 41 67421 97700 61483 28452 43208 78646 87173 43262 04309 72604 46472 76509 47464 91755 34140 31170 87099 87476 50135 80378 36926 77384 32258 43795 81190 22191 26184 16869 81013 09636 72604 93390 46472 76509 47464 91755 34140 31170 87099 87476 80378 379 41 00000
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10/04	'480' 156 42 73746 95785 34200 61430 27548 96964 43742 38222 82233 19822 00621 22894 94543 02359 17202 33903 47724 14863 70931 67461 57923 15659 38290 64137 99288 71561 64703 48826 40681 18838 50440 33147 78759 64791 17214 63791 24926 19009 37644 43254 06973 93248 156 42 00000
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17/04	'480' 972 43 99625 71339 69531 12708 92028 19160 26665 57696 44576 21605 38872 29052 63405 35848 23128 89060 02032 01790 18411 66539 89817 46338 63102 37871 29829 19860 90023 39302 58963 10418 46472 76509 47464 91755 34140 31170 87099 87476 74804 95315 02521 55044 77254 972 43 00000
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24/04	'480' 136 44 61188 95389 50048 29275 46166 33523 55941 82452 21222 19101 00621 22894 94543 02359 17202 33903 47724 14863 70931 67461 57923 15689 38290 64137 05660 12561 99127 26660 43262 00411 73746 95785 34200 61430 27548 96964 43742 38222 82233 19822 44229 96640 58228 64164 136 44 00000
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S06s April log:

Monday

5th/12th	0630/0640z	22185/20050	'462' 815 7 13621 26252 72057 44817 79106 37937 56723
19th/26th			'462' 953 7 69856 82541 98423 79033 15452 30002 09973
5th/12th	0830/0840z	9220/8270	'764' 820 5 04537 87875 47152 23486 80331
19th/26th			'764' 928 5 47154 25660 69885 96882 30034
5th/12th	0900/0910z	14580/13165	'232' 481 5 06376 48057 12261 19473 24978
19th/26th			'232' 951 6 08631 58082 26270 08982 92728 26090
5th/12th	1200/1210z	9145/11460	'149' 572 6 83620 93731 58291 64212 67194 21969
19th/26th			'149' 857 6 32314 34896 82736 36376 35685 44850

Tuesday

6th/13th	0600/0610z	15855/16485	'438' 926 5 72943 26679 05666 60982 08228
20th/27th			'438' 927 5 81155 15870 20136 52522 28142
6th/13th	0700/0710z	5760/6930	'452' 837 6 04537 87875 47152 23486 80331 17613
20th/27th			'452' 819 6 54545 50128 99477 83574 48874 94031
6th/13th	0730/0740z	7425/11560	'427' 830 5 06376 48057 13361 19474 34978
20th/27th			'427' 981 5 82045 36717 24042 75956 31670
6th/13th	0800/0810z	11635/10420	'127' 804 5 83630 93731 58291 64212 67195
20th/27th			'127' 849 5 09394 76911 75155 92918 97067
6th/13th	1000/1010z	6410/7340	'427' 986 5 35673 81934 80610 87030 68010
20th/27th			'427' 963 5 88620 58069 61732 74537 57440
6th/13th	1100/1110z	6190/7230	'265' 985 7 27448 67187 78872 89997 60403 70538 20786
20th/27th			'265' 804 6 52401 63919 92699 14600 74248 48574

Wednesday

7th/14th	0830/0840z	9082/9952	'464' 218 5 83630 93731 58291 64212 67195
21st/28th			'464' 281 5 59901 77233 61736 08531 34998
21st/28th	1000/1010z	13365/14505	'276' 918 5 10559 17237 16945 21817 22543

Thursday

1st/8th (E17z)	0800/0810z	14260/12930	'217' 954 6 13621 26252 82057 44817 89106 34937
15th/22nd			'217' 804 5 20205 64336 95534 08446 87636
1st/8th	0830/0840	11530/12140	'172' 490 5 61881 70151 56499 37086 11887
15th/22nd			'172' 469 5 07022 32734 34771 48591 47281 (this message also repeated Friday 23rd 0800/0810z, same frequency)
1st/8th	0930/0940z	9081/10514	'698' 432 5 99183 39237 75604 14597 72729
15th/22nd			'698' 241 5 81155 15870 20136 51533 38142
1st/8th	1200/1210z	12415/14212	'175' 429 6 09721 52734 77986 44367 37528 22839
15th/22nd			'175' 408 6 73687 04565 39895 91670 29257 69816

Friday

2nd/9th	0830/0840z	12140/13515	'156' 290 7 72943 36679 05666 60982 08338 47373 40174
16th/23rd			'156' 823 7 21767 53672 11834 81022 36903 41412 55678
2nd/9th	0900/0910z	5744/6524	'239' 401 5 22174 82024 08127 51012 43767
16th/23rd			'239' 806 5 46062 68672 97478 39685 30485

Saturday

3rd	0800/0810z	10350/8520	'132' 497 5 83630 93731 58291 64212 67195
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PoSW's logs:**S06. OM Voice:-****First + Third Fridays in the Month Schedule:-**

Unable to find this schedule in March; frequencies in that month in 2020 were 8171 and 5876 kHz and the assumption was that this years frequencies would be close to these. In April it was discovered that everything had moved up a bit:-

2-Apr-21:- 1901 UTC, 9056 kHz, in progress with, "768 768 768 00000", strong signal.
2000 UTC, 6825 kHz, also strong.

16-Apr-21:- 1900 UTC, 9056 kHz, "768 768 768 00000", good signal with rapid QSB.
2000 UTC, 6825 kHz, peaking over S9.

Saturday 1300 + 1330 UTC Schedule:-

6-Mar-21:- 1300 UTC, 10755 kHz, S06 with that "480" call, weak, difficult to impossible copy, could just hear the S06 OM.
1330 UTC, 9073 kHz, even weaker, same frequencies were used in March of last year.

13-Mar-21:- 1300 UTC, 10755 kHz, weak, difficult copy, DK/GC sounded like, "153 153 44 44" (?).
1330 UTC, 9073 kHz, very weak, unreadable.

3-Apr-21:- 1300 UTC, 11487 kHz – from the prediction list; very weak, could just about make out the "480" call. Suggested frequency for the 1330z sending is 9412, nothing heard.

10-Apr-21:- 1300 UTC, 11487 kHz, very weak, unreadable.
1330 UTC, 9412 kHz, stronger, DK/GC "156 156 42 42".

Sunday 0930 + 1000 UTC Schedule:-

Unaware of this Sunday morning S06 until reading the prediction list:-

4-Apr-21:- 0937 UTC, 13945 kHz, transmission in progress, good signal, ended before 0942z with, "379 379 41 41 00000".
1000 UTC, 11128 kHz, suggested frequency for the second sending, very weak signal, unreadable.

11-Apr-21:- 0930 UTC – plus 15 seconds approx – 13945 kHz, “480”, about 45s in “156 156” as though going into the message but then reverted to “480” call. DK/GC “156 156 42 42”, so the same as heard on Saturday the 10th. Good signal.
1000 UTC, 11128 kHz, weaker but readable, local interference particularly fierce around this part of the short-wave spectrum.

25-Mar-21:- 0930 UTC, 13945 kHz, DK/GC “136 136 44 44”, not too strong, ended after 0942 UTC.
0930 UTC, 11128 kHz, very weak, largely unreadable.

S06s, YL Voice:-

Monday 0830 + 0840 UTC Schedule, Call “764”:-

8-Mar-21:- 0830 UTC, 9220 kHz, very weak, unreadable, much better copy from the second sending:-
0840 UTC, 8270 kHz, DK/GC “913 913 5 5”, “04537 87875 47152 23486 80331”.

15-Mar-21:- 0830 UTC, 9220 kHz, DK/GC “923 923 5 5”, weak, “96320 36793 53038 76342 15009”.
0840 UTC, 8270 kHz, stronger.

22-Mar-21:- 0830 UTC, 9220 kHz, “923 923 5 5” and 5Fs as on the 15th, strong signal for a change.
0840 UTC, 8270 kHz, also strong.

29-Mar-21:- 0830 UTC, 9220 kHz, “764 764 764 00000”, “no message” because this is the fifth Tuesday in this month.
0839 UTC, just after, 8270 kHz, the usual early start for the second sending of a no message.

5-Apr-21:- 0830 UTC, 9220 kHz, back to being a weak signal, largely unreadable, second sending much stronger:-
0840 UTC, 8270 kHz, DK/GC “820 820 5 5”, “04537 87875 47152 23486 80331”.

12-Apr-21:- 0830 UTC, 9220 kHz, “820 820 5 5” and 5Fs as on the 5th, S6 to S7.
0840 UTC, 8270 kHz, strong.

Tuesday 0730 + 0740 UTC Schedule, Call “427”:-

2-Mar-21:- 0730 UTC, 7425 kHz, another case of the first sending being too weak to copy, second sending much better.
0740 UTC, 11560 kHz, strong signal, DK/GC “816 816 5 5”, “17613 74220 56381 16458 39354”.

16-Mar-21:- 0730 UTC, 7425 kHz, too weak to copy, second sending much better:-
0740 UTC, 11560 kHz, DK/GC “915 915 6 6”, good signal with QSB, “60332 17613 64220 56381 16458 39354”.

30-Mar-21:- 0730 UTC, 7425 kHz, “427 427 427 00000”, “no message”, as expected.
0739 UTC, just after, 11560 kHz, early start for the second sending, also as expected.

6-Apr-21:- 0730 UTC, 7425 kHz, DK/GC “830 830 5 5”, strong signal for a change, “06376
48057 13361 19474 34978”.
0740 UTC, 11560 kHz, very strong.

13-Apr-21:- 0730 UTC, 7425 kHz, “830 830 5 5” and 5Fs as on 6-April, S5 to S6.
0740 UTC, 11560 kHz, unlike on the 6th this was very weak.

27-Apr-21:- 0730 UTC, 7425 kHz, very weak, unreadable, second sending better:-
0740 UTC, 11560 kHz, DK/GC “981 981 5 5”, “82045 36717 24042 75956 31670”.

Thursday 0830 + 0840 UTC Schedule, Call “172”:-

4-Mar-21:- 0830 UTC, 11530 kHz, very weak, another unreadable S06s.
0840 UTC, 12140 kHz, second sending, strong signal, DK/GC “953 953 6 6”, “83630 93731 58291 74212 67195 31960”.

11-Mar-21:- 0830 UTC, 11530 kHz, “953 953 6 6” as on 4-Mar, fair signal.
0840 UTC, 12140 kHz, very strong.

18-Mar-21:- 0830 UTC, 11530 kHz, weak, unreadable.
0840 UTC, 12140 kHz, much stronger, DK/GC “489 489 5 5”, “06376 48057 13361 19474 34978”.

25-Mar-21:- 0830 UTC, 11530 kHz, unusually strong, S-meter well over the “9”, “489 489 5 5” and 5Fs as on the 18th.
0840 UTC, 12140 kHz, very strong, S9+.

1-Apr-21:- 0830 UTC, 11530 kHz, DK/GC “490 490 5 5”, well over S9, “61881 70151 56499 37086 11887”.
0840 UTC, 12140 kHz, very strong.

15-Apr-21:- 0830 UTC, 11530 kHz, DK/GC “469 469 5 5”, S7 with deep QSB, “07022 32734 34771 48591 47281”.
0840 UTC, 12140 kHz, very strong.

22-Apr-21:- 0830 UTC, 11530 kHz, “469 469 5 5” and 5Fs as on the 15th, strong signal.
0840 UTC, 12140 kHz, also strong.

Fridav 0830 + 0840 UTC Schedule, Call "156":-

5-Mar-21:- 0830 UTC, 12140 kHz, DK/GC "294 294 7 7", very strong signal, "87030 68010 61121 42077 34605 02105 79322".
0840 UTC, 13515 kHz, also very strong.

12-Mar-21:- 0830 UTC, 12140 kHz, "294 294 7 7" and 5Fs as on the 5th, very strong signal.
0840 UTC, 13515 kHz, very strong.

19-Mar-21:- 0830 UTC, 12140 kHz, DK/GC "902 902 7 7", very strong signal, "46062 68672 97478 39685 30485 96632 52537".
0840 UTC, 13515 kHz, slightly weaker.

26-Mar-21:- 0830 UTC, 12140 kHz, "902 902 7 7" and 5Fs as on the 19th, strong.
0840 UTC, 13515 kHz, also strong.

2-Apr-21:- 0830 UTC, 12140 kHz, DK/GC "290 290 7 7", S9+, very strong signal, "72943 36679 05666 60982 08338 47373 40174".
0840 UTC, 13515 kHz, weaker.

16-Apr-21:- 0830 UTC, 12140 kHz. DK/GC "823 823 7 7", very strong signal, "21767 53672 11834 81022 36903 41412 55678".
0840 UTC, 13515 kHz, slightly weaker.

23-Apr-21:- 0830 UTC, 12140 kHz, DK/GC "823 823 7 7" and 5Fs as on the 16th, strong signal.
And then something unusual happened:- the carrier stayed on after the end of the transmission, a quick blip of tone followed by a single spoken "172". At 0840 UTC the S06s YL started up with call "172" for the usual four minutes or so, then DK/GC "469 469 5 5" and same message which had been heard on this same frequency, 12140, on the previous day.
The second sending of today's message was heard at the same time on the expected frequency;-
0840 UTC, 13515 kHz, second sending of "156", S5 to S6, on at the same time as the sending on 12140 so "Young Olga" has two transmitters at her disposal.

First Saturday in the month 0800 + 0810 UTC Schedule, Call "132":-

6-Mar-21:- 0800 UTC, 10350 kHz, started off with a reasonable signal but rapidly became too weak to copy, perked up a bit at the very end in time to hear, "476 476 5 5 0 0 0 0". Second sending better:-
0810 UTC, 8520 kHz, DK/GC "476 476 5 5", "73943 36679 05666 60982 08338".

3-Apr-21:- 0800 UTC, 10350 kHz, very weak, unreadable, again second sending better:-
0810 UTC, 8520 kHz, DK/GC "497 497 5 5", "83630 93731 58291 64212 67195".

S11a log March/April

6433kHz	1135z	03/03 [377/00] Konyetz 1138z S4	Malc, RNGB, HfD	WED
	1135z	10/03 [371/31 09002..... 32396] Konyetz 1146z S5	Malc	WED
	1135z	12/03 [371/31 09002.....etc] Repeat of Wednesday	Malc	FRI
	1135z	17/03 [376/00] Konyetz 1138z S4	Malc	WED
	1135z	24/03 [379/00] Konyetz 1138z S5	Malc	WED
	1135z	26/03 [378/00] Konyetz 1138z S3	Malc	FRI
	1135z	31/03 [373/00] Konyetz 1138z S3	Malc	WED
	0830z	17/04 [376/30 45145.....06321] Konyetz 0840z S7	Malc	SAT
	0830z	24/04 [373/00] Konyetz 0833z S4	Malc	SAT
	0830z	25/04 [372/00] Konyetz 0833z S5	Malc	SUN
6480kHz	0915z	01/03 [486/39 31977 34263 82071 58709 04188 62450 39049.....43370 77657] Konyetz 0926z	RNGB, Malc, HfD	MON
	0915z	05/03 [486/39 31977.....77657] Konyetz 0927z S3	Malc	FRI
	0915z	08/03 [487/00] Konyetz 0918z S6	Malc, RNGB	MON
	0915z	15/03 [480/00] Konyetz 0918z S2	Malc, RNGB	MON
	0915z	19/03 [485/00]	RNGB	FRI
	0915z	22/03 [483/00] Konyetz 0918z S3	Malc	MON
	0915z	26/03 [483/00] Konyetz 0918z S3	Malc, RNGB	FRI
	0915z	29/03 [484/00] Konyetz 1138z S7	Malc	MON
	0915z	02/04 [482/00] Konyetz 0918z S3	Malc	FRI
	0915z	09/04 [483/33 66702.....65684] Konyetz 0925z S3	Malc	FRI
	0915z	12/04 [487/00] Konyetz 0918z S4	Malc	MON
	0915z	16/04 [481/00] Konyetz 0918z S5	Malc, RNGB	FRI
	0915z	23/04 [485/00] Konyetz 0918z S3	Malc	FRI
	0915z	26/04 [484/00] Konyetz 0918z S3	Malc	MON
	0915z	30/04 [481/00] Konyetz 0918z S4	Malc	FRI
8088kHz	1020z	02/03 [425/00] Konyetz 1023z S6	Malc, RNGB	TUE
	1020z	05/03 [426/00] Konyetz 1023z S2	Malc	FRI
	1020z	09/03 [420/37 99686..... 54015] Konyetz 1032z S3	Malc	TUE
	1020z	12/03 [420/37 99686.....etc] Repeat of Tuesday	Malc	FRI

1020z	16/03 [424/00] Konyetz 1023z S2		Malc, RNGB	TUE
1020z	23/03 [429/00] Konyetz 1023z S2		Malc	TUE
1020z	26/03 [422/00] Konyetz 1023z S3		Malc , RNGB	FRI
1020z	02/04 [424/00] Konyetz 1023z S2		Malc	FRI
1020z	06/04 [425/00] Konyetz 1023z S2		Malc	TUE
1020z	09/04 [427/00] Konyetz 1023z S3		Malc	FRI
1020z	13/04 [420/00] Konyetz 1023z S3		Malc	TUE
1020z	16/04 [426/00] Konyetz 1023z S4		Malc	FRI
1020z	20/04 [427/00] Konyetz 1023z S3		Malc	TUE
1020z	23/04 [429/00] Konyetz 1023z S3		Malc	FRI
1020z	27/04 [426/37 65780.....21620] Out 1031z S2		Malc	TUE
1020z	30/04 [426/37 65780.....etc]		Malc	FRI
8597kHz	0700z	04/03 [478/00]	RNGB	THU
	0700z	08/03 [478/00]	HfD	MON
	0700z	18/03 [478/00] Konyetz 0703z S3	Malc	THU
	0700z	29/03 [478/00] Konyetz 0703z S3	Malc	MON
	0700z	01/04 [477/00] Konyetz 0703z S4	Malc, RNGB	THU
	0700z	08/04 [477/00] Konyetz 0703z S3	Malc, RNGB	THU
	0700z	12/04 [478/00] Konyetz 0703z S4	Malc	MON
	0700z	15/04 [472/00] Konyetz 0703z S6	Malc	THU
	0700z	19/04 [477/34 35399 60206 29888 73746 19347 03419 76896.....97546 64788] Konyetz 0811z	RNGB, Malc	MON
	0700z	22/04 [477/34 35399.....etc] Repeat of Monday	Malc	THU
	0700z	26/04 [479/00] Konyetz 0703z S3	Malc	MON
	0700z	29/04 [475/00]	RNGB	THU
10213kHz	1850z	03/03 [280/00] Konyetz 1853z S2 (Dutch SDR)	Malc	WED
	1850z	10/03 [282/00] Konyetz 1853z S4	Malc	WED
	1850z	13/03 [285/00] Out 1853z S8	Malc, RNGB	SAT
	1850z	17/03 [288/38 62933.....27122] Konyetz 1901z S6	Malc	WED
	1850z	20/03 [288/38 62933.....etc] Repeat of Wednesday	Malc	SAT
	1850z	27/03 [280/00] Konyetz 1853z S2	Malc	SAT
	1850z	31/03 [286/00] Konyetz 1853z S3 (Dutch SDR)	Malc	WED
	1850z	03/04 [284/00] Konyetz 1853z S2	Malc	SAT
	1850z	07/04 [288/00] Konyetz 1853z S9	Malc	WED
	1850z	10/04 [280/00] Konyetz 1853z S6	Malc	SAT
	1850z	14/04 [287/00] Konyetz 1053z S9+10	Malc	WED
	1850z	17/04 [288/00] Konyetz 1853z S3	Malc	SAT
	1850z	24/04 [282/37 21971.....37946] Konyetz 1902z S9	Malc	SAT
	1850z	28/04 [288/00] Konyetz 1853z S7	Malc	WED
11116kHz	0510z	26/04 [658/00] KiwiSDR POL	HfD	MON

V02 a

Not heard.

V07

We start with Spectre3000's logs from his use of a Japan based SDR. Compare with those of Daniel in Argentine. The difference in signal strength suggesting the recipient is in the Asian boundaries:

15893kHz	0100z	07/03 [868 1 6236 80 48008 ... 80235 000 000] 0111z Weak QRN3 QSB3	Spectre	SUN
	0100z	14/03 [868 1 511 36 90455 ... 16412 000 000] 0106z Weak QRN3 QSB3	Spectre	SUN
	0100z	21/03 [868 1 144 84 94268 ... 29134 000 000] 0112z Weak QRN3 QSB3	Spectre	SUN
	0100z	28/03 [868 868 868 000] 0102z Weak QRN3 QSB3	Spectre	SUN
14693kHz	0120z	07/03 [868 1 6236 80 48008 ... 80235 000 000] 0131z Fair QRN3 QSB3	Spectre	SUN
	0120z	14/03 [868 1 511 36 90455 ... 16412 000 000] 0126z Fair QRN3 QSB3	Spectre	SUN
	0120z	21/03 [868 1 144 84 94268 ... 29134 000 000] 0132z Fair QRM4 QSB3	Spectre	SUN
	0120z	28/03 [868 868 868 000] 0122z Fair QRN3 QSB3 SUN Spectre		
13893kHz	0140z	07/03 [868 1 6236 80 48008 ... 80235 000 000] 0151z Strong QRN3 QSB3	Spectre	SUN
	0140z	14/03 [868 1 511 36 90455 ... 16412 000 000] 0146z Strong QRN3 QSB3	Spectre	SUN
	0140z	21/03 [868 1 144 84 94268 ... 29134 000 000] 0152z Strong QRN3 QSB3	Spectre	SUN

Thx Spectre

Onto DanAr V07 logs

March 2021

Sunday

0100z 15893kHz 0120z 14693kHz 0140z 13893kHz

07/03 868 1 6236 80 48008 ... 80235 000 000 Weak

868 868 868 1
6236 80
48008 93727 20155 02916 60934
51725 90546 50738 15273 96566
34913 66531 94373 72360 98384
82429 54318 78659 11036 36342
78401 59127 60911 17353 33068
53404 73579 82679 11775 03995
36309 70495 73693 70292 92632
96810 45692 01653 52255 02677
02754 87582 64746 73010 01548
00349 55549 88944 21176 61214
76527 46176 99159 30231 93130
25259 22237 20103 71518 76180
90563 57738 72220 32471 18892
04981 95376 68090 18971 30242
31810 20063 96857 84940 79824
08609 16138 76708 17725 80235
000 000 *Courtesy DanAR*

14/03 868 1 511 36 90455 ... 16412 000 000 Weak

868 868 868 1
511 36
90455 44635 95822 91577 38899
08759 30487 53047 49440 06576
58209 20957 40061 01385 31517
91102 78890 71758 80386 26395
57225 77552 68012 63922 96429
01971 38477 68209 07249 97040
71739 96712 57547 40332 46932
16412 000 000 *Courtesy DanAR*

21/03 868 1 144 84 94268 ... 29134 000 000 Weak

868 868 868 1
144 84
94268 35059 34690 64377 15635
20806 97040 85790 66788 55102
99756 65485 28169 01100 97054
23367 81838 64301 67364 08215
72099 90539 41994 92610 23004
32605 16827 73249 78665 83199
97998 93295 17556 35966 46749
84079 76445 84824 75404 91045
12697 55817 08418 11096 73962
81389 11177 43956 92217 67280
98531 09178 74498 52405 57027
97199 91857 71126 44351 94418
68766 74536 95712 58004 61928
72724 29551 80728 54360 92857
85945 59380 04632 31129 67816
61286 71107 64653 08370 99591
88964 08194 22765 29134
000 000 *Courtesy DanAR*

28/03 868 000 Weak

April 2021

0300z 12218kHz 0320z kHz 0340z kHz

04/04 [0300z] 254 1 6111 24 14524 ... 04811 000 000 Weak, SDR Japan

254 254 254 1
6111 24
14524 99169 88115 07015 79512
86412 81218 68851 14704 84414
04693 84338 53360 44281 73994
52971 96367 70700 91560 62211
48421 73107 20422 04811
000 000 *Courtesy DanAR*

11/04 254 1 6111 24 14524 ... 04811 000 000 [Fair SDR Novosibirsk ...Edd] Weak DanAR

254 1 6111 24
14524 99169 88115 07015 79512
86412 81218 68851 14704 84414
04693 84338 53360 44281 73994
52971 96367 70701 91560 62211
48421 73107 20422 04811
000 000
Courtesy Edd/DanAR

18/04 254 000 Weak DanAR

DanAR writes: This emission was a mess , missing numbers , interrupted transmissions and I tried to put all numbers together as best I can:

12218kHz0300z	25/04 [254 254 254 1 3999 80 64708 39694 59006]QSA1	DanAR	SUN
-SDR Japan- At 03:06z transmission out			
11518kHz0320z	25/04 [254 254 254 1 01989 82013 14503 39901 05412 49601 000 000]QSA2	DanAR	SUN
-SDR Japan- Missing decode key , group number and first numbers-			
10418kHz 0340z	25/04 [254 254 254 1 3999 80 64708 39694 59006 05412 49601 000 000] QSA2	DanAR	SUN
-SDR Japan-			

[Fm10418 khz 0340z 25/04/21]:

```

254 254 254 1
3999 80
64708 39694 59006 01989 82013
14506 69901 01142 27767 74097
97572 67817 56787 17269 36151
58508 19637 66706 67763 41171
20734 93462 08434 54203 07530
13425 49756 69287 89500 19581
13912 44480 61867 52543 93504
02028 77550 13256 83554 94350
05793 35624 93539 22609 20990
01424 31875 60482 20378 76442
98089 59996 68871 22612 81900
94272 77513 93041 90509 39815
76073 79972 98481 41429 59214
12704 49756 11727 32381 49487
05096 07387 84957 80069 82191
27665 15363 66615 05412 49601
000 000      Courtesy DanAR

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Excellent work Dan, thanks!

V15 North Korean Intelligence via Radio Pyongyang

V24

V26

4243kHz0940z	03/04 6 i.p. reading a 4-character groups message. Ends at 0946 UTC (AB-J)	Ary	SAT
4243kHz0905z	27/04/21 [(From M95 sked - USB - Chinese - Female - // 9054) (Remote tuner Khabarovsk)]	JPL	TUE
9054kHz0905z	27/04/21 [(From M95 sked - USB - Chinese - Female - // 4243) (Remote tuner Khabarovsk)]	JPL	TUE

Polytones

XPA1c

Tuesday/Thursday

March 2021

0810z	12132kHz	0830z	13453kHz	0850z	14576kHz		
02/03		973 1 05734 00124 72023 ... 52244			Poor condx	[0850z Unworkable]	Weak QRM3
04/03		973 1 05734 00124 72023 ... 52244					Weak
09/03		973 1 05734 00124 72023 ... 52244				[0850z Fair]	Weak
09/03		973 1 05734 00124 72023 ... 52244				[0850z NRH]	0810z Weak, 0830z Fair
16/03		973 1 02937 00160 92096 ... 16054				[0850z Fair]	Weak
18/03		973 1 02937 00160 92096 ... 16054					Weak

23/03 973 1 02937 00160 92096 ... 16054 [0850z Fair] Weak

973 973 973 1 973 973 973 1 973 973 973 1

02937 00160 92096 46866 58373 59365 32397 08795 65963 70800
28108 20334 98178 37537 32212 34094 40139 02433 75368 92067
50228 14152 73876 95139 46621 49223 04672 33197 61303 56128
74721 87116 27030 45832 98925 07926 76600 11424 57393 07890
73344 75457 52066 22986 96247 32166 63567 84104 80400 47723
67150 88372 68477 15443 74722 06714 30840 24392 25639 25606
46410 18876 83860 43950

63010 05023 99751 49958 73205 97920 89876 57269 46659 04817
06596 05298 34276 92259 57573 45541 38762 86788 19190 24126
25842 26324 18477 65642 20232 23891 98040 43071 91745 09460
60671 31486 20760 52370 40511 66909 73048 55181 23951 77530
63919 72072 79627 53457 23992 16596 56620 71937 60261 70796
34117 05741 21769 69301 98490 21234 42926 69232 75295 11301
84766 92550 85478 78107

31544 96660 07940 97608 12816 75483 26864 69294 59572 51391
98492 18239 35939 24682 96794 18675 57742 66870 70112 48172
04227 85197 88452 02549 18588 97669 21992 32350 74931 40067
88019 03517 49543 94367 16054 *Courtesy PLdn*

25/03 973 1 02937 00160 92096 ... 16054 [0810/0830z QRM4] Weak

30/03 973 1 08416 00188 70296 ... 23443 [0810/0830z Weak QRM3 unworkable] Strong

April 2021

0710z 10428kHz 0730z 11431kHz 0750z 13441kHz

01/04 486 1 08416 00188 70296 ... 23443 [0810/0830z NRH] Weak

06/04 486 1 08416 00188 70296 ... 23443 Weak QSB3

08/04 486 1 08416 00188 70296 ... 23443 [0750z Very strong] Weak QRM3

486 486 486 1 486 486 486 1 486 486 486 1

08416 00188 70296 04344 54279 32755 79248 92330 26466 04224
35018 74755 88582 91618 71115 99046 51478 50591 98970 81491
54427 94114 67126 48730 70694 35700 64175 01683 35859 25809
44778 80533 75890 73819 01212 37123 66059 40527 38316 39876
88183 05017 71128 38943 10437 72238 77650 40027 35980 88288
06007 68475 27451 59394 88091 40239 33983 50692 10669 26710
69991 77331 21741 27202

87407 23179 02491 19334 52463 14795 78766 69885 86223 33589
68077 19768 48899 79480 22191 90859 86397 54291 99708 56600
55592 86251 79464 23259 26510 33147 32118 68408 65957 04794
10681 50197 65074 91540 42740 62792 42333 21256 86071 02448
45995 47187 12334 35865 89911 47052 18395 12176 41937 09913
27118 41147 65587 27499 27190 52191 53955 43829 48502 22944
70299 44649 02147 14764

60664 87517 49923 73800 79640 76901 78661 67849 46679 28946
57130 48588 75435 72745 46420 55240 56451 63792 06931 38219
61604 50376 60693 30058 04178 10846 38291 19258 23794 20441
44699 69017 90795 99909 73176 11305 55724 42382 63041 52224
57933 95687 12595 81035 26927 53300 72088 28113 68241 44979
41497 60620 63573 07565 71342 16436 13645 03809 65148 50863
54429 98088 23443 *Courtesy PLdn*

13/04 486 1 00111 00146 54522 ... 32135 3m55s lg [0750z Very strong] Weak

486 486 486 1 486 486 486 1 486 486 486 1

00111 00146 54522 81559 29030 34947 98260 50169 30054 06357
97110 74388 01956 79771 14508 82759 96130 13911 33666 41003
73790 45216 58219 52767 62156 06041 57979 25470 49075 72816
74663 46358 02786 01979 87652 68083 53893 09132 74948 03957
63706 01423 12439 62597 05473 58913 35754 20218 82474 40746
05784 28840 12327 29076 26460 80993 48914 87577 81784 90088
16500 50724 96893 19903

89820 73344 06779 93282 78667 29200 83205 57894 38639 04286
22698 12258 87165 22899 33224 75766 87965 90315 72226 19586
25060 71384 30961 14283 88759 66121 40173 29123 04319 98087
07022 51399 65159 05874 81496 80910 95626 27769 09861 97858
79820 90733 15770 12984 32285 66112 36537 86305 63432 13068
77238 60904 74662 86292 93814 90100 52973 12035 84306 63296
89154 44691 48716 03335

89460 55348 74551 75451 65581 78738 12441 88404 96824 10956
82822 39554 74760 17764 19386 51502 85672 33281 84580 62947
32135 *Courtesy PLdn*

15/04 486 1 nnnnn nnnnn nnnnn ... 32125 Msg 3m55s lg [as 13/04] 0700/0720z Unworkable, 0740z Weak QSB3/4 Poor Condx

20/04 486 1 00111 00146 54522 ... 32125 Msg 3m55s lg [0710z QSB4] Weak

22/04 486 1 00111 00146 54522 ... 32135 [0750z Very strong] Weak

27/04 486 1 09732 00172 82496 ... 01731 [0710z Weak] Fair, QSB3

486 486 486 1 486 486 486 1 486 486 486 1

09732 00172 82496 94460 67494 58110 17285 30143 54715 47348
 27924 23309 66969 49357 97258 03334 41486 55552 65244 70000
 69460 53827 69059 94831 18372 60348 98277 16894 95558 29828
 54042 17897 77570 04427 46848 57654 69282 86595 68259 27612
 46815 43556 24450 75240 21198 15139 65525 68238 71684 05422
 96900 44759 46836 90902 20778 11736 65872 79110 64548 17414
 45344 27047 03242 38593

49642 63886 63653 04543 36725 61429 99607 95751 89626 41918
 42778 93485 06757 69183 45976 11005 22933 03723 79564 65733
 48800 68455 20704 63821 88990 87532 73991 12047 39683 52983
 59090 86332 44589 13878 09304 18824 33989 09503 67324 96519
 13411 61641 81530 16208 75280 07422 29457 64008 23349 42863
 55422 73279 34249 18011 87620 53805 25898 91196 95567 58320
 14147 24637 97841 68537

03546 13405 23393 79946 13635 59324 20930 73808 78904 83422
 69283 76509 42820 30865 74776 68546 15277 50151 92064 44131
 31803 14957 78034 03764 36606 44419 88727 00937 00153 67601
 98442 33885 82466 39893 72246 53435 65744 81103 01317 90489
 41063 17570 89547 96956 26959 04043 01731 *Courtesy PLdn*

XPA1 Wed/Fri

Wednesday/Friday

March 2021

1310z	14451kHz	1330z	13451kHz	1350z	12151kHz		
03/03	441 1 00442 00170 69019 ... 47264						Ary WED

441 441 441 1 441 441 441 1 441 441 441 1
 00442 00170 69019 01016 10113 20190 99524 72498 88568 62391
 90649 39098 09759 32863 19714 86629 63555 33102 09232 85581
 18079 91791 51133 65585 87041 72217 91252 26490 38923 51026
 84232 32924 86998 20320 05965 10800 62405 90015 39130 77057
 09603 68516 69188 78854 12973 29843 79130 54615 68943 01421
 77175 44280 88668 58263 20382 87353 98464 93737 27474 00769
 98883 66591 45139 77404 94558 48006 70575 93620 10247 67479
 16459 86038 95096 28124 35185 89930 31294 27397 05422 38386
 47072 19330 30498 69913 10483 47184 74897 02837 62378 00600
 49911 12730 16402 94963 41518 80711 92021 60846 25112 41655
 99356 20505 64420 89444 31428 72560 52086 79542 50875 02637
 53428 14962 66488 11624 21773 33088 59038 23471 06952 08540
 83595 54343 62897 58549 74888 94975 44364 91748 96794 70914
 86167 44834 13827 66507 91520 44413 17764 65727 00505 64548
 19176 13731 84651 54558 73339 27156 77042 10371 46539 81855
 59303 38628 67470 85164 19087 51465 29343 17167 00810 25953
 86262 60747 91726 45265 60211 22906 83798 13381 52774 09678
 18070 71864 47264 *Courtesy Ary*

05/03	441 1 00442 00170 69019 ... 47264						Weak QRM3
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10/03 Unworkable

12/03	441 1 00442 00170 69019 ... 47264			[1350z Fair]			Weak
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17/03 RESULTS LOST IN TRANSFER

19/03 Weak, QSB4 Fades made 4m30s lg message unworkable

24/03	441 1 09244 00202 79179 ... 11133			[1310z Fair]			Weak QRM3
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441 441 441 1 441 441 441 1 441 441 441 1

09244 00202 79179 98733 99152 59789 58979 56880 63616 12228
 22215 81621 93527 67851 40347 69544 97875 55448 93327 35791
 33271 08349 64637 76493 19893 26061 07378 95756 18541 13369
 69606 07535 76228 82930 02668 20551 37682 30219 30645 35968
 89666 95869 65345 95039 37688 09854 13100 92119 34981 05443
 24089 10057 96242 95462 02127 83914 40557 67591 43428 12773
 41912 66122 21971 03964

04711 78315 08415 86526 69392 13287 34878 26365 18764 92204
 13325 56597 01648 76675 11683 48155 34812 45654 33584 91930
 54204 99145 12394 48312 78014 66818 06175 02707 90867 35428
 26962 73257 35691 79448 66296 02002 97940 86480 79481 44974
 42520 90655 32098 47833 40234 22463 98242 04206 96467 18965
 63051 95393 33172 08367 75587 38168 67338 69245 19933 73709
 01821 83174 51646 31654

51307 93159 05359 75867 14693 81924 16385 15809 74835 15738
 22657 31154 77665 74137 27049 61585 75861 76643 47688 21605
 92263 26400 69217 97397 30837 72812 67510 06677 27839 26698
 44885 62300 75376 56480 78747 41170 26592 77301 19006 17422
 11506 89316 05245 01132 63947 80987 97651 94269 57378 95946
 42021 84381 39738 53232 86719 65729 64567 01530 81631 10379
 38509 48959 45676 20536

61700 69858 87869 01360 26185 62361 23791 60271 33855 50394
 92681 40066 11133 *Courtesy PLdn*

26/03 Very weak, unworkable. Transmission length 4m30s lg same as 24/03
 31/03 441 1 09118 00240 96241 ... 71132 [1310z Strong] Weak

April 2021

1210z 13368kHz 1230z 12168kHz 1250z 11168kHz

02/04 311 1 09118 00240 96241 ... 71132 Ary FRI

311 311 311 1 311 311 311 1 311 311 311 1
 09118 00240 96241 79720 57125 90886 89844 05450 72582 32144
 71726 55767 52392 95165 40327 64674 70033 20892 18220 63233
 31237 81848 70467 40015 16041 35659 97757 02091 33728 98284
 66657 73613 54434 22280 14975 32256 95027 51252 36574 41812
 61894 00976 58818 88514 77986 82814 62352 84405 66087 91282
 02890 85195 65201 72207 82703 43109 23110 96364 91375 34765
 84988 97313 01737 40415 35049 28556 24944 82471 37725 61840
 87899 54122 71064 45476 32698 29407 67414 38040 92448 31849
 44678 81112 83710 32393 49896 90065 60726 44781 53258 25911
 95751 71663 66282 83137 55472 65196 38333 40000 34940 87197
 05168 31934 95837 68034 71348 87148 51600 28927 07985 79503
 57958 77073 26377 99407 90653 10678 00623 39148 69238 83253
 86188 85630 46185 66231 06960 91851 03501 89573 30563 09381
 18490 31442 00397 74541 38297 23251 57593 51026 61104 67168
 02925 82031 97308 82317 63325 76484 52106 99220 92137 76479
 38835 15378 29309 48723 74257 69584 58769 54322 91851 22254
 58402 53076 42490 79955 91961 54067 14562 11084 84639 31467
 11510 92686 03266 28269 73954 82656 45657 37155 60062 92931
 25679 14638 04148 34968 39322 45301 59357 12455 00504 17680
 88715 21664 40474 40109 31325 02136 02504 17526 29216 34334
 30551 52294 10561 53127 33897 51776 25532 15975 62795 73038
 07962 44514 79162 61563 48439 07876 25572 01036 66380 14339
 40284 20086 78873 56845 66551 08059 54813 58166 93736 54309
 16064 97469 37463 00324 77995 35728 04575 09304 06476 95387
 79630 28188 71132 *Courtesy Ary*

07/04 311 1 09118 00240 96241 ... 71132 1230z Missed [1250z Unworkable] Fair

09/04 Unworkable across schedule

14/04 Unworkable across schedule

16/04 311 1 03911 00086 92937 ... 67511 [1250z Unworkable] Fair, QRM3

21/04 311 1 03911 00086 92937 ... 67511 [1250z Unworkable] Weak, QRM3

23/04 311 1 03911 00086 92937 ... 67511 [1250z Weak] Fair, QRM3

28/04 311 1 00198 00114 85469 ... 46722 Weak, QSB3

311 311 311 1 311 311 311 1 311 311 311 1

00198 00114 85469 25476 11298 86258 36444 83561 54662 68391
 98383 54548 35639 89652 10467 06376 76307 93741 17189 91253
 91265 15489 12702 94416 65695 16284 54789 60788 41160 31940
 97011 17426 96769 35834 92099 96497 56761 88468 59395 23039
 83473 07892 37936 75484 43959 70886 30703 60237 41055 52647
 25605 03719 81579 94183 90034 14484 33821 39411 74577 25629
 14789 05584 71056 71255

10634 56585 81985 86883 12126 61238 71353 71708 18774 24374
 35013 12580 04112 13815 07012 52857 01590 57035 19438 02481
 17890 24972 67555 07542 09323 33700 59938 66613 57527 00939
 24792 29119 39357 23311 84574 99039 65223 77102 97953 43785
 29159 59511 50524 84669 64451 91996 09439 74372 15988 36921
 82701 58251 46722 *Courtesy PLdn*

30/04 311 1 00198 00114 85469 ... 46722 [1210z Fair QSB2] Weak QSB4

XPA2 m

Sunday/Tuesday

March 2021

1200z 13384kHz 1220z 13984kHz 1240z 14984kHz

02/03 Unworkable, poor condx 3m47s lg msg

07/03 01915 00124 54793 ... 73336 [1240z Strong] Weak QRM3

09/03 00274 00086 34876 ... 37042 [1240z Strong] Fair

14/03 00273 00086 34876 ... 37042 [1240z Weak] Strong

16/03 00274 00090 49684 ... 47572 [1240z Strong] Weak, QSB3/4

21/03 00274 00090 49684 ... 47572 [1240z Strong] Fair

00274 00090 49684 57249 41330 33022 06627 12877 48444 76663
 84735 00807 64719 04862 01377 64008 48617 07827 57215 92550
 58093 76337 35396 63677 32181 31577 68159 99231 51428 47978
 65843 96749 72556 33438 94691 68663 12895 04189 02066 53493
 87182 78945 97141 76458 13639 75644 82998 76507 68845 19424
 66600 00637 40524 55880 01321 25314 56115 06917 60414 18878
 33189 90382 40057 21726 55467 39827 50649 76048 33850 73749
 11047 3841 332305 02483 52361 60530 75170 35766 63562 55380
 70294 77252 58502 36249 66976 55568 83577 54956 29063 09111
 15454 85685 47572
Courtesy PLdn

23/03 00634 00028 99143 ... 25155 Very strong

00634 00028 99143 51953 26857 63632 88939 07883 72646 07860
 56994 65580 07781 07512 51403 19916 99916 69940 96672 99725
 97036 58275 79944 02608 41399 39435 70197 05347 01726 76281
 25155
Courtesy PLdn

28/03 00634 00028 99143 ... 25155 [1240z Fair] Fair, QSB3

30/03 00634 00028 99143 ... 25155 Fair. QRM3

April 2021

1200z 14442kHz 1220z 15842kHz 1240z 16342kHz

04/04 00634 00028 99143 ... 25155 [1240z Fair, QSB3] Very strong

06/04 09942 00098 27494 ... 55514 [1200z QSB3] Weak

11/04 09942 00098 27494 ... 55514 [1240z QSB2] Fair

13/04 05964 00200 34742 ... 64504 [1200z Fair] Strong

18/04 Unworkable across schedule

20/04 00333 00218 75028 ... 33537 [1240z weak] Strong

00333 00218 75028 67522 46452 17737 66029 54974 93480 86990
 85746 20466 43973 92585 48447 26989 12217 53744 70461 51449
 82423 10822 92175 55821 06145 78627 93414 63715 97347 90266
 89426 26547 34486 10018 67139 53079 19808 32137 73614 76793
 18137 62286 24237 99795 53541 08718 98981 84976 65899 30754
 78571 57389 38387 26151 80994 76902 37158 80425 96051 33876
 77780 00768 83165 25831 40282 45169 10210 17230 16483 76332
 11854 77023 09581 40284 87689 80416 10136 68451 16567 18545
 64964 33670 30061 62265 58051 39303 16957 91723 14327 39729
 00545 84017 43125 77666 94989 96051 13227 58693 85346 57518
 51564 28125 94983 02859 24161 28629 20599 18437 92928 78056
 06743 78505 77204 12239 92902 48170 16521 29930 88750 63154
 62202 53611 29782 75618 66510 81280 91638 93548 41929 01151
 66470 05016 87848 74729 84786 92407 14224 91071 10731 52850
 37054 06255 96688 52527 66311 80332 84496 08209 96451 68709
 33609 04299 58440 96849 39841 23583 80735 76063 78621 70469
 95942 91181 10052 63913 82138 22338 97812 63367 23746 64706
 84830 61393 72684 83731 30171 21972 85590 88987 96362 53864
 73079 10215 72214 54869 92670 19033 00906 95907 59812 23213
 34785 66008 77392 40257 10832 72621 66766 83208 82130 16356
 69912 89654 33942 66637 60909 71332 70592 20541 27897 02664
 32036 52700 84097 56036 51993 37521 57942 58106 37528 07657
 33537
Courtesy PLdn

25/04 00383 00218 75028 ... 33537 [1220/1240z Unworkable] Weak, QSB3/4

27/04 00203 00222 03585 ... 26312 Fair

00203 00222 03585 99158 05483 43629 78913 00937 24097 56033
 54723 28753 51670 37924 21333 68228 71528 30335 14021 87965
 32718 10818 55122 28471 22195 57593 80600 22812 04202 58087
 84386 69726 36314 61542 65062 83415 27843 53775 61100 11830
 45856 35390 26955 88098 58868 57260 61458 33254 69526 78851
 00004 77913 40660 20900 11558 02251 90812 54119 51376 09098
 20940 33761 70346 30223 87122 50799 56056 64008 67878 97127
 91751 06806 50531 00738 02516 44368 76411 40012 62558 86809
 64480 07738 13906 87679 03522 31419 75569 81600 58638 93034
 66848 33126 81840 63179 57583 38180 70945 77950 70978 27288
 43980 61820 35660 05795 08803 10226 52280 15625 03388 91230
 05125 02484 42085 87855 37335 43689 88875 97547 25215 24769
 57411 08072 82615 68914 86665 68014 45696 01014 31408 76308
 55325 35124 92490 12774 75175 40215 86155 35816 20669 57822
 47125 61474 03826 34729 64237 08833 41929 95836 73681 69682
 93643 51859 09421 71995 75407 74917 38442 30379 66188 36633
 42732 59300 38261 87595 43730 54040 66386 98448 07866 13141
 02163 11550 75780 36359 88678 00272 28106 75147 61154 18686
 57911 60925 13385 75183 21238 72718 27054 47952 03881 52820
 71937 55045 71230 37035 66567 16341 03764 86626 47893 58472
 83583 91210 96029 28933 81664 72475 25658 72228 28490 00346
 86996 23013 30748 16201 30511 78824 96678 99240 07707 04493
 35503 21772 34768 52780 26312
Courtesy PLdn

XPA2 p

Monday/Wednesday

March 2021

0800z 13931kHz 0820z 14831kHz 0840z 16131kHz

01/03 0323 0011n nnnnn nnnnn ... nnnnn NRH at PLdn, Twente SDR very weak, unusable
but fm Ary: 00323 00114 17978 ... 36616

00323 00114 17978 65898 89626 79217 32458 49902 36526 65984
77041 66024 38824 44060 43710 61040 48269 14849 29960 60802
24485 43442 35213 20487 00539 61695 59047 98702 95545 03842
01849 54916 62034 83978 90294 19080 19381 12669 14826 07493
54445 20922 47202 33543 01784 00913 01180 14371 85947 52839
22526 39522 46288 71591 17192 91121 89081 77807 30868 21224
19404 88907 48749 83500 93196 57845 80886 29030 16449 37047
96685 11452 23949 85352 33755 63875 60433 47035 93052 12532
68196 43884 84203 73553 75817 09187 09449 49287 73767 27686
12188 27579 20178 80094 40148 52523 61035 48125 41547 25455
50967 00292 11129 28018 19372 35043 33738 45266 55951 36971
84197 64371 95512 32414 86397 95406 36616 *Courtesy Ary*

03/03 NRH Poor condx
08/03 00323 00114 17978 ... 36616 [0840z Unworkable] Strong
10/03 00323 00114 17978 ... 36616 [0800z Fair, 0840z QSB3] Strong
15/03 00257 00156 67091 ... 62022 [0800z Weak] Unworkable
17/03 RESULTS LOST IN TRANSFER
22/03 00257 00156 67091 ... 62022 0800z Strong 0820z Weak 0840z NRH

00257 00156 67091 03767 00054 29754 84945 74203 39188 40800
46857 10962 15356 41313 54152 27421 76319 12600 35629 17181
69014 46132 11203 67886 67443 88866 65932 32680 81278 65744
36757 72480 25229 15068 48381 45990 14549 34428 70183 63097
41730 25749 25070 23744 47691 53242 16693 89852 60923 08341
87859 06381 90020 16704 52523 57291 32992 40370 76507 67927
82646 18473 07502 09510 87360 27655 97121 98886 66758 81073
24492 19077 19147 48790 15516 55580 36106 73442 05372 68246
33176 63689 78317 18215 90462 86430 02453 65818 42490 72678
81397 09803 17799 60798 43970 59394 25595 25257 65693 36329
95465 60768 52556 39812 95634 48882 97778 67461 61710 42321
88924 16660 91990 36217 68318 43785 37073 65285 07409 55411
87189 91211 01516 48644 36201 94385 87034 79078 90249 00178
55761 23028 02761 77369 33083 07225 95665 35972 12195 94809
80853 63146 65644 61374 62811 02943 11271 04454 15056 38301
01032 48387 52987 41597 14060 06032 76713 98904 62022

Courtesy PLdn

24/03 00257 00156 67091 ... 62022 0800z Fair 0820z Strong 0840z NRH
29/03 06093 00144 46190 ... 73531 [0840z QRM3] Strong

06093 00144 46190 13845 35504 53748 10991 74562 78200 23235
32410 88567 44097 16414 60576 94676 08314 60264 95160 11905
65767 91771 81038 05896 37469 10830 31603 30863 66013 89900
73487 29398 21696 77205 82478 41985 71445 99867 11550 03834
15224 46172 59756 05319 14386 33619 48621 25638 71179 22789
06599 96608 94156 38738 43179 75655 40321 05466 32157 61178
15109 86024 75457 92802 03021 80057 11597 59443 54157 71118
02815 95866 36346 80595 90713 87348 65607 54942 82286 35726
06064 20726 47067 30311 44857 73779 91314 28344 35108 41103
32383 73921 06532 74552 12730 01740 23633 63541 68281 61001
10529 04943 09453 61422 15644 92950 21106 81315 80618 93536
91559 02672 65940 77035 68127 96588 65853 81308 46423 42408
51470 93406 69946 77624 61397 05963 05050 14088 67355 21747
17289 28476 72664 70613 48476 37447 25250 49078 52164 10998
69140 05414 56015 56416 40389 88416 73531 *Courtesy PLdn*

31/03 06093 00144 46190 ... 73531 0800z Strong, 0820z QRM5, 0840z Weak

April 2021

0700z 11409kHz 0720z 12209kHz 0740z 13409kHz

05/04 06093 00144 46190 ... 73531 [0720zQRM4, 0740z Fair] Weak
07/04 06093 00144 46190 ... 73531 [0720z QSB4] Fair
12/04 06645 00138 62674 ... 54467 [0700/0720z Unworkable] Weak QSB3
14/04 06645 00138 62674 ... 54467 [0700z Weak, 0720z QRM3] Fair
19/04 06645 00138 62674 ... 54467 Conditions into UK very variable at this time 0700z Weak, 0720z QRM5, 0740z Weak

21/04	06645 00138 62674 ... 54467	[0720z QRM5]	Fair, QRM3
26/04	08220 00184 53007 ... 07550	[0700/0720z Unworkable]	V.Weak
28/04	08220 00184 53007 ... 07550	[0720z QRM3/4]	Weak

XPA2 Wed/Fri

Wednesday/Friday

March

1200z	12139kHz	1220z	13539kHz	1240z	14639kHz	
03/03	00622 00104 36662 ... 02646					[1240z NRH] Strong
05/03	00622 00104 36662 ... 02646					[1200z Weak, QRM] Strong

00622 00104 36662 31629 99282 82990 02783 22773 57579 44298
61616 32782 49285 77817 42473 89222 80281 67518 39974 24750
89610 24110 76611 00560 04023 60639 05861 45473 80058 26732
29043 19048 96632 56496 94147 87932 94725 79009 26225 72583
70855 97694 32439 37053 26200 19145 33994 57387 61336 14759
19308 13862 21270 72658 24785 60411 20252 34460 18564 18886
77905 03500 86579 48515 67724 31668 09147 14897 20754 99061
73436 91350 82012 90750 83665 51051 19655 42867 09548 75965
85145 49961 47553 68630 90382 95867 26272 03617 18051 07255
80906 18773 67373 42325 63509 98585 02978 43368 97440 72709
12453 12609 09905 58350 45465 53949 02646 *Courtesy PLdn*

10/03	00216 00098 64338 ... 12167					Strong
12/03	00216 00098 64338 ... 12167					[1240z Strong] Weak

00216 00098 64338 39542 79099 65701 22999 51421 76401 64449
70682 35158 41029 19213 37753 16671 65247 17915 06921 33945
82802 86153 82597 55383 47100 65660 28479 28738 13328 73976
36813 72667 73602 17694 41652 93369 64615 98540 82923 98216
52187 76716 60625 64607 21867 74721 61104 33782 66830 12299
34473 02108 59516 77723 63329 86816 17640 98659 25190 97374
97580 58319 13360 19229 58649 26099 01493 06218 65292 75065
58406 66027 07261 08396 13141 20207 80487 67064 88661 49778
40139 22427 75733 12783 45377 82677 91938 17593 83387 80736
75692 03530 81156 23273 18303 83877 85345 32665 50306 07768
12167 *Courtesy PLdn*

17/03	RESULTS LOST IN TRANSFER					
19/03	09807 00012 82697 ... 31446					Strong
	09807 00012 82697 48945 47176 99550 21802 82636 60209 24980 24230 44932 80164 96171 31446 <i>Courtesy PLdn</i>					

24/03	00329 00047 78974 ... 06252					[1200z Weak QRM4] Strong
26/03	00218 00036 67863 ... 05141					[1220z Weak] Strong
	[Note 24/03 is one numeral difference. Centre slide slipped during measurement/determination? 26/03 believed correct]					
31/03	09773 00001 00000 ... 36270					Strong

Wed/Fri

April 2021

1200z	14377kHz	1220z	14977kHz	1240z	15977kHz	
02/04	01179 00001 00000 ... 36260					Strong
07/04	03428 00001 00000 ... 37255				1220z Missed	Very strong
09/04	05734 00001 00000 ... 40260					[1220z QRM3/4] Strong
14/04	09875 00178 67818 ... 60572					[1220z Missed] Strong
16/04	09875 00178 67818 ... 60572					Fair
21/04	00303 00202 21361 ... 24756					Weak, QSB3

23/04 00303 00202 21361 ... 24756 4m45s lg [1220z Fair, stopped 2m31s into sending] Very strong

00303 00202 21361 25586 39367 65641 33639 52340 64915 45525
05265 41896 97635 33889 47699 45622 01473 54054 67708 76735
48823 38129 87229 84873 30692 86071 06930 66633 90324 44439
22878 22375 55539 12164 01977 12698 26421 41030 24924 20628
83430 64203 39088 41259 90367 78671 68744 27234 59681 76826
44681 79634 88357 69512 83511 45261 72589 43551 53902 60261
33740 32396 71289 03489 79820 03243 88916 15971 05256 73820
31936 00864 41936 49196 37915 36094 94146 90874 28753 00155
68483 21501 23730 57693 23460 38712 33475 94399 15944 74983
02181 92019 92097 96391 23092 25730 52733 88833 41675 84164
28697 95543 02386 01419 84395 77711 06093 00786 13322 17034
57136 52734 31023 97934 90012 09250 09450 93447 51384 99484
74298 52415 62738 02473 35600 47051 42735 69986 91663 95563
67062 99726 77749 09997 72283 81068 06710 54236 30693 05434
93817 51836 59955 83184 42071 56148 49180 02930 97864 57911
00641 10767 74397 09353 53088 34483 84367 33917 23581 29244
21209 79973 17709 03406 13791 49163 69031 29925 74427 01803
52800 36656 59731 62778 35338 61944 39328 52694 64916 65978
56703 97889 24663 00238 82537 22110 34673 78698 71304 75329
70483 53667 03615 43495 51854 13168 85305 54005 98428 06165
67898 43595 05856 91255 24756 *Courtesy PLdn*

28/04 02072 00204 08639 ... 22743 [1240z QRM2] Very strong

02072 00204 08639 12401 64054 97634 14326 49037 10727 14228
58507 08740 03733 43498 26123 14646 06993 61988 00221 78038
95636 30039 23194 18980 83027 04473 13106 03777 65312 86428
35736 47801 68244 73758 09388 17112 14908 98049 71785 66354
63116 82504 54717 71875 04865 78275 06291 10716 53380 81824
17117 90511 60952 20656 20583 34173 92057 22707 13081 63114
98734 70275 35132 66179 92080 66119 65754 70156 05433 69952
32803 86590 40551 02529 80332 51805 22667 13031 32895 43139
17593 60004 07713 19866 32292 09162 55005 97314 94555 90950
77000 90918 93761 17850 10107 05839 44492 31912 83849 51035
75928 90719 47207 99014 66318 54032 40780 05627 24611 66788
41579 64600 46827 34612 90607 56913 60800 91649 38390 15664
15637 37161 22175 35336 51969 81393 64986 22489 70585 86164
89336 38885 87512 37534 33933 60859 95059 74643 66241 13519
64865 50760 27124 34642 55681 08315 74631 02723 81373 24760
14048 76943 61971 35031 11656 83981 19769 63458 74157 57074
78794 40370 74767 94687 08099 03909 11855 39473 09161 66727
06533 53844 90161 96520 71257 88117 00859 12523 12759 05122
94607 57384 37645 46628 64451 06167 93443 53236 12662 22987
36790 37179 75706 42913 98177 69883 92617 96393 94488 32701
33974 72053 28240 01949 63431 82092 22743 *Courtesy PLdn*

30/04 02072 00204 08639 ... 22743 [1200z Very strong] Strong QRM3

XPA2 others

Mon

0910z 18333kHz 0930z 16345kHz 0950z 14838kHz

01/03 09638 00054 81464 ... 27267 Ary MON

09638 00054 81464 20243 32240 01240 73985 13532 66211 78740
50681 43735 60972 16530 32388 52804 39549 54282 32567 82502
27658 40254 76998 94298 11860 26874 16385 93337 12066 74671
77818 20468 19045 17641 16788 06092 32561 23187 67627 71274
74002 05582 15579 69519 28892 60939 71497 86278 71292 54265
31974 61202 33104 40052 63071 52753 27267 *Courtesy Ary*

1B XPA2 from H-FD

Tue 02.03.2021 1600Z 13994 msgMrz
Tue 02.03.2021 1620Z 13494 msg
Tue 02.03.2021 1640Z 12194 msg

Wed 03.03.2021 0910Z 18333 msg via KiwiSDR RUS
Wed 03.03.2021 0930Z 16345 msg via KiwiSDR RUS
Wed 03.03.2021 0950Z 14838 msg via KiwiSDR RUS

Wed 03.03.2021 1200Z 12139 msg
Wed 03.03.2021 1220Z 13539 msg
Wed 03.03.2021 1240Z 14639 msg

Thu 04.03.2021 0910Z 16261 msg, weak via KiwiSDR RUS
Thu 04.03.2021 0930Z 15961 msg via KiwiSDR RUS
Thu 04.03.2021 0950Z 14861 msg via KiwiSDR RUS

Mon 08.03.2021 1600Z 12163 msg
Mon 08.03.2021 1620Z 10863 msg
Mon 08.03.2021 1640Z 9363 msg

Tue 09.03.2021 1100Z 14639 msg
Tue 09.03.2021 1120Z 13539 msg
Tue 09.03.2021 1140Z 12139 msg, QRM by R Li- berty, KWT

Wed 17.03.2021 1100Z 15861 msg
Wed 17.03.2021 1120Z 14431 msg
Wed 17.03.2021 1140Z 13431 msg

17426kHz1100z	01/04 01792 00001 00000 35662	Ary	THU
16326kHz1120z	01/04 01792 00001 00000 35662	Ary	THU
14926kHz1140z	01/04 01792 00001 00000 35662	Ary	THU
16341kHz1100z	02/04 06209 00191 45578 ... 53771	Ary	FRI
14841kHz1120z	02/04 06209 00191 45578 ... 53771	Ary	FRI
13941kHz1140z	02/04 06209 00191 45578 ... 53771	Ary	FRI

06209 00191 45578 28299 56649 73583 73415 67883 72215 70960
29821 34896 99368 84350 46929 23261 18337 99378 39925 63932
87773 47495 68157 78203 13382 83753 86121 74383 94992 20828
46448 23700 49743 80465 64081 65019 70805 47454 23645 12890
83709 28878 24073 62495 25022 12375 63008 08724 79516 70541
81742 91793 94782 46169 78252 59019 99901 40880 03817 68275
10715 89576 87974 92001 96319 50039 36886 57573 91939 47092
95982 76093 02351 47390 98994 32308 76657 68617 07893 61713
45129 85984 10033 14705 28271 30194 47644 33282 41988 34116
95213 61578 22190 53497 71312 05014 95184 37078 98499 65682
29721 52466 70319 79687 81902 47022 58197 26889 42269 90227
43341 69206 85065 91282 90936 25729 42663 04462 18543 10842
84729 21212 93727 85316 62189 17899 67446 05552 77106 42298
71100 31943 48041 87539 64053 20410 68709 61843 10538 94492
90407 25196 05318 86403 08853 22742 36438 74414 10626 91434
50438 64670 03303 29401 05587 34559 78794 18640 79121 27903
84500 13240 17771 23407 74654 38350 50989 49904 87486 74604
79616 71781 25500 97683 13049 74672 06103 56525 52395 99349
11479 30532 91330 87383 57508 00411 47214 26131 35824 03475
64079 29407 87358 53771

Courtesy Ary

XPA2 [H-FD]

Fri 02.04.2021 1100Z 16341 msg	Tue 06.04.2021 1100Z 16341 msg
Fri 02.04.2021 1120Z 14841 msg	Tue 06.04.2021 1120Z 14841 msg
Fri 02.04.2021 1140Z 13941 msg	Tue 06.04.2021 1140Z 13941 msg

Sat 03.04.2021 1500Z 15881 msg
Sat 03.04.2021 1520Z 14481 msg
Sat 03.04.2021 1540Z 13381 msg

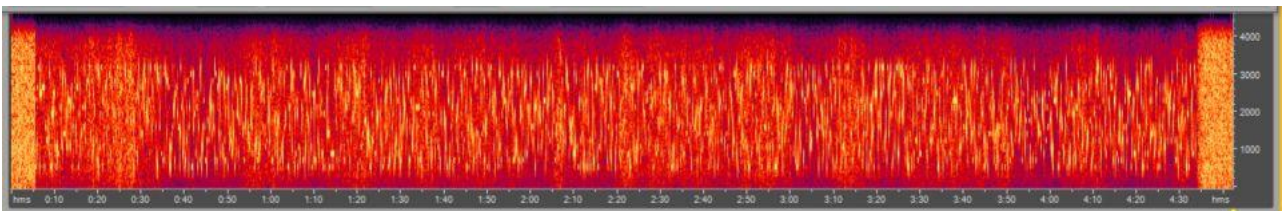
Tue 06.04.2021 1600Z 15819 msg
Tue 06.04.2021 1620Z 14919 msg
Tue 06.04.2021 1640Z 13919 msg

Wed 07.04.2021 0910Z 18038 msg
Wed 07.04.2021 0930Z 17474 msg
Wed 07.04.2021 0950Z 16286 msg

Wed 07.04.2021 1100Z 17426 msg
Wed 07.04.2021 1120Z 16326 msg
Wed 07.04.2021 1140Z 14926 msg

Thu 15.04.2021 0910Z 15859 msg
Thu 15.04.2021 0930Z 14659 msg
Thu 15.04.2021 0950Z 13459 msg

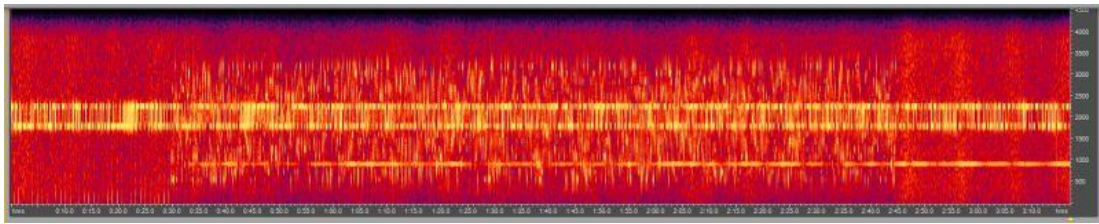
1B XPB1



7881kHz 2010z 02032021 Strong signals 4m28s

9181kHz	2000z	02/03	Fair	4m28s		PLdn	TUE
7881kHz	2010z	02/03	Strong	4m28s		PLdn	TUE
6881kHz	2020z	02/03	Strong	4m28s		PLdn	TUE
5881kHz	2030z	02/03	Strong	4m28s		PLdn	TUE
5181kHz	2040z	02/03	V.strong	4m28s		PLdn	TUE
4581kHz	2050z	02/03	V.strong	4m28s	TTYQRM1	PLdn	TUE
9181kHz	2000z	07/03	Strong	4m28s		PLdn	SUN
7881kHz	2010z	07/03	Strong	4m28s	QRM2	PLdn	SUN
6881kHz	2020z	07/03	Strong	4m28s		PLdn	SUN
5881kHz	2030z	07/03	Strong	4m28s		PLdn	SUN
5181kHz	2040z	07/03	V.strong	4m28s		PLdn	SUN
4581kHz	2050z	07/03	V.strong	4m28s	TTYQRM3	PLdn	SU

9181kHz	2000z	09/03	Fair	2m15s		PLdn	TUE
7881kHz	2010z	09/03	Strong	2m15s		PLdn	TUE
6881kHz	2020z	09/03	Strong	2m15s		PLdn	TUE
5881kHz	2030z	09/03	Strong	2m15s		PLdn	TUE
5181kHz	2040z	09/03	Strong	2m15s		PLdn	TUE
4581kHz	2050z	09/03	Strong	2m15s	TTYQRM4	PLdn	TUE

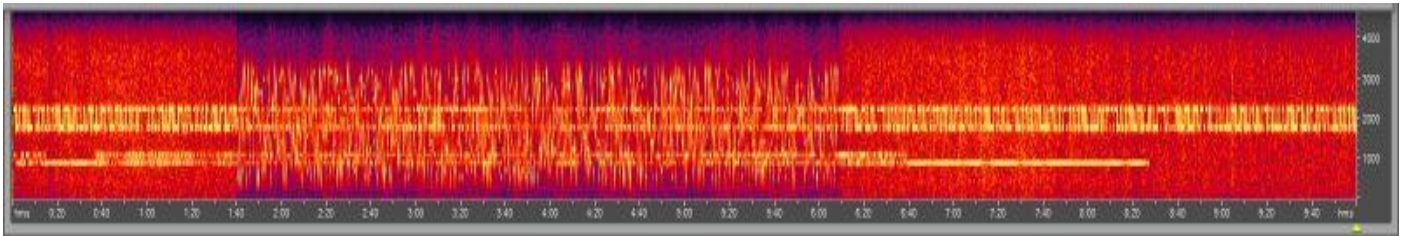


TTYQRM4 4581kHz 2050z 09/03/2021

9181kHz	2000z	14/03	NRH	2m15s		PLdn	SUN
7881kHz	2010z	14/03	NRH	2m15s		PLdn	SUN
6881kHz	2020z	14/03	Weak	2m15s		PLdn	SUN
5881kHz	2030z	14/03	Fair	2m15s		PLdn	SUN
5181kHz	2040z	14/03	Fair	2m15s		PLdn	SUN
4581kHz	2050z	14/03	Strong	2m15s		PLdn	SUN

17/03 RESULTS ACROSS SUN/TUE SCHEDULE LOST IN TRANSFER

9181kHz	2000z	21/03	Fair	4m28s	QRM3	PLdn	SUN
7881kHz	2010z	21/03	Strong	4m28s		PLdn	SUN
6881kHz	2020z	21/03	V.Strong	4m28s		PLdn	SUN
5881kHz	2030z	21/03	V.Strong	4m28s		PLdn	SUN
5181kHz	2040z	21/03	V.Strong	4m28s		PLdn	SUN
4581kHz	2050z	21/03	V.Strong	4m28s		PLdn	SUN



4581kHz 2050z 23/03 V.strong 4m28s DIGIQRM4

9181kHz	2000z	23/03	Fair	4m28s	QRM3	PLdn	TUE
7881kHz	2010z	23/03	Strong	4m28s		PLdn	TUE
6881kHz	2020z	23/03	Strong	4m28s		PLdn	TUE
5881kHz	2030z	23/03	Strong	4m28s		PLdn	TUE
5181kHz	2040z	23/03	V.strong	4m28s		PLdn	TUE
4581kHz	2050z	23/03	V.strong	4m28s	DIGIQRM4	PLdn	TUE

See image above

9181kHz	2000z	28/03	Fair	4m28s	QRM3	PLdn	SUN
7881kHz	2010z	28/03	V.strong	4m28s		PLdn	SUN
6881kHz	2020z	28/03	V.strong	4m28s		PLdn	SUN
5881kHz	2030z	28/03	V.strong	4m28s		PLdn	SUN
5181kHz	2040z	28/03	V.strong	4m28s		PLdn	SUN
4581kHz	2050z	28/03	V.strong	4m28s	DIGIQRM4	PLdn	SUN

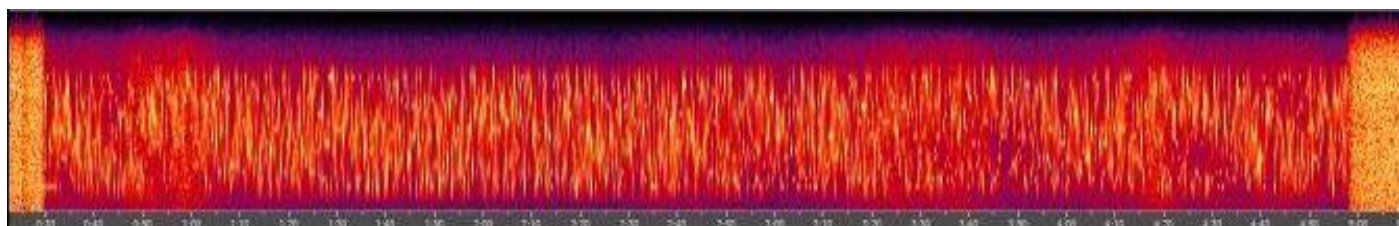
9181kHz	2000z	30/03	Fair	4m28s	QRM3	PLdn	TUE
7881kHz	2010z	30/03	Strong	4m28s		PLdn	TUE
6881kHz	2020z	30/03	V.strong	4m28s		PLdn	TUE
5881kHz	2030z	30/03	V.strong	4m28s		PLdn	TUE
5181kHz	2040z	30/03	V.strong	4m28s		PLdn	TUE
4581kHz	2050z	30/03	V.strong	4m28s	DIGIQRM3	PLdn	TUE

April 2021

13457kHz	1900z	04/04	Weak	4m28s		PLdn	SUN
12147kHz	1910z	04/04	Fair	4m28s	QRM3	PLdn	SUN
11547kHz	1920z	04/04	Fair	4m28s	QRM3	PLdn	SUN
10447kHz	1930z	04/04	Weak	4m28s	QRM3	PLdn	SUN
9347kHz	1940z	04/04	Unworkable		QRM5	PLdn	SUN
8147kHz	1950z	04/04	Strong	4m28s		PLdn	SUN

13457kHz	1900z	06/04	Fair	2m15s		PLdn	TUE
12147kHz	1910z	06/04	Fair	2m15s	QRM4	PLdn	TUE
11547kHz	1920z	06/04	Fair	2m15s	QRM3	PLdn	TUE
10447kHz	1930z	06/04	Fair	2m15s	QRM3	PLdn	TUE
9347kHz	1940z	06/04	Fair	2m15s	QRM3	PLdn	TUE
8147kHz	1950z	06/04	V.strong	2m15s		PLdn	TUE

13457kHz 1900z	11/04	Fair	2m15s	QRM3	PLdn	SUN
12147kHz 1910z	11/04	Fair	2m15s	QRM3	PLdn	SUN
11547kHz 1920z	11/04	Fair	2m15s	QRM3	PLdn	SUN
10447kHz 1930z	11/04	Fair	2m15s	QRM3	PLdn	SUN
9347kHz 1940z	11/04	Strong	2m15s		PLdn	SUN
8147kHz 1950z	11/04	Strong	2m15s		PLdn	SUN
13457kHz 1900z	13/04	V. strong	1m40s		PLdn	TUE
12147kHz 1910z	13/04	V. strong	1m40s		PLdn	TUE
11547kHz 1920z	13/04	V. strong	1m40s		PLdn	TUE
10447kHz 1930z	13/04	V. strong	1m40s		PLdn	TUE
9347kHz 1940z	13/04	V. strong	1m40s		PLdn	TUE
8147kHz 1950z	13/04	V. strong	1m40s		PLdn	TUE
13457kHz 1900z	18/04	NRH			PLdn	SUN
12147kHz 1910z	18/04	NRH			PLdn	SUN
11547kHz 1920z	18/04	Unworkable			PLdn	SUN
10447kHz 1930z	18/04	V.strong	1m40s		PLdn	SUN
9347kHz 1940z	18/04	V.strong	1m40s		PLdn	SUN
8147kHz 1950z	18/04	V.strong	1m40s	QRM2	PLdn	SUN
13457kHz 1900z	20/04	Strong	4m28s		PLdn	TUE
12147kHz 1910z	20/04	Strong	4m28s	QRM3	PLdn	TUE
11547kHz 1920z	20/04	Fair	4m28s		PLdn	TUE
10447kHz 1930z	20/04	Fair	4m28s		PLdn	TUE
9347kHz 1940z	20/04	Fair	4m28s	QRM3	PLdn	TUE
8147kHz 1950z	20/04	Strong	4m28s		PLdn	TUE



8147kHz 1950z 25/04/2021

Very strong

13457kHz 1900z	25/04	NRH			PLdn	SUN
12147kHz 1910z	25/04	NRH		QRM5	PLdn	SUN
11547kHz 1920z	25/04	Unworkable			PLdn	SUN
10447kHz 1930z	25/04	Unworkable			PLdn	SUN
9347kHz 1940z	25/04	Unworkable			PLdn	SUN
8147kHz 1950z	25/04	V.strong	4m28s		PLdn	SUN
13457kHz 1900z	27/04	V.strong	2m15s		PLdn	TUE
12147kHz 1910z	27/04	Weak	2m15s	QRM3	PLdn	TUE
11547kHz 1920z	27/04	Weak	2m15s	QRM3	PLdn	TUE
10447kHz 1930z	27/04	Weak	2m15s	QRM3	PLdn	TUE
9347kHz 1940z	27/04	V.strong	2m15s		PLdn	TUE
8147kHz 1950z	27/04	V.strong	2m15s		PLdn	TUE

Mon/Sat

March 2021

18253kHz 1100z	01/03	NRH			PLdn	MON
17453kHz 1110z	01/03	NRH			PLdn	MON
15953kHz 1120z	01/03	NRH			PLdn	MON
14953kHz 1130z	01/03	Weak	1m40s		PLdn	MON
14353kHz 1140z	01/03	Fair	1m40s		PLdn	MON
13553kHz 1150z	01/03	Fair	1m40s		PLdn	MON
18253kHz 1100z	06/03	NRH			PLdn	SAT
17453kHz 1110z	06/03	NRH			PLdn	SAT
15953kHz 1120z	06/03	Unworkable			PLdn	SAT
14953kHz 1130z	06/03	Weak	1m40s		PLdn	SAT
14353kHz 1140z	06/03	Weak	1m40s		PLdn	SAT
13553kHz 1150z	06/03	Fair	1m40s		PLdn	SAT
18253kHz 1100z	08/03	Weak	1m40s		PLdn	MON
17453kHz 1110z	08/03	Weak	1m40s		PLdn	MON
15953kHz 1120z	08/03	Weak	1m40s		PLdn	MON
14953kHz 1130z	08/03	Weak	1m40s		PLdn	MON
14353kHz 1140z	08/03	Weak	1m40s		PLdn	MON
13553kHz 1150z	08/03	Weak	1m40s		PLdn	MON

18253kHz 1100z	13/03	V.strong	1m40s		PLdn	SAT
17453kHz 1110z	13/03	Weak	1m40s		PLdn	SAT
15953kHz 1120z	13/03	Unworkable			PLdn	SAT
14953kHz 1130z	13/03	Weak	1m40s		PLdn	SAT
14353kHz 1140z	13/03	Strong	1m40s		PLdn	SAT
13553kHz 1150z	13/03	Strong	1m40s		PLdn	SAT
18253kHz 1100z	15/03	Unworkable			PLdn	MON
17453kHz 1110z	15/03	Unworkable			PLdn	MON
15953kHz 1120z	15/03	Unworkable			PLdn	MON
14953kHz 1130z	15/03	Weak	4m28s		PLdn	MON
14353kHz 1140z	15/03	Weak	4m28s		PLdn	MON
13553kHz 1150z	15/03	Weak	4m28s		PLdn	MON
18253kHz 1100z	20/03	Weak	4m28s		PLdn	SAT
17453kHz 1110z	20/03	Strong	4m28s	QRM3	PLdn	SAT
15953kHz 1120z	20/03	Weak	4m28s		PLdn	SAT
14953kHz 1130z	20/03	Strong	4m28s	QRM3	PLdn	SAT
14353kHz 1140z	20/03	Strong	4m28s	QRM3	PLdn	SAT
13553kHz 1150z	20/03	Strong	4m28s	QRM3	PLdn	SAT
18253kHz 1100z	22/03	NRH			PLdn	MON
17453kHz 1110z	22/03	NRH			PLdn	MON
15953kHz 1120z	22/03	NRH			PLdn	MON
14953kHz 1130z	22/03	Weak	1m40s		PLdn	MON
14353kHz 1140z	22/03	Strong	1m40s		PLdn	MON
13553kHz 1150z	22/03	Weak	1m40s	QRM3	PLdn	MON
18253kHz 1100z	27/03	NRH			PLdn	SAT
17453kHz 1110z	27/03	Weak	1m40s		PLdn	SAT
15953kHz 1120z	27/03	Weak	1m40s		PLdn	SAT
14953kHz 1130z	27/03	Weak	1m40s		PLdn	SAT
14353kHz 1140z	27/03	Weak	1m40s		PLdn	SAT
13553kHz 1150z	27/03	NRH			PLdn	SAT
18253kHz 1100z	29/03	Weak	4m28s	QRM3	PLdn	MON
17453kHz 1110z	29/03	Weak	4m28s	QRM3	PLdn	MON
15953kHz 1120z	29/03	Weak	4m28s	QRM3	PLdn	MON
14953kHz 1130z	29/03	Weak	4m28s	QRM3	PLdn	MON
14353kHz 1140z	29/03	Unworkable			PLdn	MON
13553kHz 1150z	29/03	Unworkable			PLdn	MON
April 2021						
17474kHz 1200z	03/04	NRH			PLdn	SAT
16274kHz 1210z	03/04	NRH			PLdn	SAT
15974kHz 1220z	03/04	NRH			PLdn	SAT
14974kHz 1230z	03/04	Weak	4m28s		PLdn	SAT
14374kHz 1230z	03/04	Weak	4m28s		PLdn	SAT
13874kHz 1250z	03/04	Weak	4m28s		PLdn	SAT
17474kHz 1200z	05/04	NRH			PLdn	MON
16274kHz 1210z	05/04	Weak	1m30s	QRM3	PLdn	MON
15974kHz 1220z	05/04	Weak	1m30s	QRM3	PLdn	MON
14974kHz 1230z	05/04	Weak	1m30s	QRM3	PLdn	MON
14374kHz 1230z	05/04	Weak	1m30s	QRM3	PLdn	MON
13874kHz 1250z	05/04	Weak	1m30s	QRM3	PLdn	MON
17474kHz 1200z	10/04	NRH			PLdn	SAT
16274kHz 1210z	10/04	Weak	1m28s		PLdn	SAT
15974kHz 1220z	10/04	Weak	1m28s		PLdn	SAT
14974kHz 1230z	10/04	Weak	1m28s	QRM3	PLdn	SAT
14374kHz 1230z	10/04	Weak	1m28s	QRM3	PLdn	SAT
13874kHz 1250z	10/04	Weak	1m28s	QRM3	PLdn	SAT
17474kHz 1200z	12/04	Unworkable			PLdn	MON
16274kHz 1210z	12/04	Fair	4m28s	QRM3	PLdn	MON
15974kHz 1220z	12/04	Fair	4m28s	QRM3	PLdn	MON
14974kHz 1230z	12/04	Fair	4m28s	QRM3	PLdn	MON
14374kHz 1230z	12/04	Unworkable			PLdn	MON
13874kHz 1250z	12/04	Unworkable			PLdn	MON
17474kHz 1200z	17/04	Unworkable			PLdn	SAT
16274kHz 1210z	17/04	Unworkable			PLdn	SAT
15974kHz 1220z	17/04	Unworkable			PLdn	SAT
14974kHz 1230z	17/04	Very weak			PLdn	SAT
14374kHz 1230z	17/04	Unworkable			PLdn	SAT
13874kHz 1250z	17/04	Very weak			PLdn	SAT

17474kHz 1200z	19/04	NRH		PLdn	MON
16274kHz 1210z	19/04	NRH		PLdn	MON
15974kHz 1220z	19/04	NRH		PLdn	MON
14974kHz 1230z	19/04	Unworkable		PLdn	MON
14374kHz 1230z	19/04	Weak	1m40s	PLdn	MON
13874kHz 1250z	19/04	Unworkable		PLdn	MON
17474kHz 1200z	24/04	NRH		PLdn	SAT
16274kHz 1210z	24/04	Strong	1m40s	PLdn	SAT
15974kHz 1220z	24/04	Strong	1m40s	PLdn	SAT
14974kHz 1230z	24/04	Weak	1m40s	PLdn	SAT
14374kHz 1230z	24/04	Weak	1m40s	PLdn	SAT
13874kHz 1250z	24/04	Unworkable		PLdn	SAT
17474kHz 1200z	26/04	NRH		PLdn	MON
16274kHz 1210z	26/04	NRH		PLdn	MON
15974kHz 1220z	26/04	Unworkable		PLdn	MON
14974kHz 1230z	26/04	Unworkable		PLdn	MON
14374kHz 1230z	26/04	Unworkable		PLdn	MON
13874kHz 1250z	26/04	Unworkable		PLdn	MON

H-FD:

1B XPB1 fm H-FD includes 0600z schedule which cannot be copied at PLdn QTH:

Tue 02.03.2021 0600Z 13562 msg
Tue 02.03.2021 0610Z 14362 msg
Tue 02.03.2021 0620Z 14862 msg
Tue 02.03.2021 0630Z 15962 msg
Tue 02.03.2021 0640Z 16262 msg
Tue 02.03.2021 0650Z 17462 msg

Note the first three slots, 1100, 1110, 1120z 01/03 and compare with PLdn results

Mon 01.03.2021 1100Z 18253 msg via KiwiSDR RUS
Mon 01.03.2021 1110Z 17453 msg via KiwiSDR RUS
Mon 01.03.2021 1120Z 15953 msg via KiwiSDR RUS
Mon 01.03.2021 1130Z 14953 msg
Mon 01.03.2021 1140Z 14353 msg
Mon 01.03.2021 1150Z 13553 msg

Tue 02.03.2021 2000Z 9181 msg
Tue 02.03.2021 2010Z 7881 msg
Tue 02.03.2021 2020Z 6881 msg
Tue 02.03.2021 2030Z 5881 msg
Tue 02.03.2021 2040Z 5181 msg
Tue 02.03.2021 2050Z 4581 msg

Mon 19.04.2021 0500Z 13527 msg
Mon 19.04.2021 0510Z 13927 msg
Mon 19.04.2021 0520Z 14727 msg
Mon 19.04.2021 0530Z 14927 msg
Mon 19.04.2021 0540Z 15827 msg
Mon 19.04.2021 0550Z 16327 msg

Tones, Hybrids and FSK

X06 Mazielka (1c) logs section

Report : Interesting German transmission and X06

On Sunday, April 25th, there was the transmission of the monthly DX programme of the German Amateur Radio Club (DARC).

It came at 0900 UTC on 6070 kHz and later on some other stations in the livestream.

The programme in April 2021 had the fokus on numbers stations. They brought the interview, which Mr. Michael Lutz from Stuttgart, the author of the « Top secret books », made with Jochen NumbersKopf on September 11th 2017 here in Marburg (see EN 103).

During this interview I mentioned ENIGMA2000. You can listen to the whole transmission in German here :

<https://mmv-mediathek.de/play/32698-radio-darc.html>

X06 Mazielka (1c) logs section

Date	Day	UTC	Freq	Scale	Monitor	Comments
20210311	Thu	1154	12920	1--6--	Schorschi	X06b with S9
20210311	Thu	1209	13129	1--6--	Schorschi	X06b with S9
20210311	Thu	1216-1219	13338	564213	Schorschi	TX to Bonn, G118, S9
20210319	Fri	1210	14451	625413	Ary/NL	Shortie i. p., TX to Tel Aviv, G193
20210323	Tue	1008-1015	13510	612534	Edd Smith	TX to Ashgabat, i.p., G234, S9(SDR)
20210401	Thu	0731-0734	13448	162543	Ary	TX to Nicosia, G39
20210402	Fri	0707-0710	12200	241563	Ary	TX to Karachi, G50
20210408	Thu	0737-0747	7543	246135	Ary	(1)
20210408	Thu	0752-0754	7988	561243	Ary	TX to Helsinki, G117
20210408	Thu	0940-1021	13506	164532	Ary, Kopf., Schorschi	TX to Dublin, G106, S9
20210408	Thu	1023	14926	1--6--	Schorschi	X06b before XPA2

Additional report in from 'E' [No tonal detail]

08/02/2021 11425kHz 0901z

04/04/2021 12190kHz 0704z

1)Sequence: 246135, followed by 3 lower tones (lower than usual), which changed at 0741 UTC. 1st version: "312" (lower), 2nd one: "146" (lower)

Many thanks to all contributors as usual. Till the next E2K issue I say "Good-bye" - and please stay safe and healthy

Jochen Numbers-, X06 Database and Teamkopf

HM01

11435kHz1600z	01/03	51514 44183 62432 46057 44658 31544 (repeat of 21 Feb)	Ary	MON
Files				
10655151.TXT				
63204418.TXT				
31026243.TXT				
27864605.TXT				
35664465.TXT				
58183154.TXT				
11435kHz1628z	01/03	75303 50751 37182 21666 12427 72422	Ary	MON
11435kHz1600z	03/03	75305 50753 37184 21668 83561 72424	Ary	WED
11435kHz1658z	03/03	75305 50753 37184 21668 83561 72424 should be on 11530 kHz	Ary	WED
11435kHz1558z	07/03	05161 50757 75721 42342 83565 72428	Ary	SUN
Files				
20620516.TXT				
81285075.TXT				
50657572.FIC				
36104234.FIG				
65868356.TXT				
36627242.FIG				
11435kHz1628z	10/03	05163 22342 75723 42345 38221 55481	Ary	WED
Files				
20620516.TXT				
07882234.TXT				
50657572.FIC				
36104234.FIG				
83033822.TXT				
67205548.TXT				
11435kHz1628z	12/03	05165 22344 75725 42347 38222 55483	Ary	FRI
Files				
20620516.TXT				
07882234.TXT				
50657572.FIC				
36104234.FIG				
83033822.TXT				
67205548.TXT				
11435kHz1558z	19/03	05024 06634 02235 81506 50741 24563	Ary	FRI
Files				
76620502.TXT				
61140663.TXT				
50880223.FIC				
18868150.TXT				
66785074.TXT				
48682456.TXT				

11435kHz1558z	20/03	05025 06635 02236 81507 50742 24564		Ary	SAT
Files					
76620502.TXT					
61140663.TXT					
50880223.FIC					
18868150.TXT					
66785074.TXT					
48682456.TXT					
11435kHz1601z	21/03	05026 06636 02237 56481 50743 24565		Ary	SUN
Transmission started while already in progress					
Files					
76620502.TXT					
61140663.TXT					
50880223.FIC					
12885648.TXT					
66785074.TXT					
48682456.TXT					
11435kHz1558z	21/04	44851 21389 51142 88773 83176 77451		Ary	WED
Files					
05274485.TXT					
36062138.FIG					
00235114.TXT					
20048877.TXT					
36058317.FIG					
68547745.TXT					
11435kHz1558z	22/04	44852 40011 51143 88774 83177 77451		Ary	THU
Files					
05274485.TXT					
20884001.TXT					
00235114.TXT					
20048877.TXT					
36058317.FIG					
68547745.TXT					
11435kHz1558z	27/04	44857 40015 51148 88779 33612 77456		Ary	TUE
Files					
05274485.TXT					
20884001.TXT					
00235114.TXT					
20048877.TXT					
36443361.FIG					
68547745.TXT					
11435kHz1601z	29/04	47731 40017 44161 71861 33614 77458		Ary	THU
Files					
13114773.TXT					
20884001.TXT					
54414416.TXT					
61107186.TXT					
36443361.FIG					
68547745.TXT					
11435kHz1558z	30/04	47731 88341 44162 71862 33615 77459		Ary	FRI
Files					
13114773.TXT					
24608834.TXT					
54414416.TXT					
61107186.TXT					
36443361.FIG					
68547745.TXT					
11462kHz0858z	29/04	44858 40016 44161 71861 33613 77457	(groups changed at 2158z on 28-4)	Ary	WED

11530kHz1658z	01/03	75303 50751 37182 21666 12427 72422	Ary	MON
Files				
45747530.TXT				
81285075.TXT				
06063718.TXT				
00572166.TXT				
31541242.TXT				
36627242.FIG				
11530kHz1702z	03/03	75305 50753 37184 21668 83561 72424	Ary	WED
11530kHz1658z	04/03	75306 50754 37185 21669 83562 72425	Ary	THU
Files				
45747530.TXT				
81285075.TXT				
06063718.TXT				
00572166.TXT				
65868356.TXT				
36627242.FIG				
11530kHz1658z	05/03	75307 50755 37186 42341 83563 72426	Ary	FRI
Files				
45747530.TXT				
81285075.TXT				
06063718.TXT				
36104234.FIG				
65868356.TXT				
36627242.FIG				
11530kHz1658z	06/03	75308 50756 37187 42341 83564 72427	Ary	SAT
Files				
45747530.TXT				
81285075.TXT				
06063718.TXT				
36104234.FIG				
65868356.TXT				
36627242.FIG				
11530kHz1658z	07/03	05161 50757 75721 42342 83565 72428	Ary	SUN
11530kHz1658z	08/03	05161 22341 75721 42343 83566 72429	Ary	MON
Files				
20620516.TXT				
07882234.TXT				
50657572.FIC				
36104234.FIG				
65868356.TXT				
36627242.FIG				
11530kHz1658z	11/03	05164 22343 75724 42346 38221 55482	Ary	THU
Files				
20620516.TXT				
07882234.TXT				
50657572.FIC				
36104234.FIG				
83033822.TXT				
67205548.TXT				
11530kHz1658z	13/03	05166 22345 75726 42348 38223 55484	Ary	SAT
Files				
20620516.TXT				
07882234.TXT				
50657572.FIC				
36104234.FIG				
83033822.TXT				
67205548.TXT				
11530kHz1728z	14/03	05167 22346 75726 81501 38224 55485	Ary	SUN
Files				
20620516.TXT				
07882234.TXT				
50657572.FIC				
18868150.TXT				
83033822.TXT				
67205548.TXT				

11530kHz1658z	16/03	05021 06631 02232 81503 38227 24561	Ary	TUE
Files				
76620502.TXT				
61140663.TXT				
50880223.F1C				
18868150.TXT				
83033822.TXT				
48682456.TXT				
11530kHz1658z	18/03	05023 06633 02234 81505 50741 24562	Ary	FRI
Files				
76620502.TXT				
61140663.TXT				
50880223.F1C				
18868150.TXT				
66785074.TXT				
48682456.TXT				
11530kHz1658z	22/03	05026 06636 02237 56481 50743 24565	Ary	MON
Files				
76620502.TXT				
61140663.TXT				
50880223.F1C				
12885648.TXT				
66785074.TXT				
48682456.TXT				
11530kHz1658z	23/04	44853 40011 51144 88775 83178 77452	Ary	FRI
Files				
05274485.TXT				
20884001.TXT				
00235114.TXT				
20048877.TXT				
36058317.F1G				
68547745.TXT				
11534kHz1605z	24/04	66012 17241 10803 16171 10125 67090 late start	Ary	SAT
Files				
50416601.F1C				
20511724.TXT				
46251080.TXT				
01041617.TXT				
74061012.TXT				
57856709.TXT				
11635kHz1758z	03/03	75305 50753 37184 21668 83561 72424	Ary	WED
Files				
45747530.TXT				
81285075.TXT				
06063718.TXT				
00572166.TXT				
65868356.TXT				
36627242.F1G				
11635kHz1828z	09/03	05162 22341 75722 42344 83567 55481	Ary	TUE
Files				
20620516.TXT				
07882234.TXT				
50657572.F1C				
36104234.F1G				
65868356.TXT				
67205548.TXT				
11635kHz1758z	20/04	44851 21388 51141 88772 83175 04049	Ary	TUE
Files				
05274485.TXT				
36062138.F1G				
00235114.TXT				
20048877.TXT				
36058317.F1G				
73080404.TXT				

Ary notes: The first new groups and files since March 22nd

17480kHz2200z	20/03 (05025 06635 02236 81507 50742 24564) QSA2	DanAr	SAT
17480kHz2200z	23/03 (05026 06636 02237 56481 50743 24565) QSA2	DanAr	TUE
17480kHz2200z	25/03 (05026 06636 02237 56481 50743 24565) QSA2	DanAr	THU
17480kHz2200z	01/04 (05026 06636 02237 56481 50743 24565) QSA2	DanAr	THU
17480kHz2200z	24/04 -Only carrier- QSA2	DanAR	SAT

More news

NORTH KOREA: Not spying but interesting:

JUSTICE NEWS Department of Justice Office of Public Affairs FOR IMMEDIATE RELEASE Monday, March 22, 2021

First North Korean National Brought to the United States to Stand Trial for Money Laundering Offenses DPRK Intelligence Service Affiliated Businessman Accused of Using the U.S. Financial System and Deceiving U.S. Banks to Circumvent Sanctions Against North Korea

<https://www.justice.gov/opa/pr/first-north-korean-national-brought-united-states-stand-trial-money-laundering-offenses>

Note: A copy of the indictment can be viewed here: <https://www.justice.gov/opa/press-release/file/1379211/download>

WASHINGTON – After nearly two years of legal proceedings, Mun Chol Myong (Mun), 55, a national of the Democratic People’s Republic of Korea (DPRK), has been extradited to the United States. This case represents the first ever extradition to the United States of a DPRK national. Mun is accused of laundering money through the U.S. financial system as part of a scheme to provide luxury items to the DPRK.

“The indictment alleges that Mun defrauded banks and laundered money in an effort to evade counter-proliferation sanctions imposed on North Korea by the United States and the United Nations,” said Assistant Attorney General John C. Demers for the Justice Department’s National Security Division. “He is the first North Korean intelligence operative — and the second ever foreign intelligence operative — to have been extradited to the United States for violation of our laws. We will continue to use the long reach of our laws to protect the American people from sanctions evasion and other national security threats.”

“We are pleased that Mun has been extradited and will stand trial for the offenses alleged in the indictment,” said Acting U.S. Attorney Channing D. Phillips for the District of Columbia. “The U.S. Attorney’s Office for the District of Columbia will always be prepared to protect our nation’s financial system and pursue those who violate our laws, regardless of where they might hide.”

“One of the FBI’s biggest counterintelligence challenges is bringing overseas defendants to justice, especially in the case of North Korea,” said Assistant Director Alan E. Kohler Jr. of the FBI’s Counterintelligence Division. “Thanks to the FBI’s partnership with foreign authorities, we’re proud to bring Mun Chol Myong to the United States to face justice, and we hope he will be the first of many.”

“It is important to underscore the relevance of this first-ever extradition of a North Korean national,” said Special Agent in Charge Michael F. Paul of the FBI’s Minneapolis field office. “Our Minneapolis agents worked this case closely with international partners highlighting how FBI special agents are persistent and have an international impact wherever they are.”

According to the indictment and other court documents unsealed today, between April 2013 and November 2018, Mun and others conspired to covertly and fraudulently access the U.S. financial system. Mun is alleged to have defrauded U.S. banks and violated both U.S. and United Nations (U.N.) sanctions as part of his money laundering activities in transactions valued at over \$1.5 million. The indictment further alleges that Mun was affiliated with the DPRK’s primary intelligence organization, the Reconnaissance General Bureau, which is the subject of U.S. and U.N. sanctions.

Mun has been detained in a foreign country since his arrest by local authorities on May 14, 2019. He made his initial appearance today in federal court in the District of Columbia, where he was indicted on May 2, 2019. Mun faces six counts of money laundering, including conspiracy to commit money laundering.

According to the indictment, Mun and his conspirators went to great lengths to avoid detection of their sanctions-busting operation. They used a web of front companies and bank accounts registered to false names and removed references to the DPRK from international wire transfer and transactional documents. By intentionally concealing that their transactions were for the benefit of DPRK entities, Mun and his conspirators deceived U.S. correspondent banks into processing U.S. dollar transactions for the benefit of DPRK entities, which the correspondent banks would have otherwise not processed.

This investigation was conducted by the FBI’s Minneapolis Field Office and coordinated by the FBI’s Counterintelligence Division. The Department of Justice would also like to thank the U.S. Indo-Pacific Command and the FBI’s Investigative Operations Division for providing analytical support during the investigation. The Justice Department’s Office of International Affairs provided substantial assistance in securing Mun’s arrest and extradition. The FBI’s Washington Field Office also provided essential support during the extradition process.

Assistant U.S. Attorneys Michael P. Grady and Tejpal S. Chawla of the U.S. Attorney’s Office for the District of Columbia, and Trial Attorney David C. Recker of the National Security Division’s Counterintelligence and Export Control Section, with support from Paralegal Specialist Brian Rickers and Legal Assistant Jessica McCormick, are prosecuting the case.

An indictment is merely a formal charge that a defendant has committed a violation of criminal laws and every defendant is presumed innocent until, and unless, proven guilty beyond a reasonable doubt in a court of law.

Topic(s):
Counterintelligence and Export Control
National Security
Component(s):
Federal Bureau of Investigation (FBI)
National Security Division (NSD)
USAO - District of Columbia

<https://www.justice.gov/opa/pr/first-north-korean-national-brought-united-states-stand-trial-money-laundering-offenses>

Gizza Job

First, for the discerning ten quid tourist we have



Intelligence agency GCHQ asks for would-be job applicants to come forward – but only if they are 'from an ethnic minority background or women'

GCHQ invited only people 'from an ethnic minority background or women' to register their interest for a role in its IT department
Intelligence agency were branded 'morons' by Tory MP Philip Davies
GCHQ told MailOnline the listing was not an advert but a 'registration of interest'
By ROSS IBBETSON and EMER SCULLY FOR MAILONLINE
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<https://www.dailymail.co.uk/news/article-9325775/GCHQ-advertises-job-department-people-ethnic-minority-background-women.html>

GCHQ has invited only people 'from an ethnic minority background or women' to register their interest for a role in its IT department.

The intelligence agency said that the job would be open to applicants from all backgrounds following this preliminary registration period of several weeks.

The move was labelled 'completely unacceptable' by Philip Davies, MP for Shipley in West Yorkshire, who branded the agency 'morons'.

GCHQ told MailOnline that their job post was in accordance with the Equality Act - which says it is illegal to discriminate on ethnicity and gender - because it is not a job advert 'but a registration of interest.'

GCHQ explicitly stated only people 'from an ethnic minority background or women from any ethnic background' should register interest in the role in a move slammed by an MP as 'completely unacceptable'

Confusingly, GCHQ's posting went on to claim applications were welcome 'from everyone'. A note warning registration of interest was only open to 'those from an ethnic minority background and women' was highlighted in bold twice - at the start and end of the posting +5

Confusingly, GCHQ's posting went on to claim applications were welcome 'from everyone'. A note warning registration of interest was only open to 'those from an ethnic minority background and women' was highlighted in bold twice - at the start and end of the posting

It is against the law 'to treat someone less favourably than someone else because of a personal characteristic such as religion, sex, gender reassignment or age,' the Government website states.

A note warning registration of interest was only open to 'those from an ethnic minority background and women' was highlighted in bold twice - at the start and end of the posting.

The GCHQ post read: 'At GCHQ, diversity and inclusion are critical to our mission. To protect the UK, we need a truly diverse workforce that reflects the society we serve.'

'This includes diversity in every sense of the word: those with different backgrounds, ethnicities, gender identities, sexual orientations, ways of thinking and those with disabilities or neurodiverse conditions.'

'We therefore welcome and encourage applications from everyone, including those from groups that are under-represented in our workforce.'

That note has since been amended to read: 'Please note this Registration of Interest is only open to those from an ethnic minority background or women from any ethnic background.'

'Following a Registration of Interest period of several weeks, we will open this role for applications. At this stage, applications from candidates of all ethnicities and genders will be welcome.'

Mr Davies MP slammed the decision as he called GCHQ's recruitment department 'morons'.

The agency proudly displays its credentials above the posting, stating that it is a champion of the LGBT charity Stonewall and a supporter of Black History Month

The note in bold has since been amended to read: 'Please note this Registration of Interest is only open to those from an ethnic minority background or women from any ethnic background. Following a Registration of Interest period of several weeks, we will open this role for applications'

He told MailOnline: 'It is completely unacceptable. It is disgraceful to be perfectly honest. Why they think they should be able to discriminate on grounds of race and sex is beyond me.'

Government's guidance on avoiding discrimination in job postings

You must not state or imply in a job advert that you'll discriminate against anyone. This includes saying that you are not able to cater for workers with a disability.

Only use phrases like 'recent graduate' or 'highly experienced' when these are actual requirements of the job.

Otherwise you could discriminate against younger or older people who might not have had the opportunity to get qualifications.

Where you advertise might cause indirect discrimination - for example, advertising only in men's magazines.

Employing people with protected characteristics

You can choose a candidate who has a protected characteristic over one who does not if they're both suitable for the job and you think that people with that characteristic:

Are underrepresented in the workforce, profession or industry;

Suffer a disadvantage connected to that characteristic (for example people from a certain ethnic group are not often given jobs in your sector).

You can only do this if you're trying to address the under-representation or disadvantage for that particular characteristic. You must make decisions on a case by case basis and not because of a certain policy.

You cannot choose a candidate who is not as suitable for the job just because they have a protected characteristic.

Source: Gov.uk

He said white working class boys were 'the one category with the worst outcomes in the UK' and preferential treatment shouldn't be given to a black old Etonian or a public schoolgirl.

He added: 'Most people would think it is disgusting for employers to say they will filter people out of jobs on the basis of race. It is completely and utterly unacceptable.'

'It should be illegal and everybody, apart from obviously the morons at GCHQ, knows white working class boys are the one category with the worst outcomes in the UK.'

'Are they really saying they want to give preferential treatment to a black old Etonian or a female public schoolgirl over a white working class boy? What possible justification could they have.'

'I advise they go back to the drawing board and I hope they treat the security of our county with a less cavalier approach than they do their recruitment policy.'

The agency proudly displays its credentials above the posting, stating that it is a champion of the LGBT charity Stonewall, a supporter of Black History Month and a 'disability confident leader'.

Employers should not discriminate against anyone while advertising a job vacancy, according to the Government's website.

It reads: 'You must not state or imply in a job advert that you'll discriminate against anyone. This includes saying that you are not able to cater for workers with a disability.'

And although preference can be given to someone with a 'protected characteristic', this must be on a case-by-case basis and 'not because of a certain policy'.

The Registration of Interest is not an official job application, but allows GCHQ's recruitment department to access a spreadsheet of potential applicants from diverse backgrounds, a spokesman revealed.

GCHQ told MailOnline: 'Diversity and inclusion are mission critical for GCHQ, ensuring we're more representative of the communities we serve to better protect the UK.'

'This registration of interest is one of a number of steps we're taking to encourage more women and people from ethnic minority backgrounds to consider careers.'

Employers should not discriminate against anyone while advertising a job vacancy, according to the Government's website

'When the job advert for this role does go live anyone will be able to apply for it.'

A spokesperson for the Equality and Human Rights Commission, said: 'Proportionate positive action is a lawful and important way to improve equality of opportunity. We encourage organisations to use it, where appropriate, to address the disadvantages experienced by under-represented groups and to improve levels of participation.'

'However, opening up jobs only to people from under-represented groups where membership of that group is not a genuine requirement of the job is unlawful discrimination.'

It comes after a senior civil servant accused the Government of seeking to avoid 'reputational damage' by paying a black female colleague £52,000 more than him.

Matthew Parr is suing the Home Office for sex and race discrimination after discovering he was earning less than his counterpart for doing the same job.

He claimed being a white man meant he was paid a £133,983 salary, plus £7,904 living allowance, while Wendy Williams took home £185,000.

Both are one of five HM Inspectors of Constabulary (HMIs) who act as watchdogs for the UK's police forces.

Mr Parr, a former rear admiral, was appointed in 2016 during Theresa May's tenure as Home Secretary when Whitehall was driving down the salaries of top officials.

An employment tribunal heard that at the time of Ms Williams' appointment 15 months earlier, the Treasury was also trying to reduce pay packets.

Matthew Parr is suing the Home Office for sex and race discrimination after discovering he was earning less than his counterpart Wendy Williams (right) for doing the same job

But it heard that mandarins agreed she would be paid the top £185,000 salary as awarding her less than existing HMIs could open the Government up to a discrimination challenge.

Mr Parr said in a witness statement: 'Documents disclosed by the Respondent make clear that Wendy Williams was paid the top of the band then in force, because of concern that to pay her less than her fellow HMIs presented the Government with a risk of legal challenge on the grounds of discrimination and of reputational damage.'


He claimed his 'race and sex had a clear influence' on the decision to pay him the substantially less £133,983 when he came into post.

The Government denied sex and race discrimination and maintained plans to lower salaries were always going to come into force regardless of the person who took the position.

<https://www.dailymail.co.uk/news/article-9325775/GCHQ-advertises-job-department-people-ethnic-minority-background-women.html>



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PoSW's Items of Interest in the Media

Like many people these days I try to avoid the mainstream media as much as possible other than listening to the headlines on Radio 4 at 7 am just in case the Martians have landed during the night or the Government have made it a punishable offence to be a white male aged over 60. However, purchasing a copy of *The Times* on 22-March revealed a couple of stories which could have come straight from that imaginary Government organisation, The Department of Not Enough to Worry About, which forms part of the National Guesswork Authority. First a short article by Larisa Brown, Defence Editor, with the unlikely headline of, "Shoebox satellites raise the spectre of space terrorism", which says, "Terrorists could soon be operating in space as cheaper satellites become available, the head of the RAF has warned.

Air Chief Marshal Sir Michael Wigston said both state and non-state actors such as the Islamic State group could pose a threat to British satellites in the future.

He said that space was becoming more congested with China and Russia developing space-based capabilities and that the UK would have to 'keep an eye' on the development of technology by extremist groups.

There are also concerns that terrorists could use cyber or electronic warfare to interfere with communications reliant on satellites in space.

Wigston said that it was 'inevitable' that Britain would have to develop its own weapons to destroy equipment developed by adversaries.

The Chief of the Air Staff said: 'The ability to launch small satellites the size of a shoebox into space is becoming cheaper and more readily available. It is so cheap that you could imagine an organisation like Daesh (Isis) could decide to do something in space because the technology is readily available. These are things we have to keep an eye on.

Boris Johnson has announced a new RAF command which will launch British satellites and its first rocket from Scotland next year.

More details about how the military will operate in space will be outlined in the defence command paper published today, which will reveal both major cuts and investments to the armed forces.

Military intelligence sources said Russia had already shown an 'intent' to jam communications from satellites in space. Last week *The Times* revealed Russia was believed to have tried to jam GPS signals to aircraft taking off from RAF Akrotiri in Cyprus.”

More concern over the Russian bogeyman from another article on the same page with the headline, “Troop cuts will 'leave UK exposed to attack’”, written by Tom Newton-Dunn, which says, “Plans to reduce the army by 10,000 troops will encourage an attack from Russia and could leave Britain unable to fight the Gulf War or Iraq war again or to retake the Falklands, a former defence chief has warned.

Lord Richards of Herstonceux said that the defence overhaul would also mean that the UK would not have the military strength to stop genocides like that in Rwanda in 1994.

A defence command paper released today is expected to reduce the army to 72,000 troops, its smallest in 200 years.

Richards, who was chief of the defence staff from 2010-13 said on Times Radio yesterday that 'the direction of travel is right' because 'we need to get more into high-tech, cyber, drone technology and so on', but he added: 'It can't be at the expense of conventional capabilities. And key to that is numbers. Mass still matters.'

The general, who is the only British officer to have commanded British troops since the Second World War, when he led international forces in Afghanistan in 2006, said: 'You've got to have some of the more traditional capacity in case mass becomes an attraction to one's potential opponents. I'm thinking Russia and China. I don't necessarily buy that they're about to start World War Three with us, but they still possess large numbers and if all we've got is high-tech stuff and they've got half a million troops that can come across the border at you then these high-tech capabilities aren't going to be much good. If your opponent senses that they are at a disadvantage, or their own capability us being neutered by one's own possession of those capabilities, they will look for another way of achieving their goals, and that could suddenly become numbers again – mass. And we certainly won't have it.’”

So there we are then; as the Good Book says, “Wars and rumours of wars”. If China is considered such a threat then should there not be some action taken against our political class, both the two main parties, who have permitted so much of our country's industry and important infrastructure to be sold off to the the Chinese and sold off to the Chinese at a knock-down price? Charges of treason and crimes against the well-being of the British people would seem to be in order with appropriate punishment upon conviction.

Continuing on a military theme;- there has been much speculation that the British Government is determined to impose censorship on the internet in this country putting pressure on internet companies to refrain from permitting content on line which goes against Government policies, especially with regard to the current Covid 19 crisis. Often mentioned in connection with this is a unit of the British Army, the 77th Brigade. The *I* newspaper of 30-November of last year – a while ago but I only noticed this story as I was sorting out some of the very few newspapers I have bought over the last year – they are very good for wrapping kitchen waste – which carried an article by Dean Kirby with the headline, “Army information warfare unit to combat anti-vaxxers”, which says, “The Army's elite information warfare unit is to be deployed to tackle anti-vaccine propaganda as the UK prepares to deliver its first jabs.

The 77th Brigade which specialises in 'non-lethal' forms of psychological warfare is said to be starting an 'uplift' of professional and reserve soldiers. According to *The Sunday Times*, leaked documents have revealed its soldiers are already monitoring social media messages about Covid-19 and analysing how UK citizens are being targeted on line.

It comes after at least 155 people were arrested in anti-lockdown protests in London on Saturday. Protesters shouted 'freedom' and clashed with police.

A huge public campaign will be launched after a vaccine is approved, with a counter disinformation campaign expected to be waged by the Cabinet Office backed by the Army and GCHQ.”

Point to ponder:- “The only consistent thing about the left is absolute hatred of human freedom and in particular white men. Everything else is just moved around to fit the narrative and agenda they have” - seen on the internet.

Thanks Peter!

More News:

Privacy campaigners slam secret 'Snooper's Charter' surveillance trial as Home Office teams up with two internet firms to test how to track the browsing history of every person in the country.

Two UK internet providers have been tracking the websites visited by customers

Companies are working with the Home Office and National Crime Agency

Trial of new 'snooping' powers granted by the Investigatory Powers Act 2016

Privacy groups slammed the Government for a 'staggering lack of transparency'

By JAMES ROBINSON and WILLIAM COLE and JACK MAIDMENT, DEPUTY POLITICAL EDITOR FOR MAILONLINE

PUBLISHED: 12:52, 12 March 2021 | UPDATED: 02:21, 13 March 2021

<https://www.dailymail.co.uk/news/article-9354999/Home-Office-teams-police-internet-firms-spy-peoples-web-browsing-history.html>

Home Office chiefs are facing a furious backlash from MPs and civil liberties campaigners after teaming-up with UK internet providers to test ways to track people's browsing history.

In a move described by one MP as a 'spectacular invasion of privacy', the Home Office and the National Crime Agency (NCA) have conducted a secretive trial which allows them to obtain information on what internet sites people have visited.

If the 'small scale' scheme is a success, it could be rolled-out nationwide.

The trial, said to have involved two unnamed internet providers, uses powers from the Investigatory Powers Act 2016 - dubbed the 'Snooper's Charter'.

It allows the Government to request Internet Connection Records (ICRs) from telecoms companies.

These records contain websites a person has visited - though not specifically what they have accessed on those websites.

The trial has been going on for months and has been shrouded in secrecy - so much so that the two internet providers involved cannot be identified.

The Home Office said the project is in its early stages and is looking at what data might be able to be acquired, how useful it is and how it could be used.

Its emergence has reignited rumbling privacy concerns, with campaigners saying the trial gives security officials access to the 'most intrusive monitoring system of any democracy in history'.

MPs have also expressed fears that the latest project could lead to a mass invasion of privacy.

Former Conservative party chairman, David Davis MP, said the move was a 'spectacular invasion of privacy' and warned the powers could be misused to target individuals or groups who opposed the government.

He told MailOnline: 'If they are going to do this, what are they going to do with the data they collect? The scope for it to be used for pressure or for blackmail is enormous.'

'The problem is not just how the data will be used but the storage of it as well. If hackers are able to get into the Pentagon, it could end up being an enormous honey-pot.'

Social media users also responded to the news by suggesting the move resembled something out of George Orwell's dystopian novel '1984'.

Privacy rights groups have slammed the government for testing out 'snooping powers' by teaming up with two internet providers to track websites visited by their customers

The act allows the secretary of state to make an internet provider keep their records for up to a year, with a judge's approval. These records can include which websites their customers visit and how much data they download - but it will not show the exact content they looked at on the sites

The Investigatory Powers Act (IPA) allows the Home Secretary, subject to a senior judge's approval, to compel an internet provider to keep their records for up to a year.

But it must be under the suspicion of a 'serious crime' - one that could attract the minimum of a 12-month sentence.

The 'serious crime' element was added in 2018 after the UK's Court of Appeal ruled that the Government's previous legislation breached people's rights by collecting internet activity and phone records with no suspicion of 'serious crime' and no independent sign-off.

Judicial Commissioners: Who are they and what do they do?

There are currently 11 Judicial Commissioners in the Investigatory Powers Commissioner's Office.

The Judicial Commissioners provide independent authorisation and oversight of certain investigatory powers - such as the Investigatory Powers Act - used by intelligence agencies, police forces and other public authorities.

The current head is Sir Brian Leveson, the now retired judge who chaired the inquiry into British press ethics - a review that famously carried his name.

Former High Court judge Sir Adrian Fulford is also a Judicial Commissioner.

Appointments are made by the Prime Minister and candidates must hold or have held a senior judicial appointment. When filled, there should be 13 commissioners in total. Two more are set to be appointed following a selection process in Autumn last year.

One unnamed Judicial Commissioner is said to have approved the trial of Internet Connection Records in July 2019, before approving another in October.

The Judicial Commissioner is said to have sought and received advice from the Technology Advisory Panel as part of his consideration of these two applications for the retention of ICRs.

At the same time, the Investigatory Powers Commission also announced plans to appoint 13 judicial commissioners to provide independent oversight of surveillance. The current head of the commission is Sir Brian Leveson - who chaired the inquiry into British press ethics.

Under IPA powers, records that can be collected include which websites customers visit and how much data they download - but the data will not show the exact pages viewed.

For example, it would show that an internet user has visited MailOnline, but not what articles a person has viewed.

However, even restricting the information to basic metadata could still reveal a lot about a person's habits, including where they shop, their political views and if they use pornography.

First revealed in WIRED magazine, the trial of the powers was not formally announced or publicised, but was referenced in a 168-page report from the Investigatory Powers Commissioner's Office (IpcO).

The report said the Judicial Commissioner had provided approval for a network operator to retain communication data 'for the purposes of a trial' back in 2019. Another request was approved later the same year.

A spokesman for the Investigatory Powers Commissioner's Office said that the trial is ongoing and it is conducting regular reviews to 'ensure that the data types collected remain necessary and proportionate'.

It added that once the trial has been fully assessed, a decision will be made on whether the system will be expanded nationally.

The passage of the Investigatory Powers Act was spearheaded by then-home secretary Theresa May who argued the updated surveillance powers were needed to keep the public safe and to help the police and security services combat crime and terrorism.

The first approval of the ICR trial was made in July 2019 - the month Sajid Javid left the Home Office and Priti Patel took over. It is not clear which signed off the on trial or which of the Judicial Commissioners approved the programme.

Privacy campaigners have long opposed the IPA legislation and the emergence of the powers prompted an immediate outcry.

Silkie Carlo, from civil liberties and privacy campaigning organisation, Big Brother Watch, told MailOnline: 'We fought tooth and nail against these plans to put the nation's internet records at the fingertips of authorities, from police officers to DWP and even NHS trusts.'

'We have absolutely no problem with robust targeted powers being used against identified suspects, but there is no justification for intruding in the private lives of the entire population.'

<https://www.dailymail.co.uk/news/article-9354999/Home-Office-teams-police-internet-firms-spy-peoples-web-browsing-history.html>

Top NATO Scientist with Security Clearance Busted Spying for China

Holger Roonemaa, Michael Weiss

March 19, 2021, 7:33 am

https://news.yahoo.com/amphtml/top-nato-scientist-security-clearance-073352843.html?twitter_impresion=true&guccounter=1

TALLINN, Estonia—Chinese military intelligence recruited an Estonian national working at a NATO research institution focused on maritime and submarine research, The Daily Beast has learned.

The spy, Tarmo Kõuts, renowned in the Estonian scientific community for his research, was convicted last week and sentenced to three years in prison. The Baltic country's intelligence services had warned for years of the growing Chinese threat, but the conviction was the first of its kind. So far, Estonia's counterintelligence service, known domestically by its acronym KAPO, has been praised for its success in catching spies recruited and run by Russia.

According to Aleksander Toots, the deputy director of KAPO and Tallinn's top counterintelligence official, Kõuts was recruited in 2018 by China's Intelligence Bureau of the Joint Staff Department of the Central Military Commission—as Beijing's military intelligence agency is known—along with an alleged accomplice who is yet to be tried in court. Both were arrested on September 9, 2020, with no publicity or discussion of the case in the Estonian media.

Kõuts pleaded guilty to conducting intelligence activities against the Republic of Estonia on behalf of a foreign state. The charges were one stop short of treason. He was sentenced to three years in prison.

Kõuts was recruited on Chinese territory, said Toots, who spoke exclusively with The Daily Beast and Estonia's Delfi newspaper: "He was motivated by traditional human weaknesses, such as money and need of recognition."

Toots added that Kõuts received cash payments from his Chinese handlers as well as paid trips to various Asian countries, with luxury accommodations and dinners at Michelin star restaurants. The intelligence operatives handling him were operating under cover of a think tank. Inna Ombler, the prosecutor handling the case confirmed that Kõuts earned €17,000 -- a little over \$20,000 -- for his espionage, which the Estonian government has since seized from him.

Kõuts, who earned his doctorate in environmental physics in 1999, had worked for years at Tallinn Technical University's Maritime Institute where he specialized in geophysics and operational oceanography. His research led to marine scientists successfully predicting a damaging winter storm with rapidly rising sea levels in Estonia in 2005. Kõuts was also part of a scientific research group that was awarded the Estonian National Science Prize in 2002 for finding the best location for a seaport on the island of Saaremaa. Although officially designed to accept cruise ships, the port needed to be able to host NATO vessels.

From 2006, Kõuts became directly involved in the national defense sector. He was named a member of the Estonian Ministry of Defense's Scientific Committee, which oversees the country's military research and development initiatives. As part of that secondment he also became a member of the Scientific Committee of the NATO Undersea Research Center based in La Spezia, Italy and even served, from 2018 to 2020, as the vice president of that organization, which is now known as the Centre for Maritime Research and Experimentation (CMRE). According to its website, the CMRE "conducts relevant, state-of-the-art scientific research in ocean science, modelling and simulation, acoustics and other disciplines."

Kõuts's public Facebook account shows he checked-in at Lerici, Italy— from La Spezia—in April 2018, the year of his recruitment by China. His role at the NATO center gave Kõuts direct access to Estonia's and NATO's confidential military intelligence. At the time of his arrest, he had a state secret permit as well as NATO security clearance dating back fourteen years. In the three years Kõuts worked for Chinese military intelligence, confined his espionage to observations and anecdotes about his top-level work but did not, according to Toots, yet pass on any confidential military information.

"That he had such security clearances was one of the reasons we decided to put a stop to his collaboration [with the Chinese] so early," Toots said. It might have saved him from a much stricter sentence that would have followed if he'd been charged with treason, which he would have been if Kõuts had passed on state or NATO secrets.

Indeed, the biggest espionage breach NATO ever had was an Estonian one, just four years after the Baltic state joined the military alliance. In 2008, KAPO arrested Herman Simm, the head of the Ministry of Defense's Security Department. Simm's job was to coordinate the protection of state secrets, issue security clearances and act as a liaison between the Estonian Ministry of Defense and NATO. He'd been working for Russia's foreign intelligence service, the SVR, for the entirety of his tenure. Simm was sentenced to twelve and a half years imprisonment and he additionally needed to pay €1.3 million—\$1.8 million in today's dollar value—in damages. He was released from prison on Christmas 2019.

Since that scandal, Estonia has become one of the foremost Russian spy-catchers. "I'm continually amazed," Toomas Henrik Ilves, Estonia's former president, said. "We must be the only country the Kremlin seems to be interested in since we're the only ones catching all their agents. What makes us so special?"

Unlike other NATO members, this Baltic country has a tendency to name and shame those it captures. It also rarely trades spies for its own captured assets. A much publicized exception to this rule was the case of Eston Kohver, a KAPO officer who was captured in 2014 by the FSB, Russia's domestic security service, on the Estonian side of the Estonian-Russian border while conducting an operation to interdict cross-border smuggling. Kohver was traded, Bridge of Spies-style, in 2015 for Aleksei Dressen, a Russian agent the FSB recruited from within KAPO's own ranks years earlier.

Aleksander Toots oversaw both counterintelligence investigations that led to Simm's and Dressen's arrests. And despite his pedigree in snaring agents from Estonia's next-door neighbor and former occupying power, Toots now sees a rising threat from farther east.

Over the last three years, KAPO and Välisluureamet, Estonia's foreign intelligence service, have raised the alarm about the rising threat of Chinese espionage. Last year Välisluureamet warned that Estonians who traveled to China were susceptible to influence operations and recruitment. "To this end, Chinese special services may use various methods and pretexts, such as establishing first contact or job offers over the internet. At home, Chinese special services can operate almost risk-

free,” Välisluureamet explained in their annual security environment assessment. Politicians, public servants and scientists who hold political or defense-related clearances were named as possible recruitment targets.

KAPO added that it first detected an increase in the interest of Chinese intelligence services after Estonia joined the EU and NATO in 2004 but lately that interest had intensified. The Chinese, Estonian counterintelligence concluded, are particularly interested in “decisions on global issues, be it the Arctic, climate or trade.”

Tarmo Kõuts’ recruitment fits that category exactly, as his scientific research concentrated heavily on the maritime impact of climate change and some of his scholarly papers focused squarely on the Arctic region.

https://news.yahoo.com/amphtml/top-nato-scientist-security-clearance-073352843.html?_twitter_impression=true&guccounter=1

RAF spy plane 'monitors Russian war games in Arctic waters' as Moscow tests new hypersonic missile which it claims 'hit the bullseye'

Reports say a British spy plane has monitored Russian moves in the Barents Sea

Russia boasted that its new hypersonic missile had 'hit the bullseye' in testing 6,100mph Zircon missile was first tested on Vladimir Putin's birthday last year
By WILL STEWART FOR MAILONLINE
PUBLISHED: 14:56, 26 March 2021 | UPDATED: 14:56, 26 March 2021

<https://www.dailymail.co.uk/news/article-9406847/RAF-spy-plane-monitors-Russian-war-games-Arctic-waters.html>

A British spy plane has monitored Russian war games in the Arctic where Moscow says it has completed initial tests on a new hypersonic missile, local media says.

An RC-135W Rivet Joint reconnaissance jet flown by the RAF is said to have circled the skies near where the Kremlin's Admiral Gorshkov frigate sailed off Russia's northern coast this week.

The Gorshkov has carried out at least four test launches of the new 6,100mph Zircon missile, which is expected to go into service next year and which defence chiefs boasted had 'hit the bullseye' in testing.
Vladimir Putin sees the Mach 8 Zircon as his missile of choice to target US cities in the event of a nuclear conflict, it is claimed.

An RC-135W Rivet Joint reconnaissance plane (file photo) operated by the RAF is said to have circled the skies near where Russia was carrying out war games this week

The Gorshkov was expected to fire the Zircon this week, although defence chiefs confirmed only that supersonic Oniks missiles had been fired from the frigate. The missiles hit a target off Novaya Zemlya, where a large area of water was declared 'forbidden to navigate for all vessels' in Arctic waters.

A military source told Russian state news agency TASS: 'Flight trials (of the Zircon) from Admiral Gorshkov have been completed successfully.

'A total of four launches have been made. All missiles hit the 'bullseye'

Trials of the Zircon missile are planned to be finished in 2021, while mass production of the new weapon is expected to commence in 2022, reported TASS.

It was the second time in a week that a British spy plane had buzzed an area of the Barents Sea to snoop on Russian missile tests, the Barents Observer said.

Tests of the Mach 8 missile from a submarine are also expected soon.

Putin has previously described the Zircon - also known as Tsirkon - as 'truly unparalleled ... in the world'.

The first Zircon test launch of the missile from the Gorshkov was staged in early October and seen as a 68th birthday present for Putin.

More test launches followed in November and December.

A radiation leak during a military accident which killed two people and wounded six in 2019 was thought to have taken place during testing on the missile.

Radiation levels temporarily soared 20 times above the normal level in Severodvinsk, 18 miles from the weapons testing site at Nyonoksa, according to Greenpeace.

Dmitry Kiselyov, the host of Russian news show Vesti Nedeli, showed a map of the US on screen with targets he claimed that the Kremlin would hit in a nuclear war.

Kiselyov, seen as a top Putin propagandist, said the Zircon missile could hit the targets in less than five minutes.

Putin has claimed that the West was seeking to steal secrets relating to Zircon and other state-of-the-art Russian weapons such as the Avangard.

Oniks missiles were also fired at a target near the Novaya Zemlya archipelago which was once a Soviet nuclear testing ground, said the defence ministry.

Two Russian Northern Fleet logistics support ships - Elbrus and Ilya Muromets were also in position southwest of Novaya Zemlya.

Earlier Zircon tests were made from the White Sea, twice hitting floating targets and once a land-based target.

<https://www.dailymail.co.uk/news/article-9406847/RAF-spy-plane-monitors-Russian-war-games-Arctic-waters.html>

Who remembers BBC's 'Spy Ship' loosely set on the disappearance of MV Gaul in the Barents Sea?

EncroChat ruling has ‘far-reaching effects’ for legal role of interception in UK investigations

The computer forensic experts involved in the review of police use of data hacked from the ultra-secure EncroChat phone network assess the impact of the Appeal Court ruling on future legal use of intercept evidence

By Duncan Campbell, Ian Brown

Published: 15 Mar 2021

<https://www.computerweekly.com/opinion/EncroChat-ruling-has-far-reaching-effects-for-legal-role-of-interception-in-UK-investigations>

Duncan Campbell and Dr Ian Brown were the only computer forensic expert witnesses for the first evidence review of police use of data hacked during 2020 from the ultra secure EncroChat phone network, claimed to be dedicated for the use of serious criminals. Here they assess the impact of the appeal court verdict on future legal use of intercept evidence.

The key question considered by the Court of Appeal was the distinction between temporary, transient, random-access memory (RAM) and permanent data storage in modern digital communications systems.

In computer science and technology, the distinction between memory and storage is fundamental. Until 2021, RAM and processor registers and memory store areas were understood to be an integral part of every digital transmission system – unlike records such as voicemails left and stored when phone calls do not connect.

There now appears to be no legal distinction between temporary memory and data stores inside computing devices. The Appeal Court explained: “The 2016 Act does not use technical terms ... experts have an important role in explaining how a system works, but no role whatever in construing an Act of Parliament.”

The court said that when data in a phone call, video call or message is temporarily held in RAM as an “essential part” of a transmission system, it is “stored”. This was true even if data was stored only for nanoseconds. “Parliament has not chosen to define the ‘relevant time’ when interception takes place by reference to whether the communication is in the RAM of the device at the point of the extraction,” the court pointed out.

The UK is the only country in the common law world that bans the use of intercept evidence in legal proceedings, and has even criminalised enquiries or suggestions about whether interception has been used. Britain’s 65-year-old ban is “archaic, unnecessary and counter-productive”, according to the all-party criminal law reform group Justice.

The UK’s Investigatory Powers Act 2016 requires ISPs and CSPs secretly to install additional software and equipment to carry out authorised “lawful interception” of telecommunications. Except for some new types of “bulk interception”, this is normally done by software inside switches and routers, not by tapping into fibres or intercepting radio transmissions.

The new ruling could enable police and other agencies, when tapping computers or phone calls carried or switched digitally, to decide to bring intercepts into evidence when they choose, merely by obtaining an “equipment interference” warrant to cover the role of the software alterations installed to do lawful interception. The decision fundamentally changes UK policy on intercept evidence, based on the new legal meaning of “memory”.

When we experience “latency” in phone or video calls, meaning that information may be seen or heard or messages received seconds or even many seconds after the event, most of the delay is the time the data spends in numerous RAM stores and registers en route, including during analogue-to-digital conversions, buffering, serialisation and digital signal processing. Because of this, most data communications spend almost all of their transmission time in transient storage – so could now legally be copied using warrants for equipment interference applied at any midway point.

A call going from Birmingham to London (200km along roadside or railside routes) could, in theory, travel at just under the speed of light in air, or at two-thirds of the speed of light in a cable, so would reach a London listener in about a millisecond. If the actual delay is a hundred milliseconds (one-tenth of a second) or more, the data has been in some form of storage, and could be copied without “intercepting” during at least 99% of its journey.

The Court of Appeal verdict says that former legal understandings of when a communication starts and stops are an “obvious error”. Under previous rulings, transmission was defined to start when a microphone hears a speaker, and to end when a recipient hears loudspeaker sound from their receiver.

Previous understandings of law were irrelevant and “do not ... assist in this exercise”, the Court of Appeal said – including all its own former decisions and also the Privacy and Electronic Communications Directive. “The 2016 (Investigatory Powers) Act is a new statute ... there is no relevant authority,” it said.

This decision means that the start of transmission might be when data leaves or enters a mobile phone, or it could be when data was encrypted or decrypted. The court did not provide a replacement definition.

Experts advising Parliament in 2016 were never asked to contemplate that previous legal and technical definitions might be set aside after the law was passed. “Although a number of submissions were received suggesting revocation of the special laws making intercept material evidentially inadmissible, I did not forecast the implications of the particular methods used in Operation Venetic where data was apparently siphoned from handsets,” said Peter Sommer, who advised the Joint Lords and Commons Select Committee carrying out the pre-legislative scrutiny, “nor that in future there would be this level of confusion between what constituted interception and what amounts to equipment interference. The Bill, now the Act, had over 200 clauses plus many schedules and Parliament did not give itself much time to consider all the consequences.”

These decisions have fundamental and far-reaching effects on the legal role of interception in future UK investigations and cases. Parliament and judges will have to address the new and unresolved uncertainties about the legal meaning of “transmission”. These questions call out for the Intelligence and Security Committee and the Investigatory Powers Tribunal to take a detailed look at the technical and legal issues raised, and to make them clear.

<https://www.computerweekly.com/opinion/EncroChat-ruling-has-far-reaching-effects-for-legal-role-of-interception-in-UK-investigations>

[I met Duncan Campbell and his wife at the London Science Museum in the GCHQ: Top Secret Exhibition. Splendid bloke and very knowledgeable too and with a good sense of humour]

Ikea goes on trial in France accused of spying on staff

French branch of Swedish retailer accused of running elaborate system to spy on staff and job applicants

Agence France-Presse
Mon 22 Mar 2021 11:23 GMT

<https://www.theguardian.com/business/2021/mar/22/ikea-goes-on-trial-in-france-accused-of-spying-on-staff>

Ikea's French subsidiary has gone on trial accused of running an elaborate system to spy on staff and job applicants using private detectives and police officers.

Ikea France, as a corporate entity, is being prosecuted in a court in Versailles, as well as several of its former executives who could face prison terms.

The investigative publications *Le Canard Enchaîné* and *Mediapart* uncovered the surveillance scheme in 2012, and magistrates began investigating after the Force Ouvrière union lodged a legal complaint.

Prosecutors say Ikea France set up a "spying system" across its French operations, collecting information about the private lives of hundreds of existing and prospective staff, including confidential information about criminal records.

Since the revelations, the company has sacked four executives, but Ikea France, which employs 10,000 people, still faces a fine of up to €3.75m (£3.22m).

The 15 people being tried in the court include former store managers and executives such as the former CEO Stefan Vanoverbeke and his predecessor, Jean-Louis Baillot. Both men were present on Monday but declined to comment to waiting reporters.

The group also includes four police officers accused of handing over confidential information.

The charges include illegal gathering of personal information, receiving illegally-gathered personal information, and violating professional confidentiality, some of which carry a maximum prison term of 10 years.

"We are here to today to show that there are these types of actions inside companies that police trade unions and above all their employees," a senior member of the CGT union, Amar Lagha, told reporters.

At the heart of the system allegedly was Jean-François Paris, Ikea France's former director of risk management. Prosecutors say he regularly sent lists of names to private investigators, whose combined annual bill could run up to €600,000, according to court documents seen by Agence France-Presse.

The court is investigating Ikea's practices between 2009 and 2012, but prosecutors say they started nearly a decade earlier.

Among the targets was a staff member in Bordeaux "who used to be a model employee, but has suddenly become a protester", according to an email sent by Paris. "We want to know how that change happened," he said, wondering whether there might be "a risk of eco-terrorism".

In another case, Paris wanted to know how an employee could afford to drive a brand-new BMW convertible. Such messages usually went to Jean-Pierre Fources, the boss of the surveillance company Eirpace.

He would then send Paris confidential information, which prosecutors say he got from the police database STIC with the help of the four officers.

Prosecutors say the information flow may even have gone both ways, with an internal Ikea France document recommending handing over its report about an employee to police "to get rid of that person via a legal procedure outside the company".

Emmanuel Daoud, a lawyer for Ikea France, acknowledged that the case had revealed "organisational weaknesses". He said the company had since implemented an action plan, including a complete revamp of hiring procedures.

"Whatever the court rules, the company has already been punished very severely in terms of its reputation," he said.

Founded in 1943, the Swedish multinational Ikea's ready-to-assemble furniture and accessories are sold in about 400 stores worldwide.

<https://www.theguardian.com/business/2021/mar/22/ikea-goes-on-trial-in-france-accused-of-spying-on-staff>

Anyone recall the system that Robert Maxwell used on his staff – a full suite of monitoring equipment, audio, visual, telephonic and so on!

Postcard from Titanic's radio operator is being sold at auction

<https://www.stripes.com/news/us/postcard-from-titanic-s-radio-operator-is-being-sold-at-auction-1.669461>

Stars & Stripes 12 April 2021

Postcard from Titanic's radio operator is being sold at auction

BOSTON — A postcard written by the Titanic's senior radio operator just weeks before the ocean liner sank in the North Atlantic in 1912 has been put up for auction.

The card, with a glossy image of the ill-fated ship on the front, was written by Jack Phillips to his sister, Elsie Phillips, in March 1912 while awaiting the ship's first sea trials, according to RR Auction in Boston.

"Very busy working late. Hope to leave on Monday & arrive Soton Wednesday afternoon. Hope you quite OK. Heard from Ethel yesterday," he wrote. It's signed "Love Jack."

It is postmarked Belfast, where the Titanic was built, and has a canceled halfpenny stamp.

“Soton” is a contraction of Southampton, the English port city from where the Titanic departed on its maiden voyage. It sank in the early morning hours of April 15.

Phillips, who turned 25 on board, stayed at his post after the Titanic struck an iceberg to send calls for assistance to other ships in the area until water was lapping around his feet, according to RR Auction.

He made it off the ship after being told by the captain that he had done his duty, according to his biography in the British National Archives, but died of exposure in the frigid North Atlantic, according to RR Auction.

The postcard is being sold by the estate of Vera and John Gillespie, longtime members of the Massachusetts-based Titanic Historical Society, said Bobby Livingston, executive vice president at RR Auction.

It is expected to sell for around \$15,000 in the Fine Autographs and Artifacts auction that began March 26 and ends Wednesday, the day before the anniversary of the tragedy.

Phillips sent his sister hundreds of postcards during his career, often depicting the ship on which he was serving at the time. But only a handful were connected to the Titanic, Livingston said.

Titanic memorabilia is still popular, more than a century after the disaster, he said.

“It’s one of those stories that still resonates around the world, about the hubris of man being taken out by nature,” he said.

<https://www.stripes.com/news/us/postcard-from-titanic-s-radio-operator-is-being-sold-at-auction-1.669461>

[Thanks The Spectre 3000]

Spy chief warns cyber threat from China could see it control the 'global operating system' as West faces 'moment of reckoning' in race for tech supremacy

UK faces 'moment of reckoning' in race for tech supremacy, spy chief says
Jeremy Fleming called for Britain to evolve like an animal in a changing habitat
He warned digital dominance of hostile states like China threatens our future
By DAVID WILCOCK, WHITEHALL CORRESPONDENT FOR MAILONLINE
PUBLISHED: 13:46, 23 April 2021 | UPDATED: 19:36, 23 April 2021

<https://www.dailymail.co.uk/news/article-9504163/Spy-chief-warns-West-faces-existential-threat-evolutionary-technology-race-China.html>

A UK spy chief has warned the cyber threat from China could see it control the 'global operating system'.

Jeremy Fleming, the director of GCHQ, said the west faces a 'moment of reckoning' in the race for tech supremacy. And while the UK is a digital 'big animal', there is a 'pressing need to act' to combat undemocratic nations who are increasingly powerful.

In a major speech today, he warned the digital dominance of hostile states like China threatens our future prosperity and security. He said: 'The concern is that China's size and technological weight means that it has the potential to control the global operating system.' And, if left unchecked, this could threaten the design and freedom of the internet and endanger future technologies such as 'smart cities'.

Mr Fleming said it was now vital that the UK adapt in order to keep up with the evolving threats, calling it a 'moment of reckoning'.

Giving the annual Imperial College Vincent Briscoe Annual Security Lecture, remotely from GCHQ in Gloucester, he said: 'As an intelligence chief, I am bound to say that Russia and China remain of concern.'

Russia's pattern of malign behaviour around the world - whether in cyberspace, in election interference or in the aggressive operations of their intelligence services - demonstrates that it remains the most acute threat to the UK's national and collective security.

'Previously, I and others have pointed out that in terms of our national security, Russia is affecting the weather, whilst China is shaping the climate.'

'That remains the case. But when it comes to technology, I'll use another analogy. The threat posed by Russia's activity is like finding a vulnerability on a specific app on your phone - it's potentially serious, but you can probably use an alternative.'

'States like China are early implementors of many of the emerging technologies that are changing the digital environment.'

'They have a competing vision for the future of cyberspace and are playing strongly into the debate around international rules and standards.'

Mr Fleming said the coronavirus pandemic and the increased reliance society had placed on technology had not only benefited the UK and its allies, but also 'our foes', who have exploited 'accelerations in connectivity and poor cyber security'.

In response to this threat, Mr Fleming said the UK must lead conversations with its allies about global cyber defence, safeguarding democracy and how to collaborate in protecting scientific research and supply chains.

The director called out adversaries for misusing tools meant to bring society together to instead 'fuel division, exploit vulnerable people and peddle extreme views'.

The warning comes amid wider political tensions between powers in the West and East.

Most recently, Beijing's national security law imposed on Hong Kong has been a major source of contention, while concerns have been raised about Ukraine's border due to the recent Russian military build-up of forces there.

He added: 'The UK really is a global cyber power – a big animal in the digital world. But historic strength does not mean we can assume we will be in the future.

'New technology is enabling life online. Cyber security is an increasingly strategic issue that needs a whole nation approach. The rules are changing in ways not always controlled by Government.'

He added 'Without action, it is increasingly clear that the key technologies on which we will rely for our future prosperity and security won't be shaped and controlled by the West.

'We are now facing a moment of reckoning. In the natural world, during a period of rapid change, the only option is to adapt. And it's the same for us.'

Mr Fleming called for the development and protection of future technologies to be a priority for Britain, warning that the pandemic has 'enabled our adversaries' in new ways.

And we will have to work with 'like-minded nations' to find solutions to technological issues, the spy chief added.

<https://www.dailymail.co.uk/news/article-9504163/Spy-chief-warns-West-faces-existential-threat-evolutionary-technology-race-China.html>

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July 2021

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Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
x	x	x	x	x			0000		F01	01A	17471	17471
x				x			0025/0035		F01	01A	14941/12221	16218/13949
	x			x			0030/0050/0110		M12	01B	8161/ 9161/ 115, search	7857/ 9157/ 814, search
x	x	x	x	x	x	x	0100		V13	0		16257
x				x			0125/0135		F01	01A	14941/12221	16218/13949
x	x	x	x	x	x	x	0200		V13	0	15388	15388
x							0210/0310		E06	01A	11404/13562 537	11557/13803 537
x				x			0210/0230/0250		M12	01B	13426/12126/10226 412	15918/14818/13918 989
			x	x			0300/0400		E06	01A	14767/12157 361	14932/12212 361
x	x	x	x	x	x	x	0300		V13	0	15388	15388
						x	0300/0320/0340		V07	01B	13521/12121/11421 514	13479/12179/11479 414
		x	x				0315		E11	03	8565 25#	8565 25#
x	x	x	x	x	x	x	0400		V13	0	9725	15388
			x				0430/0450/0510		E07A	01B	7933/ 9133/10233 741	7933/ 9133/10233 741
				x		x	0435		E11	03	6849 35#	6849 35#
x							0450		E11	03	7469 41#	7469 41#
x	x	x	x	x	x	x	0500		V13	0	9725, 18040	11430
x		x					0510		S11A	03	13537 65#	13537 65#
x		x		x		x	0455		HM01	18	10860	10860
	x		x		x		0455		HM01	18	11462	11462
x	x						0500/0510/0520 0530/0540/0550		XPB1	01B	13435/13935/14435 14835/15935/16225 check	11559/12159/13459 13959/14459/14959 check
			x	x			0500/0600	1/3	E06	01A	14565/16125 460	13985/15830 328
	x			x			0530		M01A	14	9441 751	9441 751
		x	x				0530		M01A	14	9129 or 9192 498	9129 or 9192 498
	x						0530/0550/0610		M12	01B	9317/10484/11552 135	9317/10484/11552 135
		x	x				0540		M01A	14	7692 536	7692 536
x		x		x		x	0555		HM01	18	10345	10345
	x		x		x		0555		HM01	18	14375	14375
x	x	x	x	x	x	x	0600		V13	0	11430	11430
	x						0600/0610		S06S	01A	15945/16945 438	15945/16945 438
						x	0600/0620/0640		E07	01B	10317/11117/12217 312	10317/11117/12217 312
	x			x			0620		M01A	14	10233 or 10235 354/458	10233 or 10235 354/458
		x	x				0620		M01A	14	9421 135	9421 135

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
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		x	x				0630		M01A	14	8111 902/536	8111 902/536
x							0630/0640		S06S	01A	16320/14875 462	16320/14875 462
x		x					0640		E11	03	15800 94#	15800 94#
	x		x				0645		E11	03	13424 51#	13424 51#
x		x		x		x	0655		HM01	18	9330	9330
	x		x		x		0655		HM01	18	13435	13435
x			x				0700		S11A	03	9339 47#	9339 47#
	x			x			0700		E11	03	8680 57#	8680 57#
x	x	x	x	x	x	x	0700		V13	0	15388	15388
						x	0700		M01	01B	6780 025	6780 025
	x						0700/0710		S06S	01A	5430/ 6780 452	5430/ 6780 452
	x			x			0700/0720/0740		E07	01B	16246/18446/19246 242	16331/18731/19331 373
	x		x				0700/0720/0740		M12	01B	13423/12123/11123 411	14581/13481/12181 541
						x	0700/0720/0740		V07	01B		
x		x					0700/0720/0740		XPA2	01B	12148/13448/13948	12148/13448/13948
					x	x	0710		E11	03	6480 49#	6480 49#
	x			x			0710		M01A	14	10651 297/358	10651 297/358
		x	x				0710		M01A	14	9175 146/208	9175 146/208
	x		x				0710/0730/0750		XPA1	01B	11169/12179/13431	11421/12151/13972
	x			x			0715		E11	03	10429 63#	10429 63#
	x			x			0720		M01A	14	9151 728	9151 728
x	x						0730/0740		S06S	01A	7365/11655 427	7365/11655 427
x		x					0730/0740		S06S	01A	11530/14977 172	11530/14977 172
x			x				0745		E11	03	9610 26#	9610 26#
	x		x				0745		E11	03	14940 22#	14940 22#
		x		x			0745		E11	03	15720 34#	15720 34#
x		x		x		x	0755		HM01	18	9065	9065
	x		x		x		0755		HM01	18	11365	11365
x	x	x	x	x	x	x	0800		V13	0	15388	15388
			x				0800/0810		E17Z	01A	16780/12850/ 217	16780/12850/ 217
	x						0800/0810		S06S	01A	14373/12935 127	14373/12935 127

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
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					x		0800/0820/0840		E07A	01B	12177/13477/14877 148	13373/14373/14873 338
			x	x			0820		E11	03	4909 43#	4909 43#
	x	x					0820		E11	03	17378 13#	17378 13#
x				x			0830		E11	03	12202 18#	12202 18#
							0830/0840		S06S	01A	8221/ 9353 764	8221/ 9353 764
x		x					0830/0840		S06S	01A	11565/12560 464	11565/12560 464
				x			0830/0840		S06S	01A	10290/ 9655 156	10290/ 9655 156
x			x	x			0830/0930		S06	01A	17475/14736 842	16022/13925 842
x		x					0845		E11	03	search 15#	search 15#
	x		x				0845		E11	03	12153 15#	12153 15#
		x	x		x		0855		HM01	18	9240	9240
	x		x		x		0855		HM01	18	11462	11462
x		x					0900		E11	03	7449 53#	7449 53#
							0900/0910		S06S	01A	16380/14835 232	16380/14835 232
				x			0900/0910		S06S	01A	6844/ 7161 239	6844/ 7161 239
x		x					0910/0930/0950		XPA2	01B	17431/15841/13934	17417/15812/14504
			x		x		0910/0930/0950		XPA2	01B	14794/13994/12194	13527/12227/11427
x				x			0915		S11A	03	x5082 48# search	x5082 48# search
x	x	x	x	x	x	x	0930		M14	01A	16347 617, only 10.+25. when msg repeat 14878 on 11.+26.	16347 617, only 10.+25. when msg repeat 14878 on 11.+26.
		x	x				0930		E11	03	6923 27#	6923 27#
x			x				0930/0940		S06S	01A	9255/10325 698	9255/10325 698
x		x		x		x	0955		HM01	18	9155	9155
	x		x		x		0955		HM01	18	12180	12180
	x			x			1000		E11	03	8180 30#	8180 30#
	x						1000/1010		S06S	01A	4820/ 5660 427	4820/ 5660 427
	x	x	x	x			1015/1025/1035		F01	01A	11414/ 9317/ 7572	11487/ 9376/ 7591
x	x			x			1020		S11A	03	6977 42#, check	6977 42#
x		x					1045		E11	03	8545 69#	8545 69#

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
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	x						1100/1110		S06S	01A	6810/ 7560 265	6810/ 7560 265
	x			x			1100/1120/1140		XPA2	01B	search	search
		x	x				1100/1120/1140		XPA2	01B	16147/15847/14747	15982/14982/13882
x	x	x	x	x	x	x	1200		V13	0	9725	9276,15890
x							1200/1210		S06S	01A	10230/12165 149	10230/12165 149
x			x				1200/1210		S06S	01A	13145/14535 175	13145/14535 175
					x		1200/1210/1210 1230/1240/1250		XPB1	01B	16329/15929/14829 14429/13929/13529 check	15876/14876/14376 13976/13376/12176 check
	x						1200/1220/1240		M12	01B	14377/13461/12114 317	14377/13461/12114 317
	x	x					1205		E11	03	6304 46#	6304 46#
		x		x			1210/1230/1250		XPA1	01B	search	search
	x		x				1230		E11	03	33#, search	33#, search
x			x				1300		E11	03	5737 31#	5737 31#
x	x	x	x	x	x	x	1300		V13	0	13974	7502,13974
x					x		1300/1320/1340		E07	01B	12176/11576/10276 512	12176/11576/10276 512
							1300/1320/1340		M12	01B	14377/13461/12114 317	14377/13461/12114 317
	x				x		1345		E11	03	12984 91#	12984 91#
			x		x		1410/1430/1450		E07	01B	15836/14536/13536 157	13417/14717/15817 603
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x	x						1500/1510		S06S	01A	6766/ 7744 914	6766/ 7744 914
					x		1500/1520/1540		XPA2	01B	15938/14538/13438	14892/13492/12192
			x		x		1510/1530/1550		E07	01B		
x				x			1510/1530/1550		E07A	01B	12182/11082/10182 101	12182/11082/10182 101
x				x			1530		E11	03	5409 52#	5409 52#
			x				1530		E11	03	10356 26#	10356 26#
					x	x	1530		E11	03	5082 36#	5082 36#
	x	x	x	x	x	x	1555		HM01	18	11435	11435
x		x				x	1600/1620/1640		M12	01B	16113/15813/14813 188	14926/14426/13426 944
					x		1600/1620/1640		XPA2	01B		
	x		x				1600/1620/1640		XPA2	01B	13538/14438/14938	13417/14817/15917
	x					x	1605		E11	03	5371 23#	5371 23#

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
		x				x	1625		E11	03	7863 97#	7863 97#
x				x		x	1650		E11	03	12229 92#	12229 92#
	x	x	x	x	x	x	1655		HM01	18	11530	11530
		x				x	1700/1720/1740		E07	01B	13934/12134/10934 919	13368/11568/10468 354
			x				1700/1720/1740		M12	01B	12162/11566/18711 546	12162/11566/18711 546
		x					1710/1730/1750		M12	01B	12162/11566/10711 546	12162/11566/10711 546
x			x				1730		E11	03	8088 41#	8088 41#
x						x	1745		E11	03	14410 24#	14410 24#
x	x	x	x	x	x	x	1755		HM01	18	11635	11635
	x		x				1800		M01	14	5280 025	5280 025
			x				1800/1820/1840		M12	01B	12162/11566/10711 546	12162/11566/10711 546
	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#	7600 64#
	x					x	1900/1910/1910 1930/1940/1950		XPB1	01B	14852/13952/12152 11152/10352/ 9252 check	15863/14963/13963 12163/11163/10463 check
		x					1900/1920/1940		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
				x			1900/2000	1/3	S06	01A	search ??? x9336/7315	
		x			x		1910		E11	03	4783 39#	4783 39#
				x		x	1910		E11	03	9610 61#	9610 61#
		x		x			1950/2010/2030		M12	01B	16194/14794/13394 173	16217/14817/13417 284
	x		x				2000		M01	14	4905 025	4905 025
x			x				2000/2020/2040		M12	01B	13926/13426/11526 573	13892/13392/11592 119
			x				2000/2020/2040		M12	01B	14377/13461/12112 317	14377/13461/12112 317
		x					2000/2020/2040		E07A	01A	12166/10766/ 9266 172	12166/10766/ 9266 172
				x			2000/2100	1/3	S06	01A		search ??? x9336/7315
x		x		x		x	2055		HM01	18	11635	11635
	x		x		x		2055		HM01	18	16180	16180
				x	x		2100/2120/2140		M12	01B	10843/10243/ 9243 822	11144/10544/ 9344 153
	x					x	2100/2120/2140		XPA2	01B	13376/11576/10776	13427/12227/10827
		x		x			2100/2120/2140		XPA2	01B	12124/11124/10624	13462/12162/11562

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...
x			x				2110/2130/2150		M12	01B	10843/10243/ 9243 822	14493/13393/ 431, search
x		x		x		x	2155		HM01	18	10715	10715
	x		x		x		2155		HM01	18	17480	17480
		x			x		2210/2230/2250		M12	01B	10183/ 9083/ 8083 199	10223/ 9323/ 8023 239
					x		2230/2240		F01	01A	20206/18031	19224/17491
					x		2330/2340		F01	01A	20206/18031	19224/17491

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#	7850 25#	8565 25#	8565 25#	since 01/14, last log 03/21
				x		x	0435		E11	03	5779 35#	5779 35#	6849 35#	6849 35#	since 04/15, last log 03/21
x							0450		E11	03	5371 41#	5371 41#	7469 41#	7469 41#	since 02/10, last log 04/21 2nd transmission Thu 1730z
x	x						0510		S11A	03	11116 65#	11116 65#	13537 65#	13537 65#	since 08/19, last log 04/21
x	x						0640		E11	03	12153 94#	12153 94#	15800 94#	15800 94#	since 07/17, last log 04/21
x		x					0645		E11	03	10800 51#	8423 51#	13424 51#	13424 51#	since 07/09, last log 04/21
x			x				0700		S11A	03	8597 47#	8597 47#	9339 47#	9339 47#	since 04/10, last log 04/21
x				x			0700		E11	03	8180 57#	8180 57#	9680 57#	9680 57#	since 01/12, last log 04/21
					x	x	0710		E11	03	8102 49#	8102 49#	6480 49#	6480 49#	since 07/15, last log 04/21
x				x			0715		E11	03	9963 63#	9963 63#	10429 63#	10429 63#	since 02/11, last log 04/21
x			x				0745		E11	03	10213 26#	10213 26#	9610 26#	9610 26#	since 03/14, last log 04/21 2nd transmission Thu 1530z
x			x				0745		E11	03	14865 22#	14865 22#	14940 22#	14940 22#	since 01/20, last log 04/21
	x		x				0745		E11	03	17410 34#	17410 34#	15720 34#	15720 34#	since 06/17, last log 04/21
			x	x			0820		E11	03	5941 43#	5941 43#	4909 43#	4909 43#	since 10/09, last log 04/21
x	x						0820		E11	03	19184 13#	19184 13#	17378 13#	17378 13#	since 12/18, last log 04/21
x				x			0830		E11	03	12153 18#	12153 18#	12202 18#	12202 18#	since 07/15, last log 04/21
x	x						0845		E11	03	12202 71#	12202 71#	search 15#	search 15#	since 09/10, last log 04/21
x		x					0845		E11	03	12202 15#	12202 15#	12153 15#	12153 15#	since 07/17, last log 04/21
x		x					0900		E11	03	8180 53#	8180 53#	7449 53#	7449 53#	since 10/05, last log 04/21
x				x			0915		S11A	03	6480 48#	6480 48#	x5082 48# search	x5082 48# search	since 04/19, last log 04/21
		x	x				0930		E11	03	6940 27#	6940 27#	6923 27#	6923 27#	since 02/14, last log 04/21
x				x			1000		E11	03	7317 30#	7317 30#	8180 30#	8180 30#	since 11/16, last log 04/21
x	x			x			1020		S11A	03	8088 42#	8088 42#	6977 42# check	6977 42#	since 02/10, last log 04/21
x	x						1045		E11	03	7317 69#	7317 69#	8545 69#	8545 69#	since 03/18, last log 04/21
		x		x			1135		S11A	03	6433 37#	6433 37#	5149 37#	5149 37#	since 02/14, last log 04/21
x	x						1205		E11	03	6923 46#	6923 46#	6304 46#	6304 46#	since 03/10, last log 04/21 2nd transmission Mon 0450z
x	x	x					1230		E11	03	12530 33#	12530 33#	33# search	33# search	since 10/11, last log 04/21
x	x	x					1300		E11	03	5371 31#	5371 31#	5737 31#	5737 31#	since 07/14, last log 04/21 until 03/21 Sat/Sun at 0805z
x				x			1345		E11	03	14972 91#	14972 91#	12984 91#	12984 91#	since 10/15, last log 04/21
x				x			1530		E11	03	5737 52#	5737 52#	5409 52#	5409 52#	since 05/15, last log 04/21
			x				1530		E11	03	10330 26#	10330 26#	10356 26#	10356 26#	since 06/14, last log 04/21 2nd transmission Mon 0745z
				x	x		1530		E11	03	4505 36#	4505 36#	5082 36#	5082 36#	since 03/14, last log 04/21 until 02/21 at 1930z
x					x		1605		E11	03	5082 23#	5082 23#	5371 23#	5371 23#	since 11/15, last log 04/21
		x			x		1625		E11	03	6923 97#	6923 97#	7863 97#	7863 97#	since 02/15, last log 04/21
x				x	x		1650		E11	03	11116 92#	11116 92#	12229 92#	12229 92#	since 05/16, last log 04/21
x			x				1730		E11	03	7864 41#	7864 41#	8088 41#	8088 41#	since 03/10, last log 04/21 2nd transmission Mon 0450z
x					x		1745		E11	03	13470 24#	13470 24#	14410 24#	14410 24#	since 04/18, last log 04/21
		x		x			1850		S11A	03	10213 28#	10213 28#	12457 28#	12457 28#	since 06/17, last log 04/21
x			x				1900		E11	03	7317 64#	7317 64#	7600 64#	7600 64#	since 05/16, last log 04/21
		x		x			1910		E11	03	4181 39#	4181 39#	4783 39#	4783 39#	since 02/14, last log 03/21 until 02/21 at 1705z
			x	x			1910		E11	03	8530 61#	8530 61#	9610 61#	9610 61#	since 04/17, last log 04/21

XPA1 Sched c and XPA2[Sched m & p] Russian Intelligence and/or Diplomatic Multitone Systems
[Radiogramma] Transmission Schedules.

Zulu > Month v	XPA1 Sched c Tuesday/Thursday H+10 H+30 H+50 0710 / 0810z		XPA2 Sched m Sunday/Tuesday H 00 H+20 H+40 1200/2100		XPA2 Sched p Monday/Wednesday H 00 H+20 H+40 0700 / 0800z				
	Jan	12157	13462	14374	10921	12221	13521	11493	13393
Feb	13397	14413	15972	11163	13363	14563	13387	13887	14787
Mar	12132	13453	14576	13384	13984	14984	13931	14831	16131
Apr	10428	11431	13441	14442	15842	16342	11409	12209	13409
May	11169	12179	13431	13376	11576	10776	12148	13448	13948
June	11421	12151	13972	13427	12227	10827	12148	13448	13948
July	10446	11474	12175	13394	12194	10794	12148	13448	13948
Aug	10234	11511	12117	12159	11559	10559	12152	13552	13952
Sept	10862	11571	12216	13914	15814	16314	12152	13552	13952
Oct	12167	13437	14972	14469	16169	17469	13372	14672	15872
Nov	13978	14859	15871	14783	13883	12183	11529	13429	13929
Dec	11531	12137	13932	10807	12207	13507	11493	13393	13993

SPECIAL MATTERS

Thanks to all our contributors:

Ary, Edd, BR, CC, CQ, Danix, DanAr, E, F5, HH, HJH, JkC, Jochen, KW , Malc, MaleAnon, PoSW, PLdn, RNGB, Spectre,

E: Thanks E. Hope you summer good too. Hope you have had both jabs.

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>

2021

<p>January</p> <table border="1"> <tr><th>S</th><th>M</th><th>T</th><th>W</th><th>T</th><th>F</th><th>S</th></tr> <tr><td></td><td></td><td></td><td></td><td></td><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td></tr> <tr><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td></tr> <tr><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr> <tr><td>31</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	S	M	T	W	T	F	S						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31							<p>February</p> <table border="1"> <tr><th>S</th><th>M</th><th>T</th><th>W</th><th>T</th><th>F</th><th>S</th></tr> <tr><td></td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td></tr> <tr><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td></tr> <tr><td>28</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	S	M	T	W	T	F	S		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28							<p>March</p> <table border="1"> <tr><th>S</th><th>M</th><th>T</th><th>W</th><th>T</th><th>F</th><th>S</th></tr> <tr><td></td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td></tr> <tr><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td></tr> <tr><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td><td>26</td><td>27</td></tr> <tr><td>28</td><td>29</td><td>30</td><td>31</td><td></td><td></td><td></td></tr> </table>	S	M	T	W	T	F	S		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
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