

ENIGMA 2000 NEWSLETTER



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



Vishnya Class Intelligence Gathering Ship [AGI] Seen off Scottish coast and near sensitive naval base.

Note vertical antennae aft

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Editorial

A Happy New Year to our readers. Members will doubtless be pleased the subs for this group have been paid so we exist for another year.

Last year's propagation was poor and Malc M8 has taken time to inform us about the new cycle: "Update on the Sunspot cycle: We are now officially in Cycle 25 with 40 new sunspots recorded in the new cycle. It is due to peak around 2025. However it is likely to be a very weak cycle again with a steep fall after 2025"
Many thanks Malc

The noise scene is also becoming bad; last time Peter reported QRM he was encountering:

"Interference to short-wave reception continues to increase, one strange manifestation which appeared about six weeks ago takes the form of what I can only describe as a great "splurge" of a wobbly, AC modulated carrier which pops up roughly every 670–680 kHz across the band so presumably from a switch mode power supply or the video circuitry of a security camera system, perhaps, as it is there round the clock.

The lowest frequency on which it has been found is in the region of 2365 kHz and there is one spike around 3706 in the 80 metre band and one inside 40 metres.

Fortunately the wide-band local interference which wiped out the HF end of the medium wave band and short wave up to about 3 MHz which had been around for several years but which vanished suddenly just under a year ago has not returned.

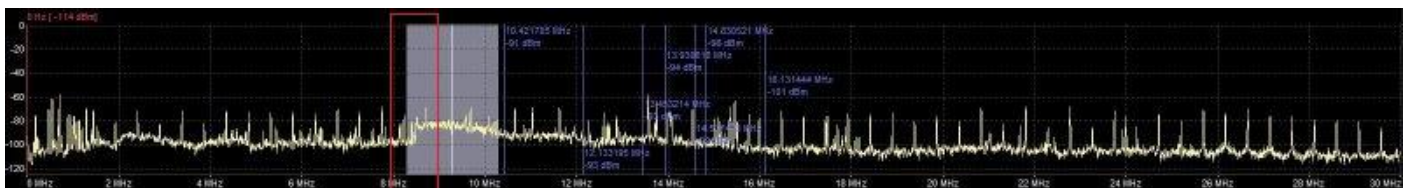
I think a lot of interference comes from internet traffic over the phone lines which around here are on poles above ground.

However, there are signs all over the district warning of forthcoming road closures in connection with the installation of "ultra fast broad-band" and green coloured cabinets are appearing at roadsides. I saw at one place the other day where work has already begun they were rolling out a large drum of fibre optic cable and digging a trench to put it underground which on the face of it would eliminate radiated interference but if the final connection into the customer's property is still going to be copper wire then the interference will still be there."

He is not alone and I wonder how many of us are suffering from OFCOM intransigence over the regulations. When PLT first appeared it became a national sport for some to intercept one far away to curry an attendance from OFCOM engineers and get the thing off air [Remember, the plug in data over mains units are not transmitters]. With BT allegedly giving them out with their Routers and Sky having such a facility built into its boxes and left running [I'm told] the PLT QRM dominated. My past next door neighbours had one. Took me straight off air. Luckily OFCOM visit licensed amateurs to help with the interfering stuff. He even offered to knock on my next door neighbour to reason with him [waste of time to be honest, a most unreasonable bloke you couldn't have met]. He knew the devices would cause problems but only turned them off when he saw the inspector surveying my property with a loop antenna on a very nice piece of handheld equipment. Anyway, that noisy and not particularly neighbour and his offspring are long gone. No QRM, no noise and altogether different people next door.

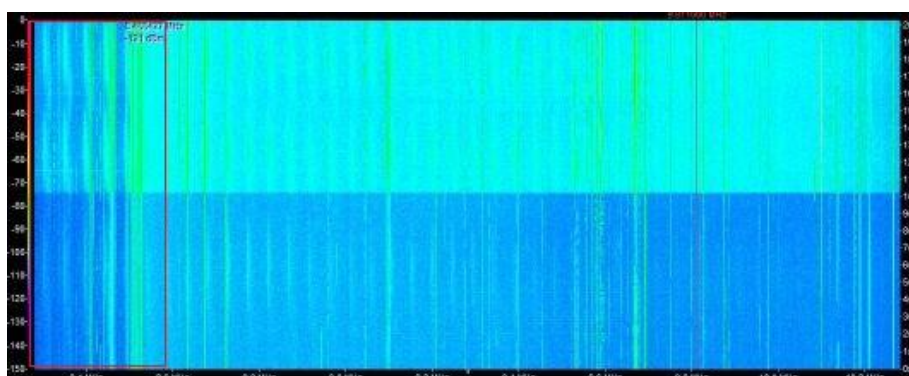
However, the noise is getting very bad again; I have three antennas, Inverted L [80 to 10m], 40m ¼ wave vertical [40 to 6m] and a, active receiving loop inside the house good for 100kHz to 30000kHz [from China sahib! Very cheap]. Out of the three the loop is best although the 5vdc in is converted to 12v out. I can't find any evidence on the coax of fast switching of these cheapo 'bucky' units so the noise must be coming from elsewhere. Doubtless overhead broadband distribution, unwanted cable distribution boxes that are still powered up and of course all the domestic and otherwise crap switchmode PSU's.

If you look at XPB1 you'll see my reference to QRM5 on the last three slots for Saturday 28th November. Well this is why and note the sudden change of s7 noise level reducing to s5 around 8500kHz. Note also the spikes that peter mentions. In my case they extend to 495000kHz; measured between two random points of: 48.672601MHz and 48.187932MHz the difference is 484.6679kHz.



Noise 01

Looking at Noise01 in the upper region it can be seen a smaller spike exists. That is around 200kHz so it is easy to understand Peter's 670-680kHz assessment. You can also see the sudden drop in noise, S7/8 to S5. Outlined in red.

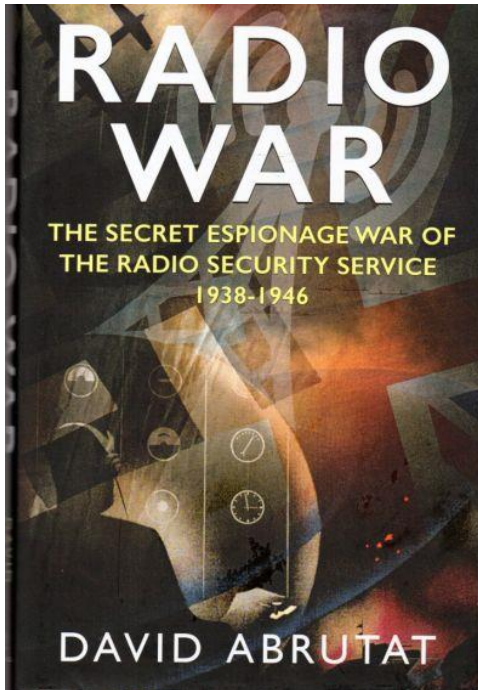


Noise 02

In Noise02 can be seen the clearer and less noise area, outlined in red. below the 8500kHz area.

So, will OFCOM come out to this or tackle BT over it broadband distribution using an unbalanced pair for which they were never designed for? Of course not; its big business and mega money. When a letter from GCHQ expressed concerns over the rising noise floor was leaked that was 'withdrawn, denied' etc. The RSGB, apart from selling books, has made representation to OFCOM concerning this very poor noise floor we now have, only in the amateur bands of course – easily notched – and even they can see the piss is being taken in buckets, using a very cold catheter and with a rough end

Book Review



Radio Wars by David Abrutat

One question often asked at Bletchley Park, after the statement that we had really surprised Axis troops by reading their codes etc, is where did the information actually come from?

The sadness is that few persons realised exactly what went on as regards signal interception. There have been books written about WW" radio games but were usually vanity publications and easily missed. Other, better known titles, 'Spies of the Airwaves' and 'The Enemy is Listening' were both accounts from those involved. The publicity that surrounded Bletchley Park carried so much interest the ordinary public never completely saw a fuller picture giving no real thought as to the where's and how's of the code interception before, during and certainly after WW2.

In his book Dr David Abrutat, himself an ex-Royal Marine, adequately examines the thought and actions that formed an efficient intercept 'vehicle' for Britain's need to address espionage, battle order and military movement across land sea and air and in particular on the home ground.

The formation of the RSS and the use of radio amateurs is splendidly covered; the signal analysis and a greater understanding and use of the science of Radio Direction Finding are all covered in the book. Surprisingly the use of G7nn calls, as amateur transmissions towards the close of war in Europe is also covered as well as QSO content [limited] and what to if asked etc etc.

There is lots of data to back up what Dr Abrutat states as well; this in opposition to previous books on the subject where such info would still be covered by disclosure law and doubtless the OSA.

The book is not an easy read; it flows much as any text can but the sheer detail here makes this book a reference work and not just another account of radio in wartime.

Personally, I recommend this book wholesale. I took three weeks to read it at night and it was a heavy but most worthwhile task. Indeed, if this was Dr Abrutat's thesis then he deserved his doctorate.

Dr David Abrutat recently took over the post of GCHQ Historian from Tony Comer. As a former Royal Marine and ex RAF Officer he is known to have lectured in International Relations and Security.

Talking of books, member JPL sent details of this new work on GCHQ as reviewed in the Calgary Herald:

U of C professor takes a look Behind the Enigma with first authorized history of Britain's secret cyber-intelligence agency

Author of the article:Eric Volmers

Publishing date:Dec 04, 2020 • Last Updated 12 days ago • 4 minute read

<https://calgaryherald.com/entertainment/books/u-of-c-professor-takes-a-look-behind-the-enigma-with-first-authorized-history-of-britains-secret-cyber-intelligence-agency>

When University of Calgary history professor John Ferris got his first look at the mountains of information available to him at the Government Communications Headquarters (GCHQ), he was overcome with two emotions: exhilaration and fear.

As the writer of the first authorized history of Britain's secretive cyber-intelligence agency, Ferris was given unprecedented access to previously classified documents stored at the headquarters of the GCHQ. For an academic who had been exploring the history of signal intelligence, or Sigint, for the past 40 years, this offered kid-in-a-candy-store levels of excitement.

But fear began to creep in when he realized the sheer volume of material he now had access to.

"The frightening side was that it was dumped on me all at once," says Ferris. "I had a relatively short timeframe to write it. I had to learn all of these things which are absolutely new. In technical terms, there were all sorts of things I had to learn. So the result is that it was really emotionally quite stressful as well as giving me a great deal of fun."

Ferris figures he spent roughly a year on and off in the basement of GCHQ's headquarters in Cheltenham — nicknamed the "Doughnut" due to its unique architecture — doing research, as well as spending countless hours at home in Calgary sifting through material made available to him online.

Some of the highly classified material U of C professor John Ferris got access to in writing a history book on the British Government Communications Headquarters. Some of the highly classified material U of C professor John Ferris got access to in writing a history book on the British Government Communications Headquarters.

jpg
So it's not surprising that the resulting book, Behind the Enigma, is an intimidating 825-page tome. It begins with the 1844 origins of modern British signal intelligence, which is the collection of intelligence through the interception of signals and communications. From there, it takes readers through the formation of the GCHQ in the First World War, to its famed achievements in codebreaking intercepted Nazi messages at Bletchley Park during the Second World War, to its activities gathering intelligence during the Falklands conflict and the Cold War, to its current role battling terrorism and online crime.

Some of the highly classified material U of C professor John Ferris got access to in writing a history book on the British Government Communications Headquarters. Some of the highly classified material U of C professor John Ferris got access to in writing a history book on the British Government Communications Headquarters. PHOTO BY UNKNOWN AUTHOR /jpg

In the years he spent working on the book, the scope quickly evolved to cover a much broader history. Initially, the idea was to trace the history of GCHQ up until the end of the Cold War, with certain restrictions being put on post-Second World War diplomatic messages or revelations of methods still in use. But it was later agreed that Behind the Enigma should cover its activities right up to the present day, which opens up broader questions about modern intelligence gathering and mass surveillance.

“What is going on with Sigint in the world today is really important and different from what it is in the Cold War,” Ferris says. “So to help British readers, the British public, understand what GCHQ does, they gave me more material about the post-Cold War era and I wrote up until 2020. Sigint goes from being a state-to-state issue and goes to one involving states and societies. It used to be only governments had signals-intelligence capabilities, now millions of entities have some kind of Sigint capability. Phishing is a kind of very primitive Sigint. I would say we are talking about hundreds of thousands of organized cybercriminals who have quite sophisticated Sigint capabilities. Suddenly, it’s the duty of GCHQ, and also of, say, the Canadian Communications Security Establishment, to help protect its citizens and public from direct attacks by foreign Sigint agencies, whether they are government or private.”

Some of the highly classified material U of C professor John Ferris got access to in writing a history book on the British Government Communications Headquarters. This photo is titled Hut Six registration room.

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After more than 100 years of operating in the shadows, this newfound openness by the GCHQ is no doubt at least partially due to a need to explain its operations to a public that has become increasingly wary about mass surveillance done by government agencies. You would be hard-pressed to find any review of Behind the Enigma that does not mention American whistleblower Edward Snowden. He leaked classified information from the National Security Agency, GCHQ’s Five Eyes American partner. Snowden is certainly included in the book, but he takes up only a fraction of the 800-plus pages.

Some of the highly classified material U of C professor John Ferris got access to in writing a history book on the British Government Communications Headquarters. This photo shows Wrens working communications at Eastcote.

Some of the highly classified material U of C professor John Ferris got access to in writing a history book on the British Government Communications Headquarters. This photo shows Wrens working communications at Eastcote. jpg

Ferris says there is a misconception about agencies collecting citizens’ data as part of mass surveillance. While the bulk collection of data is considered by some to be unavoidable for any state conducting signals intelligence, most agencies have to use their limited resources to examine communications from actual threats such as terrorists or spies, he says.

“On a given day, if the Five Eyes were to temporarily collect five billion bits of telecommunications, that sounds like a lot,” Ferris says. “But the absolute number of communications that they can process in any way will be in the tens of thousands probably. And the number of those messages which they can actually read would be in the low tens of thousands. In the end, the real point is they don’t have enough people to go after communications of people like you or I, because we don’t matter. They barely have enough ability to handle terrorists, cybercriminals, foreign governments, foreign intelligence agencies.”

“On the one hand, I agree that we absolutely need to maintain legal control to ensure these agencies don’t do things which we believe or wrong. But I’m not particularly worried about Five Eyes Sigint going after the communications of Five Eyes citizens illegally.”

<https://calgaryherald.com/entertainment/books/u-of-c-professor-takes-a-look-behind-the-enigma-with-first-authorized-history-of-britains-secret-cyber-intelligence-agency>

The E2k review of this book can be found here in a future issue. Thanks for posting JPL

Cover story:



A better view of those vertical antennae mounted aft

Two Russian Spy Ships Operating Near Important Military Base In Scotland

Two Russian Navy intelligence gathering ships have taken up position off the British coast. H I Sutton has the story.
H I Sutton 08 Nov 2020

<https://www.navalnews.com/naval-news/2020/11/two-russian-spy-ships-operating-near-important-military-base-in-scotland/>

The Russian Navy has a sizable fleet of dedicated intelligence gathering ships. Festooned with antenna, their crews listen in to other country’s communications, and analyze radar and other military transmissions. So NATO countries are naturally uncomfortable when one takes up position close to their ports and bases.

Now two Russian Navy intelligence gathering ships have taken up position off the British coast. They are in the Moray of Firth, north of Aberdeen, and just miles from the important air base at RAF Lossiemouth. The ships were visible on commercial satellite imagery on November 6.

They are on the opposite coast to where a wrecked Wave Glider uncrewed surface vessel (USV) was discovered in early October. Although there has been speculation that the unclaimed craft was a Russian intelligence gathering craft, we are confident that this isn't the case.

The Russian intelligence ships are therefore unrelated. It is however a reminder that the intelligence game is still being played around the British Isles and in the North Atlantic.

The scene is reminiscent of the Soviet 'fishing trawlers' which used to operate off Scotland during the Cold War. These monitored British and American warships and submarines. They were particularly active watching British and American nuclear submarines leaving the Clyde. The Moray of Firth was another frequent haunt.

The two ships have been identified as Pr.684 Vishnya Class intelligence gathering ships. They are operating approximately 23 miles off the Scottish coast, and about 34 miles from RAF Lossiemouth. The base is home to the RAF's new Poseidon MRA1 maritime patrol aircraft, as well as four squadrons of Typhoon FGR4 fighters. The Vishnyas are accompanied by a Russian Navy replenishment ship, believed to be the Sergey Osipov.

The Russian Navy ships are around 23 miles off the Scottish Coast.

The Sergey Osipov, a Pr. 1559V Boris Chilikin class replenishment oiler, has been in the area for a couple of weeks. She sailed down from the Russian Navy's arctic bases on the Kola Peninsula. On October 27 it was seen in almost the same location refueling a Russian Navy missile destroyer.

The Vishnya Class are the workhorses of Russia's intelligence gathering fleet. Seven are active including two in the Northern Fleet, which are likely these two. They are 91.5 meters long and displace 3,470 tons, about the same as a frigate. They have a crew of around 150 persons.

The Vishnya Class intelligence ships carry an array of antenna. Individual ships vary and the antenna are often hidden under fiberglass radomes.

One of the Northern Fleet's Vishnya Class ships, the Viktor Leonov, frequently operates off the U.S. Coast and in the Caribbean. She was there in December 2019, when she was accused of operating in an unsafe manner. And it is probable that one of these ships is her. She may be headed to operate off the East Coast of America now.

<https://www.navalnews.com/naval-news/2020/11/two-russian-spy-ships-operating-near-important-military-base-in-scotland/>

For excellent imagery and diagrams see also:

<https://www.dailymail.co.uk/news/article-8934327/Royal-Navy-warship-HMS-Tyne-shadows-Russian-vessel-Scotland.html>

Antennas seen on another Russian AGI:



It isn't just the naughty Russians who pursue intelligence in a Maritime fashion and whilst lots have been written about this subject ENIGMA 2000 finds itself unwilling to state more about modern methods.

The USN had AGI's and two of which came to grief. The stories have been well written and described but if you wonder here are two images from USS Pueblo, currently moored outside Pyongyang as a floating museum and well maintained by the North Koreans. [Visited by E2k member some years back].

Two specific areas inside the USS Pueblo:



Then there was the USS Liberty at the mercy of the Israeli Airforce of which much has also been written. An interesting story indeed.

The Australian Secret Intelligence Service: 007 blessing and curse

15 Nov 2020|Graeme Dobell

<https://www.aspistrategist.org.au/the-australian-secret-intelligence-service-007-blessing-and-curse/>

When intelligence folk smell roses, they look for the funeral. That bit of spy lore is about finding the opportunity in the threats (or vice versa).

The lore hints at the mystique of the trade: the allure of secrets.

As a former head of Oz spies (the Australian Secret Intelligence Service) and spy-catchers (the Australian Security Intelligence Organisation), David Irvine takes a droll view of the forbidden-fruit fascination of both secrets and sex. Irvine cites this wonderful bit of fruitiness from a top British diplomat, Rodric Braithwaite:

‘The subject of intelligence attracts attention out of proportion to its real importance. My theory is that this is because secrets are like sex. Most of us think that others get more than we do. Some of us cannot have enough of either. Both encourage fantasy. Both send the press into a feeding frenzy. All this distorts sensible discussion.’

For journalists, sex and secrets must lead to James Bond (‘racy without careening into the red zone of camp’). And so it was in the final episode of the ASPI interviews with the director-general of the Australian Secret Intelligence Service, Paul Symon, the question was posed: Is James Bond a blessing or a curse? Both, replied Symon:

A blessing because on holidays it’s a darn good read or darn good movie. Curse, because there’s so much wrong—there’s so much wrong with the way he performs his function. He’s licensed to kill. We don’t give people a licence to kill. He has, one would suggest, an ego, aspects of narcissism that wouldn’t fit comfortably with my people. So, he’s a blessing and a curse.

Dealing with the mythology of the mystique is one reason that Australia’s top spy has gone before the camera for four ASPI interviews.

Symon says ASIS has a good story to tell the Australian people. And as the only ASIS officer who can be named, he sees the need for more public conversations. Lots of media attention is a problem, he says, ‘but no media attention is a problem as well’.

Spies, Symon says, can go to places denied diplomats, where the internet search engines can’t reach. The job is to ‘pick the eyes out of the most sensitive secrets overseas that bear in on our national interest and help inform a judgement that our government needs to make—whether it’s in relation to our military, our economic or security outlook. We’re trying to help inform that debate and we are looking for that piece of gold that is not obtainable by any other means.’

Finding gold is always tough, as is searching for those intelligence nuggets. ASPI senior fellow Andrew Davies, in the ‘new age of espionage’ issue of Australian Foreign Affairs, writes of the complications of darkening geopolitics, surging technology, and a continuing terrorist threat. Yet many ‘dirty tricks’ of the past have transitioned to digital, Davies says, showing ‘the enduring value of old-school espionage’.

Danielle Cave, deputy director of ASPI’s International Cyber Policy Centre, writes that data mountains and cyberspace loom over spycraft. Spooks must fear algorithms and facial recognition technologies, Cave says, because everyone leaves a trace online: ‘Spies can’t always teleconference like the rest of us.’

Following those themes, I asked Symon about the viability of gathering human intelligence amid the ‘digital cornucopia and cyber cacophony’. The cornucopia–cacophony line drew the most amused raised eyebrow from Australia’s chief spy in our interviews. But my follow-on line (‘There’s a lot of noise out there.’) worked because, apparently, that touches concepts ASIS is using, as Symon explains:

There are jewels there, and that’s what drives us—to find those jewels. The other aspect of that very complex array of cornucopias and cacophonies that you’ve talked about is that ... there’s an opportunity for us to ‘swim’ in that noise—as the term that we use inside the organisation—and to be pretty invisible in that noise. There’s a lot happening, a lot of bandwidth, there is a lot of noise. How can we perform our function in the middle of that without it being clear that we are part of a foreign espionage service? How do we use that cacophony? How do we swim in all of that noise to quietly go about our business? We’re turning our mind to that, because we think that’s where the future of the Service lies.

Reaction to the ASIS interviews varies. The Australian’s Ben Packham thought getting the top spy in front of a camera for the first time made for ‘a landmark series of video interviews’. By contrast, Hamish McDonald (one of the finest Oz foreign correspondents of my generation) felt it went ‘softly, softly’ in the ‘carefully controlled setting’ of ASPI.

The historian Peter Edwards sees the interviews responding to the need to make ‘secret agencies as transparent as possible about their past, current and likely future activities’. A comment I valued was from a Canberra wise owl who said the series works because it’s ‘reporting on ASIS as an organisation rather than a fantasy’.

The effort to clarify purposes and principles is where Symon starts and finishes the final ASPI interview: 'We are not some maverick organisation sitting outside. We are the Australian people, we are comprised of them.'

For 68 years, ASIS has dwelt in the most secret spaces of the spook universe. In lifting the cloak a little, Symon concludes with these words to Australians on what they should understand about ASIS:

We are you—we serve you, we serve the government, we serve the prosperity and security agenda that we all aspire to for our nation now and into the future. We're a component. We proudly serve Australians. We think we do it well, we do it legally, we do it with propriety, we do it conscientiously.

And so really my message is, while there is a certain mystique around a secret intelligence service, we know our bearings, we have our bearings. We care deeply about what we do. We're here for Australia. We're for Australians. We serve with pride. That's the message I want to send.

<https://www.aspistrategist.org.au/the-australian-secret-intelligence-service-007-blessing-and-curse/>

Here we have a well written article on the death of Gareth Williams; if you want to see the pics then click on the link

Revealed: How the body in a bag spy Gareth Williams was murdered by Russians and smeared by MI6, writes former MP NORMAN BAKER

By [NORMAN BAKER FOR THE MAIL ON SUNDAY](#)

PUBLISHED: 22:14, 7 November 2020 | **UPDATED:** 02:31, 8 November 2020

<https://www.dailymail.co.uk/news/article-8924617/NORMAN-BAKER-body-bag-spy-Gareth-Williams-murdered-Russians-smeared-MI6.html>

It is ten years since Gareth Williams, a brilliant mathematician from the security services, was found dead, his naked, decomposing body padlocked into a red holdall in the bath of his [London](#) flat. His face was serene, his hands neatly folded on his chest in an almost religious pose. The key to the lock lay beneath his body.

The distress of the 31-year-old's family and friends was made all the harder to bear by the bewildering shortage of answers as to how or why he had died. And today, a decade on, the official police explanation remains that it had been an accident. We are told that Williams died alone in his Pimlico flat as the result of a solo sex game that went wrong.

The authorities would like us to believe that it was nothing to do with his employment at GCHQ, the Government communications analysis centre in Cheltenham, and nothing to do with his work for MI6 in London, the secret intelligence service to which he'd been seconded.

But this account is wearing thin and, as the years pass, the doubts are piling up.

Why, for example, was there such a long delay before MI6 spies 'discovered' the body of their colleague? You might have thought the security services would keep a close eye on such a star operative.

Why did MI6 give every impression of trying to hinder the police investigation?

And who exactly was responsible for smearing Williams's reputation with lurid sexual allegations in the weeks and months that followed?

It is ten years since Gareth Williams, a brilliant mathematician from the security services, was found dead, his decomposing body padlocked into a red holdall in the bath of his London flat

These questions help point to a very different version of events from the one that the police and security services are keen to promote – one that not only places Russian assassins at the heart of Gareth Williams's death but implicates MI6 in the bizarre cover-up that followed.

Williams, an expert in analysing codes and a keen amateur cyclist, was last seen alive on Sunday, August 15. Later, when his computer was examined at his Alderney Street apartment, it showed that someone visited a cycling website at 1.15am the following day. After that, there was no further trace of his movements.

It is puzzling then – according to the official version of events – that it was more than a week later, on the morning of Monday, August 23, before MI6 finally got around to investigating his absence, after a call from Williams's worried sister, Ceri.

He had been due to chair an MI6 meeting on Monday, August 16 and attend another on Friday, August 20, but had failed to appear. Apparently, nothing was said. On the evening of August 16, the analyst had been due to meet a colleague from GCHQ who was interested in taking over his flat. But, once again, Williams's absence seems to have passed without comment.

Can it really be true that the disappearance of a man with the reputation for being as accurate as a Swiss watch set no alarm bells ringing? I doubt it. I have spoken to a number of intelligence experts who, without exception, view this supposed oversight as unbelievable. I am told that steps would have been taken within an hour to speak to him or track him down.

This was certainly the view of the Westminster coroner, Dr Fiona Wilcox, who handled the 2012 inquest into his death. She said MI6's account of the delay 'begins to stretch bounds of credibility'. Indeed.

It was falsely suggested that he used drugs and paid for male prostitutes.

It seems certain to me that the absence of Gareth Williams prompted an immediate MI6 investigation, that officers went to his flat and were confronted by the gruesome evidence of his death. His apartment in Alderney Street was part of an MI6 safe house with an alarm system connecting it to headquarters. I'm told there would have been other security systems, too, and his bosses would have been alerted to any problem almost from the outset.

Why, then, would MI6 choose to lie about the delay? And why would they allow the body to lie in the bath for a week until the police became involved?

Someone certainly wanted the evidence to disappear. It was the height of summer, yet the heating had been left on full, causing the corpse to decay rapidly. Williams's DNA was literally disappearing down the bath's plug hole.

Then came a series of unpleasant stories about his supposedly unorthodox sex life.

A tabloid newspaper was told that Williams had been a secret transvestite who might have been killed by a gay lover. Women's clothing of his size had been found at his flat. It was reported that cocaine was discovered along with gay pornography and various bits of sado-masochistic equipment. It was falsely suggested that Williams had been in the habit of paying for male prostitutes.

Where had these smears come from? Not, it seems, from the police, who angrily denied the stories. There was no evidence that Williams had used escorts, they said, and no evidence that he had bought sex gear or used drugs.

We have been here before, of course. Back in 1990, a British agent called Jonathan Moyle was found almost naked, crammed inside a 5ft hotel wardrobe in the Chilean capital Santiago. His head was in a pillow case and his body was encased in a polythene bag.

Guests at a British Embassy cocktail party, including journalists, were discreetly told that Moyle had been conducting an auto-erotic experiment when he died. They were not told that he had uncovered a plan by the Chilean company Industrias Cardoen to sell 50 American-made Bell helicopters to the Iraqi dictator Saddam Hussein. It later transpired that Moyle had been drugged, suffocated and injected with a lethal substance. A Chilean investigation concluded he had been murdered and a British coroner agreed, recording a verdict of unlawful killing.

The distress of the 31-year-old's family and friends was made all the harder to bear by the bewildering shortage of answers as to how or why he had died

Then, in 1994, it was reported that Conservative MP Stephen Milligan had been found dead on the kitchen table of his home, naked except for a pair of stockings and suspenders. There was a black bin liner over his head, a length of flex around his neck and a segment of orange in his mouth. Who leaked these circumstances to the press, and why?

What was not reported was the fact that the Eastleigh MP – the parliamentary aide to the Minister for Defence Procurement, Jonathan Aitken – had discovered evidence of illegal British arms sales to Iraq by the precision tool manufacturer Matrix Churchill.

If MI6 seemed only too keen to promote the story that Gareth Williams's death was a sexual matter, the police thought differently and believed from the outset that he had been murdered.

I am told by a well-connected source that MI6 was so unhelpful to the Metropolitan Police that they threatened to walk away from the case. It took a top-level meeting between Sir John Sawers, the head of MI6, and Sir Paul Stephenson, the head of the Met, before an uneasy way forward could be agreed.

Next, the police officer leading the investigation, Detective Chief Inspector Jackie Sebire, was instructed to use officers from the SO15 Counter Terrorism Command to liaise with MI6. The reason has never been explained, but it is clear to me her determination to unearth the truth was not shared by SO15. It is also clear that vital evidence was withheld from her investigation. Sebire's team were not even allowed to speak to Williams's MI6 colleagues.

It was only at the inquest, almost two years later, that it emerged that Williams, after his death, had been found to possess nine MI6 memory sticks. This was news to Sebire. Whatever they contained, a source told me that the sticks had been wiped by MI6.

The inquest also heard that when SO15 officers visited MI6 headquarters on the south bank of the Thames, they were shown a cabinet used by Williams but that, lamentably, they failed to make an inventory of its contents.

The claims made about his death are so ludicrous as to be insulting.

A locked holdall believed to contain personal and work-related items was found under his desk, yet the police officer who discovered it, Detective Constable Colin Hall, told the inquest he had been instructed to leave it where it was.

In the event, the coroner was not distracted by the smears about Williams's sex life and declared herself 'satisfied that, on the balance of probabilities, Gareth was killed unlawfully'.

Sebire agreed, concluding after the inquest that 'it's highly likely that a third party was involved in Gareth's death'.

Much attention was paid to whether it had been possible for Williams to climb into a holdall, zip it closed, padlock it, then put the key under his body.

The sheer difficulty seemed convincing evidence that, at the very least, others were involved in his death. And there was no evidence that Williams had any sexual interest in confined spaces. A couple of escapology experts tried hundreds of times but failed to achieve the feat. But then a strange story popped up in one newspaper claiming that a retired Army sergeant had shown how the feat was indeed possible and that 'Scotland Yard detectives had been able to repeat the experiment'.

In November 2013, the police announced that they had concluded that Williams's death was 'probably an accident' after all and the case was closed.

It would be interesting to know what Sebire made of this volte face. Subsequently promoted to the rank of Assistant Chief Constable in Bedfordshire, she has failed to return my calls.

Deputy Assistant Commissioner Martin Hewitt declared there was 'no evidence that Williams's death was connected to his work' and said it was 'beyond credibility' that MI6 had destroyed any evidence. Yet the inquest had heard there were no fingerprints, palm prints or indeed any traces of Williams's DNA on the rim of the bath, the bag zip or the bag padlock.

So, aside from locking himself into a bag in a manner that escapologists found impossible to repeat, we were now being asked to believe that Williams had miraculously wiped away all traces of his entry into the bag.

The inquest was told that the front door and locks had been removed before the police arrived. Had he done this as well?

And had he also turned the light off in the bathroom and shut the door? And turned the heating up to full in the middle of summer?

Had he also wiped his phone and returned it to its factory settings? For that is how it was found.

These claims are so obviously ludicrous as to be insulting.

Williams was murdered, and for reasons flowing from his highly sensitive work investigating the laundering of Russian money.

At the time of his death, he was creating computer defences for the City of London and would have been aware of many illegal transactions. He was a key person for national security. He often spoke to the US National Security Agency and was a regular visitor to its headquarters at Fort Meade in Maryland.

Gareth Williams caught on CCTV at Holland Park Underground station

What is the evidence of Russian involvement? From July 2010 onwards, defector and former KGB double-agent Boris Karpichkov began noticing cars with Russian diplomatic number plates parked near, or driving slowly by, Alderney Street. He recorded the numbers. Living close by at the time, he was worried about his own safety.

The Russian cars were seen on numerous occasions between July 6 and 9, and then again from August 12 to 15, the last day of Williams's life. They have not been seen since.

In this looking-glass world, it is standard practice to monitor targets ahead of a 'hit' – to see what time they leave, where they go, what time they return, who else might be around.

Had Williams been blackmailed? There is some evidence he might have been gay, though colleagues describe him more as asexual.

Being homosexual would not have been a problem for MI6. I know from my time as a Home Office Minister that those in sensitive positions are expected to reveal everything as part of the vetting process, including who you've been to bed with and what you did when you got there. Providing there is no illegal activity, the evidence is simply recorded. No judgments are made.

For the Russians, however, it is a different matter. They still take the view that homosexuality is a weakness to be exploited – and it is entirely possible they attempted to do so.

Boris Karpichkov says his Russian contacts have told him of a Russian operation to target Williams, which was disparagingly codenamed Operation Sweetie.

I have been told by a well-placed source that, not long before his death, Williams had been drugged and rendered unconscious while on holiday in America. A compromising scene was then created around him and photographed. I have no proof, but it is a tactic often used by the Russians.

MI6 prefers to drown the truth about a loyal agent in a sea of smears.

Perhaps, too, the Russians were aware that the code-breaker had gained improper access to material within MI6 which was not relevant to his work.

Specifically, he had obtained the guest list for an event in London which was to be attended by former US President Bill Clinton. It was reported that he did this 'for a friend', but the reason why has never been made clear. If known by the Russians, that could certainly have been grounds for blackmail.

It is also true that Williams made and received some unexplained payments. In the days between August 11 and 15, three lots of £2,000 were paid into his bank account and then withdrawn shortly afterwards.

These might have been the £2,000 tax-free sums he was paid monthly as a London supplement while he on secondment to MI6 from GCHQ. More unusual were the two piles of notes, each totalling £500, found in his flat after his death.

In the days following the discovery of his death, this newspaper revealed that £18,000 had disappeared from one of his bank accounts two months earlier, and at that point its destination had not been traced. Also in his flat were unopened bags containing designer women's clothes worth £20,000.

The Mail on Sunday also suggested that Williams's bank and credit cards had been used in the week between his death and the official discovery of his body in the bath.

Where does all this leave us?

I do not believe that Gareth Williams was anything other than a good man, loyal to his country.

I believe it was entirely possible the Russians were blackmailing him, but that his reaction would have been to tell his line managers.

Did they encourage him to play along and pretend he had fallen under the Russian spell?

According to Karpichkov, Williams was visited by an East European businessman codenamed Lukas, whom he let into his flat. Lukas was there to blackmail Williams into becoming a double-agent.

Is it possible that, as Karpichkov suggests, Williams let slip that he knew the identity of a Russian mole in a senior role at GCHQ? This man, codenamed Orion, was a key person for the Russians and they could not risk him being outed. Such an admission would have been catastrophic, tantamount to Williams signing his own death warrant.

But Williams, remember, was a mathematician, not an experienced agent in the field.

According to Karpichkov, Lukas drugged his wine to leave him unconscious and then a specialist Russian team was called in to finish the job with a cocktail of plant-based poisons, leaving no trace at the post-mortem.

The fact that he was placed in a bag suggests that the Russians intended to remove him from the flat so that he became a missing person rather than a death, and any investigation was delayed. Were they interrupted? Or perhaps MI6 found the body before they could return.

Now, with a corpse on their hands, it was MI6 which had the problem. There were many reasons not to publicise such a brazen Russian 'hit' on their own territory, or answer the questions it would inevitably raise.

And if, as Karpichkov and my own sources suggest, they really did have a GCHQ mole in their sights, MI6 might well have concluded it was better to delay 'finding' the body, then explaining the death as a sexual escapade. That would give them time and opportunity to identify the Russian agent – and who could say that such a decision was entirely wrong

Gareth Williams, however, paid not only with his life but his reputation, like Stephen Milligan and Jonathan Moyle before him.

MI6 knows very well what happened on that terrible August night in Alderney Street but prefers, for the moment, to hide it – drowning the truth about a loyal agent in a sea of sexual fantasies and smears.

Share or comment on this article:

NORMAN BAKER: How the body in a bag spy Gareth Williams was murdered by Russians and smeared by MI6

<https://www.dailymail.co.uk/news/article-8924617/NORMAN-BAKER-body-bag-spy-Gareth-Williams-murdered-Russians-smeared-MI6.html>

Above all else we seem to be moving to the standard practices of the mid 50s to 70s

UK kicks out two Belarus officials in tit-for-tat move after British diplomats are expelled for 'legitimate observation' of pro-democracy protests

UK has retaliated after two officials kicked out of Belarus for observing protests

A pair of diplomats from the former Soviet state have been expelled from the UK

Alexander Lukashenko facing demonstrations amid claims he rigged election

By JAMES TAPSFIELD, POLITICAL EDITOR FOR MAILONLINE

PUBLISHED: 15:23, 10 November 2020 | UPDATED: 09:03, 11 November 2020

<https://www.dailymail.co.uk/news/article-8934217/UK-kicks-two-Belarus-officials-tit-tat-move.html>

The UK today kicked out two Belarus diplomats in a tit-for-tat response to the ejection of two UK envoys by the former Soviet bloc state.

Foreign Secretary Dominic Raab announced the move after the British diplomats, including a defence attache, were ordered home from the capital, Minsk.

The Foreign Office said the pair had been engaged in the 'legitimate observation' of protests demanding the removal of President Alexander Lukashenko following his disputed re-election.

Britain has already imposed sanctions on Mr Lukashenko and his allies and called for a re-run of the August poll.

The Foreign Office said the UK pair had been engaged in the 'legitimate observation' of protests demanding the removal of President Alexander Lukashenko following his disputed re-election

Mr Raab said in a statement: 'We have sent a clear message today to Lukashenko's regime that their unjustified expulsion of British diplomats has consequences.

'The UK will continue to hold the Belarusian authorities to account for the rigged election in August and their ongoing use of violence to suppress the Belarusian people.'

Belarusian ambassador Maxim Yermalovich was summoned to the FCDO on Tuesday afternoon to be informed of the decision.

Officials said it was a 'proportionate and appropriate' response to the ejection of the British diplomats

<https://www.dailymail.co.uk/news/article-8934217/UK-kicks-two-Belarus-officials-tit-tat-move.html>



In En121 we stated, "No idea what its about but it looks good! Perhaps one of our Russian Speakers might care to translate please?"

Many thanks to our member who read our request and acted accordingly by informing us the Cyrillic script reads

"Everything that is created by the people -- we shall defend!"

Very Soviet era [and very CCCP too]. Thank you for replying.

Morse Stations

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

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

Morse - Number Stations

UNID CW

UNID 1 – 8134kHz Mystery Station 00000 / SALUT LES GARS C EST MOI 1234567890 etc...

Mon 16 November – Fri 20 November 00000

First reported on Monday, 16 November & logged in S.E. England with a fair signal, fading at night. The station continuously sending 00000, (long zeros). With monitoring it became clear that it was transmitting 24 hours a day non-stop & continued to do so until Friday, 20 November when the content of the message changed.

Friday 20 November – Wednesday, 02 December SALUT LES GARS C EST MOI 1234567890

By 1448z on the afternoon of Friday 20 November, the transmitted 00000 had been replaced by a text sentence - SALUT LES GARS C EST MOI 1234567890 which translates from the French to 'Hi guys it's me 1234567890'. By 1647z the same day the station had ceased transmitting.

Following a quiet weekend the transmission was back on 8134kHz by 1248z on Monday, 23 November sending SALUT LES GARS C EST MOI 1234567890 once more and this message was continually sent until Wednesday, 02 December.

Wednesday, 02 December - Friday, 04 December 0055005 & 000

By 1455z on Friday, 02 December the SALUT LES GARS message had been replaced by another group of numbers, this time 0055005, again using long zeros, which had been changed by 0240z on Friday, 04 December by three dashes, (either the letter O, the figures 000 using the short zero or perhaps just three dashes!). The signal was under a strong data modem signal for much of Friday, December 04 but was audible at times & the transmissions continued over the weekend.

Either sometime late on Sunday 06 December or early Monday 07 December the signal had again ceased transmissions, at any rate it was missing in the early hours of Monday 07 December & has not returned.

Conclusions

It's not possible to come to any definite conclusion as to the source of this mystery station, so any suggestions would be purely speculative. There are, however, a few points of interest that may be of help. The signal was monitored with the assistance of a number of online SDR receivers and was noted as audible over a good part of Europe, with Western Europe being the strongest. The signal into the UK & the continent faded out at night although it could still be heard on a couple of the German SDRs. The one SDR that gave the most consistent & strongest signal at night was at Iitti, Finland.

Given that the test message was in French, would that suggest a source In France? Possibly, although it should be noted that the apostrophe was omitted from the word c'est. Would a French operator omit the apostrophe? Perhaps that is permissible in Morse. The pattern of signal strengths noted would also not suggest France as the origin, although there are of course other countries where French is the native tongue.

The wide distribution of the signal would suggest a fairly powerful transmitter so we can possibly rule out a pirate or individual radio enthusiasts, plus the length and range of the transmissions would be unlikely to escape the attentions of the radio authorities.

It has been suggested that the transmissions were a military exercise, possibly for Radio Direction Finding or 'Fox Hunting' & from all the possibilities this would seem to be the most likely. Were the 00000 & 000 sequences a cheeky nod to the Russians? We will likely never know the truth...

Compiled from logs from AB, BR, PoSW & RNGB. Once again we are indebted to Ary, AB who not only alerted us to the transmissions but also kept us up to date with logs.

This station was noted by PoSW as a strange CW on 8134kHz

He wrote:

Not sure if this counts as a number station, certainly had numbers but not in the usual way:-

1-Dec-20, Tuesday:- 0716 UTC, 8134 kHz, slow CW, slow enough for me to read, a few words in the French language followed by numbers one to nine plus zero, "SALUT LES GARS C EST MOI 1 2 3 4 5 6 7 8 9 0", repeated over and over, long zero, reasonable strength signal.

Was still on when checked at several times during the day at 0915, 1325, 1500 and 1600 UTC. Nothing heard when checked at 1805.

2-Dec-20, Wednesday:- 0732 UTC, still on, same message, had changed when checked at 1130z, now sending a seven-figure group, "0055005", still on at 1345 and 1555z, nothing audible at 1740z.

3-Dec-20, Thursday:- 0725 UTC, still on with, "0055005", still on at 1215z, had changed again later in the day:- 1618 UTC, sending the letter "O", presumably from the same TX as the earlier signals, not audible at 1735z.

4-Dec-20, Friday:- 0714 UTC, still sending "O", also heard at 0950, 1110 and 1430z.

5-Dec-20, Saturday:- 0713 UTC, still "O", heard with weak signal at 1205 and 1540z.

6-Dec-20, Sunday:- Still sending "O" when checked at 0950 and 1120 UTC, the last appearance, nothing heard on this frequency since.

Thanks all for a splendid analysis of this station

UNID 2 – Bulgarian

This station first reported in our September 2020 Newsletter, (NL120), logged by André, (F5JBR), from 11 July 2020.

The time of the schedule has changed with daylight saving from 0700z (summer) to 0800z (winter) with a daily schedule on 4735kHz. This log from Ary, (AB).

4735 0800z (IP) 14 Nov UNID Morse CW AB SAT

VVVVV PROMRÖ = 14 11 = 1000 0600 0260 0810 1220 1200 0650 0280 0860 1290 1400 0620 0270 0820 1230 1600 0610 0220 0810 1220 1800 0380 0200 0490 0720 2000 0360 0200 0460 0650 2200 0320 0200 0390 0540 2400 0330 0200 0400 0540 0200 0330 0200 0400 0550 0400 0340 0200 0400 0560 0600 0290 0200 0370 0540 0800 0530 0210 0730 1120 = ABV =	VVVVV PROMRÖ = 14 11 = 1000 0600 0260 0810 1220 1200 0650 0280 0860 1290 1400 0620 0270 0820 1230 1600 0610 0220 0810 1220 1800 0380 0200 0490 0720 2000 0360 0200 0460 0650 2200 0320 0200 0390 0540 2400 0330 0200 0400 0540 0200 0330 0200 0400 0550 0400 0340 0200 0400 0560 0600 0290 0200 0370 0540 0800 0530 0210 0730 1120 = AR
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M01/1 XIV MCW, hand (197 sched for Nov - Feb). Will change to M01/2 sched ID 463 for Mar - Apr.

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 a number times in Nov / Dec)

November 2020:

4490	2000z	03 Nov	'197' 246 30 == 65040 ... 98353 == Fair/Good, med-fast. One error grp05 34155 34159	BR	TUE
	2000z	05 Nov	'197' 543 = 30 == 52313 ... 04652 == Good, slow. Two errors noted. Format 4	BR	THU
	2000z	10 Nov	'197' 233 30 == 74407 ... 59154 == Good, fast. Several errors noted. Ended 30 39 000	BR	TUE
	2000z	12 Nov	'197' 300 30 == 85680 ... 90232 == Good, fast. Excellent Morse	BR/HFD	THU
	2000z	17 Nov	'197' 217 = 30 == 88688 ... 24304 == Good, med-fast. No errors	Format 4 BR	TUE
	2000z	19 Nov	'197' 773 30 == 23672 ... 99456 == Fair/Good, fast. Excellent Morse. No errors	BR	THU
	2000z	24 Nov	'197' 735 30 == 88286 ... 80213 == Good, fast. Several errors noted. Extra fig. added to grp	BR	TUE
	2002z	26 Nov	'197' 903 30 == 49883 ... 96341 == Fair/Good, fast. Late start with shaky tone. Error grp25	BR	THU
5320	1800z	03 Nov	'197' 435 30 == 48265 ... 99839 == Sent 31 grps.	AB/HFD	TUE
	1800z	05 Nov	'197' 678 = 30 == Weak, slow. Ending DK sent as 876 876	Format 4 BR	THU
	1800z	12 Nov	'197' 444 30 == 33226 ... 28693 == Weak/Fair, fast. Excellent Morse. No noted errors	BR	THU
	1800z	17 Nov	'197' 310 = 30 == 11821 ... 24846 == Weak/Fair, med-fast. Difficult copy at times	Format 4 BR	TUE
	1800z	19 Nov	'197' Very weak - No useful copy	BR	THU
	1800z	24 Nov	'197' 418 30 == 65831 ... 12896 == Fair, fast. With QSB. Excellent Morse. No noted errors	BR	TUE
	1800z	26 Nov	NRH	BR	THU
5465	0700z	22 Nov	'197' 661 30 == ... 30	QSB present HFD	SUN
5810	1502z	07 Nov	NRH	BR	SAT
	1500z	14 Nov	'197' 813 30 == 02509 ... 81300 == Fair/Good, fast. Excellent Morse. No errors	BR/HFD	SAT
	1500z	21 Nov	'197' 170 30 == 51088 ... 39602 == Fair/Good, slow. Several errors. Format 4 (Ending only)	BR	SAT
	1500z	28 Nov	'197' 547 30 == 07170 ... 53399 == Fair/Good, fast. Error grp04 42070 02070	BR	SAT

December 2020:

4490	2000z	01 Dec	'197' 991 30 == 31068 ... 34155 ==	Good, fast. Hi noise. Error grps26/27		BR	TUE
	2000z	03 Dec	'197' 449 30 == 53723 ... 8523 . ==	Weak/Fair, fast. Hi noise. Poor copy		BR	THU
	2000z	08 Dec	'197' 296 = 30 == 66897 ==	Weak/Fair, fast. Hi noise & QSB. Poor copy	Format 4	BR	TUE
	2000z	10 Dec	NRH			BR	THU
	2000z	15 Dec	'197' 737 30 == 21868 ... 39463 ==	Fair, med-fast. Poor copy due to high local noise & QSB		BR	TUE
	2000z	17 Dec	'197' 532 30 == 99545 ... 12483 ==	Fair/good, very fast. Numerous errors. Incomplete grps.		BR	THU
	2000z	29 Dec	'197' 764 30 == 00588 ... 14339 ==	Fair/good, fast. Several errors noted otherwise good		BR	TUE
5320	1800z	01 Dec	'197' Weak. No useful copy			BR	TUE
	1800z	03 Dec	'197' Weak. No useful copy			BR	THU
	1800z	08 Dec	NRH			BR	TUE
	1800z	10 Dec	'197' Fair sig. under strong STANAG on freq. No useful copy			BR	THU
	1800z	17 Dec	'197' 541 30 == 38333 ... 66400 ==	Fair/Good, very fast. Numerous errors. Incomplete grps.		BR	THU
	1800z	22 Dec	'197' 074 30 == 98195 ==	Fair/weak, med-fast. Poor copy faded towards end of msg.		BR	TUE
	1800z	31 Dec	'197' Very weak - No useful copy			BR	THU
5465	0700z	13 Dec	'197' 197 30 == 58519 ... 88296 ==	Mostly sent as one string with no spaces. Errors noted		AB	SUN
5810	1500z	05 Dec	'197' 390 = 30 == 98942 ... 53750 ==	Fair, slow. High noise. No noted errors	Format 4	BR	SAT
	1500z	12 Dec	'197' 411 30 == 30271 ... 56050 ==	Fair, fast. Error grp26/27. Op. resent from grp25		BR	SAT
	1500z	19 Dec	'197' 317 30 == 20058 ... 55836 ==	Fair, very fast. Poor copy due to high local noise & QSB		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.

No reports

M01b

Last heard Friday 29 May 2020 - Appears to have ceased. M01b will now be omitted from all future newsletters.

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 Scheds

15831/14431/13431	0100/20/40z	03 Nov	844 1 (440 192)	54678 51305 ... 40513 13289	(Via SDR South Korea)	Danix	TUE
16275/15975/14675	0010/30/50z	02 Nov	296 1 (594 182)	02943 33562 ... 78332 68981	(Via SDR South Korea)	Danix	MON
		16 Nov	296 1 (9753 140)	86600 89931 ... 22204 51640	(Via SDR Khabarovsk)	Danix	MON
		30 Nov	296 1 (465 126)	15545 09269 ... 01262 50977	(Via SDR Khabarovsk)	Danix	MON
13447	0030z	28 Dec	941 000	Strong	(Via SDR Nagano, Japan)	dMHz	MON
14947/13447/000	0010/30/50z	28 Dec	941 000			HFD	MON

European M12 Logs

November 2020: New scheds in bold type

6859/7459/7959	2200/20/40z	06 Nov	849 1 (545 32)	54003 83844....		BR/HFD	FRI
	2200/20/40z	07 Nov	849 1 (545 32)	54003 83844....		BR	SAT
	2200/20/40z	13 Nov	849 1 (545 32)	54003 83844....		BR	FRI
	2200/20/40z	14 Nov	849 1 (545 32)	54003 83844....		BR	SAT
	2200/20/40z	20 Nov	849 1 (582 109)	40072 14819....		BR	FRI
	2200/20/40z	21 Nov	849 1 (582 109)	40072 14819....		BR	SAT
	2200/20/40z	27 Nov	849 1 (481 .01)	Multiple path reception. Unable to read		BR	FRI
6874/8074/---	0030/0050/0110z	03 Nov	803 000			Danix	TUE
6937/5737/4537	2210/30/50z	02 Nov	975 000			BR	MON
	2210/30/50z	05 Nov	975 000			BR	THU
	2210/30/50z	12 Nov	975 000			BR	THU
	2210/30/50z	16 Nov	975 1 (7704 54)	27196 68825....		BR	MON
	2210/30/50z	26 Nov	975 000			BR	THU
	2210/30/50z	30 Nov	975 000			BR	MON
7536/6836/---	2050/2110/2130z	06 Nov	581 000			BR	FRI
	2050/2110/2130z	11 Nov	581 000			HFD	WED
	2050/2110/2130z	18 Nov	581 000			BR	WED
	2050/2110/2130z	25 Nov	581 000			BR	WED

8119/9119/10419	0600/20/40z	03 Nov	114 1		HFD	TUE
9317/10484/11552	0530/0550/0610z	03 Nov	135 1		HFD	TUE
10446/9046/---	2300/20/40z	02 Nov	392 000		Danix	MON
	2300/20/40z	16 Nov	392 000		BR	MON
	2300/20/40z	30 Nov	392 000		BR	MON
11435/10598/9327	1810/30/50z	04 Nov	938 1		HFD	WED
	1810/30/50z	11 Nov	938 1 Very weak – No useful copy		BR	WED
	1810/30/50z	18 Nov	938 1 (2027 72) 65713 66170....		BR	WED
12162/11566/10711	1710/30/50z	04 Nov	546 1	(Via SDR Russia)	HFD	WED
	1700/20/40z	05 Nov	546 1 (3946 107) 59450 87079.... (Only 10711kHz audible)		BR	THU
	1800/20/40z	05 Nov	546 1 (5769 110) 28943 90722....		BR/HFD	THU
	1800/20/40z	19 Nov	NRH		BR	THU
	1800/20/40z	26 Nov	NRH		BR	THU
14377/13461/12114	1300/20/40z	02 Nov	317 1 (6933 98) 17568 40344 ... 35092 72709 000 000		Gert/HFD	MON
	1300/20/40z	09 Nov	317 1 (8668 99) 95078 69298....		BR	MON
	1200/20/40z	10 Nov	317 1 (6098 97) 35266 60188 ... 72805 31005 000 000		AB	TUE
	2000/20/40z	12 Nov	317 1	(Via SDR Russia)	HFD	THU
	1300/20/40z	30 Nov	317 1 (3961 104) 18533 91047....		BR	MON
17432/18532/19132	0800/20/40z	01 Nov	451 1 (525 121) 04065 11259 ... 58730 73757 000 000		AB/HFD	SUN

December 2020:

5832/6832/7732	2200/20/40z	04 Dec	887 000		BR	FRI
	2200/20/40z	05 Dec	887 000		BR	SAT
	2200/20/40z	12 Dec	887 000		BR	SAT
	2200/20/40z	18 Dec	887 1 (9725 56) 78546 21442....		BR	FRI
	2200/20/40z	19 Dec	887 1 (9725 56) 78546 21442....		BR/HFD	SAT
6908/5808/---	2050/2110/2130z	02 Dec	985 000		HFD	WED
	2050/2110/2130z	04 Dec	985 000		BR	FRI
	2050/2110/2130z	09 Dec	985 000		BR	WED
	2050/2110/2130z	11 Dec	985 000		BR	FRI
	2050/2110/2130z	16 Dec	985 000		BR	WED
6937/5737/4537	2210/30/50z	10 Dec	975 1 (174 72) 92456 82615....		BR	THU
	2210/30/50z	14 Dec	975 000		BR	MON
	2210/30/50z	16 Dec	975 000		BR	WED
	2210/30/50z	17 Dec	975 000		dMHz/HFD	THU
	2210/30/50z	24 Dec	975 1 (9508 81) 59093 05372....		BR	THU
	2210/30/50z	31 Dec	975 000		Gert	THU
11435/10598/9327	1810/30/50z	02 Dec	938 1 Poor signals – No useful copy		BR	WED
12162/11566/10711	1700/20/40z	17 Dec	546 1		HFD	THU
14377/13461/12114	1200/20/40z	01 Dec	317 1 (5412 96) 81109 15210 ... 82389 39174 000 000		Gert/HFD	TUE
	1300/20/40z	07 Dec	317 1 (7838 99) 50326 75812....		BR	MON
	1300/20/40z	11 Dec	317 1 (9878 58) 97117 61009....		BR	FRI
	1300/20/40z	14 Dec	317 1 (4824 95) 81702 42036....		BR	MON
	1300/20/40z	21 Dec	317 1 (7226 99) 26568 92910 ... 57123 64345 000 000		Gert	MON
	1200/20/40z	22 Dec	317 1 (1524 95) 23800 72753 ... 07526 69380 000 000		Gert	TUE
	1300/20/40z	28 Dec	317 1 (9926 96) 42487 58724....		BR	MON
	1200/20/40z	29 Dec	317 1 (4954 99) 19247 86602 ... 79492 50110 000 000		Gert	TUE
16234/17434/18234	0800z/20/40z	16 Dec	242 1 (197 137) 54571 69817 ... 15208 03030 000 000		Gert	WED

M12 17432/18532/19132kHz 0800/0820/0840z 01 Nov 2020
451 451 451 1 (R2m) 525 121 525 121
04065 11259 03748 11972 17907 53012 36064 98122 72615 81104 92063 96839 82801 39437 34808 74544 67741 18590 37875 89325 24957 69975 63689 68018 18689 24990 52554 96337 12026 36506 09110 86424 68811 84419 86351 07997 64367 78294 52809 21366 84669 22194 83369 38059 63515 83880 20729 68563 12966 86031 65880 12079 10590 43959 75754 64786 85280 86181 11676 48260 16448 97666 20998 69691 79117 03799 04258 40568 75440 21433 66957 76853 13877 85552 96707 62373 03624 93348 06312 24443 89679 19617 31064 91421 39881 87354 50737 49407 03856 80195 49421 69941 28733 21767 08105 32626 50119 61426 06592 21745 61086 60482 54453 73005 32089 75994 07814 60559 74016 23916 64716 71779 71316 66534 01168 72793 92678 19342 53460 58730 73757 000 000
<i>Courtesy AB</i>

M12 14377/13461/12114kHz 1300/1320/1340z 21 Dec 2020
317 317 317 1 (R2m) 7226 99 7226 99
26568 92910 49356 52592 20100 03629 80021 70275 45429 44839 19792 05449 43118 74528 21636 19446 66983 88695 95674 07254 10797 13883 51142 43597 47522 81348 46990 75229 84672 43650 14033 35831 92896 26166 04374 81547 60398 85301 73570 39622 49002 96866 37709 71515 15088 87992 78391 17512 50013 63277 07617 61430 85159 42148 43850 33783 32213 62830 71562 38441 76242 38387 87536 13511 51184 03536 71623 06392 37973 71838 66070 09008 06797 10048 33277 97365 21252 07028 38974 03956 89729 11739 72811 69430 13083 72758 68509 33441 16804 80696 78786 74417 07633 41148 31667 49779 30052 57123 64345 000 000
<i>Courtesy Gert</i>

M12 16275/15975/14675kHz 0010/0030/0050z 30 Nov 2020	
296 296 296 1 (R2m) 465 126 465 126	
15545 09269 03247 97670 93766 64571 29112 11137 47467 06529 99209 55530 83750 92026 59967 10039 25832 40331 91818 04098 62160 62638 07385 95667 79583 41781 56605 63183 98223 24503 64297 80278 01435 60829 29244 10800 95646 45373 15995 50813 53084 04167 30961 01468 04576 29611 52433 62748 31798 32270 62122 61426 17807 96294 13695 10437 19983 66726 00373 08902 12085 69984 66160 98300 51201 52404 52845 90393 08215 38819 93112 87884 33073 47283 50120 66655 71343 93578 07973 85558 06478 50837 88373 97490 69730 61284 95778 70239 39732 23059 09817 13921 10027 08513 31184 53521 06756 04300 92952 04344 29883 51172 93243 57158 28057 33727 63972 53158 45462 69875 66756 74238 44992 27257 54356 49590 76103 43289 49125 43196 70189 63838 21348 47534 01262 50977 000 000	
<i>Courtesy Danix</i>	

M12 16234/17434/18234kHz 0800/0820/0840z 16 Dec 2020	
242 242 242 1 (R2m) 197 137 197 137	
54571 69817 33595 97741 45213 95981 43500 64826 26201 55186 72305 07225 79137 25962 72911 73462 97085 06059 98236 43883 02712 23144 82292 64799 42704 74893 57977 28076 94510 57203 46521 06571 06178 23299 15026 11907 04913 49690 33473 39384 92008 33010 45452 91032 04886 32574 26977 26620 59266 98782 41729 49031 09832 82588 82746 68581 61976 85219 00899 91049 86519 94313 06461 73537 49626 74758 11035 02791 67362 51986 54737 49050 23526 10853 31127 78821 03996 22924 58145 12085 71825 87546 51076 21414 85424 42565 34715 53557 31722 61917 24112 13688 62990 96244 36080 86449 72494 99390 47735 30103 14209 85846 68605 30528 33043 93038 33140 82377 72228 67307 50051 88803 09216 41025 78956 77050 20411 39454 56719 53137 46836 51434 85674 89528 05053 33519 00936 93857 87484 39131 11570 83411 20634 87952 75965 15208 03030 000 000	
<i>Courtesy Gert</i>	

M14 IA MCW / ICW Short 0

All the Family 1a training schedules ceased at the end of November. This included the regular Saturday 0800z & 0900z schedules along with the Tuesday 1820z & Wednesday 1920z, which had been present since 2003z.

We hope this is not another permanent closure of a set of Morse numbers transmissions, but it is not looking good. Perhaps they will return in the New Year.

Thanks to AB, ER, HFD & RNGB for this above information & comments – and for all their M14 logs.

November 2020:

4650	0900z	07 Nov	523 (183 31) = 78123 45781 ... 56789 74351 = 173 31 00000	(SDR Poland)	ER	SAT
	0900z	14 Nov	523 (191 32) = 16432....		HFD	SAT
4730	0800z	07 Nov	523 (183 31) = 78123 45781 ... 56789 74351 = 173 31 00000	(SDR Poland)	ER	SAT
	0800z	14 Nov	523 (191 32) = 16432 76541 ... 76345 63190 = 191 32 00000	MCW	AB/HFD	SAT
17458	0930z	10 Nov	617 00000	(SDR Poland)	ER/HFD	TUE
	0930z	25 Nov	617 00000	(SDR Utwente)	ER	WED

December 2020:

On 08 December Ary, (AB), logged an M14 that had been sent instead of the expected F06(a) transmission.

12214	0700z	08 Dec	910 (326 45) = 01299 59208 ... 91693 44827 = 326 45 00000	(F06(a) expected)	AB	TUE
17458	0930z	10 Dec	617 00000	(SDR Utwente)	ER	THU

M14 4730kHz 0800z 14 November 2020
523 523 523 00000
523 (R4m) 191 191 32 32 ==
16432 76541 81490 62311 72985 76598 45631 67854 65419 78648 76505 54271 65390 72549 67538 65345 67431 67543 98732 48329 34731 83857 73981 65392 64231 23612 72456 72319 74274 72435 76345 63190 ==
191 191 32 32 00000
<i>Courtesy AB</i>

M14 12214kHz 0700z 08 December 2020
910 (R4m) 326 326 45 45 ==
01299 59208 60210 63919 08101 42969 40936 43066 11026 41499 92853 97720 53276 65905 21961 85185 32963 39722 85849 68010 10762 80963 22709 52735 72365 58096 49946 76765 31644 49630 80883 85595 85475 62005 32955 67542 56174 85471 25844 38182 82446 92642 92999 91693 44827 =
326 326 45 45 00000
<i>Courtesy AB</i>

M23 O ICW

The sequence of schedules first logged on 11 October ceased on Thursday, 29 October but was found again on the following Tuesday, 03 November.

This is the first time that calls do not conform to the previously rigid format of three numbers, & this combined with the number of different daily schedules & a transmission span covering nearly two months would seem to indicate a change in format for M23.

Transmissions from 03 November continued with the established schedules as logged from Tuesday, 20 October until Thursday, 26 November. All schedules failed to appear from Friday, 27 November.

Daily Schedule of Transmissions Logged from 03 November – 26 November (All Monitors)

Time * (UTC)	Frequency (KHz)	Duration (Minutes)	Call
0758 – 0828	10184	30	OTE
0858 – 0918z	10184	20	ST3
1543 - 1613	8166	30	SET
1628 - 1658	8166	30	SET
1817 – 1832	5345	15	3OS
1858 – 1913	5345	15	3OS

* Standard timing are shown in the chart. Actual times sometimes varied by + - 1 minute.

M23 was discovered active again by Jean-Paul, (JPL), on Monday, 21 December sending the call ST3 on 5345kHz at 1909z (in progress), which was found to be a regular daily schedule from 1856 – 1916z. JP was monitoring on the Novosibirsk SDR with a strong signal. A further transmission was found by Ary, AB, using the same frequency & call at 0856z on 29 December.

Daily Schedule of Transmissions Logged from 21 December – 30 December (AB, JPL)

Time * (UTC)	Frequency (KHz)	Duration (Minutes)	Call
0856 – 0828	5345	20	ST3
0858 – 0918z	5345	20	ST3

These two schedules are also being logged into January 2021 & the continuing transmissions from M23 will be covered in the next newsletter.

Regarding 5345kHz Peter of Saffron Walden offers:

This slow Morse station sending “3OS” starting at 1818 UTC and again at 1858 UTC for a duration of fifteen minutes had been heard daily in October but appeared to cease at the end of that month since there was no sign of it on 30-Oct. Perhaps on that occasion propagation was bad so that the signal was not “making the trip”, or perhaps it took a break but whatever the case it was back again in November:-

2-Nov-20, Monday:- 1822 UTC, M23 with “3OS” in progress, good signal, stopped at 1832:40s UTC
1857:43s UTC, starting up again.

Throughout November both transmissions appeared daily, starting just a little bit earlier as the days went by, sometimes a strong signal and sometimes so weak as to be only just readable.

The final appearance appeared to be on the last Thursday in November:-

26-Nov-20:- 1817 UTC, just after, starting up, weak signal.

Nothing heard on the remaining days of the month and has not been heard in December.

Update:- M23 CW on 5345 active again in December:-

17-Dec-20, Thursday:- 0858 UTC, 5345 kHz, surprised to find slow CW sending “ST3” over and over, looks like the reports of the demise of M23 have been somewhat exaggerated,

strong signal, still on at 0915z, was about to give up monitoring in order to attend to the tasks of the day when it stopped at around 0916:25s UTC.

Checked 5345 several times during the day but nothing further heard until the evening:-

1858 UTC, very weak CW, only just detectable, appeared to stop shortly after 1916z.

18-Dec-20, Friday:- 0856:30s UTC, in at the start, “ST3, strong signal, stopped at 0916:25s UTC.

1911 UTC:- almost forgot to listen, in progress, much stronger signal than yesterday, stopped at 1916:25s.

19-Dec-20, Saturday:- 0856:25s UTC approx, starting up with “ST3”, strong signal, stopped 0916:23s UTC.

1856:30s approx, weak signal, stopped 1916:24s UTC.

A daily schedule here, two transmissions, one starting a bit before 0857z with a strong signal and the other firing up before 1857z considerably weaker.

Has not been heard at other times of the day when 5345 has been monitored from around 0630 to 2200 UTC.

Has appeared daily during the rest of December including Christmas Day - or at least the

first transmission was in progress with a strong signal when monitored at around 0905z on 25-Dec.

Thanks to Ary, Brian, Daniel, JPL and PoSW for logs of this 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 - 1301z	01 Dec	Mardi-Leçon	22-2/1 Codé	22-2/2 Clair,	22-2/3 Codé,	22-2/4 Clair (600 grps/hr)	BR	TUE
1230 - 1256z	03 Dec	Jeudi- Leçon	24-2/1 Codé,	24-2/2 Clair,	24-2/3 Codé,	24-2/4 Clair (840 grps/hr)	BR	THU
1230 - 1303z	04 Dec	Vendredi- Leçon	25-2/1 Codé,	25-2/2 Clair,	25-2/3 Codé,	25-2/4 Clair (960 grps/hr)	BR	FRI

3881//6825

0918z	21 Nov	VVV VVV VVV DE FAV22 FAV22 FAV22 QLH 3881/6825 KHZ SAMEDI 4/LEÇON NUMÉRO 1/2 VITESSE 600 CODÉ = SAMEDI 4/LEÇON NUMÉRO 2/2 VITESSE 600 CLAIR =	AB	SAT
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0920z	18 Dec	VVV VVV VVV DE FAV22 FAV22 FAV22 QLH 3881/6825 KHZ	AB	FRI
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VENDREDI-LEÇON NUMÉRO 15-1/1 VITESSE 960 CODÉ =
HBCJX NWHSF ATSGQ JKWLA MQPOI AKOSL QJNUR DTGSF CXHWU ZJQKA
GDJSU 45632 ZLJSK XNBWJ 76018 HNDJX CHTYD QJKAL WNKJQ MALIK
IKJQN CXFDR WHNQJ AKJQL KIJHD BXVSF ZTAYH SJNHJ RYGDW DFSGD
JWNYH FKSKQ LAMPO BHODF XHOSL EYTSF 35263 HSNWJ QKAJU OLAPM
HNDJS VWGRT SHQJA 6537/ HBXJD WNQJA UHGDT GDOLQ GBCHX WNQJU
CGDHA JQKAO LQMAO JNVGD XCWVQ HBWJA UHYGT RFSJQ GBCHX WNQJA
QGDJS WNHYR JKSLQ AOLKJ BCJFG XVDGR SYHZU OLQJH BCJOD XCSLA
WLWLW DGBUS 53762 QHNWJ AOLJK FGCHS GKQLZ OLQMW BXNDG ZRSDO
LAMPK HBCJD XIJXK UJSOK 65038 MAHDG XCFJK QLAJU HDJSK QMAPI
UJDBG XGDVR ZTGSU AJQKL PAMKF IAOHO DGXVS HNWOR ZTSFA KLQMA
OKIHU YGFTR 10964 BCNDH XJQKE SIKAP UJDLQ BWNOR ZYHSI QKALM
WMAPL WNCVF PMAUJ YHTGR CGDTR 45393 NXHRT +

VENDREDI-LEÇON NUMÉRO 15-1/2 VITESSE 960 CLAIR =
POUR LES MILITAIRES DU RANG QUI SOUHAITENT DEVENIR SOUS-OFFICIER, IL Y A DEUX
POSSIBILITÉS : PASSER PAR LA VOIE SEMI-DIRECTE, OU PAR LE RECRUTEMENT RANG. LA VOIE
SEMI-DIRECTE EST AU CŒUR DU RECRUTEMENT DES SOUS-OFFICIERS CAR BIEN QUE PLUS
EXIGEANTE EN DÉBUT DE PARCOURS, ELLE OUVRE LARGEMENT LES PERSPECTIVES DES
CARRIÈRES JUSQU'AUX GRADES LES PLUS ÉLEVÉS DU CORPS DES SOUS-OFFICIERS. COMME DANS
TOUS LES RECRUTEMENTS, PLUS ON EST RECRUTÉ JEUNE, PLUS ON A LA POSSIBILITÉ DE
DÉROULER UN PARCOURS PROFESSIONNEL ATTRACTIF ET COMPLET, SOULIGNE LE LIEUTENANT-
COLONEL, DU BPRH LA DRHAT. +

VENDREDI-LEÇON NUÉRMO 15-1/3 VITESSE 960 CODÉ =
GFCDX QHNWJ AUJDT 35627 9017/ HNXVW SHQJA ZUHDT SJKQM PLIKB
CGCFD XBWCD QHJAK QKOLA YHDGR HDFSU ZKQLP LSHGR PABHF PAHDF
XHBFG WNQJY TGDFC XHSYR 68393 BWJFY CHQJZ JWNHF UJAFQ LDKPD
HSPLB CHFTR WNHDU AJIDO SKQGR ZHQJC BXJQK WLAJU UTYDF POGUT
OFGCR XOKQL SJUTC 65381 YHBIJ KQGTD 563// HBCJR QKALP GBCHR
QKAJU YHDOQ LPMAU HBCGV XNWSH QJHBT DUJZI QKAOH GBCOQ BWNHT
MLAUH VBDTR SGQHA HWJQK AKLPA BHCYT FGSUJ HWXCD SHVWC XJDUY
HBKLM MQNBH XHTGF SHQUJ HNVFR 54783 MPJUG HXCDY SJQIA NVGDY
QHVVV XHQJR SUJAO QMAHJ DHBVX WHFTR SJKAL OQFGO BXJGY 96740
YHDVC XVFRT /5637 HWBXI AKQLP MQBGT CVXJQ ZUJFK SKQMA MLGBH
DFXRS QHAUY DHSJR KLQTG VXHER 46387 VGDHU BJDFR WBQJH LMQHM
VBXHT DFSJH HSIES CWVXH CJHQL MPJKY HGBVT CFDDJ +

VENDREDI-LEÇON NUMÉRO 15-1/4 VITESSE 960 CLAIR =
ORGANISÉE EN NORVÈGE TOUS LES 2 ANS, CETTE MANŒVRE MULTINATIONALE INTERARMÉES
DE NIVEAU OTAN OFFRE UN CADRE D'ENTRAÎNEMENT ET DES CONDITIONS EXTRÊMES UNIQUES
EN EUROPE. ENVIRON 15000 HOMMES ET PLUS DE 14 NATIONS Y PARTICIPENT. NORVÈGE, GRANDE-
BRETAGNE, ALLEMAGNE, SUÈDE, FINLANDE, CANADA, BELGIQUE, ETC...., TOUS ONT DÉTACHÉ
POUR L'OCCASION DES UNITÉS SPÉCIALISÉES. C'EST CONFIRMÉ ET RECONFIRMÉ: LE PONT DE
SKOGSTAD VIENT D'ÊTRE DÉTRUIT PAR L'ENNEMI. IL FAUT REVOIR NOTRE MANŒVRE, ANNONCE
LE CHEF DE BATAILLON PIERRE LOKNER, CHEF DES OPÉRATIONS. DANS LA TENTE DU POSTE DE
COMMANDEMENT, SOUS LA LUMIÈRE DES NÉONS, C'EST L'EFFERVESCENCE. +

CQ DE FAV22 VA

M51b

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

3881//6825

0611z	21 Nov	Non-stop 5-character groups composed of M51a messages	AB	SAT
0836z	18 Dec	Non-stop 5-character groups composed of M51a messages	AB	FRI
1023z	18 Dec	Non-stop 5-character groups composed of M51a messages	AB	FRI

The spaces between the messages were not transmitted but entered afterwards.

YUTGD SGQHA ZBWHP QMAOL KQIAH DVXCW GERSF HQJUK XNWHR 37628
PMLAY DGCXV WNHYE XYCJV DHSRZ AYHSF QUJWC XLQKQ WVDFT UJXVE
AOLCG WUJFO QLKAY 45201 XBWHR SYHFU AJLQO WBCVF DOLSM TGCXV
WNQJA 28927 CVDJR TYDIO QLKAG CBVXH QXWRF ZJQKL APMWN OLHYT
XBVXH SHNWJ QKALP MQJNH BCVFR STGZU QJNAI QKALP QMAYN UYTFG
CVXGR CWOLA 37287 XBWNG SHQUJ ZUJSK WXSCG CLPMA ZNJKU YHNBG
XBCFR SJKAY LCGDO WPMJH NXCDT ZUJSF AWJKL QPMAU JKQCV YHMLO
VCGRT SDZJK AHNBX 36829 WNBGD RTSGZ 25617 XVCHD WJKQI UJHTG
BCNDR SFZCW QHJKA LWOKY NCGRF XFLFL DFERS MFMFM

SHQJA WNXJD QKAIL QMAPO BHJRT XVSJQ WJGDH EUZJD CNFJT SJZKA
YHDSJ JQKEU DIKOZ KLZSG 36276 10984 JGDHS WJURY PEUSH ZUJGD
SHWBC XVSHE ZUJAI QKDFG HCBVJ SKRYF CBXVD 46359 UJHDI KSLOP
JHFGC GFCBX NJETD SHZUJ AJKSI QKBCV FGRYD SXXJN OHFGV 45287
HBCGF XNWJR DUJYG CVXKJ HSGZY WBZAJ KAI OF PAMJK UJBGT CVXJS
ZUJKQ 27108 HAJKR GBXJS AJSUK QKOAL PMAYH JQKZU

HNDJS XVWBZ QKPAH DJNCJ RTSHZ UJQKZ 63829 UJDGC VXXZO ALKFG
 JKDUJ NXVDG ZUJDL SMQOZ SBXCF DGH LR DGSHZ WJQKR DG VFN CNXJR
 UJDBC OLRTS WJQKA ZOKDL 46372 BXNWJ SJQKZ AOLPF GCBXJ SKZUY
 PMJHF BCVRT DYZKP SKZPI KUJFH XVCGC XHNDJ RUGHS ZKQMP ZUJDG
 OYHFG CBXKR SGZUJ SKQIK ZUJPS HXBCH NBVJT 84735 HBCJD XNSJR
 PJBLR DMSKN WNQKP DHBCK RTDGS PLHJR DGCJZ SJZUC VXXKH

etc.

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).

3099	4018	5029	6576	7062	8890
3245	4220	5101	6753	7889	
3509	4250	5133	6829		
3610	4256	5138	6842		
3786	4315	5156			
	4321	5201			
	4355	5248			
	4421	5257			
	4537	5315			
	4541	5328			
	4545	5457			
	4640	5479			
	4667.75	5516			
	4754	5519			
	4775	5555			
	4847	5656			
	4859	5666			
		5680			
		5712			
		5750			

New Scheds for Nov / Dec 2020:

From logs submitted from JPL

3842//4135 New Round Slip for this frequency First heard 21 December V GFDH (x3) DE 5J9K (x2)

Chart of M89 Freq & Call signs heard in Nov / Dec 2020

New Scheds shown in Bold Type

From logs submitted from JPL

<u>Freq in KHz</u>	<u>Call Slip</u>
3595//4888	V QYE2 (x3) DE 9WV (x2)
3595//4888//6824	V QYE2 (x3) DE 9WV (x2)
3595//4888//6824//8182	V QYE2 (x3) DE 9WV (x2)
3595//4888//8182	V QYE2 (x3) DE 9WV (x2)
3596//NRH	V QYE2 (x3) DE 9WV (x2)
3596//4888	V QYE2 (x3) DE 9WV (x2)
3842//NRH	V K9S3 (x3) DE Q5R2 (x2)
3842//NRH	V 8FBH (x3) DE 5J9K (x2)
3842//NRH	V 8FDH (x3) DE 5J9K (x2)
3842//NRH	V GFDH (x3) DE 5J9K (x2)
3850//4860//5640//6320//6840	Q2M (x3) DE NYZ (x2) (R5) QSA ? K (R5)
4720//5150	VVV WNF (x3) DE FXM (x2)

<u>Freq in kHz</u>	<u>Call Slip</u>
4888//NRH	V QYE2 (x3) DE 9WV (x2)
4898//NRH	V QWS1 (x3) DE 87DS (x2)
5640//6820//6840//8290//10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA
5640//6820//6840//8290//8360//10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA
5858//NRH	V 8FDH (x3) DE 5J9K (x2)
5858//NRH	V K9S3 (x3) DE Q5R2 (x2)
5858//NRH	V GFDH (x3) DE 5J9K (x2)
6824//8182	V QYE2 (x3) DE 9WV (x2)
7620//8350	V WNF(x3) DE FXM (x2) (R5) (Hand Sent)

Courtesy JPL

3509	SAL	1404z (IP) 28 Dec	VVV EJR DE SAL	(Remote tuner Hong Kong)	JPL	MON
4220	6D8V	1146z (IP) 15 Dec	RMKS 6D8V TO CM7B K	(Remote tuner Hong Kong)	JPL	TUE
4250	L2HQ	1149z (IP) 28 Dec	NR 003 CK 99 67 1228 EEEE KCL8 DE L2HQ CL K NR 001/EX 1951 RMKS 5763 TO 5973 BT KC5/B6L	(Remote tuner Hong Kong)	JPL	MON

4315		1136z (IP) 21 Nov	IEC BT 4162 AR K (IP – Exercise related) NR 2038 CK 91 09 1121 1930 RMKS BT 7425 TO 7520 AR K	(Remote tuner Hong Kong)	JPL	SAT
4321		1142z (IP) 09 Nov	R IEC BT 2345 34 AR (Exercise related)	(Remote tuner Hong Kong)	JPL	MON
4640		1206z (IP) 14 Nov	MSG NR .41 CK 91 18 1114 1925 RMKS 6841 TO 7606 K	(Remote tuner Hong Kong)	JPL	SAT
4667.75		1115z (IP) 30 Dec	C3U/R7 AR BT NR 8166 CK 200 22 1230 1900 RMKS 7946 TO 7987 BT BT	(Remote tuner Japan)	JPL	WED
4754		1130z (IP) 09 Nov	FF NR 51/EX 1929 RMKS CQ BT E3Q4/V8G5 AR DE AS23 QSL TIME 0930 AR DE ZXCA QSL TIME 1930 HR WK NR 210 AR DE Z85S QSL TIME 1930 HR WK NR 118 AR	(Remote tuner Hong Kong)	JPL	MON
4775		1148z (IP) 24 Nov	Various calls to outstations FOW4, FGW4, POE7, SDU8, GTEK, ZTER, SDF4, INMK, KKR4	(Remote tuner Shenyang)	JPL	TUE
4847	CT4X	1122z (IP) 11 Dec 1125z (IP) 15 Dec	VVV BTF3 DE C4TX K Various Calls – Z4HG, 2F8D, BTF3	(Remote tuner Hong Kong) (Remote tuner Hong Kong)	JPL JPL	FRI TUE
4888	9WFV	1120z (IP) 05 Dec	V QYE2 (x3) DE 9WFV (x2) (IP - Cont'd) (// 3595) CK 91 43 1205 1920 RMKS 6323 TO 8644 669. 6863 BT	(Remote tuner Novosibirsk)	JPL	SAT
5029	MPU7	1115z (IP) 30 Dec	8IC DE MPU7 NR 3239 CK 91 96 1230 1916 RMKS BT 2420 TO 2986 AR K K	(Remote tuner Japan)	JPL	WED
5101		0050z (IP) 19 Nov	IEC BT 4532 4851 AR K (Exercise related) HR WK NR 1029 K	(Remote tuner Shenyang)	JPL	THU
5133	NAP8	1414z (IP) 28 Dec	IEC BT S4QN AR K (Exercise related)	(Remote tuner Hong Kong)	JPL	MON
5248		1242z (IP) 07 Nov	9950 AR (IP – 1303z) (Probably IEC Code – Exercise related)	(Remote tuner Hong Kong)	JPL	SAT
		1632z (IP) 18 Nov	NR 460 NIL NIL SK (1304z) 596/XX070/5765/03/70/77/X870A/COMM/9950 AR NOTE: Suspect this frequency is linked to 8642kHz where similar traffic was logged on 15 Nov 20 at 0215z. Possibly day time and night time frequencies.	(Remote tuner Hong Kong)	JPL	WED
		1127 (IP) 30 Nov	HR SVC GA HR SVC GA BT 596/XZ778/5290/X578A/27/03/57/COMM/9950 AR (Remote tuner Hong Kong)		JPL	MON
5257		1806z (IP)	VVV BT 0PV6 0PVB OPV6 AR HR NIL GB (Long zero)	(Remote tuner Novosibirsk)	JPL	SUN
5315	K8VS	1418z (IP) 28 Dec	IEC BT A5FG AR K (Exercise related) VV 80A DE K8VS K IEC BT 4TDP K VVV W9ZL DE K8VS K VVV T5CK DE K8VH K NR 9811/EX 2224 RMKS CQ BT M..N/65DG AR	(Remote tuner Hong Kong)	JPL	MON
5555		0041z (IP) 19 Nov	RMKS 664U TO 6643 K	(Remote tuner Shenyang)	JPL	THU
5656		1554z (IP) 19 Nov	HR 03 CHAN KP HR 03 CHAN AR	(Remote tuner Shenyang)	JPL	THU
5750	MHW	1107z (IP) 30 Dec	VVV MYP (x3) DE MHW (x3)	(Remote tuner Taiwan)	JPL	WED
5680		0033z (IP) 19 Nov	0830 RMKS 7900 TO 9619 BT 1001 6676 6661 6669 6661 6196 6760 6760 9670 6620 9176 6606 9820 6670 6916 6660 AR (0035z) BT 1001 6676 6661 6669 6661 6196 6760 6760 9670 6620 9176 6606 9820 6670 6916 6660 AR (Silent - 0037z)	(Remote tuner Shenyang)	JPL	THU
5689	57BJ	1242z (IP) 07 Nov	V 765G (x3) DE 57BJ (x2) MSG NR 2935 CK 50 45 1107 2050 RMKS CQ BT IEC BT 5921 AR K (Exercise related – 1254z)	(Remote tuner Hong Kong)	JPL	SAT
	T35Y		VV KYU7 DE T35Y K (1256z) R IEC BT 1589 AR K			
6576		1018z (IP) 05 Dec	NR 4367 CK 6916 220 . 18.0819 NMKS 1877431. 18773.. K	(Remote tuner Hong Kong)	JPL	SAT

7062	0847z (IP) 30 Dec	(First time I've seen this format being used by M89) /F2697/F2686/F2627/F2600/F2668/F2664/F2651/F2603/F2671/Z0084/F2673/Z0267/F2681/F2602 AR F2600/F2668 AR K (This was a 20 group message)	(Remote tuner Novosibirsk)	JPL	WED
7889	3BTP 0828z (IP) 30 Dec	3BTP calling various outstations 3BTP DE 7VUF R QSA 2 QSA ? K 3BTP DE N5BA R QSA 2 QSA ? K 3BTP DE DFN1 R QSA 2 QSA ? K	(Remote tuner Novosibirsk)	JPL	WED
8642	0215z (IP) 15 Nov	596/XZ720/9345/05/07/27/X520A/COMM/9950 AR HR SVC NR 1063 HR WK NR 1063	(Remote tuner Novosibirsk)	JPL	SUN
8182	9WVW 0227z (IP) 15 Nov	V QYE2 (x3) DE 9WVW (x2) MSG GA NR 0379/MZ 1025 RMKS 7909 TO 1337 968. .. BT (IP - Weak/fading - 0227z) ..941 6663 66.. ..067 6269 6.69 9666 6681 9095 6914 (Cont'd - 0228z) AR (Return to R/S - 0229z)	(Remote tuner Novosibirsk)	JPL	SUN

M89 4754kHz 1130 (IP) - 1136z 09 November 2020

FF NR 51/EX 1929 RMKS CQ BT (IP - 1130z)
E3Q4/V8G5 AR
FF NR 51/EX 1929 RMKS CQ BT
E3Q4/V8G5 AR HR WK NR 425 QSL ? K
DE AS23 QSL TIME 0930 AR
R R DE ZXCA QSL TIME 1930 HR WK NR 210 AR (1131z)
R DE Z85S QS ITME 193 NR 118 AR
R DE .. (Too weak - 1133z)

VV AADY K
VV AADY K (1135z)
DE Z85S QSL TIME 1930 HR WK NR 118 AR (1136z)

M89 4847kHz 1125 (IP) - 1129z 11 December 2020

HR WK NR 522 AR (IP - Very weak - 1125z)
DE Z4HG QSL ..1922 HR WK NR 210 AR
DE .. QSL ..192. HR WK NR 120 K
R DE L.H 7 QSL DTG 1922 HR WK NR .. K
R DE X.FN QSL DTG 1923 HR WK NR 4.. K
QSL DTG 1923 HR WK NR 115 AR
DE 2F8D QSL DTG 1923 WK NR 6026 K (1128z)
DE KY.3 QSL DTG 1923 WK NR ..10 AR
VVV BTF3 K
VVV BTF3 K (1129z)

M89 4775kHz 1148 - 1154z 24 November 2020

DE FOW4 QSA 1 K (IP - 1149z)
H VVV K78Y K (All stations on this frequency)
RR DE FGW4 QSA 1 K
R QSA 2 NIL SK
OK NIL S PSE
VVV KFRW K
R R DE R3 QSA 1 K
R QSA 2 NIL SK
R R OK NIL SK PSE
VV POE7 K
R R DE ... R DE QW7E QSA 2 K
R QSA 1 NIL SK
R OK NIL SK PSE
VV SDU8 K
R DE XC.. QSA . K
R QSA 1 NIL SK
R OK NIL SK PSE
VV GTEK EEEEE
VV ZTER K
R DE SDF4 QSA 1 K
R QSA 2 NIL SK
R R OK NIL SK PSE
VV INMK K
VV F.
R DE KKR4 QSA 2 K
R QSA 2 NIL SK
R OK NIL SK PSE (1154z - Silent)

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	1613z 18 Nov V YHxD (x3) DE SAQC (x2) (IP - Cont'd) //NRH	(Remote tuner Novosibirsk)	JPL WED
3968//6936	Call Sign SAQC (Previously 3A7D)	Suspect change in frequency and Round Slip for DKG6 DE 3A7D	1739z 04 Nov V YHxD (x3) DE SAQC (x2)	(Remote tuner Novosibirsk)	JPL WED
			1935z 03 Dec V YHxD (x3) DE SAQC (x2)	(Remote tuner Novosibirsk)	JPL THU
4243//NRH	Message number differs from current XSV70 and XSV85 message numbers.				
	1200 (IP) - 1210z	09 Nov NR 041 CK 17 35 1109 1610 BT		(Remote tuner Japan)	JPL MON
		NR 18 CK 128 35 1109 1625 BT			
	1150 (IP) - 1151z	10 Nov NR 20 CK 118 35 1110 1624 BT		(Remote tuner Hong Kong)	JPL TUE
	1155 (IP) - 1212z	12 Nov NR 051 CK 53 35 1112 1520 BT		(Remote tuner Hong Kong)	JPL THU
		NR 050 CK 23 35 1112 1606 BT			
		NR 24 CK 141 35 1112 1621 BT			
	1153 (IP) - 1154z	13 Nov NR .6 CK 115 35 1113 1543 BT (Msg NR probably 26)		(Remote tuner Hong Kong)	JPL THU
	2331 (IP) - 2359z	18 Nov NR 074 CK 13 35 1119 0601 BT		(Remote tuner South Shenyang)	JPL WED
		NR 075 CK 12 35 1119 0602 BT			
		NR 064 CK 37 35 1119 0650 BT			
		NR 37 CK 088 35 1119 0739 BT			

		1146 (IP) – 1200z	21 Nov	NR 069 CK 62 35 1121 1610 BT	(Remote tuner Shenyang)	JPL	SAT
		1145 ((IP) – 1149z 1150 (IP) - 1153z	05 Dec 09 Dec	NR 10 CK 139 35 1205 1546 BT NR 006 CK 56 35 1209 1531 BT NR 18 CK 162 35 1209 1558 BT	(Remote tuner Hong Kong) (Remote tuner Hong Kong)	JPL JPL	SAT WED
		1150 (IP) - 1205z	11 Dec	NR 047 CK 19 35 1211 1557 BT NR 22 183 35 1211 15558 BT	(Remote tuner New Zealand)	JPL	FRI
		1146 (IP) – 1200z	23 Dec	NR 034 CK 42 35 1223 1536 BT NR 46 CK 155 35 1223 1546 BT	(Remote tuner Hong Kong)	JPL	WED
		1157 (IP) - 1205z	28 Dec	IEC BT 7529 AR K (Exercise related) IEC BT 1120 AR K NR 1001/CCK CK 30 78 0101 2000 RMKS 7227 TO 7225 BT CL 1001/CCK	(Remote tuner Hong Kong)	JPL	MON
4243//9054		Message number differs from current XSV70 and XSV85 message numbers.					
		1150 (IP) - 1210z	06 Nov	NR 039 CK 54 35 1106 1515 BT NR 12 CK 160 35 1106 1555 BT	(Remote tuner South Korea)	JPL	FRI
		1143 (IP) - 1151z	30 Nov	7G NR 165/CCK CK 91 62 1130 1935 RMKS 04.1 TO 4721 K NR 087 CK 28 35 1130 1531 BT NR 60 CK 104 35 1130 1554 BT	(Remote tuner Hong Kong)	JPL	MON
		1156 (IP) - 1203z	03 Dec	NR 023 CK 15 35 1203 1554 BT NR 06 CK 145 35 1203 1606 BT	(Remote tuner Hong Kong)	JPL	THU
		1143 (IP) - 1157z	15 Dec	NR 018 CK 35 35 1215 1544 BT NR 30 CK 138 35 1215 1615 BT	(Remote tuner Hong Kong)	JPL	TUE
		1153 (IP) - 1156z	21 Dec	NR 030 CK 19 35 1221 1525 BT NR 42 CK 140 35 1221 1535 BT	(Remote tuner Taiwan)	JPL	MON
		1153 (IP) - 2359z	22 Dec	NR 088 CK 23 35 1223 0627 BT NR 033 CK 29 35 1223 0645 BT NR 45 CK 113 35 1223 0707 BT	(Remote tuner Taiwan)	JPL	TUE
		1153 (IP) - 1159z	27 Dec	NR 042 CK 30 35 1227 1529 BT NR 54 CK 147 35 1227 1611 BT	(Remote tuner Hong Kong)	JPL	SUN
		1149 (IP) - 1217z	30 Dec	NR 048 CK 57 35 1230 1543 BT NR 020 CK 19 35 1230 1628 BT NR 021 CK 31 35 1230 1629 BT NR 60 CK 181 35 1230 1629 BT	(Remote tuner Hong Kong)	JPL	WED
4364//NRH	Call Sign XSV85	1143 (IP) - 1149z	10 Nov	NR 1018 CK 527 35 1110 1701 BT	(Remote tuner Hong Kong)	JPL	TUE
4364//8073	Call Sign XSV85	1130 - 1149z	06 Nov	NR 0980 CK 452 35 1106 1654 BT	(Remote tuner Hong Kong)	JPL	FRI
		1138 - 1154z	09 Nov	NR 1008 CK 438 35 1109 1641 BT	(Remote tuner Hong Kong)	JPL	MON
		1135 - 1151z	12 Nov	NR 1032 CK 222 35 1112 1717 BT	(Remote tuner Hong Kong)	JPL	THU
		1132 - 1150z	13 Nov	NR 1040 CK 389 35 1113 1559 BT	(Remote tuner Hong Kong)	JPL	FRI
		1133 - 1148z	14 Nov	NR 1048 CK 467 35 1114 1629 BT	(Remote tuner Hong Kong)	JPL	SAT
		1130 - 1145z	21 Nov	NR 1071 CK 383 35 1121 1557 BT	(Remote tuner Hong Kong)	JPL	SAT
		1135 (IP) - 1145z	27 Nov	NR 1095 CK 235 35 1127 1526 BT	(Remote tuner Hong Kong)	JPL	FRI
		1139 - 1142z	05 Dec	NR 1127 CK 234 35 1205 1647 BT	(Remote tuner Hong Kong)	JPL	SAT
		1130 - 1143z	15 Dec	NR 1163 CK 232 35 1215 1625 BT	(Remote tuner Hong Kong)	JPL	TUE
		1130 - 1147z	21 Dec	NR 1198 CK 419 35 1221 1643 BT	(Remote tuner Hong Kong)	JPL	MON
		0001 - 0011z	23 Dec	NR 1206 CK 36 35 1223 0713 BT NR 1207 CK 110 35 1223 0714 BT	(Remote tuner Hong Kong)	JPL	WED
		1132 - 1147z	23 Dec	NR 1208 CK 445 35 1223 1638 BT	(Remote tuner Hong Kong)	JPL	WED
		1200 - 1206z	27 Dec	NR 1218 CK 34 35 1227 1618 BT	(Remote tuner Hong Kong)	JPL	SUN
		1132 - 1143z	28 Dec	NR 1221 CK 349 45 1228 1611 BT	(Remote tuner Hong Kong)	JPL	MON
		1130 - 1148z	30 Dec	NR 1229 CK 44 35 1230 1614 BT NR 1230 CK 320 35 1230 1632 BT	(Remote tuner Hong Kong)	JPL	WED
		1138 - 1147z	31 Dec	NR 1233 CK 44 35 1231 1530 BT NR 1234 CK 303 35 1231 1609 BT	(Remote tuner Hong Kong)	JPL	THU
		(This should be last message for this year. Should revert back to message number 0001 next sked)					
4620	05 05	1009 (IP) - 1114z	05 Dec	CK 31 33 1205 1855 RMKS 8986 TO 8908 BT 05 05 (Long zero – associated with M95) NR 014/CCK CK 31 33 1205 1855 RMKS 8986 TO 8908 BT	(Remote tuner Novosibirsk)	JPL	SAT
4689	5ZEF	0903 (IP) - 0911z	30 Dec	H0R0 DE 5ZEF IEC BT 7617 AR K (Exercise related) NR 183/EX 1706 RMKS 5208 TO 5576 BT ABCJ/ZRQJ AR NR 166/EX 1708 RMKS 5576 TO 5208 BT WFQ2/WFA2 AR NR 184/CCK CK 99 73 1230 1700 RMKS 5208 TO 5576 K	(Remote tuner Novosibirsk)	JPL	WED

5479//NRH	Call Sign SAQC 1145z	(Active daily - only first marker log has been included) 10 Nov V YHxD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Hong Kong)	JPL	TUE
	1112z	11 Dec V YHxD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	FRI
5479//6936	Call Sign SAQC 1207z	(Active daily - only first marker log has been included) 07 Nov V YHxD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	SAT
6936	2313z	11 Dec V YHxD (x3) DE SAQC (x2) (IP - Cont'd)	Weak in S.E. England	BR	FRI
5479//10722	Call Sign SAQC 1111z	(Active daily - only first marker log has been included) 06 Nov V YHxD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	FRI
	0209z	15 Nov V YHxD (x3) DE SAQC (x2) (IP - Cont'd) NR 0431000 RMKS 5409 TO 5471 BT COMM/1030/XZ921/17/5402/5471 AR QSL ? HR WK NR 25 (IP - 0209z - Return to R/S - 0210z)	(Remote tuner Novosibirsk)	JPL	SUN
	1111z	03 Dec V YHxD (x3) DE SAQC (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	THU
5555	Call sign XSV85 1037 (IP) - 1103z	27 Nov NR 843/CCK CK 299 38 50 9147 NR 297/CCK CK 455 86 1844 9056 RMKS 485DE TO 9993 00011230 .455 3067 1844 BT NR 4538497 RMKS 8.86 TO 5167 BT CL/1856/ZBT/8695/8695 AR NR 4367058 RMKS 4634 TO 8799 SVC QR. 1855 QRW L180947 1844/OMM 8887 AR NR 012/CCK CK 389 12 1030 1020 RMKS 4856 TO 9993 0081 239 84553067 1844 BT (Appears that operator is practicing, but doesn't realize he's live) NR 2.1/EX 191. 1030 1230 RMKS CQ BT NR 120 1230 RMKS 4634 TO 8799 BT SVC QRW 1855 QRW L180947 184	(Remote tuner Novosibirsk)	JPL	FRI
5672	0236 (IP) - 0340z	15 Nov IEC BT 4207 AR K (IP - Exercise related) MSG NR 043/CCK CK 99 70 1115 130 RMKS 1795 TO 1938 K	(Remote tuner Novosibirsk)	JPL	SUN
8073//NRH	Call sign XSV85	Usual format is Initial call-up in voice USB, then to digital 4+4 mode LSB, finally, switching to CW			
	0006 - 0008z	19 Nov NR 1066 CK 106 35 1119 0649 BT	(Remote tuner Hong Kong)	JPL	THU
	1131 - 1142z	24 Nov NR 1083 CK 364 35 1124 1600 BT	(Remote tuner Hong Kong)	JPL	TUE
	1130 - 1158z	30 Nov NR CK ..3 35 1130 1622 BT NR 1108 CK 42 35 1130 1624 BT	(Remote tuner Hong Kong)	JPL	MON
	1130 - 1145z	03 Dec NR 1119 CK 22 35 1203 1636 BT NR 1120 CK 381 35 1203 1637 BT	(Remote tuner Hong Kong)	JPL	THU
	1155 (IP) - 1157z	09 Dec NR 1144 CK 31 35 1209 1635 BT	(Remote tuner Hong Kong)	JPL	WED
	1130 - 1147z	11 Dec NR 1149 CK 418 35 1211 1642 BT	(Remote tuner Hong Kong)	JPL	FRI
9054	Call sign XSV85	All logged via Remote tuner Hong Kong unless stated (See also 4243//9054kHz listing)			
	1150 (IP) - 1157z	14 Nov NR 66 CK 17 35 1114 1530 BT NR 28 CK 099 35 1114 1601 BT	(Remote tuner Hong Kong)	JPL	SAT
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 4243kHz 2331z 18 November 2020

Initial call-up in voice USB 2331z Female operator
 Chinese digital 4+4 QPSK 75/3000 LSB 2333z
 V Switched to CW 2349z

V HR MSG TO YR PSE CY (2350z)
 HR 7G TO YR PSE CY (2350z)
NR 074 CK 13 35 1119 0601 BT
 UT5 TAN 3U4 3A4 TTA TTU TT3 773 353 4UT
 44D 4D6 3D5 AR A HR 7G GA
NR 075 CK 12 35 1119 0602 BT
 UT5 TAN 3U4 7TA TTA TTU TT3 773 4UT 44D
 DD7 NT6 AR A HR 7G GA (2352z)
NR 064 CK 37 35 1119 0650 BT
 5AA UTT TAN 3U4 7TA N44 3A4 (Cont'd - 2353z)
 AR A HR 7G GA
NR 37 CK 088 35 1119 0739 BT
 UTU TAN 3U4 3A4 7TU 7TA NU6 7UD N44 7T5 (Cont'd - 2356z)
 AR A HR UP SB WK (2359z)

M95 5672kHz 0236 - 0240z 15 November 2020

R QSA 1 IEC BT 4207 AR K (IP - Exercise related - 0236z)
 R IEC BT 4207 AR K (Other station N/H on this freq.)
 R MSG GA CY HW K
 R HR MSG GA MSG NR 043/CCK CK 99 70 1115 130 RMKS
1795 TO 1938 K (0238z)
 CL BT NPT RPT R BT BT
 A75. .UAN 37N4 A567 UN7A UT37 D7UA 5D7A 5TUN ATU6
 (Cont'd - 0240z)

M95 9054kHz 2348 - 2359z 22 December 2020

VVV HR MSG TO YR PSE CY (2348z)
NR 088 CK 23 35 1223 0627 BT
 UT5 TU3 3U4 3A4 TTA TTU TT3 773 353 N3D
 35U 4AA 343 N3D 4A5 447 4D3 336 N3D 4D6
 3DU N3D 3D3 AR 7G AGN
NR 088 CK 23 35 1223 0627 BT (Repeats message - 2352z)
 AR A HR 7G GA
NR 033 CK 29 35 1223 0645 BT
 5AA UTT TU3 3U4 3A4 5T7 5TD N44 5TN N44
 5AA 75U 353 N3D 35A 4AA 343 N3D 4A5 446
 344 N3U 447 3DU N3D 3D3 4D3 N3D 4D6 AR MSG AGN
NR 033 CK 29 35 1223 0645 BT (Repeats message - 1256z)
 AR A HR 7G GA
NR 45 CK 113 35 1223 0707 BT
 UTU TU3 3U4 3A4 TTU 773 353 N3D 35U 4AA (Cont'd - 2359z)

M95 4364/8073kHz 1130 - 1149z 06 November 2020

Into voice - USB Chinese 1130z Male operator
 Switched to Chinese digital 4+4 QPSK 75/3000 - LSB 1132z Switched to
 CW Hand sent 1146z

V BNGC (x3) DE XSV85 (x2) (1146z)
 HR MSGS GA PSE CY (1147z)
NR 0980 CK 452 35 1106 1654 BT
 TT6 3U6 3AN 3U7 TA7 773 TA7 773 354 367 4T4 NN3 (Cont'd - 1149z)

Courtesy JPL

Marker Beacons (MX MXI)

3593.9	2246z	06 Dec	MXI	CW	Beacon "S"	Sevoromorsk	BR	SUN
3657	2351z	06 Dec	MX	CW	Beacon "V"	Khiva	BR	SUN
4557.7	2354z	06 Dec	MXI	CW	Beacon "D"	Sevastopol	BR	SUN
4558.8	2357z	06 Dec	MXI	CW	Beacon "P"	Kaliningrad	BR	SUN
4557.9	2356z	06 Dec	MXI	CW	Beacon "S"	Sevoromorsk	BR	SUN
5153.7	0001z	15 Dec	MXI	CW	Beacon "D"	Sevastopol	BR	TUE
5153.8	2359z	06 Dec	MXI	CW	Beacon "P"	Kaliningrad	BR	SUN
5153.9	2359z	06 Dec	MXI	CW	Beacon "S"	Sevoromorsk	BR	SUN
5154.1	2359z	06 Dec	MXI	CW	Beacon "A"	Astrakhan	BR	SUN
5156.8	0001z	07 Dec	MX	CW	Beacon "L"	St Petersburg (Fast)	BR	MON
5342	0219z	13 Nov	MX	CW	Beacon "V"		BR	FRI
5343	0210z	09 Nov	MX	CW	Beacon "V"		BR	MON
7508.7	0015z	07 Dec	MXI	CW	Beacon "D"	Sevastopol	BR	MON
7508.8	1141z	15 Dec	MXI	CW	Beacon "P"	Kaliningrad	BR	TUE
7509.1	0015z	07 Dec	MXI	CW	Beacon "A"	Astrakhan	BR	MON
8494.8	1139z	15 Dec	MXI	CW	Beacon "P"	Kaliningrad	BR	TUE
8495.1	0017z	07 Dec	MXI	CW	Beacon "A"	Astrakhan	BR	SUN
8497.8	1138z	15 Dec	MX	CW	Beacon "L"	St Petersburg	BR	TUE
10871.7	1135z	15 Dec	MXI	CW	Beacon "D"	Sevastopol	BR	TUE
10871.8	1133z	15 Dec	MXI	CW	Beacon "P"	Kaliningrad	BR	TUE
10871.9	1346z	15 Dec	MXI	CW	Beacon "S"	Sevoromorsk	BR	TUE
13527.7	1126z	15 Dec	MXI	CW	Beacon "D"	Sevastopol	BR	TUE
13527.9	1127z	15 Dec	MXI	CW	Beacon "S"	Sevoromorsk	BR	TUE
13528	1127z	15 Dec	MXI	CW	Beacon "C"	Moscow	BR	TUE
16331.7	1122z	15 Dec	MXI	CW	Beacon "D"	Sevastopol	BR	TUE
16331.9	1123z	15 Dec	MXI	CW	Beacon "S"	Sevoromorsk	(Rasping tone) BR	TUE

Oddities

3243kHz	'The Goose' Marker									
3243	1540z	09 Nov	Normal sound			Moderate	USB	chpa		MON
<u>3510kHz 'The Air Horn'</u>										
3510	1536z	09 Nov	Data transmission with alarm signal in background			Moderate	USB	chpa		MON
4182kHz 'T' Marker										
4182	1626z	09 Nov	Transmission of letter T			Good	USB	chpa		MON
4770kHz 'The Alarm'										
4770	1524z	09 Nov	Alarming sound & clear.			Good	USB	chpa		MON
<u>S28 'The Buzzer'</u>										
4625	1527z	09 Nov	S28	'The Buzzer' Marker	Slightly rough tone some QSB	Good	USB	chpa		MON
<u>S30 'The Pip'</u>										
3756	1533z	09 Nov	S30	'Pip' marker (Night freq)	Minor QRM		USB	chpa		MON
<u>S32 'Squeaky Wheel'</u>										
3828	1532z	09 Nov	S32	'Squeaky Wheel' marker (Night freq)		Moderate	USB	chpa		MO

Contributors: AB, BR, chpa, Danix, dMHz, ER, Gert, HFD, JPL, PoSW, RNGB, *Thank you all for your logs.*

Voice, Polytone, Tones, Hybrids and FSK

Some frequency changes seen particularly with E07 and some polytones. Within the polytones more activity recorded this month [thanks Ary Daniel and presumably others of Priyom] especially the short lived 10m schedules that may hail an exercise or as suggested elsewhere a diplomatic urgent news cast.

Like other stations in the Short Wave these modes have like suffered from the poor propagation across the HF spectrum and, certainly within the UK, electrical noise due to VDSL distribution along unbalanced feeders, piss poor switch mode power supplies that flood the market virtually uncontrolled, and central heating thermostats and voltage boosters. Here's hoping for a quieter 2021 – don't hold your breath folks!

E06 Nov/Dec log:

E06 in company with all the other Family 1a training schedules failed to appear from the 2nd half of November. We await with interest to see if they resume in 2021

E06 Nov/Dec log:

Thursday/Friday		0300z	14654kHz	0400z	12177kHz	
17/12	'361' 708 45 groups	(thanks HfD)				
First/Third Thursday (repeats Friday)		0600z	18285kHz	0700z	20140kHz	
05/11	'507' 482 61 47062 28435 18743 13582 67686 72475 16098 05655 01031 92640 33267 18835 31534 28565 30625 97629 02710 35640 49210 42931 72253 04330 26241 40020 37200 31616 70893 31241 67663 24121 98765 82093 02537 17677 48452 57872 04860 83014 28861 53400 77370 52244 70023 42439 79046 45825 77098 39533 02892 04714 09616 91232 00578 57375 35371 38792 65017 76343 31951 19739 06765 482 61 00000					
19/01	'507' 391 62 31179 66625 34772 54872 01889 76033 59458 14520 76717 33102 21831 23541 67660 15313 91831 25610 74953 21622 68107 58271 82871 25185 10375 14820 06399 20475 43766 09745 37217 36980 46072 58750 62455 28676 53844 52952 54621 17451 48273 32081 56166 09676 06799 86234 07116 28109 31373 40965 89202 26318 89319 05340 84946 77810 27741 87682 75105 57056 47378 08680 22948 54594 391 62 00000					
		0600z	14575kHz	0700z	17420kHz	
03/12	'923' 574 61 32888 89374 36671 97125 42412 24758 45282 63006 07727 39779 07071 27529 19081 94451 40929 54268 14926 58929 62150 17325 28925 92332 95315 59500 49573 84563 02118 25175 53338 65797 47570 85083 97287 13336 53020 95171 82117 10514 09434 56718 21528 37340 49354 69923 78894 97570 01004 98131 57145 11887 72940 84893 52816 31879 42726 91041 10188 54522 48034 43981 36472 574 61 00000					
17/12	'923' 854 61 64261 62147 77668 19754 53685 71348 77179 06210 37403 81812 62196 61482 98197 75426 15862 44815 24938 34790 17463 59057 38972 77170 80945 87010 94611 50662 04476 82948 55491 09745 16960 49005 95246 12415 32490 51112 95946 06101 48619 54169 42714 94517 49440 81148 37980 02685 99371 25804 83798 82259 38617 73692 05674 24403 16210 11169 16317 72341 21601 27070 42794 854 61 00000					
First/Third Thursday of month		2030z	4836kHz	(frequency may vary slightly)		
05/11	'321' 979 45 15432 86426 05598 65675 65790 43483 23453 83874 12353 12452 68710 08343 24102 88748 72607 03936 73261 61723 87182 83823 84574 61251 87891 23467 94546 13242 17964 43525 12121 21198 64265 42346 56781 44322 38765 32145 63451 22344 56944 13368 78965 12368 12346 73456 32422 979 45 00000					

19/11 '321' 510 41 61157 43256 03545 65746 21575 95874 65245 22504 85475 11425 57961 76154 52873 45495 87824 02457 85456 84587 56547 78931
26456 98578 83478 35746 89546 75842 01203 78496 71054 85475 21254 12424 74154 90154 95745 02157 99865 42578 54765 25423
52315 41 00000

Friday following First & Third Thursday 2130z 4760kHz (frequency may vary slightly)

06/11 '472' 979 45 15432 86426 05598 65675 65790 43483 23453 83874 12353 12452 68710 08343 24102 88748 72607 03936 73261 61723 87182 83823
84574 61251 87891 23467 94546 13242 17964 43525 12121 21198 64265 42346 56781 44322 38765 32145 63451 22344 56944 13368
78965 12368 12346 73456 32422 979 45 00000 (Repeat of Thursday)

20/11 '472' NRH

Other: 1900z 9261kHz 2000z 5384kHz

11/11 '853' 276 41 22283 12592 41629 29472 82976 51953 79118 26486 46641 17060 07630 29140 86483 79497 87799 29171 78931 85147 42757 85855
13513 22343 92667 67461 43849 95596 17095 31859 34453 78326 12403 82221 83011 43026 36349 58774 22847 92313 57075 52503
35237 276 41 00000 (Repeated next day)

From PoSW:

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

5-Nov-20:- 4836 kHz, very weak, difficult copy, calling "321", DK/GC "979 979 45 45 (?).

19-Nov-20:- 4836 kHz, call "321", DK/GC "510 510 41 41", weak but reasonably clear.

No sign of this schedule on either the third or the seventeenth of December.

Friday 2130 UTC Schedule Following First + Third Thursdays:-

6-Nov-20:- 4760 kHz, call "472", DK/GC "979 979 45 45", weak, difficult copy.

20-Nov-20:- Unable to find the expected transmission at 2130z on 4760, +/-.

As was the case with the Thursday schedules above there was no sign of E06 on Fridays the 4th and 18th of December. Either propagation has been unusually poor or these Thursday and Friday E06 schedules have gone.

Tnx RRGB and PoSW

E07

PoSW leads in with his usual logs and analysis:

Sunday + Wednesday Schedule, 1800 UTC Start:-

1-Nov-20, Sunday:- 1800 UTC, 7582 kHz, "571 571 571 000", strong signal, broadcast station on close frequency.
1820 UTC, 6782 kHz, second sending, slightly weaker.

4-Nov-20, Wednesday:- 1800 UTC, 7582 kHz, "571 571 571 000".
1820 UTC, 6782 kHz, second sending.

8-Nov-20, Sunday:- 1800 UTC, 7582 kHz, "571 571 571 000", good signal, the broadcaster on a close frequency also strong.
1820 UTC, 6782 kHz, S7.

11-Nov-20, Wednesday:- 1800 UTC, 7582 kHz and 1820 UTC, 6782 kHz, "571 571 571 000".

15-Nov-20, Sunday:- 1800 UTC, 7582 kHz with BC QRM and 1820 UTC, 6782 kHz, "571 571 571 000".

22-Nov-20, Sunday:- 1800 UTC, 7582 kHz, "571 571 571 000", with broadcaster interference, as always.
1820 UTC, 6782 kHz, weak.

25-Nov-20, Wednesday:- 1800 UTC, 7582 kHz, very weak, could just hear the "000" of a no-message transmission under the broadcast interference.
1820 UTC, 6782 kHz, weak.

6-Dec-20, Sunday:- 1800 UTC, 6771 kHz, "785 785 785 000", S5 at best.
1820 UTC, 5871 kHz, weak.

9-Dec-20, Wednesday:- 1800 UTC, 6771 kHz, S6 to S7 and 1820 UTC, 5871 kHz, weak, "785 785 785 000".

16-Dec-20, Wednesday:- 1800 UTC, 6771 kHz, weak, "785 785 785 000".
1820 UTC, 5871 kHz, stronger.

20-Dec-20, Sunday:- 1800 UTC, 6771 kHz and 1820 UTC, 5871 kHz, both weak signals, "785 785 785 000".

23-Dec-20, Wednesday:- 1800 UTC, 6771 kHz, "785 785 785 000", weak.
1820 UTC, 5871 kHz, stronger.

Monday + Wednesday Schedule, 2000 UTC Start:-

2-Nov-20, Monday:- 2000 UTC, 7616 kHz, “682 682 682 1” for a full message, DK/GC “763 55” x 2, very strong signal.
2020 UTC, 6816 kHz, second sending, weaker signal.
2040 UTC 5216 kHz, third sending, very strong “XJT” noise-maker on the same frequency.

4-Nov-20, Wednesday:- 2000 UTC, 7616 kHz, “682” and “763 55” again, very strong.
2020 UTC, 6816 kHz, weaker.
2040 UTC, 5216 kHz, strong enough to over-ride the “XJT”.

9-Nov-20, Monday:- 2000 UTC, 7616 kHz, “682 682 682 000”, strong.
2020 UTC, 6816 kHz, also strong.

11-Nov-20, Wednesday:- 2000 UTC, 7616 kHz and 2020 UTC, 6816 kHz, weaker, “682 682 682 000”.

23-Nov-20, Monday:- 2000 UTC, 7616 kHz, very weak signal, unreadable, appeared to be “full message” format, did not vanish after two minutes.
2020 UTC, 6816 kHz, “682 682 682 1”, very weak, sank into noise.
2040 UTC, 5216 kHz, difficult copy due to extremely strong “XJT” on same frequency.
DK/GC “883 79” x 2.

25-Nov-20, Wednesday:- 2000 UTC, 7616 kHz, “682 682 682 1”, DK/GC “883 79” x 2, weak, just about readable.
2020 UTC, 6816 kHz, stronger.
2040 UTC, 5216 kHz, audible under strong “XJT”.

2-Dec-20, Wednesday:- 2000 UTC, 6823 kHz, “881 881 881 000”, strong signal.
2020 UTC, 5823 kHz, very strong.

7-Dec-20, Monday:- 2000 UTC, 6823 kHz, “881 881 881 000”, much weaker than on the 2nd.
2020 UTC, 5823 kHz, much stronger, well over S9.

9-Dec-20, Wednesday:- 2000 UTC, 6823 kHz and 2020 UTC, 5823 kHz, both strong, “881 881 881 000”.

14-Dec-20, Monday:- 2000 UTC, 6823 kHz, full message this evening, something of a rarity in recent times, “881 881 881 1”, DK/GC “438 93” x 2, strong signal.
2020 UTC, 5823 kHz, slightly weaker.
2040 UTC, 5123 kHz, very strong.

23-Dec-20, Wednesday:- 2000 UTC, 6823 kHz, “881 881 881 000”, weak.
2020 UTC, 5823 kHz, much stronger, well over S9.

28-Dec-20, Monday:- 2000 UTC, 6823 kHz and 2020 UTC, 5823 kHz, both strong signals, “881 881 881 000”.

Saturday Schedule, 1400 UTC Start:-

7-Nov-20:- 1400 UTC, 10323 kHz, “310 310 310 000”, strong signal.
1420 UTC, 9123 kHz, weaker. Frequencies changed from those in use since the springtime.

21-Nov-20:- 1400 UTC, 10323 kHz, “310 310 310 000”, strong.
1420 UTC, 9123 kHz, also strong.

28-Nov-20:- 1400 UTC, 10323 kHz and 1420 UTC, 9123 kHz, both strong signals, “310 310 310 000”.

5-Dec-20:- 1400 UTC, 9143 kHz, frequencies have changed, found quite quickly in spite of not being very strong, “116 116 116 000”.
1420 UTC, 8143 kHz, stronger.

19-Dec-20:- 1400 UTC, 9143 kHz and 1420 UTC, 8143 kHz, both strong, “116 116 116 000”.

26-Dec-20:- 1400 UTC, 9143 kHz, strong signal, “116 116 116 000”.
1420 UTC, 8143 kHz, also strong.

Sunday Schedule, 0700 UTC Start:-

8-Nov-20:- 0700 UTC, 10268 kHz, “201 201 201 000”, found at about one minute in, reasonable signal.
0720 UTC, 11068 kHz, second sending, strong, well over S9.

15-Nov-20:- 0700 UTC, 10268 kHz, S4 to S5 and 0720 UTC, 11068 kHz, stronger, “201 201 201 000”.

22-Nov-20:- 0700 UTC, 10268 kHz and 0720 UTC, 11068 kHz, both weak signals, “201 201 201 000”.

29-Nov-20:- 0700 UTC, 10268 kHz, “201 201 201 000”, strong, well over S9.
0720 UTC, 11068 kHz, also strong.

6-Dec-20:- 0700 UTC, 9326 kHz, strong signal, no problem in finding, “345 345 345 000”.
0720 UTC, 10426 kHz, also strong.

13-Dec-20:- 0700 UTC, 9326 kHz, “345 345 345 000”, weak signal, only just readable.
0720 UTC, 10426 kHz, stronger.

20-Dec-20:- 0700 UTC, 9326 kHz and 0720 UTC, 10326 kHz, both strong, “345 345 345 000”.

Others' Logs:

Sunday

0700z	9326kHz	0720z	10246kHz	0740z	kHz	
20/12	345 000					0700z Weak 0720z Strong

Sunday/Wednesday

November 2020

1800z	7582kHz	1820z	6782kHz	1840z	5182kHz	
01/11	571 000					[1800z QRM] Weak
04/11	571 000					Weak
08/11	571 000					[1800z Fair, BCQRM] Weak
11/11	571 000					Weak
15/11	571 000					Weak
18/11	571 000					Weak
22/11	571 000					Weak
25/11	571 000					[1800z NRH QRM] Weak
29/11	571 000					Weak

December 2020

1800z	6771kHz	1820z	5871kHz	1840z	4571kHz	
02/12	785 000					Weak
06/12	785 000					Weak
13/12	785 000					Weak
16/12	785 000					Weak
20/12	785 000					Weak
23/12	785 000					Weak
27/12	785 000					Weak
30/12	785 000					Weak

Monday/Wednesday

November 2020

2000z	7616kHz	2020z	6816kHz	2040z	5216kHz	
02/11	682 1 763 55 79302 ... 30501 000 000					[2040z QRM] Weak
04/11	682 1 763 55 79032 ... 30501 000 000					[2040z Fair, QRM3] Weak
09/11	682 000					Weak [M8] Fair [PLdn]
11/11	682 000					We



16/11	682 000	[As seen in image above]	Strong
18/11	682 000		Weak
23/11	682 1 883 79 88993 ... 56912 000 000	[2040z QRM]	Weak, Dutch SDR
25/11	682 1 883 79 88993 ... 56912 000 000	[2040z QRM]	Weak
30/11	682 000		Weak

December 2020

	2000z 6823kHz	2020z 5823kHz	2040z 5123kHz	
02/12	881 000			2000z Strong, 2020z Fair
07/12	881 000			Weak
14/12	881 1 438 93 01260 ... 62096 000 000			Strong
16/12	881 1 428 93 01260 ... 62096 000 000			Weak
21/12	881 000			2000z Weak , 2020z Strong
23/12	881 000			Weak
28/12	881 000			Fair
30/12	881 000			Weak

Tuesday/Friday

November 2020

	0700z 15823kHz	0720z 16323kHz	0740z 18623kHz	
06/10	836 1 8142 105 86881 ... 6280 000 00			Weak
10/11	836 000			Weak
13/11	836 000		[0720z monitored only]	Weak
17/11	836 1 421 87 54594 ... 24460 000 000		[0740z Unworkable]	Weak
	0700z Start up problems: 836 x 3 1 0700z Pause 836 x 3 1 twice then 421 87 54594 ... 24460 000 000			
20/11	836 1 421 87 54594 ... 44460 000 000		[0740z Dutch SDR]	Weak
24/11	836 000			Weak

Tuesday/Friday

December 2020

	0700z 14364kHz	0720z 14964kHz	0740z 15964kHz	
01/12	399 1 9417 92 38221 ... 29481 000 000			Weak
04/12	399 1 9417 92 38221 ... 29481 000 000			Weak
08/12	399 000			Weak

11/12	399 000					Weak
15/12	399 1 137 58 7142? ... 92961 000 000					Weak, QSB1
18/12	399 1 137 58 62714 ... 92961 000 000	Note Correction (1 st grp 15/12)				Weak
22/12	399 000					Weak
29/12	399 000					Weak

Thursday/Saturday

November 2020

1410z	11574kHz	1430z	10274kHz	1450z	9274kHz	
05/11	327 000					Weak
07/11	327 000					Weak
12/11	327 000					Weak
14/11	327 000					Weak
19/11	327 1 375 99 62383 ... 08399 000 000				[1450z BCQRM]	Weak
21/11	327 1 375 99 62383 ... 08399 000 000				[Null msgs sent 1430/1450z 327 000?]	Weak
26/11	327 000					Weak
28/11	327 000					Weak

December 2020

1410z	10226kHz	1430z	9226kHz	1450z	8126kHz	
03/12	674 000					Weak
10/12	674 000					Weak
12/12	674 000					Weak
17/12	674 1 381 25 30493 ... 54184 000 000					Weak, Dutch SDR
26/12	674 000					Weak
31/12	674 000				[1430z Dutch SDR]	Weak

Saturday

November 2020

1400z	10323kHz	1420z	9123kHz	1440z	8023kHz	
07/11	310 000					1400z Strong, 1420z Fair
14/11	310 000					Very strong
21/11	310 000					Very strong
28/11	310 000					Very strong

December 2020

1400z	9243kHz	1420z	8143kHz	1440z	kHz	
19/12	116 000					1400z Fair 1420z Weak
26/12	116 000					1400z Fair, 1420z Weak

E07a

Peter offers his logs and individual analysis:

Friday Schedule, 1610 UTC Start:-

6-Nov-20:- 1610 UTC, 8138 kHz, a full message this afternoon, "158 158 158 1 14902", DK/GC "7554 97" x 2. Good signal, a strong "XJT" noise-maker had been churning away but obligingly went off a bit before 1611z.

Same message had been sent on the previous Friday, 30-October.

1630 UTC, 7538 kHz, second sending, strong signal.

1650 UTC, 6838 kHz, also strong.

13-Nov-20:- 1610 UTC, 8138 kHz, "158 158 158 000", not too strong, 4 to 5 on the S-meter.

1630 UTC, 7538 kHz, also around S5.

20-Nov-20:- 1610 UTC, 8138 kHz and 1630 UTC, 7538 kHz, both S7 to S8, "158 158 158 000".

27-Nov-20:- 1610 UTC, 8138 kHz, "158 158 158 000", S7 to S8.

1630 UTC, 7538 kHz, stronger.

4-Dec-20:- 1610 UTC, 5887 kHz, "830 830 830 000", strong signal, missed 1630z sending which would have been on 5387.

11-Dec-20:- 1610 UTC, 5887 kHz, "830 830 830 000", weak signal.

1630 UTC, 5387 kHz, stronger.

18-Dec-20:- 1610 UTC, 5887 kHz and 1630 UTC, 5387 kHz, both strong, "830 830 830 000".

Saturday Schedule, 0900 UTC Start:-

7-Nov-20:- 0900 UTC, 11553 kHz, "515 515 515 1 14902", as expected, based on past observations, the same message as the previous day's 1510z E07a, DK/GC "7554 97", weak signal.

0920 UTC, 12153 kHz, second sending, much stronger.

0940 UTC, 13553 kHz, also strong.

14-Nov-20:- 0900 UTC, 11553 kHz, "515 515 515 000", S5 to S6.

0920 UTC, 12153 kHz, stronger.

21-Nov-20:- 0900 UTC, 11553 kHz, weak and 0920 UTC, 12153 kHz, much stronger, "515 515 515 000".

27-Nov-20:- 0900 UTC, 11553 kHz, "515 515 515 000", S7.

0920 UTC, 12153 kHz, much stronger.

5-Dec-20:- 0900 UTC, 11121 kHz, "124 124 124 000", very strong signal.

0920 UTC, 12221 kHz, slightly weaker but not by much.

19-Dec-20:- 0900 UTC, 11121 kHz, weak signal and 0920 UTC, 12221 kHz, much stronger,

"124 124 124 000".

26-Dec-20:- 0900 UTC, 11121 kHz, "124 124 124 000", S7 to S8.

0920 UTC, 12221 kHz, peaking over S9.

Wednesday Schedule, 2100 UTC Start:-

4-Nov-20:- 2100 UTC, 5877 kHz, "825 825 825 1 37033" for a full message, DK/GC "2974 89" x 2.

2120 UTC, 5277 kHz, strong signal.

2140 UTC, 4577 kHz, also strong.

11-Nov-20:- 2100 UTC, 5877 kHz, "825 825 825 000".

2120 UTC, 5277 kHz, second sending, both strong signals.

18-Nov-20:- 2100 UTC, 5877 kHz and 2120 UTC, 5277 kHz, both strong, "825 825 825 000".

25-Nov-20:- 2100 UTC, 5877 kHz, strong and 2120 UTC, 5277 kHz, very strong, "825 825 825 000".

2-Dec-20:- 2100 UTC, 5877 kHz, "825 825 825 000", very strong.

2120 UTC, 5277 kHz, also very strong.

9-Dec-20:- 2100 UTC, 5877 kHz and 2120 UTC, 5277 kHz, both strong, "825 825 825 000".

16-Dec-20:- 2100 UTC, 5877 kHz, "825 825 825 000", strong signal.

2120 UTC, 5277 kHz, also strong.

Others' Logs:

Wednesday

November 2020

2100z **5877kHz** **2120z** **5277kHz** **2140z** **4577kHz**

04/11	825 1 37033 2974 89 48144 ... 37012 000 000	2100z Weak, 2120z Very strong, 2140z Fair
11/11	825 000	Very strong
18/11	825 000	Strong
25/11	825 000	Strong

December 2020

02/12	825 000	Strong
09/12	825 000	Fair
16/12	825 000	Fair
23/12	825 000	[2100z QRM3] Strong
30/12	825 000	Weak

Thursday

November 2019

0530z **5111kHz** **0550z** **5811kHz** **0610z** **6911kHz**

05/11	189 1 37033 2974 89 48144 ... 37012 000 000	[0610z Strong] Weak
12/11	189 000	0530z Weak, QRM3 0550z Strong
19/11	189 000	Strong, QRM2
26/11	189 000	Fair, QRM2

December 2020

03/12	189 000	Very strong
10/12	189 000	0530z strong 0550z Fair, QRM3
17/12	189 000	Strong
23/12	189 000	Strong
31/12	189 000	Strong

Friday

November 2020

1610z **8138kHz** **1630z** **7538kHz** **1650z** **6838kHz**

06/11	158 1 14902 7554 97 87988 ... 37442 000 000	Strong
13/11	158 000	Fair, QRM3
20/11	158 000	1610z Weak 1630z Fair
20/11	158 000	Fair

December 2020

1610z **5887kHz** **1630z** **5387kHz** **1650z** **5087kHz**

04/12	830 000	1610z Strong, 1630z Weak
11/12	830 000	Weak
18/12	830 000	Weak
25/10	NRH; High noise level	

Saturday

November 2020

0900z	11553kHz	0920z	12153kHz	0940z	13553kHz		
07/11	515 1 14902 7554 97 87988 ... 37442 000 000					[0920z Strong]	Weak, QRM3/4
14/11	515 000						Weak, QRM3
21/11	515 000						Fair, QRM3
28/11	515 000						Very strong

December 2020

0900z	11121kHz	0920z	12221kHz	0940z	13421kHz		
05/12	124 000						Strong
12/12	124 000						Fair
19/12	124 000					0900z Weak 0920z Strong	
26/12	124 000						Weak

E11 & E11a log Nov/Dec

4505kHz	1705z	04/11 [396/38 39805.....68266] Out 1716z S4	Malc	WED	
	1705z	07/11 [396/38 39805.....etc] Repeat of Wednesday	Malc	SAT	
	1705z	11/11 [396/00] Out 1708z S2 + QRM	Malc, RNGB	WED	
	1705z	14/11 [396/00] Out 1708z S2 + QRM	Malc, Gary H	SAT	
	1930z	14/11 [367/00] Out 1933z S5	Malc	SAT	
	1705z	18/11 [396/00] Out 1708z S3+QRM	Malc	WED	
	1705z	21/11 [399/00] Out 1708z S9	Malc, RNGB	SAT	
	1705z	25/11 [392/00] Out 1708z S3 + QRM	Malc	WED	
	1705z	28/11 [393/00] Out 1708z S5	Malc, Gary H	SAT	
	1705z	02/12 [391/00] Out 1708z S6	Malc, RNGB	WED	
	0710z	05/12 [491/00] Out 0713z S3	Malc	SAT	
	1705z	05/12 [390/00] Out 1708z S3	Malc	SAT	
	1705z	09/12 [396/00] Out 1708z S7	Malc	WED	
	1705z	16/12 [395/39 85380 93509 54304 00179 35604 34266 14526.....65267 26227] Out 1716z S9	Gary H, Malc	WED	
	1705z	19/12 [395/39 85380.....etc] Repeat of Wednesday	Malc	SAT	
	1705z	23/12 [399/00] Out 1708z S5	Malc	WED	
	1705z	26/12 [392/00] Out 1708z S5	Malc, dMHz	SAT	
	1705z	30/12 [396/00] Out 1708z S2+QRM	Malc, RNGB	WED	
	4909kHz	0805z	01/11 [311/00] Out 0808z S2	Malc	SUN
		1930z	01/11 [363/00] Out 1933z S4	Malc	SUN
0805z		07/11 [313/32 75844.....86822] Out 0814z S3 (Dutch SDR)	Malc	SAT	
1930z		07/11 [365/32 07885 37486 96072 45470 41679 14620 38325.....89106 93349] Out 1940z S3	RNGB, Malc	SAT	
0805z		08/11 [313/32 75844.....etc] Repeat of Saturday	Malc	SUN	
1930z		08/11 [365/32 07885.....etc] Repeat of Saturday	Malc, Gary H	SUN	
0805z		14/11 [315/00] Out 0808z S5	Malc, RNGB	SAT	
1930z		15/11 [367/00] Out 1933z S3	Malc	SUN	
0805z		21/11 [316/00] Out 0808z S7	Malc, RNGB	SAT	
0805z		22/11 [315/00]	RNGB	SUN	
1930z		21/11 [366/00] Out 1933z S9	Malc	SAT	
1930z		22/11 [360/00] Out 1933z S9	Malc	SUN	
0805z		28/11 [311/00] Out 0808z S3	Malc, RNGB	SAT	
1930z		28/11 [365/00] Out 1933z S4	Malc	SAT	
0805z		29/11 [312/00] Out 0808z S2	Malc	SUN	
1930z		29/11 [365/00] Out 1933z S5	Malc	SUN	
0805z		05/12 [319/00] Out 0808z S2	Malc, RNGB	SAT	
1930z		05/12 [363/00] Out 1933z S5	Malc	SAT	
0805z		06/12 [316/00] Out 0808z S2	Malc	SUN	
1930z		06/12 [365/00] Out 1933z S2	Malc	SUN	
0805z		12/12 [319/00] Out 0808z S3	Malc	SAT	
1930z		12/12 [360/34 16237.....28373] Out 1940z S2	Malc	SAT	
1930z		13/12 [360/34 16237.....etc] Repeat of Saturday	Malc	SUN	
1930z		19/12 [364/00]	dMHz	SAT	
0805z		19/12 [315/00] Out 0808z S3	Malc	SAT	
0805z		26/12 [310/39 35775..... 52912] Out 0816z S6	Malc	SAT	
1930z		27/12 [363/00] Out 1933z S6	Malc	SUN	

5082kHz	1625z	01/11 [975/00] Out 1628z S4	Malc	SUN	
	1530z	02/11 [520/00] Out 1533z S3	Malc	MON	
	1625z	04/11 [976/00] Out 1628z S5	Malc	WED	
	1530z	06/11 [525/00] Out 1533z S3	Malc	FRI	
	1625z	08/11 [974/00] Out 1628z S4	Malc	SUN	
	1530z	09/11 [520/31 27156.....42888] Out 1539z S4	Malc	MON	
	1625z	11/11 [975/32 73208.....28870] Out 1634z S6	Malc	WED	
	1530z	13/11 [520/31 27156 34219 43966 84055 47316 25742 44982.....69244 42888] Out 1539z S5	Gary H, Malc	FRI	
	1625z	15/11 [975/32 73208.....etc] Repeat of Wednesday	Malc	SUN	
	1530z	16/11 [527/00] Out 1533z S7	Malc	MON	
	1625z	18/11 [975/00] Out 1628z S4	Malc	WED	
	1530z	20/11 [525/00] Out 1533z S6	Malc	FRI	
	1625z	22/11 [978/00] Out 1628z S9	Malc	SUN	
	1530z	23/11 [524/00] Out 1533z S7	Malc	MON	
	1625z	25/11 [976/00] Out 1628z S7	Malc	WED	
	1530z	27/11 [527/00] Out 1533z S3	Malc, Gary H	FRI	
	1625z	29/11 [970/00] Out 1628z S3	Malc	SUN	
	1530z	30/11 [522/00] Out 1533z S3	Malc	MON	
	1625z	02/12 [974/00] Out 1628z S3	Malc	WED	
	1530z	04/12 [521/00] Out 1533z S5	Malc	FRI	
	1625z	06/12 [970/00] Out 1628z S2	Malc	SUN	
	1530z	07/12 [525/00] Out 1533z S5	Malc	MON	
	1625z	09/12 [977/00] Out 1628z S5	Malc, Gary H	WED	
	1530z	11/12 [528/00]	Brixmis	FRI	
	1625z	13/12 [977/00] Out 1628z S5	Malc	SUN	
	1530z	16/12 [977/00] Out 1533z S6	Malc	WED	
	1625z	20/12 [974/00]	Brixmis	SUN	
	1530z	21/12 [522/33 88174.....38121] Out 1540z S3	Malc	MON	
	1625z	23/12 [974/40 06893.....52962] Out 1636z S5	Malc	WED	
	1625z	27/12 [974/40 06893.....etc] Repeat of Wednesday	Malc	SUN	
	1530z	28/12 [528/00]	Gary H, Malc	MON	
	1625z	30/12 [975/00] Out 1628z S6	Malc	WED	
	5149kHz	0820z	06/11 [434/00] Out 0823z S2	Malc, RNGB	FRI
		0820z	12/11 [438/00] Out 0823z S4	Malc	THU
		0820z	13/11 [436/00] Out 0823z S4	Malc, RNGB	FRI
		0820z	19/11 [463/33 80908 60626 98246 78326 25101 93148 71245.....98611] Out 0830z S4	RNGB, Malc	THU
		0820z	20/11 [436/33 80908.....etc] Repeat of Thursday	Malc	FRI
		0820z	27/11 [435/00] Out 0823z S2	Malc, RNGB	FRI
		0820z	03/12 [432/40 04931 16525 89978 23659 23610 03677 39644 85673.....63366 80145]	RNGB	THU
0820z		04/12 [432/40 04931.....80145] Out 0831z S2	Malc, RNGB	FRI	
0820z		10/12 [434/00] Out 0823z S5	Malc, RNGB	THU	
0820z		11/12 [434/00] Out 0823z S4	Malc, RNGB	FRI	
0820z		17/12 [431/00]	Brixmis, Malc, RNGB	THU	
0820z		18/12 [434/00] Out 0823z S3	Malc, RNGB	FRI	
0820z		24/12 [434/00] Out 0823z S2	Malc, RNGB	THU	
0820z		25/12 [430/00]	RNGB	FRI	
0820z		31/12 [436/00] Out 0823z S2	Malc	THU	
5344kHz		1605z	01/11 [232/00] Out 1608z S3	Malc	SUN
	1605z	03/11 [230/00] Out 1608z S3	Malc	TUE	
	1605z	08/11 [230/00] Out 1608z S4	Malc	SUN	
	1605z	15/11 [233/00] Out 1608z S4	Malc	SUN	
	1605z	17/11 [238/00] Out 1608z S7	Malc, RNGB	TUE	
	1605z	22/11 [230/00] Out 1608z S9	Malc	SUN	
	1605z	24/11 [238/35 61487.....12544] Out 1615z	Malc	MON	
	1605z	29/11 [238/35 61487.....etc] Repeat of Monday	Malc	SUN	
	1605z	01/12 [239/36 64444 71174 66674 74956 14726 745510 91571 48230.....37871 16920]	Gary H, Malc	TUE	
	1605z	06/12 [238/36 64444.....etc] Repeat of Tuesday	Malc	SUN	
	1605z	08/12 [236/00]	Gary H	TUE	
	1605z	08/12 [238/00] Out 1608z S3	Malc	TUE	
	1605z	13/12 [233/00] Out 1608z S5	Malc	SUN	
	1605z	15/12 [232/00] Out 1608z S5	Malc, Gary H	TUE	
	1605z	20/12 [232/00]	Brixmis	SUN	
	1605z	22/12 [238/00] Out 1608z S7	Malc	TUE	
	1605z	27/12 [232/00]	dMHz, Malc	SUN	
	1605z	29/12 [235/00] Out 1608z S5	Malc	TUE	
	5409kHz	1530z	05/11 [261/35 38240 90279 43071 49001 33811 60143 31671 96028.....82333 90579]	RNGB	THU
1530z		12/11 [268/00] Out 1533z S7	Malc	THU	
1530z		19/11 [261/00] Out 1533z S7	Malc	THU	
1530z		10/12 [264/39 24901 54800 20026 97004 58874 92291 11951 02016.....47441 54633]	Gary H, Malc	THU	
1530z		17/12 [264/00] Out 1533z S4	Malc	THU	
1530z		24/12 [267/00] Out 1533z S6	Malc	THU	
1530z		31/12 [262/00] Out 1533z S5	Malc	THU	
5779kHz		1730z	12/11 [413/00] Out 1733z S3	Malc	THU
	1730z	19/11 [413/00] Out 1733z S3	Malc	THU	
	1730z	10/12 [416/00] Out 1733z S2	Malc	THU	
	0315z	16/12 [255/00]	HfD	WED	
	1730z	17/12 [416/00] Out 1733z S3	Malc	THU	
	1730z	24/12 [411/33 13454.....70969] Out 1740z S5	Malc	THU	
	1730z	31/12 [425/00] Out 1733z S5	Malc	THU	

6280kHz	0435z	13/12 [359/34 56297.....etc]	HfD	FRI
6433kHz	1205z	03/11 [465/35 10098.....32558] Out 1215z S2	Malc	TUE
	1205z	04/11 [465/35 10098.....etc] Repeat of Tuesday	Malc	WED
	1205z	11/11 [469/00] Out 1208z S4	Malc	WED
	1205z	17/11 [462/00] Out 1208z S2	Malc	TUE
	1205z	18/11 [462/00] Out 1208z S2	Malc	WED
	1205z	24/11 [460/00] Out 1208z S2	Malc	TUE
	1205z	25/11 [466/00] Out 1208z S2	Malc	WED
	1205z	01/12 [468/00] Out 1208z S2	Malc	TUE
	1205z	08/12 [463/00] Out 1208z S3	Malc	TUE
	1205z	09/12 [465/00] Out 1208z S2	Malc	WED
	1205z	15/12 [461/34 17116.....53467] Out 1215z S3	Malc	TUE
	1205z	16/12 [461/34 17116.....etc] Repeat of Tuesday	Malc	WED
	1205z	22/12 [464/00]	dMHz, Malc	TUE
	1205z	23/12 [460/00] Out 1208z S2 QRM	Malc	WED
	1205z	29/12 [465/00] Out 1208z S2	Malc	TUE
1205z	30/12 [464/00] Out 1208z S2	Malc	WED	
6804kHz	0700z	03/11 [577/34 34475.....16465] Out 0710z S3	Malc	TUE
	0700z	17/11 [577/00] Out 0703z S3	Malc, RNGB	TUE
	0700z	20/11 [575/00]	RNGB	FRI
	0700z	24/11 [574/00] Out 0703z S5	Malc	TUE
	0700z	01/12 [576/00] Out 0703z S2	Malc, RNGB	TUE
	0700z	04/12 [574/00] Out 0703z S3	Malc	FRI
	0700z	08/12 [571/00] Out 0703z S4	Malc, RNGB	TUE
	0700z	15/12 [577/00] Out 0703z S5	Malc, RNGB	TUE
	0700z	22/12 [571/32 15314.....15604] Out 0710z S7	Malc	TUE
	0700z	29/12 [570/00] Out 0703z S5	Malc	TUE
6849kHz	1650z	01/11 [926/00] Out 1653z S3	Malc	SUN
	1900z	02/11 [641/00] Out 1903z S4	Malc	MON
	1650z	06/11 [920/38 51250.....68850] Out 1700z S8	Malc	FRI
	1650z	08/11 [920/38 51250.....etc] Repeat of Friday	Malc	SUN
	1900z	09/11 [644/00] Out 1903z S2	Malc	MON
	1900z	12/11 [644/00] Out 1903z S2	Malc	THU
	1650z	13/11 [920/00] Out 1653z S3	Malc	FRI
	1900z	16/11 [644/31 28341.....48497] Out 1910z S4	Malc	MON
	1900z	19/11 [644/31 28341.....etc] Repeat of Monday	Malc	THU
	1650z	20/11 [924/00] Out 1653z S5	Malc, RNGB	FRI
	1650z	22/11 [929/00] Out 1653z S7	Malc	SUN
	1900z	23/11 [646/00] Out 1903z S2	Malc	MON
	1650z	27/11 [921/00] Out 1653z S3	Malc	FRI
	1650z	29/11 [921/00] Out 1653z S3	Malc	SUN
	1900z	30/11 [641/00] Out 1903z S2 (Dutch SDR)	Malc	MON
	1650z	04/12 [926/00] Out 1653z S2	Malc	FRI
	1900z	07/12 [647/34 61756.....91576] Out 1910z S3	Malc	MON
	1900z	10/12 [647/34 61756.....etc] Repeat of Monday	Malc	THU
	1650z	11/12 [920/37 08321.....95108] Out 1701z S2	Malc	FRI
	1650z	13/12 [920/37 08321.....etc] Repeat of Friday	Malc	SUN
	1900z	14/12 [647/00] Out 1903z S2	Malc	MON
	1900z	17/12 [643/00] Out 1903z S2	Malc	THU
	1650z	18/12 [924/00] Out 1653z S5	Malc	FRI
	1900z	21/12 [647/00] Out 1903z S3	Malc	MON
	1900z	24/12 [646/00] Out 1903z S3	Malc	THU
1650z	27/12 [921/00] Out 1653z S4	Malc	SUN	
1900z	28/12 [642/00] Out 1903z S3	Malc	MON	
7469kHz	0930z	04/11 [271/35 37014 91524 36987 66139 35339 55352 47487.....73740] Out 0940z S2	RNGB, Malc	WED
	0930z	11/11 [279/00] Out 0933z S3	Malc	WED
	0930z	12/11 [279/00] Out 0933z S2	Malc	THU
	0930z	18/11 [275/00]	RNGB	WED
	0930z	19/11 [273/00] Out 0933z S3	Malc, RNGB	THU
	0930z	25/11 [275/00] Out 0933z S2	Malc, RNGB	WED
	0930z	26/11 [279/00]	RNGB	THU
	0930z	02/12 [270/00] Out 0933z S3	Malc, RNGB	WED
	0930z	03/12 [277/00]	RNGB	THU
	0930z	09/12 [270/00] Out 0933z S2	Malc	WED
	0930z	10/12 [278/00] Out 0933z S3	Malc, RNGB	THU
	0930z	16/12 [270/00] Out 0933z S3	Malc	WED
	0930z	17/12 [279/00] Out 0933z S3	Malc	THU
	0930z	23/12 [271/36 85440.....21295] Out 0940z S2	Malc	WED
	0930z	24/12 [271/36 85440.....etc] Repeat of Wednesday	Malc, RNGB	THU
	0930z	30/12 [279/00]	RNGB	WED
	0930z	31/12 [276/00] Out 0933z S2	Malc	THU
7840kHz	0645z	05/11 [510/39 86698 89584 90249 17101 32558 56659 78165 73334.....32014 86974]	RNGB	THU
	0645z	17/11 [518/00]	RNGB	TUE
	0645z	15/12 [514/00]	HfD	TUE

7984kHz	1045z	04/11 [692/22 22583.....01800] Out 1052z S2	Malc	WED
	1045z	09/11 [692/00] Out 1048z S3	Malc	MON
	1045z	11/11 [697/00] Out 1048z S5	Malc, RNGB	WED
	1045z	16/11 [694/00] Out 1048z S4	Malc	MON
	1045z	18/11 [690/00] Out 1048z S4	Malc	WED
	1045z	23/11 [690/00] Out 1048z S5	Malc	MON
	1045z	30/11 [694/00] Out 1048z S5 (Dutch SDR)	Malc	MON
	1045z	02/12 [696/00] Out 1048z S3	Malc	WED
	1045z	07/12 [690/00] Out 1048z S2	Malc	MON
	1045z	09/12 [690/00] Out 1048z S2	Malc	WED
	1045z	14/12 [691/34 22143.....47330] Out 1055z S3	Malc	MON
	1045z	16/12 [691/24 22143.....etc] Repeat of Monday	Malc	WED
	1045z	21/12 [693/00] Out 1048z S4	Malc	MON
	1045z	23/12 [698/00] Out 1048z S2	Malc	WED
	1045z	28/12 [694/00] Out 1048z S3	Malc	MON
	1045z	30/12 [691/00] Out 1048z S2	Malc	WED
8597kHz	0900z	02/11 [533/00] Out 0903z S2	Malc, RNGB	MON
	0900z	04/11 [536/00] Out 0903z S2	Malc	WED
	1000z	06/11 [305/00] Out 1003z S2	Malc	FRI
	0900z	09/11 [533/37 50606.....56872] Out 0910z S3	Malc	MON
	1000z	10/11 [304/36 94349 30512 52320 80739 56845 38206 81736 56908.....99482 10539]	RNGB	TUE
	0900z	11/11 [533/37 50606.....etc] Repeat of Monday	Malc	WED
	1000z	13/11 [304/36 94349.....10539] Out 1011z S3	Malc	FRI
	0900z	16/11 [532/00] Out 0903z S8	Malc	MON
	1000z	17/11 [309/00] Out 1003z S5	Malc, RNGB	TUE
	0900z	18/11 [538/00] Out 0903z S5	Malc, RNGB	WED
	1000z	20/11 [309/00] Out 1003z S5	Malc	FRI
	0900z	23/11 [535/00] Out 0903z S3 QSB1	Malc	MON
	1000z	24/11 [300/00] Out 1003z S3	Malc	TUE
	0900z	25/11 [533/00] Out 0903z S2	Malc, RNGB	WED
	1000z	27/11 [302/00] Out 1003z S4	Malc	FRI
	0900z	30/11 [536/00] Out 0903z S5	Malc, RNGB	MON
	1000z	01/12 [306/00] Out 1003z S2	Malc, RNGB	TUE
	0900z	02/12 [538/00] Out 0903z S3	Malc, RNGB	WED
	1000z	04/12 [306/00] Out 1003z S2	Malc	FRI
	0900z	07/12 [536/35 77316 08191 72873 40905 48442 53453 64615.....23782 88101] Out 0910z S4	RNGB, Malc	MON
	1000z	08/12 [300/00] Out 1003z S5	Malc	TUE
	0900z	09/12 [536/35 77316.....88101] Out 0910z S2	Malc	WED
	1000z	11/12 [300/00] Out 1003z S4	Malc, RNGB	FRI
	1000z	15/12 [306/32 87878.....97415] Out 1010z S3	Malc	TUE
	0900z	14/12 [538/00] Out 0903z S6	Malc, RNGB	MON
	0900z	16/12 [530/00] Out 0903z S3	Malc	WED
	0900z	21/12 [532/00]	dMHz, Malc, RNGB	MON
	1000z	22/12 [300/00] Out 1003z S5	Malc	TUE
	0900z	23/12 [533/00] Out 0903z S2	Malc	WED
	0900z	28/12 [536/00] Out 0903z S3	Malc	MON
1000z	29/12 [304/00] Out 1003z S5	Malc	TUE	
0900z	30/12 [535/00] Out 0903z S2	Malc	WED	
9130kHz	0715z	03/11 [633/33 76988 06871 34867 49146 74599 15049 53885.....31665 96435] Out 0725z S2	RNGB, Malc	TUE
	0715z	06/11 [633/33 76988.....etc] Repeat of Tuesday	Malc	FRI
	0715z	10/11 [636/00]	RNGB	TUE
	0715z	13/11 [635/00] Out 0718z S3	Malc	FRI
	0715z	17/11 [633/00] Out 0718z S4	Malc, RNGB	TUE
	0715z	20/11 [630/00] Out 0718z S5	Malc, RNGB	FRI
	0715z	24/11 [634/00] Out 0718z S3	Malc, RNGB	TUE
	0715z	01/12 [636/00] Out 0718z S5	Malc, RNGB	TUE
	0715z	04/12 [630/00] Out 0718z S3	Malc	FRI
	0715z	08/12 [630/00] Out 0718z S2	Malc, RNGB	TUE
	0715z	11/12 [630/00] Out 0718z S3	Malc	FRI
	0715z	15/12 [630/32 96601 35814 85855 26825 83071 69111 34224.....01687 27825] Out 0725z S7	RNGB, Malc	TUE
	0715z	18/12 [630/32 96601.....etc] Repeat of Tuesday	Malc, RNGB	FRI
	0715z	22/12 [639/00] Out 0718z S3	Malc	TUE
	0715z	29/12 [631/00] Out 0718z S5	Malc	TUE
	10213kHz	0745z	02/11 [261/35 38240.....90579] Out 0756z S6	Malc
0745z		09/11 [260/00] Out 0748z S4	Malc	MON
0745z		16/11 [269/00] Out 0748z S8	Malc	MON
0745z		23/11 [269/00]	RNGB	MON
0745z		30/11 [266/00] Out 0748z S9	Malc	MON
0745z		07/12 [264/39 22901.....54633] Out 0755z S5	Malc	MON
0745z		14/12 [267/00] Out 0748z S9	Malc	MON
0745z		21/12 [261/00] Out 0848z S9	Malc	MON
0745z	28/12 [262/00] Out 0748z S4	Malc	MON	
10487kHz	1910z	01/11 [616/00] Out 1913z S2 (Dutch SDR)	Malc	SUN
	1910z	06/10 [610/00] Out 1913z S2 (Dutch SDR)	Malc	FRI
	1910z	15/11 [611/00] Out 1913z S2 (Dutch SDR)	Malc	SUN
	1910z	20/11 [614/00] Out 1903z S2	Malc, RNGB	FRI
	1910z	11/12 [613/00] Out 1913z S2 (Dutch SDR)	Malc	FRI
	1910z	13/12 [613/00] Out 1913z S2 (Dutch SDR)	Malc	SUN

11450kHz	0640z	16/11 [941/32 29406 23622 61565 75640 93075 84737 51267 60847.....70075 77000]	RNGB	MON
	0640z	14/12 [948/36 05307 61319 25295 43967 91302 77869 82139 17607.....97299 31577]	RNGB, HfD	MON
	0640z	28/12 [941/00]	RNGB	MON
12067kHz	0845z	23/11 [714/00]	RNGB	MON
	0845z	25/11 [711/00]	RNGB	WED
	0845z	30/11 [715/00]	RNGB	MON
	0845z	02/12 [716/00] Out 0848z S7	Malc	WED
	0845z	07/12 [718/38 67278 16944 74471 19771 50515 94914 61234.....12041 05816] Out 0856z S5	RNGB, Malc	MON
	0845z	09/12 [718/38 67278.....etc] Repeat of Monday	Malc	WED
	0845z	14/12 [718/00] Out 0848z S7	Malc	MON
	0845z	16/12 [719/00] Out 0848z S3	Malc	WED
	0845z	21/12 [710/00] Out 0848z S5	Malc, RNGB	MON
	0845z	23/12 [719/00] Out 0848z S5	Malc, RNGB	WED
	0845z	28/12 [711/00] Out 0848z S4	Malc	MON
	0845z	30/12 [714/00] Out 0848z S4	Malc, RNGB	WED
12089kHz	0845z	03/11 [159/21 68414.....25016] Out 0852z S4	Malc, RNGB	TUE
	0845z	12/11 [156/00] Out 0848z S2	Malc	THU
	0845z	17/11 [155/00] Out 0848z S3	Malc, RNGB	TUE
	0845z	19/11 [159/00] Out 0848z S5	Malc, RNGB	THU
	0845z	24/11 [156/00] Out 0848z S2	Malc	TUE
	0845z	26/11 [150/00]	RNGB	THU
	0845z	01/12 [155/00] Out 0848z S4	Malc	TUE
	0845z	08/12 [154/00] Out 0848z S7	Malc, RNGB	TUE
	0845z	10/12 [151/00] Out 0848z S5	Malc, RNGB	THU
	0845z	15/12 [155/00] Out 0848z S9	Malc	TUE
	0845z	17/12 [157/00] Out 0848z S7	Malc	THU
	0845z	22/12 [150/30 43762 11690 78286 91892 12048 51161 39666 95850.....99160 57055]	RNGB	TUE
	0845z	24/12 [150/30 43762.....57055] Out 0855z S2	Malc	THU
	0845z	29/12 [154/00] Out 0848z S3	Malc	TUE
	0845z	31/12 [155/00] Out 0848z S3	Malc	THU
12153kHz	0845z	12/11 [156/00]	RNGB	THU
12424kHz	0830z	02/11 [182/34 67087 59767 33645 88531 99490 97261 86876 82355.....73478 13655]	Ary	MON
	0830z	06/11 [182/34 67087.....etc] Repeat of Monday	Malc, RNGB	FRI
	0830z	09/11 [185/00] Out 0833z S3	Malc	MON
	0830z	13/11 [181/00] Out 0833z S5	Malc, RNGB	FRI
	0830z	16/11 [182/00] Out 0848z S3	Malc, RNGB	MON
	0830z	20/11 [188/00] Out 0833z S7	Malc	FRI
	0830z	23/11 [188/00] Out 0833z S5	Malc, RNGB	MON
	0830z	27/11 [183/00] Out 0823z S4	Malc, RNGB	FRI
	0830z	30/11 [185/00] Out 0833z S6	Malc	MON
	0830z	04/12 [182/00] Out 0833z S2	Malc, RNGB	FRI
	0830z	07/12 [184/00] Out 0833z S3	Malc	MON
	0830z	11/12 [181/00] Out 0833z S6	Malc	FRI
	0830z	14/12 [188/34 35771 75484 38771 08708 86840 95183 87681 49048.....76862 34580] Out 0840z	RNGB, Malc	MON
	0830z	18/12 [188/34 35771.....etc] Repeat of Monday	Malc, RNGB	FRI
	0830z	21/12 [188/00] Out 0833z S4	Malc, RNGB	MON
	0830z	28/12 [184/00] Out 0833z S5	Malc	MON
12924kHz	1745z	01/11 [246/00] Out 1748z S2 (Dutch SDR)	Malc	SUN
	1745z	02/11 [247/00] Out 1748z S2	Malc	MON
	1745z	16/11 [244/00] Out 1748z S2 (Dutch SDR)	Malc	MON
	1745z	22/11 [249/00] Out 1748z S2	Malc, RNGB	SUN
	1745z	30/11 [246/00] Out 1748z S4 (Dutch SDR)	Malc	MON
	1745z	13/12 [245/00] Out 1748z S2	Malc	SUN
	1745z	21/12 [242/00] Out 1748z S2 (Dutch SDR)	Malc	MON
	1745z	27/12 [244/00] Out 1748z S3	Malc	SUN
	1745z	28/12 [244/00] Out 1748z S2	Malc	MON
13363kHz	1345z	03/11 [911/00] Out 1348z S3	Malc	TUE
	1345z	07/11 [917/00] Out 1348z S3	Malc	SAT
	1345z	14/11 [918/00] Out 1348z S3	Malc	SAT
	1345z	17/11 [928/38 86500 47580 48598 88714 17013 2918164994 50309.....40011] Out 1356z S4	RNGB, Malc	TUE
	1345z	21/11 [918/38 86500.....etc] Repeat of Tuesday	Malc	SAT
	1345z	28/11 [914/00] Out 1348z S3	Malc	SAT
	1345z	01/12 [912/00] Out 1348z S3	Malc	TUE
	1345z	05/12 [917/00] Out 1348z S2 (Dutch SDR)	Malc	SAT
	1345z	12/12 [912/36 83254.....64628] Out 1355z S4	Malc	SAT
	1345z	15/12 [919/00] Out 1348z S3	Malc	TUE
	1345z	19/12 [911/00] Out 1348z S4	Malc	SAT
	1345z	26/12 [918/00] Out 1348z S2	Malc	SAT
	1345z	29/12 [918/00] Out 1348z S3	Malc	TUE
13908kHz	0745z	03/11 [220/34 77783 61968 43232 56911 68069 27193 35828 50493.....01257 84638]	RNGB, Malc	TUE
	0745z	05/11 [220/34 77783.....etc] Repeat of Tuesday	RNGB	THU
	0745z	10/11 [223/00]	RNGB	TUE
	0745z	12/11 [228/00] Out 0748z S2 + S9 QRM	Malc, RNGB	THU
	0745z	17/11 [225/00] Out 0748z S9	Malc, RNGB	TUE
	0745z	19/11 [221/00] Out 0748z S2	Malc, RNGB	THU
	0745z	24/11 [223/00] Out 0748z S2	Malc, RNGB	TUE

0745z	01/12 [228/00] Out 0748z S2	Malc, RNGB	TUE
0745z	08/12 [225/33 85787 19895 08532 07416 19545 82673 31473.....08818 97150] Out 0755z S9	RNGB, Malc	TUE
0745z	10/12 [225/33 85787.....etc] Repeat of Tuesday	Malc, RNGB	THU
0745z	15/12 [227/00] Out 0748z S2 (Dutch SDR)	Malc	TUE
0745z	17/12 [228/00] Out 0748z S2	Malc, RNGB	THU
0745z	22/12 [231/00] Out 0748z S6	Malc	TUE
0745z	24/12 [223/00] Out 0748z S2 (Dutch SDR)	Malc, RNGB	THU
0745z	29/12 [228/00] Out 0748z S2	Malc	TUE
0745z	31/12 [229/00] Out 0748z S3	Malc	THU
1461kHz	0820z 03/11 [131/00] Out 0823z S2	Malc, RNGB	TUE
	0820z 04/11 [132/00] Out 0823z S2	Malc	WED
	0820z 11/11 [135/33 15316 26205 13111 62779 13348 01940 40783.....91662 56698] Out 0829z S2	RNGB, Malc	WED
	0820z 17/11 [134/00] Out 0823z S9	Malc	TUE
	0820z 18/11 [136/00] Out 0823z S9	Malc, RNGB	WED
	0820z 24/11 [133/00] Out 0823z S2	Malc, RNGB	TUE
	0820z 25/11 [131/00] Out 0823z S2 (Dutch SDR)	Malc	WED
	0820z 01/12 [133/00] Out 0823z S6 QSB4	Malc, RNGB	TUE
	0820z 02/12 [133/00] Out 0823z S8	Malc, RNGB	WED
	0820z 08/12 [132/31 13335 81037 56091 26853 38463 30469 55498.....06456 77731] Out 0830z S9	Malc, RNGB	TUE
	0820z 09/12 [132/31 13335.....etc] Repeat of Tuesday	Malc	WED
	0820z 15/12 [138/00] Out 0823z S2	Malc, RNGB	TUE
	0820z 16/12 [131/00] Out 0823z S5	Malc	WED
	0820z 22/12 [130/00] Out 0823z S4	Malc, RNGB	TUE
	0820z 23/12 [136/00] Out 0823z S2	Malc	WED
	0820z 29/12 [133/00] Out 0823z S3	Malc, RNGB	TUE
	0820z 30/12 [133/00] Out 0823z S2 (Dutch SDR)	Malc	WED
17378kHz	0745z 04/11 [347/32 34338 59358 57601 54559 04140 03118 31756.....32395 45444] Out 0754z	RNGB, Malc	WED
	0745z 06/11 [347/32 34338.....etc] Repeat of Wednesday	Malc	FRI
	0745z 11/11 [343/00] Out 0748z S2 (Dutch SDR)	Malc, RNGB	WED
	0745z 13/11 [348/00] Out 0748z S2 (Dutch SDR)	Malc	FRI
	0745z 18/11 [346/00] Out 0748z S2+QRM (Dutch SDR)	Malc	WED
	0745z 20/11 [348/00] Out 0748z S2 (Dutch SDR)	Malc	FRI
	0745z 25/11 [346/00] Out 0748z S2 (Dutch SDR)	Malc	WED
	0745z 27/11 [347/00] Out 0748z S2 (Dutch SDR)	Malc	FRI
	0745z 02/12 [343/00] Out 0748z S2 (Dutch SDR)	Malc	WED
	0745z 04/12 [349/00] Out 0748z S4 (Dutch SDR)	Malc, RNGB	FRI
	0745z 09/12 [342/00] Out 0748z S2 (Dutch SDR)	Malc	WED
	0745z 11/12 [344/00] Out 0748z S3	Malc	FRI
	0745z 18/12 [343/34 22027 55177 93980 59195 60191 87401 50965.....95634 86434] Out 0755z S2	RNGB, Malc	FRI
	0745z 23/12 [342/00] Out 0748z S4	Malc, RNGB	WED
	0745z 30/12 [346/00] Out 0748z S2 (Dutch SDR)	Malc	WED

E17z

In addition to the expected Thrsday schedule Ary and Daniel have been aware of an exercise involving not only polytones but also E17z and F06 [see Polytone section too]

8080kHz1440z 23/11 Exercise, noted 15 grps Ary MON
 274 938 15 91943 58456 74429 59317 33671 77963 45424 77202 24749 70635 40970 06309 03380 31979 71641 938 15 00000
 Ary noted 'The transmission actually started at 1440 UTC, not 1445. Then at 1450 UTC: 274 (R) 06309 03380 31978 71641 938 15 00000
 The carrier and noisy transmitter is still on at 1502

10240kHz1415z 24/11 Exercise, noted 19 grps Ary TUE
 274 (R) 836 19 19 4669 274 274 836 19 46692 63034 96502 00040 35152 59 txm off
 returns at 1422z 274 (R) 63034 96502 00040 35152 59388 87379 41855 32726 12357 18283 10094 stopped
 back at 1427z 274 (R) 41855 32726 12357 18283 10094 73140 16277 43912 76162 74983 08828 00897 836 19 00000

8080kHz1435z 24/11 Exercise, noted 19 grps and repeat of above Ary TUE
 274 (R) 836 19 46692 63034 96502 00040 35152 59388 87379 41855 32726 12357 18283 10094 73140 16277 43912 76162 stopped
 274 stopped
 274 (R) 10094 73140 16277 43912 76162 74983 08828 00897 836 19 00000

Thursday

November 2020

0800z	11170kHz	0810z	9820kHz	
05/11	217 498 5 80395 33504 61961 39308 71705 498 5 00000			Weak, Dutch SDR
12/11	217 498 5 80395 33504 61961 39308 71705 498 5 00000		[0810z DutchSDR]	Weak
19/11	217 463 5 80353 04587 36924 98924 80821 463 5 00000			Weak, Dutch SDR
26/11	217 463 5 80353 04587 36924 98924 08021 463 5 00000			Weak

December 2020

03/12	217 460 5 35820 78985 08200 27869 79444 460 5 00000	Weak
10/12	217 460 5 35820 78985 08200 27869 79444 460 5 00000	Weak
17/12	217 469 5 24236 84038 82278 06280 25836 469 5 00000	[0800z Dutch SDR] Weak
24/12	217 469 5 24236 84028 82278 06280 25826 469 5 00000	Weak, Dutch SDR
31/12	217 000	Weak

E25

No Reports. Believed finally closed

G06

PoSW offers his logs and findings for this station

Second + Fourth Thursdays in the Month 1830 UTC Schedule:-

12-Nov-20:- 4519 kHz, very weak signal, noisy frequency, could just about hear the “271” call, unreadable.

26-Nov-20:- nothing heard on the fourth Thursday in the month, not the slightest trace!

No sign of G06 on Thursday 10-December.

Friday 1930 UTC Schedule Following the Second and Fourth Thursdays:-

13-Nov-20:- 4792 kHz, Weak signal, difficult copy, call “436”, DK/GC “132 132 (?) 44 44 (?)”.

27-Nov-20:- As was the case with the previous day's 1830z sending, nothing found at 1930z, not on 4792 or any other frequency.

No sign of G06 on Friday 11-December at 1930 UTC on 4792, a search up and down this part of the short-wave spectrum in case another frequency was being used proved fruitless.

Similar “no show” as the related E06 schedules in this month. These Thursday and Friday transmissions have been around for many years.

M8's offerings which mirror PoSW's exactly:

November 2020

Thursday

1830z 4519kHz

12/11	271 130 44 11532 ... 38780 130 44 00000	Weak, QRM
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Friday

1930z 4792kHz

27/11 NRH

December 2020 remained NRH

S06

S06 log November 2020

Thursdays	0830z	19875kHz	0930z	16067kHz
05/11	'842' 571 32 80364 00498 30694 57641 38957 37041 03081 26824 15546 45538 34159 29386 85187 82885 91493 93549 16021 99906 54855 21465 10273 40146 78958 46651 10219 63378 79740 09108 92500 11005 30098 77801 571 32 00000			
12/11	'842' 960 34 97850 92221 06993 58753 48613 85831 99720 74199 26942 93421 69654 45016 92936 13710 76477 75079 68197 40804 96269 47488 56765 12656 82527 23457 08346 70939 84328 26860 09764 62050 70050 56600 15567 33900 960 34 00000			
19/11	'842' 357 49 59112 76789 95651 03716 44536 34964 62791 25721 10993 73956 13762 73408 77595 67570 84067 31707 80957 3--72 13711 24037 30255 54047 60269 71462 71703 38639 48792 35923 73465 95823 31949 14732 66908 81428 58874 78533 05137 35377 76135 69908 24762 34248 09272 04809 21817 14629 98332 44005 77778 357 49 00000			
26/11	'842' 610 39 77847 03265 88871 33267 80833 90479 42139 64388 54381 18148 31196 18622 47172 74470 96047 66002 34343 35016 88923 14620 66092 74479 76831 42161 19113 92606 14914 81450 18044 90208 70299 58430 19135 56222 01119 06022 73298 51734 20395 610 39 0000			

Fridays (1st & 3rd) 2000z 7378khz 2100z 5097kHz

06/11 '452' 00000
20/11 '452' 00000

S06b 1500z 13397kHz 1600z 9194kHz

11/11 '387' 510 2 11111 00062 510 2
'387' 469 52 63760 67237 71104 82810 28132 38326 80409 37219 32455 85696 67823 35978 79142 05773 12218 32216 02665 90009 41447 93108
53420 38044 66861 16204 98130 53372 30421 08738 35157 13724 25343 34625 48214 33339 76224 58815 46884 59326 89571 43695
67393 69281 10677 77233 32082 62381 47786 37550 90997 61099 49485 23598 469 52 00000 (Thanks to Daniel)

S06c 0700z 9300khz

30/11 sending '28441' followed by long S06 message at 0715z

'910' 187 231 22418 89721 78116 33992 80470 61291 97084 07391 05002 95345 43001 08455 34022 90503 26801 56084 58210 56000 48839 97938
20228 01993 19154 55469 58657 53005 93443 47572 45005 26704 35707 47539 87214 45202 43483 53002 98113 71054 96622 73540
52247 85164 15536 65668 79522 48763 39844 69861 69110 16659 63390 29326 82033 93944 86522 95191 95889 53353 71605 47819
30139 55439 12697 88911 25393 38783 55312 84105 75147 72402 27229 60746 33393 87556 66266 90526 46546 31137 55973 11664
83122 07820 05160 70334 59619 03184 32217 86018 86010 04966 40166 70465 79316 64653 93352 54957 18679 66595 31754 05561
40368 96815 83810 31059 96182 28730 63737 13241 23653 67933 64238 14242 01505 23269 80578 40630 88814 96346 26930 68906
71293 06706 30948 62129 63133 94813 17505 32334 37861 70082 17524 28441 86635 96090 62841 54338 27419 30206 53051 46837
13468 59775 05252 68161 14576 02107 22643 92690 69509 60385 42913 92620 33075 52750 52337 52242 66243 56697 76548 65513
42791 35998 83898 96628 70871 42334 62356 08258 52969 08817 55878 87151 32678 77598 71188 21796 01719 28743 90912 11806
65656 02562 23983 13742 91751 32590 89282 53047 87366 31397 13439 56777 82382 96411 28717 86821 14058 27964 81951 78303
37763 76710 70446 12836 12034 62650 05788 81337 31377 32904 71506 16079 05271 50453 35518 96661 06785 31027 03297 59600

S06s November log:

Monday

2nd/9th 0630/0640z 13470/16515 '462' 813 5 95693 44707 03156 44356 63319
16th/23rd '462' 853 7 36417 12362 87620 80171 53302 49062 16409
2nd/9th 0830/0840z 8057/8530 '764' 829 5 07022 32734 34771 48591 47281
16th/23rd '764' 291 5 73687 04565 39895 91670 29357
2nd/9th 0900/0910z 14675/12830 '232' 407 5 84620 80171 58802 48062 16409
16th/23rd '232' 914 5 10107 60562 48015 36417 12532
2nd/9th 1200/1210z 8420/10635 '149' 537 6 23063 36924 98924 75353 33884 83486
16th/23rd '149' 205 6 15452 10002 08793 41716 50801 40123

Tuesday

3rd/10th 0600/0610z 16145/14240 '438' 269 5 10002 96845 22444 08374 98662
17th/24th '438' 260 5 20205 64336 95534 08446 87636
3rd/10th 0700/0710z 5250/6320 '452' 871 6 47281 41127 88454 13285 68090 26008
17th/24th '452' 869 7 36376 35685 65850 49884 66485 41299 81177
3rd/10th 0730/0740z 7410/11532 '427' 583 6 42913 43496 72446 49973 33181 65644
17th/24th '427' 803 5 41127 88454 13285 68099 26883
3rd/10th 0800/0810z 11945/13195 '127' 893 5 72288 08481 65606 57311 32101
17th/24th '127' 460 5 10107 60562 48015 36417 12362
3rd/10th 1000/1010z 6440/5660 '427' 981 5 87425 73220 04504 68866 30206
17th/24th '427' 901 5 20205 64336 95534 08446 87636
3rd/10th 1100/1110z 5035/5975 '265' 890 7 24541 33941 56823 43884 85518 35628 05816
17th/24th '265' 401 7 19152 23063 36924 98924 75353 33884 82468
3rd/10th 1500/1510z 6845/9170 '914' NRH
17th/24th '914' NRH

Wednesday

4th/11th 0830/0840z 11535/11830 '172' 493 5 33941 11998 62487 30112 33504
18th/25th '172' 809 5 47154 25660 69885 96882 92728
4th/11th 0830/0840z 7062/10532 '464' 207 5 24541 11822 06529 62554 80295
18th/25th '464' 289 5 36924 98924 75353 33884 82486
4th/11th 1000/1010z 12365/14280 '276' 981 5 56823 40402 57272 37065 61961
18th/25th '276' 849 5 43697 04565 39895 91670 29254

Thursday

5th/12th (E17z) 0800/0810z 11170/9820 '217' 498 5 80295 33504 61961 39308 71705
19th/26th '217' 463 5 80353 04587 36924 98924 08021
5th/12th 0930/0940z 8812/9540 '698' 470 5 92103 50754 67971 35570 71582
19th/26th '698' 412 5 50801 08374 15744 33884 41299
5th/12th 1200/1210z 12155/10920 '175' 403 6 62554 30112 37065 65600 71259 49301
19th/26th '175' 238 6 73687 04565 39895 91670 29257 20205

Friday

6th/13th 0830/0840z 11040/12153 '156' 403 7 43884 85518 35628 05816 03481 40996 40334
20th '156' 247 8 32314 34896 82738 36376 35685 65850 49884 66485
27th '156' 00000
6th/13th 0900/0910z 5765/6315 '239' 476 5 93845 87709 48840 06625 28524
20th/27th '239' 856 7 20205 64336 95534 08446 87636 04475 31467

Saturday

7th 0800/0810z 8680/8260 '132' 407 5 67553 24398 20119 20765 10852

S11a log Nov/Dec

4242kHz	0915z	02/11 [481/36 29099 95319 77592 33395 74680 50496 30410 26461.....59910 27342]	RNGB	MON
	0915z	05/11 [481/36 29099.....etc] Repeat of Monday	RNGB	FRI
	0915z	09/11 [481/00] Out 0918z S4 (Dutch SDR)	Malc	MON
	0915z	13/11 [485/00] Konyetz 0918z S3	Malc, RNGB	FRI
	0915z	16/11 [485/00] Konyetz 0918z S3	Malc	MON
	0915z	20/11 [484/00] Konyetz 0918z S2	Malc, RNGB	FRI
	0915z	23/11 [480/00] Konyetz 0918z S2	Malc	MON
	0915z	27/11 [482/00]	RNGB	FRI
	0915z	30/11 [480/00] Konyetz 0918z S2 (Dutch SDR)	Malc, RNGB	MON
	0915z	04/12 [481/00] Konyetz 0918z S3 (Dutch SDR)	Malc	FRI
	0915z	07/12 [487/32 34863 63278 48262 72606 71481 96265 16575 44284.....10404 55097]	RNGB, Malc	MON
	0915z	11/12 [487/32 34863.....etc] Repeat of Monday	Malc, RNGB	FRI
	0915z	14/12 [486/00] Konyetz 0918z S2	Malc, RNGB	MON
	0915z	18/12 [484/00] Konyetz 0918z S2	Malc	FRI
	0915z	21/12 [481/00] Konyetz 0918z S3	Malc, RNGB	MON
	0915z	25/12 [483/00]	RNGB	FRI
	0915z	28/12 [482/00] Konyetz 0918z S2	Malc	MON
5371kHz	1135z	04/11 [370/37 76747 29162 31053 14049 30227 01586 29986 89516.....85410] Konyetz 1147z S3	RNGB, Malc	WED
	1135z	06/11 [370/37 76747.....etc] Repeat of Wednesday	Malc	FRI
	1135z	11/11 [372/00] Konyetz 1138z S6	Malc	WED
	1135z	13/11 [378/00] Konyetz 1138z S7	Malc, RNGB	FRI
	1135z	18/11 [373/00] Konyetz 1138z S2	Malc	WED
	1135z	20/11 [379/00] Konyetz 1138z S3	Malc, RNGB	FRI
	1135z	25/11 [378/00] Konyetz 1138z S2	Malc	WED
	1135z	27/11 [370/00] Konyetz 1138z S3	Malc	FRI
	1135z	02/12 [377/00] Konyetz 1138z S3	Malc	WED
	1135z	04/12 [379/00] Konyetz 1138z S2	Malc	FRI
	1135z	09/12 [370/00] Konyetz 1138z S2	Malc, RNGB	WED
	1135z	11/12 [378/00] Konyetz 1138z S4	Malc	FRI
	1135z	16/12 [372/00] Konyetz 1138z S4	Malc	WED
	1135z	23/12 [373/33 87063.....79202] Konyetz 1146z S2	Malc	WED
	1135z	30/12 [373/00] Konyetz 1138z S2	Malc	WED
8102kHz	1020z	03/11 [427/00]	RNGB	TUE
	1020z	06/11 [425/00] Konyetz 1023z S2	Malc	FRI
	1020z	13/11 [429/39 01429.....25031] Konyetz 1033z S8	Malc	FRI
	1020z	17/11 [420/00] Konyetz 1023z S4	Malc	TUE
	1020z	20/11 [425/00] Konyetz 1023z S2	Malc	FRI
	1020z	24/11 [422/00] Konyetz 1023z S3	Malc, RNGB	TUE
	1020z	27/11 [426/00] Konyetz 1023z S3	Malc, RNGB	FRI
	1020z	01/12 [424/00] Konyetz 1023z S2	Malc, RNGB	TUE
	1020z	04/12 [420/00] Konyetz 1023z S2	Malc, RNGB	FRI
	1020z	08/12 [424/00] Konyetz 1023z S3	Malc	TUE
	1020z	11/12 [421/00] Konyetz 1023z S3	Malc	FRI
	1020z	15/12 [421/00] Konyetz 1023z S4	Malc	TUE
	1020z	18/12 [427/00]	RNGB	FRI
	1020z	22/12 [421/35 21603 63213 70864 36553 47472 59860 92117.....01743] Konyetz 1031z S4	RNGB, Malc	TUE
	1020z	29/12 [427/00] Konyetz 1023z S4	Malc	TUE
9050kHz	0700z	02/11 [478/00] Konyetz 0703z S4	Malc	MON
	0700z	03/12 [472/00]	RNGB	THU
	0700z	05/11 [476/00]	RNGB	THU
	0700z	19/11 [470/00]	RNGB	THU
	0700z	17/12 [471/33 13351 36896 67883 26417 89244 79363 79720 08364.....34021 74370]	RNGB	THU
	0700z	24/12 [478/00]	RNGB	THU
9057kHz	0510z	14/12 [650/00]	HfD	MON
11486kHz	1850z	04/11 [285/00] Konyetz 1853z S2 (Dutch SDR)	Malc	WED
	1850z	05/12 [280/00]	RNGB	SAT
	1850z	07/11 [280/00] Konyetz 1853z S2 (Dutch SDR)	Malc	SAT
	1850z	18/11 [281/00] Konyetz 1853z S2	Malc	WED
	1850z	21/11 [286/00] Konyetz 1853z S2 (Dutch SDR)	Malc	SAT
	1850z	02/12 [288/00] Konyetz 1853z S2 (Dutch SDR)	Malc	WED
	1850z	09/12 [284/00] Konyetz 1853z S2 QSB1 (Dutch SDR)	Malc	WED
	1850z	12/12 [280/00] Konyetz 1853z S2 (Dutch SDR)	Malc	SAT
	1850z	26/12 [281/00] Konyetz 1853z S2	Malc	SAT
	1850z	30/12 [281/00] Konyetz 1853z S2 (Dutch SDR)	Malc	WED
12153kHz	0715z	04/11 [382/00] Konyetz 0718z S3	Malc	WED
	0715z	09/11 [382/38 45532.....44884] Konyetz 0727z S5	Malc	MON
	0715z	16/11 [381/00] Konyetz 0718z S6	Malc	MON
	0715z	18/11 [380/00] Konyetz 0718z S9+10	Malc	WED
	0715z	23/11 [385/00] Konyetz 0718z S2	Malc	MON
	0715z	30/11 [380/00] Konyetz 0718z S9	Malc	MON
	0715z	02/12 [380/00] Konyetz 0718z S2	Malc	WED
	0715z	07/12 [381/32 91058.....32876] Konyetz 0726z S2	Malc	MON
	0715z	09/12 [381/32 91058.....etc] Repeat of Wednesday	Malc	WED
	0715z	14/12 [384/00] Konyetz 0718z S2 (Dutch SDR)	Malc	MON

0715z	16/12 [382/00] Konyetz 0718z S2	(Dutch SDR)	Malc	WED
0715z	21/12 [383/00] Konyetz 0718z S2		Malc	MON
0715z	28/12 [383/00] Konyetz 0718z S2		Malc	

PoSW's logs add further analysis

S06. O.M. Voice:-

First + Third Fridays in the Month Schedule:-

6-Nov-20:- 2000 UTC, 7378 kHz, "452 452 452 00000", difficult copy, very strong broadcast station on close frequency.
2100 UTC, 5097 kHz, second sending, strong signal on a clear frequency. Similar frequencies used in the first two months of this year.

20-Nov-20:- 2000 UTC, 7378 kHz, "452 452 452 00000", with broadcast station making for difficult copy.
2100 UTC, 5097 kHz, strong.

Forgot to listen for this one on the first Friday in December, the 4th, losing track of the days of the week with the ongoing virus restrictions. On the third Friday had shifted by one hour as was more or less expected and unusually was a "full message":-

18-Dec-20:- Unable to find the first sending which must have been at 1900 UTC because the second sending was at 2000. Very strong broadcast stations all around 7378 kHz, S06 presumably underneath somewhere.

2000 UTC, 5097 kHz, as expected the second sending one hour earlier than in November, calling "452" for a full message, DK/GC "103 103 46 46". Strong signal on a clear frequency, ended about 20 seconds before 2014z.

Also as expected a repeat on the following day:-

19-Dec-20, Saturday:- 2000 UTC, 5097 kHz, strong signal, and again unable to find the 1900z transmission.

S06s. Y.L. Voice:-

Monday 0830 + 0840 UTC Schedule, Call "764":-

2-Nov-20:- 0830 UTC, 8057 kHz, DK/GC "829 829 5 5", good signal, "07022 32734 34771 48591 47281".
0840 UTC, 8530 kHz, slightly weaker.

23-Nov-20:- 0830 UTC, 8057 kHz, strong signal, DK/GC "291 291 5 5", "73687 04565 39895 91670 29357".
0840 UTC, 8530 kHz, also strong.

14-Dec-20:- 0830 UTC, 8057 kHz, DK/GC "219 219 5 5", "66286 90057 66740 28636 26349", S8.
0840 UTC, 8530 kHz, also S8.

21-Dec-20:- 0830 UTC, 8057 kHz, DK/GC "983 983 5 5", strong signal, "18238 10094 73140 16277 43912".
0840 UTC, 8530 kHz, also strong.

28-Dec-20:- 0830 UTC, 8057 kHz, "983 983 5 5" and 5Fs as last time, strong signal.
0840 UTC, 8530 kHz, second sending also strong but went off air at the end of the call-up routine. Came back after a short while with a much weaker signal.

Monday 0900 + 0910 UTC Schedule, Call "232:-

Seem to have overlooked this schedule; thinks "must pay more attention to the prediction list".

14-Dec-20:- 0900 UTC, 14675 kHz, strong signal, DK/GC "801 801 5 5", "03063 24122 33346 65132 02232".
0910 UTC, second sending, also strong.

21-Dec-20:- 0900 UTC, 14675 kHz, DK/GC "478 478 5 5", S7 with QSB, "75717 80332 65125 57051 43690".
0910 UTC, 12830 kHz, stronger, S9.

28-Dec-20:- 0900 UTC, 14675 kHz, weak signal, sank into noise.
0910 UTC, 12830 kHz, second sending much stronger, same message as on the 21st.

Tuesday 0730 + 0740 UTC Schedule, Call "427":-

17-Nov-20:- 0730 UTC, 7410 kHz, DK/GC "803 803 5 5", strong signal, "41127 88454 13285 68099 26883".
0740 UTC, 11532 kHz, also strong.

22-Dec-20:- 0730 UTC, 7410 kHz, DK/GC "810 810 5 5", "42913 43496 72446 49973 33181", strong.
0740 UTC, 11532 kHz, also strong.

Tuesday 0800 + 0810 UTC Schedule, Call "127":-

17-Nov-20:- 0800 UTC, 11945 kHz, not too strong, DK/GC "460 460 5 5", "10107 60562 48015 36417 12362".
0810 UTC, 13195 kHz, stronger.

24-Nov-20:- 0800 UTC, 11945 kHz, S7 with QSB, same message as on the 17th.
0810 UTC, 13195 kHz, also around S7.

1-Dec-20:- 0800 UTC, 11945 kHz, DK/GC "843 843 5 5", S5 to S6, "91943 58456 74439 59317 44671".
0810 UTC, 13195 kHz, weak signal at first, became stronger towards the end.

15-Dec-20:- 0800 UTC, 11945 kHz, DK/GC "803 803 5 5", "65644 54298 27522 31262 27954", S7 with deep QSB.
0810 UTC, 13195 kHz, stronger.

22-Dec-20:- 0800 UTC, 11945 kHz, "803 803 5 5" and same message as on the 15th, weak signal.
0810 UTC, 13195 kHz, stronger.

29-Dec-20:- 0800 UTC, 11495 kHz, "127 127 127 00000", "no message", this is the fifth Tuesday in this month, strong signal.
0809 UTC, just after, 13195 kHz, early start seems to be standard practice for the second sending of an S06s no message. Strong signal.

Wednesday 0830 + 0840 UTC Schedule, Call "172":-

4-Nov-20:- 0830 UTC, 11535 kHz, DK/GC "493 493 5 5", weak signal, sank into noise and became unreadable. Second sending much better:-
0840 UTC, 11830 kHz, less than 300 kHz higher than the first sending but much stronger,
"33941 11998 62487 30112 33504"

18-Nov-20:- Nothing readable at 0830z On 11535, second sending much better:-
0840 UTC, 11830 kHz, peaking S8 with QSB, DK/GC "809 809 5 5", "47154 25660 69885
96887 92728".

25-Nov-20:- 0830 UTC, 11535 kHz, started off a reasonable S6 but rapidly became weak and sank into noise.
0840 UTC, 11830 kHz, good signal, same message as on the 18th.

No sign of this schedule on Wednesdays 2 and 9 December, either very weak down in the noise or schedule has ceased.

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

13-Nov-20:- Missed the 0830z sending on predicted frequency 11040.
0840 UTC, 12153 kHz, DK/GC "403 403 7 7", very strong signal, "43884 85518 35628 05816 03481 40996 40334".

20-Nov-20:- 0830 UTC, 11040 kHz, very weak, unreadable. Second sending much stronger but started slightly late:-
0841 UTC approx, 12153 kHz, DK/GC "247 247 8 8", a higher group count than most,
"32314 34896 82738 36376 35685 65850 49884 66485".

4-Dec-20:- 0830 UTC, 11040 kHz, DK/GC "298 298 7 7", very strong signal this morning,
"52401 63919 92699 14623 74352 48754 42851".
0840 UTC, 12153 kHz, interference from a pulse/buzz signal extending from approx 12145
to 12175 kHz.

11-Dec-20:- 0830 UTC, 11040 kHz, same message as on the 4th, S9 with QSB.
0840 UTC – plus about 30 seconds, a bit over the more common 10 or 15 which is usual for S06s,
12153 kHz, very strong signal.

18-Dec-20:- 0830 UTC, 11040 kHz, DK/GC "432 432 7 7", started off a reasonable signal but became much weaker, "77659 98587 76869 03428 60211
90727 72333".
0840 UTC, 12153 kHz, good signal.

Friday 0900 + 0910 UTC Schedule, Call "239":-

6-Nov-20:- 0910 UTC, 6315 kHz, nothing readable at 0900z on predicted frequency 5765,
DK/GC "476 476 5 5", "93845 87709 48840 06625 28524", weak signal.

13-Nov-20:- 0904 UTC, after, 5765 kHz, late start, "476 476 5 5" and 5Fs as on the 6th.
Weak, reasonably clear..
0913 UTC and 50 seconds approx, another late start, 6315 kHz, weak signal.

4-Dec-20:- 0900 UTC, 5765 kHz, very weak, difficult copy, second sending a bit stronger:-
0910 UTC, 6315 kHz, DK/GC "486 486 5 5", "62554 30112 37065 65600 71259".

11-Dec-20:- 0900 UTC, 5765 kHz, good signal, much stronger than in past weeks, "486 486 5 5" and 5Fs as on 4-Dec.
0910 UTC, 6315 kHz, also stronger than usual.

18-Dec-20:- 0900 UTC, 5765 kHz, DK/GC "415 415 7 7", "91943 58456 74439 56317 44671 15911", good signal again.
0910 UTC, 6315 kHz, also a good signal.

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

7-Nov-20:- 0800 UTC, 8680 kHz, weak signal, difficult copy, DK/GC "407 407 5 5", 5Fs unreadable, sank into noise, second sending better:-
0810 UTC, 8260 kHz, much stronger, "67553 24398 20119 20765 10852".

5-Dec-20:- 0800 UTC, 8680 kHz, again, first sending weak, difficult copy, second sending much better:-
0810 UTC, 8260 kHz, DK/GC "478 478 5 5", peaking S8 with QSB, "62554 30112 37065 65600 71259".

V02a

Nil Reports

V07

Sunday

November 2020

0100z 15946kHz 0120z 14846kHz 0140z 13486kHz

01/11 984 1 8021 108 93018 ... 38000 000 000

Weak

984 984 984 1
8021 108
93018 67492 27189 01621 54927
60799 83466 23448 77909 17793
66439 71902 56110 16234 50343
51608 87705 02355 36098 88076
23273 11677 86700 64661 39703
63622 28963 67655 61927 87189
03169 92789 24502 07714 79488
82633 25185 49711 43449 50137
89270 37084 93099 30494 20527
70508 11193 02301 60986 01449
78472 93164 16256 52908 46605
99255 80009 14788 98243 61173
43570 32762 13414 07511 45681
96087 93721 04765 31253 15686
45876 46381 65387 73714 74599
25317 99310 31815 15402 35671
58054 28075 77053 88756 17243
41598 73079 14897 43967 39951
72828 97986 42054 61964 17051
15482 81192 23090 61384 21783
84356 36100 65813 37431 84434
94569 11464 38000
000 000 *Courtesy DanAR*

08/11 984 1 7372 116 14420 ... 06191 000 000

Weak

984 984 984 1
7372 116
14420 64119 87991 05278 91010
02063 38317 99216 48632 05626
75491 48111 50643 26599 04929
63426 83740 92532 49011 03379
85816 19594 38425 66940 82365
46513 87100 51632 35561 43968
21935 88208 69844 38345 92276
75901 51451 71255 58709 96825
07129 36116 92897 90699 33564
99672 48411 57827 43527 29182
17364 44402 96353 26034 12917
11968 70478 36115 22987 02980
29507 62230 63274 24954 98011
01560 13898 78584 15308 46874
55724 97730 49186 63704 56063
46936 02882 92183 18112 32113
59041 72494 66801 20846 63742
14502 94954 95517 49361 62525
28075 24616 98021 43596 15144
15581 24351 30278 08509 16531
78048 83503 42649 32887 73506
53218 90924 07020 78863 42152
25534 16169 16071 35842 98826
06191
000 000 *Courtesy DanAR*

15/11 984 1 181 128 34873 ... 44770 000 000

Weak

984 984 984 1
181 128
34873 23105 36693 39354 24581
66344 67311 58012 75782 80641
31222 39938 02085 45489 18086
80686 17169 48774 81090 86738
88459 49129 77739 12100 72186
47776 80690 70805 01650 54022
38324 03295 16887 33102 05326
87318 28482 66229 47962 20663
41881 92590 50368 11426 08743
10141 53724 75456 37215 91424
56371 04596 86282 56944 34738
34249 34070 45944 46086 46399
27322 93912 92539 24516 31752
70369 37576 67574 61526 11081
40016 96891 01711 20524 24658
35080 02331 04882 15075 12252
38184 62937 39478 86621 29744
84571 80939 49423 43849 38966
74480 45860 89211 40182 72589
62437 07850 81412 15463 29393
06733 48923 85537 96650 55987
05941 16512 51454 41433 65870
71644 36934 21449 54116 67986
70429 82011 52634 61520 85028
20194 21240 15119 08426 22784
33994 41050 44770 000 000
Courtesy DanAR

22/11 984 1 181 128 34873 ... 44770 000 000 [Rpt message] Strong DanAr SUN

984 984 984 1
181 128
34873 23105 36693 39354 24581
66344 67311 58012 75782 80641
31222 39938 02085 45489 18086
80686 17169 48774 81090 86738
88459 49129 77739 12100 72186
47776 80690 70805 01650 54022
38324 03295 16887 33102 05326
87318 28482 66229 47962 20663
41881 92590 50368 11426 08743
10141 53724 75456 37215 91424
56371 04596 86282 56944 34738
34249 34070 45944 46086 46399
27322 93912 92539 24516 31752
70369 37576 67574 61526 11081
40016 96891 01711 20524 24658
35080 02331 04882 15075 12252
38184 62937 39478 86621 29744
84571 80939 49423 43849 38966
74480 45860 89211 40182 72589
62437 07850 81412 15463 29393
06733 48923 85537 96650 55987
05941 16512 51454 41433 65870
71644 36934 21449 54116 67986
70429 82011 52634 61520 85028
20194 21240 15119 08426 22784
33994 41050 44770 000 000
Courtesy DanAR

29/11 984 1 9365 118 51196 ... 83429 000 000 weak and fading DanAR SUN
Daniel comments "The test signal and crosstalk audio from the broadcasting station was good in my qth before message; then going down too much. Even in SDR web receivers from Japan the signal was a mess"

984 984 984 1
9365 118
51196 63974 24158 09589 10161
42636 24374 03529 00082 20390
91186 37346 58861 93716 57602
64662 12802 75734 49825 98680
26922 50251 88768 15328 35467
77546 79086 54478 65355 34929
31132 42282 88990 44793 19792
86468 86060 72253 11379 52964
90621 22798 56531 32252 47860
59204 12023 01465 30597 78886
13514 22757 16545 11382 16677
15331 73073 58718 06320 99600
41418 53464 13356 71001 15641
02691 04777 21160 89874 68926
14779 66569 96324 98285 23617
09323 82034 47806 34577 75517
40262 91142 36165 83261 06046
89271 45351 82690 64076 58872
56230 12660 66969 43193 03096
27119 70535 48246 27562 90131
21773 69403 19489 88141 76219
36643 76239 21092 24988 90587
60456 82665 35642 04165 86183
32538 85758 83429 000 000
Courtesy DanAR

December 2020

0100z 11594kHz 0120z 10794kHz 0140z 10194kHz

06/12 571 1 5557 124 71222 ... 89840 000 000 Weak DanAR SUN

571 571 571 1
5557 124
71222 36430 37553 24985 67454
78524 86437 81945 23282 53605
09376 44414 21672 55954 54260
21379 14975 17327 41315 90564
62915 51990 45055 00287 84570
49335 54646 53091 85529 61885
56043 54279 45877 17069 61875
58424 58961 34255 97992 51307
40923 21158 35406 58400 40845
70451 51857 62603 63544 44408
72609 06393 70640 34896 79434
20617 02000 20899 83350 89388
94101 32001 08238 91299 83344
41465 41124 64998 70278 29909
12984 12070 60593 23719 42710
92583 12496 75984 14012 35410
55608 46353 22912 10052 19400
53953 96242 63183 45376 71163
52447 11577 06541 17752 87684
06412 44712 64002 43955 49683
12884 15211 05417 45049 02273
92875 83441 95140 94563 96415
53619 58380 43586 51046 20281
09291 13948 00177 06826 07366
13393 81111 14528 89840
000 000 *Courtesy DanAR*

13/12 571 1 9053 130 03062 ... 78985 000 000 [0100z China BCQRM3] Weak

571 571 571 1
9053 130
03062 49373 10475 30477 32444
94708 23345 90463 31705 01573
32192 03829 90098 87501 61814
36279 69303 55828 89019 09809
62789 24708 98263 34517 27318
08228 75513 36574 92512 82068
77307 53806 32903 44467 92468
16152 01481 65525 93363 66381
42515 46036 56152 34097 54049
75586 89814 02781 69589 05923
04904 26310 97681 95639 77062
36527 02111 46231 28623 26194
00422 32362 22442 99686 77144
84758 48320 12771 27912 27844
68585 83170 97388 44882 24214
49318 85325 57166 88729 92214
24321 78768 62747 11199 31757
99943 13375 73917 01863 27432
90264 65742 77606 12070 74828
93133 11783 54913 50642 40288
78842 43964 08115 12139 83310
96256 26190 20836 54041 87671
20251 39580 07047 17513 50431
29575 13321 58367 50332 86638
68390 18707 29830 70720 07210
89532 97558 55673 04831 78985
000 000 *Courtesy DanAR*

20/12 571 1 345 116 79924 ... 26293 000 000 [BCQRM2 China] Weak
*At 0145z aprpx MIL-STD-141A ALE [NORMAL MODE] [TWS] [FC1FEM1][EOM]

571 571 571 1
345 116
79924 21629 46853 51524 79480
75289 60161 83776 20185 80714
12275 91954 13331 85003 75372
09143 49336 25297 40604 69416
71359 23693 04675 12313 13340
32663 83919 56576 72335 94611
54423 75844 72696 30249 07736
82837 87030 86520 51519 82939
34050 31453 38407 86652 06835
78107 53231 44865 89921 59410
49192 22233 15206 46008 39319
09134 56785 70521 71391 27072
55646 59942 55657 31272 95519
00694 27472 24723 06441 50721
22427 86590 26184 95467 45543
30168 36860 41025 44112 46318
08560 24206 04060 70635 27428
93335 67379 81589 89545 39731
04815 76216 46916 91556 99902
24335 03614 67528 26707 48417
13635 15493 65928 07787 02279
28803 75454 51354 29634 93392
41867 62125 08590 37358 38193
26293 000 000
Courtesy DanAR

27/12 571 1 7457 80 95019 ... 50425 000 000 [0100z ChinaBCQRM2] Weak

571 571 571 1
7457 80
95019 37112 34441 83555 78678
18882 05377 09593 55738 76531
53790 86233 83074 73542 86750
11044 05973 32207 57045 59654
08234 20560 69622 93008 24073
43121 26120 36041 62637 22239
69580 22150 55012 35517 56316
54656 16112 17389 29011 10770
38453 30382 11201 17010 67200
90665 32875 97998 53927 09277
82672 33016 74429 98374 69551
23253 76376 95825 82614 31657
34411 46402 76552 26204 91060
56963 73411 95530 86833 95308
26944 11490 30570 22040 20553
18846 45140 81531 87880 50425
000 000 *Courtesy DanAR*

V13

Nil Reports

V15 North Korean Intelligence via Radio Pyongyang

Nil Reports

V24 South Korean Intelligence

Nil Reports

V26

9054kHz1203z	14/11/20[(From M95 sked - USB - Chinese - Female - // 4243 NRH) (Remote tuner Hong Kong)]	JPL	SAT
4364kHz1206z	27/12/20 [(From M95 sked - USB - Chinese - Male - // 8073) (Remote tuner Hong Kong)]	JPL	SUN
8073kHz1157z	09/12/20[(From M95 sked - USB - Chinese - Female - // N/H) (Remote tuner Hong Kong)]	JPL	WED
8073kHz1206z	27/12/20 [(From M95 sked - USB - Chinese - Male - // 4364) (Remote tuner Hong Kong)]	JPL	SUN

Polytones

Like E17z the polytones have not been exempt from the exercise brought to our attention by Ary and Daniel Eckman. Here are the logs submitted and info:
[Thanks Ary and Daniel]

Polytone Exercise detail:

20/11 November

I just found XPA2 on 8133 kHz at 1510. I have to go though, so I can definitively not look for the 1550 transmission. Maybe the 1530 txm but I am not sure. So if anyone would be so kind to look for the next two freqs.....

1510z 8183kHz
1530z 7546kHz

00933 00241 09165 35910 15940 96352 53339 29153 77918 23151
02202 73227 47405 75763 33472 45867 54841 20312 86979 92951
75427 78478 15641 99992 62644 64683 16240 00574 45531 20559
93035 49070 21637 43231 93248 07332 68184 76896 09761 39156
88140 50554 76753 49899 84270 96534 15773 87678 70348 42227
30267 35431 95203 18015 63002 71885 63250 03099 22269 18317
52070 09149 26675 52692 88022 40410 98710 33550 11697 66513
92388 71846 04040 49571 26191 61156 75370 04822 15199 61282
61791 30472 60278 50233 90259 75194 49229 67467 60106 02314
59842 68104 79427 68081 76667 99298 42049 50703 86319 65929
22407 82273 75229 58031 51942 13461 39096 27070 28076 33124
85603 12975 58669 75266 88229 70289 71212 73964 07214 42478
81556 93316 00188 36432 35616 05174 56501 56653 40894 06441
87145 24495 41671 04072 79997 37666 40865 75048 12698 24081
55793 88171 58721 33924 74681 43005 96851 83826 84333 24475
94843 19889 58022 80212 04755 20359 98255 48310 94030 04104
22245 47291 06289 65468 06113 54354 89216 76801 75409 31143
59523 61019 93742 03121 06440 51119 42918 84070 65711 37979
90923 95018 40915 73553 53324 49326 72320 43689 34896 66654
02334 66778 92740 16710 37660 14468 83786 58983 76800 16384
99450 25722 12099 64985 36972 78569 41518 98273 91652 55903
66530 30723 40137 06800 22246 29356 19523 85215 90039 99371
96806 43068 36251 55909 44751 72947 26637 50558 45522 28414
30387 48389 14596 70876 40314 98538 87703 22762 66667 99664
29659 36237 53090 43233

Courtesy Ary

XPA2 Exercise fm Ary MON

8175 23-11-2020 1410 XPA2 MFSK-16/20Bd
7927 23-11-2020 1420 XPA2 MFSK-16/20Bd
7538 23-11-2020 1430 XPA2 MFSK-16/20Bd

00625 00241 87427 80981 04788 84772 64552 36377 84638 88807
47286 32228 52406 32903 27102 68499 06607 82789 04081 59565
68774 76150 48228 95428 15013 76297 63843 18959 20184 22701
95284 18646 13283 19896 16935 13160 58277 00091 31588 87342
23849 36923 76031 21403 19872 00046 30747 10873 41864 71275
72211 35019 35459 79559 22678 91235 98399 07523 69680 86366
75673 46521 23769 52558 03223 36860 38577 31554 42311 31085
60786 32440 88828 48086 36914 70109 15913 20703 17155 63026
51121 91538 30349 28786 31944 55368 40944 94693 15320 04662
75263 42676 47943 21999 82845 77644 18731 88210 77939 36887
85664 47715 65225 50535 49792 02551 18866 52086 10164 15683
31533 97743 21103 87569 39663 37151 56727 02436 84644 98126
39989 44909 15228 54923 52201 83213 56987 57823 63435 22368
58880 16970 01764 46352 85797 18858 60638 68186 98013 45890
69730 91818 27394 95488 65593 05563 50942 63228 49093 14163
81914 14890 45272 28968 63193 65551 63934 40701 25224 87260
34586 59078 58283 06928 20855 10945 82958 18069 49025 32483
28988 25925 50629 39702 25334 20601 85003 03165 58704 33722
45460 64635 29906 90598 98046 38290 92377 21396 57712 69634
27842 65997 82635 05133 87522 20920 41847 23950 71328 30351
07306 52520 56792 74253 66636 63239 16300 77872 98654 14401
97824 40939 29238 82694 95433 89184 29129 38165 68470 06366
87562 33585 49197 27934 01937 01623 25525 44596 02301 77507
26015 77181 26242 84932 82063 78920 35651 65367 62674 49882
37289 95388 98988 62445

From Daniel Eckman more detail but XPA1:

1310z 8189 XPA1
1320z 7952 XPA1
1330z 7622 XPA1
1340z 6901 XPA1
1350z 6783 XPA1
1400z 5834 XPA1

" 1 1 1 1 1 1 1 1 " (sic)

00693 00275 25434 91552 44222 52319 50925 39857 63280 22171
36776 61596 67238 16170 92086 02319 30595 93169 24980 91808
60472 15816 38393 61288 84587 52287 83223 26874 45095 41053
78020 14597 83937 95060 03544 24523 42759 93021 80805 15626
80343 43677 79353 55447 64842 04483 67365 38225 67243 86270
51249 32922 99740 95709 73181 82313 32688 55861 19996 69834
39282 19431 18798 62965 47097 73214 93060 40856 51450 31009
49270 58305 77291 78094 63490 22584 53119 91264 57899 78532
50153 05277 23459 35192 65449 95402 37269 42688 48491 23205
27516 96663 51244 51764 19208 70437 62440 51000 76943 36045
05654 35538 81297 36748 40667 49774 00976 06806 06711 53079
69561 09089 47788 72526 67687 72541 18078 14356 16002 39934
37803 82783 74668 66997 38964 07554 83107 39940 87419 70326
69960 57252 16134 32595 67498 63877 03398 93592 57318 15165
54460 94074 19582 83255 07670 83307 02112 68798 43740 52590
82514 87661 51993 88366 95261 79265 68309 87974 82173 23801
68831 29897 85005 78905 18627 74538 31248 79086 88095 31015
44740 72654 84504 73518 78047 38664 53374 83741 42448 32957
06837 63276 96919 41765 45104 53664 18093 95908 41072 72253
15303 44882 27635 05079 91770 24387 21132 64069 46175 74721
12453 07590 91019 16309 55485 20923 77065 96692 88159 36984
11636 68691 98352 20359 59481 63892 50182 60709 19672 95637
23388 17729 20775 87526 12368 53651 17429 27391 83516 12924
29375 00792 81207 45572 14617 86296 33319 24769 29363 61541
67293 72297 37739 47014 08870 11071 71770 61481 91785 42968
80491 78491 62480 29923 33294 80025 81382 67862 76465 77883
42625 48442 67233 49563 51305 68547 12281 64037 82335 94130
81247 39679 63071 45326 98285 38945 17138 11436

XPA2

1410z 6991//8175 XPA2
1420z 6772//7927 XPA2
1430z 5846//7538 XPA2

8189 24-11-2020 1310 XPA2
7952 24-11-2020 1320 XPA2
7622 24-11-2020 1330 XPA2
6901 24-11-2020 1340 XPA2
6783 24-11-2020 1350 XPA2 stopped during the intro
5834 24-11-2020 1400 XPA2 stopped during the intro

00704 00241 31178 45836 93060 26954 85038 51125 99622 69259
53438 02698 98245 80893 23686 97734 33358 40658 25245 16174
51326 27678 24254 65760 74200 70235 36098 10186 74975 72699
59567 18219 15314 64363 54993 24553 54239 40417 37994 21729
38063 19534 63783 72910 50189 75050 17359 73698 45171 90056
91613 36165 69023 90186 46936 08470 74481 91126 01932 45842
98192 32252 41468 15103 88925 26502 59050 83558 78691 96350
83804 19830 66237 41969 80526 02906 53993 11918 94152 05327
77662 87534 99874 26295 21879 48006 49738 86374 46669 95309
33364 68968 07579 91486 52551 65180 84902 16182 07783 70870
80544 07758 06169 57448 30665 75613 56481 79562 39501 36188
05486 74886 50512 42342 61824 45542 14833 91514 20697 33487
13762 87232 29465 12172 26199 54941 00761 76115 29191 36046
12654 51766 37721 12757 40920 34286 93480 84126 59541 41970
18561 02451 09907 93922 70591 45405 14475 08769 60605 60471
12643 12657 57309 54156 15236 63434 30793 98943 71293 87619
19909 60386 78204 59369 75718 92397 97343 40696 94186 99248
83912 62810 47406 94879 43490 23949 00808 68126 22492 20117
40454 59919 23329 38310 13607 28477 22774 05363 78023 88299
36916 13372 74236 05689 75783 32379 35584 53612 61545 25763
31491 79172 90688 19480 79553 59320 75735 21566 61883 55754
30856 35865 86975 32326 04724 50717 01787 76271 62818 92139
32594 92600 38784 68097 60509 75644 39414 85748 40168 75971
01153 26596 36267 33545 01613 69912 15823 18981 20874 78594
30511 95926 37474 46075

XPA1

9064 25-11-2020 1110 XPA1
8152 25-11-2020 1120 XPA1
7904 25-11-2020 1130 XPA1

11111111

00820 00275 70041 40597 42703 57019 92959 68264 21178 45691
57733 91746 05903 50555 67944 20018 00104 24629 41804 72033
49135 77390 81555 03960 03260 59996 00683 08746 51710 25254
32432 07430 88320 85614 16495 96157 96352 75363 33348 67411
79002 78473 45950 14802 22081 72918 21030 05335 91528 84836
19488 58185 48281 24550 50453 16793 24657 27244 13470 08616
39220 04957 81252 02718 52009 26752 30539 32346 88676 91859
80430 08138 47433 75869 88359 76240 07153 25229 40061 14348
33261 97833 46638 75890 23564 78648 32856 64534 56884 74783
65436 07614 10450 27161 30455 54626 30801 77586 98392 52282
02060 50971 50341 01333 42202 46529 22896 00295 68760 84882
38958 79016 95778 32470 08476 55594 07605 43319 09836 11987
50171 54192 24095 19624 09280 00014 45718 96980 01397 69874
24737 67270 43948 66815 59714 85313 12262 98342 23186 62901
90719 26699 03139 10218 72483 18947 55203 05170 22342 82884
59823 66987 47123 41198 69406 59954 99092 67067 45206 50107
71808 54767 76338 46207 60424 06440 57976 70016 10489 72911
87131 76657 89252 97560 36035 56626 87222 76569 14447 28869
07218 16775 00389 17925 21869 91653 77926 05140 09718 10656
58507 88528 00147 30028 55514 34778 95198 91857 19960 07235
09360 92463 41748 48267 11446 66814 51327 91588 67223 01576
25664 84904 34227 38568 23371 38206 40141 04778 52445 24040
26883 81840 02839 22806 81873 08928 98704 81213 96268 33142
96071 77153 01551 14890 09777 28190 67508 28093 10772 70647
85131 09298 25146 26569 24969 02940 22721 16188 35001 59300
04954 46441 79896 98925 65776 74854 18839 82277 51661 36041
79053 56187 07800 91407 75140 48062 03447 17304 10307 82661
21063 17558 66556 62429 17465 62171 22450 36465

Russian Intel:

Fm Daniel:

1210-1225z 6774//7764 17xQPSK 62.5Bd
1230-1245z 5899//7572 17xQPSK 62.5Bd
1250-1305z 5474//6999 17xQPSK 62.5Bd

Fm Ary:

8141	25-11-2020	1310	17x62.5Bd QPSK/250Bd BPSK	Russian intel.
7987	25-11-2020	1320	17x62.5Bd QPSK/250Bd BPSK	Russian intel.
7534	25-11-2020	1330	17x62.5Bd QPSK/250Bd BPSK	Russian intel.
6974	25-11-2020	1340	17x62.5Bd QPSK/250Bd BPSK	Russian intel.
6774	25-11-2020	1350	17x62.5Bd QPSK/250Bd BPSK	Russian intel.
5874	25-11-2020	1400	17x62.5Bd QPSK/250Bd BPSK	Russian intel.

Onto scheduled Polytones

XPA1 c

Tuesday/Thursday

November 2020

0810z	13978kHz	0830z	14859kHz	0850z	15871kHz	
03/11	587 1 08616 00088 97480 ... 45576			Condx, local and otherwise, very poor	[0840z Fair QSB3]	Weak, QRM3
05/11	587 1 08616 00088 97480 ... 45576				[0840z Fair QSB3]	Weak, QRM3
10/11	587 1 08616 00088 97480 ... 45576					Fair
587 587 587 1 587 587 587 1 587 587 587 1 08616 00088 97480 33987 26352 44887 83158 31637 92040 26475 17882 18563 64113 16353 00926 81318 55852 81848 71900 32261 31239 58447 69398 51734 44498 07966 78312 14526 73703 55542 15257 79637 14291 66349 97694 46267 68235 15161 17422 65570 19715 99610 64861 54771 90536 72921 96767 33295 82695 83701 91805 47057 94386 22916 26666 82528 07933 16969 28012 23515 57634 50459 95425 43963						
69057 40425 41125 55069 67469 20746 70832 59303 71747 83561 35986 82449 01878 24163 39493 92712 40416 87215 16818 68232 26190 08982 29572 21545 98550 22786 45576 <i>Courtesy PLdn</i>						
12/11	587 1 08616 00088 97480 ... 45576				[0830z Unworkable]	Weak
17/11	587 000 0nn63 00001 00000 ... nnnnn				[0810z Unworkable, 0830z QRM5]	Very weak
19/11	Schedule unworkable, Local QRM5 0850z					
24/11	587 000 09768 00001 00000 ... 40667				[0810/0830z Unworkable]	Very weak Poss errors
26/11	587 000 06317 00001 00000 ... 36257					Weak [Also Argentine]

December 2020

0810z	11531kHz	0830z	12137kHz	0850z	13932kHz	
01/12	395 1 00331 00080 86520 ... 20413					Fair, QRM3
395 395 395 1 395 395 395 1 395 395 395 1 00331 00080 86520 88136 07768 53478 06548 44230 62636 74181 67138 97013 30380 36714 95238 12476 30930 88474 18205 39925 40301 65743 87168 12395 43262 95323 34520 28264 65671 84038 14840 87236 35593 04466 24654 16966 47646 17638 47929 12494 00600 37413 84177 14431 79322 26008 98292 30869 36922 64411 64509 41960 99196 31831 11234 77609 86291 62728 33602 12588 50709 37495 50161 52490						
87238 66197 04719 86602 72918 74284 24218 44573 39368 60774 04053 00107 79561 08832 73181 32036 85941 89287 20413 <i>Courtesy PLdn</i>						
03/12	395 1 00331 00080 86520 ... 20413				[0810z Weak, QRM3]	Strong
08/12	395 1 00331 00080 86520 ... 20413					Fair, QRM3
15/12	395 000 02446 00001 00000 ... 36256				[0810/0830z QRM5]	Strong
17/12	395 000 02669 00001 00000 ... 40660				[0830z Fair]	Weak, QRM3
24/12	395 000 09407 00001 00000 ... 36662				[0850z Strong]	Fair

29/12 0810z NRH, 0830/0850z QRM5

31/12 Weak, unworkable

XPA1 Wed/Fri

November 2020

Wednesday/Friday

1310z	13875kHz	1330z	13375kHz	1350z	10875kHz		
04/11	838 1 00358 00103 16343 ... 02705					Ary	WED

838 838 838 1 838 838 838 1
00358 00103 16343 83860 51640 21570 06290 88375 34969 00521
52049 76176 52494 44154 04172 86415 09935 79164 56561 92425
88347 94664 79891 27202 77365 84118 03746 63934 98164 35727
86920 12125 29109 49775 54569 63159 25190 27266 13917 11791
70897 46384 39982 49647 02121 44169 94287 10464 57475 84044
64089 43125 15924 13308 90144 07631 98927 05052 63040 99568
99671 60655 90127 05211 21573 05110 02646 61029 15548 25451
05925 17846 80838 12693 84875 74082 49029 82728 55213 83530
50622 72787 50210 40838 47078 54003 99853 15454 07062 22057
38448 06791 91887 48640 87316 38887 05453 05012 01880 30038
14469 69521 37654 83135 55135 02705 *Courtesy Ary*

06/11	838 1 00358 00103 16343 ... 02705					Fair	
11/11	838 1 00358 00103 16343 ... 02705					Weak	
13/11	838 1 00358 00103 16343 ... 02705				[1350z Weak]	Fair	
18/11	838 1 06119 00030 35287 ... 56151				[1350z Fair, QRM3]	Strong	

838 838 838 1 838 838 838 1 838 838 838 1
06119 00030 35287 16236 72991 81005 41034 46526 21648 69748
15910 11163 45895 37301 87404 26615 92106 90739 27574 41412
95562 60229 31870 47735 93915 41458 54519 88784 45612 42121
81192 66814 56151 *Courtesy PLdn*

20/11	838 1 06119 00030 35287 ... 56151				[1350z QRM5]	Strong	
25/11	838 1 06119 00030 35287 ... 56151				[1310/1330z Unworkable]	Weak	
27/11	838 1 06119 00030 35287 ... 56151				[1310z Strong]	Fair, QRM3	

December 2020

1310z	13465kHz	1330z	12165kHz	1350z	10265kHz		
02/12	412 412 412 000 03682 00001 00000 35263					Ary	WED
04/12	412 000 03348 00001 00000 ... 36657					Weak	
09/12	412 000 01704 00001 00000 ... 36651					Fair QRM3	
11/12	412 000 02592 00001 00000 ... 34663				[1310z Strong]	Weak	
16/12	412 1 07855 00067 99110 ... 37174				[1330z QRM5, 1350z QRM3]	Weak	
18/12	412 1 07855 00067 99110 ... 37174				[1350z Unworkable]	Weak	
22/12	395 000 09608 00001 00000 ... 40261				[0810/0830z BCQRM3]	Fair	
23/12	Unworkable, Msg			3m06s lg			
25/12	412 1 07855 00067 99110 ... 37174			3m06s lg	[1330z QRM4]	Weak	
30/12	412 000 04130 00001 00000 ... 31657			<i>S5 noise level on 10265kHz, rest s7-8</i>	[1350z Fair]	Weak	

XPA2 m

Sunday/Tuesday

November 2020

1200z	14783kHz	1220z	13883kHz	1240z	12183kHz	
01/11	00434 00206 05077 ... 00464					Very strong
<p>00402 00212 49331 44752 06705 09154 97471 63980 82979 61922 12429 34599 11895 26405 16511 38016 19124 48991 85705 85930 67821 31639 19419 13944 50195 68259 27557 87746 17836 07424 66012 06845 11340 99547 83633 91704 44186 03106 94671 87983 43268 34877 89944 28147 04789 81833 53281 16906 03565 91563 85429 78230 91597 54437 85752 59422 67130 24491 31042 96005 65184 12269 37310 28443 38840 92151 31257 33152 63488 57651 13539 49929 25975 42064 14569 37460 51090 87498 17367 75731 58517 06483 24594 76054 92075 24498 69375 60979 40520 69866 99448 85989 25546 21201 87351 06426 46706 89014 24890 42842 90993 88672 11152 80890 21615 08394 12803 68197 96267 12220 79707 61151 18366 70929 50873 23313 79635 04105 25621 06180 09800 81859 57159 53190 54617 11543 96230 45507 30350 96895 86800 02767 33468 09054 52404 74690 46649 46923 94871 74342 83579 93100 93981 23406 90386 33553 36699 13736 52865 19375 05926 29883 72524 24450 12575 24306 12698 35200 68708 46928 67656 34122 73109 50993 33211 42628 67036 02686 40791 12716 30929 73452 85437 00039 61661 87926 85743 12778 06306 57893 19146 79781 01041 10133 59041 94549 97927 52651 68643 22333 26034 41349 07627 36809 88451 86066 62931 21248 96471 75148 27944 99611 10966 69204 64161 98747 15634 26520 58473 15636 19690 99721 38290 84531 16045 <i>Courtesy PLdn</i></p>						
03/11	00402 00212 49331 ... 16045					Very strong
08/11	00402 00212 49331 ... 16045					Strong
10/11	00384 00242 98405 ... 44430					Strong QRM2
15/11	00384 00242 98405 ... 44430			[1200z Very strong]		Strong
17/11	00291 00164 55855 ... 30551					Very strong
<p>00291 00164 55855 86353 99733 53616 60972 36781 50723 87145 93924 93278 26701 14687 49083 94321 81684 66825 00523 82683 31160 94175 22346 85422 03366 43450 34298 95967 41306 47133 38567 13794 47850 87638 34507 60399 05541 59389 11279 52810 82042 69322 55235 53586 67215 64479 68927 76177 27427 01299 01254 47524 96370 93944 20794 31995 89489 73830 21537 21640 44517 32535 12865 19427 16066 16128 76871 95055 11126 15330 55404 25801 80409 43512 95254 73091 16701 53446 94698 96685 40254 66320 12173 70786 97143 64031 77327 63490 88237 98508 95812 11329 18213 46253 50140 24926 74945 20556 26158 95993 66819 74686 96081 60564 26494 49959 43823 11542 16196 24213 71686 93866 97581 41442 27391 71532 66947 16617 48798 88354 35657 56444 01538 54856 93636 08466 16618 37621 24863 24649 94258 05273 86475 67943 01847 14869 84869 33098 43136 64944 46702 57123 53829 42449 46516 16256 41628 16070 51979 12057 42605 95354 09265 48594 96261 82863 19903 28562 57722 03386 89584 21964 92294 36835 33424 06496 30551 <i>Courtesy PLdn</i></p>						
22/11	00291 00164 55855 ... 30551					Very strong
24/11	00573 00096 48614 ... 12630			[1240z Very strong]		Fair
<p>00573 00096 48614 42552 53486 85705 99116 31566 28424 66210 73203 43871 47375 61262 94038 56690 70193 66423 10518 12145 40233 58345 93994 67312 39180 38213 79178 67992 28467 24768 74993 63949 56246 04308 65324 15548 98467 29919 52323 72670 84141 14958 02726 47258 07792 19845 67248 64595 75933 05537 72630 54361 12018 69148 79986 08715 12193 08508 53919 65095 40818 44422 84821 62612 56867 78913 78720 66130 89149 58452 22461 44519 94477 30667 99683 82594 05385 26357 69152 68803 87612 82732 26844 83300 25037 69839 66637 42464 60485 71540 45884 56541 56024 89652 78769 84964 63427 56565 12630 <i>Courtesy PLdn</i></p>						
29/11	00573 00096 48614 ... 12630			[1240z Very strong]		Strong

December 2020

1200z	10807kHz	1220z	12207kHz	1240z	13507kHz	
01/12	05672 00150 69476 ... 41632					Very strong
<p>05672 00150 69476 08773 95586 15603 07295 87093 65330 27837 54469 39329 64249 73854 76550 03251 86204 27020 82543 30232 91860 01699 70492 84150 94165 46491 51990 17619 11656 21650 15985 38641 09797 27951 75289 83255 24246 24344 74439 46414 32778 04470 88168 46987 66646 35833 88508 04340 84318 07184 14184 57303 39961 05212 48502 17264 42970 18441 37713 11327 11042 65182 84842 45106 26989 96581 12823 32143 40205 96328 77307 61010 82367 98661 42718 40667 04311 25767 89126 87314 90377 86450 16945 55442 57046 95061 10278 05249 59984 45305 62191 38621 55643 10411 95023 70204 51744 16550 98527 34851 43365 47950 90336 86340 92323 16798 80511 01043 37652 36480 58860 54353 71126 01604 76134 40017 64759 62473 79574 08938 50333 97125 65364 03780 96018 38640 24077 60078 01727 29829 35353 06264 60216 32609 29128 55841 08264 61608 19492 09052 36485 30552 17428 43641 56064 95812 89435 72180 24174 07694 39067 71287 41632 <i>Courtesy PLdn</i></p>						
06/12	05672 00150 69476 ... 41632			[1200z Very strong]		Strong
08/12	00491 00158 16675 ... 05410					Very strong
<p>00491 00158 16675 50774 53921 18799 21232 60344 78732 55984 91754 47542 82781 25098 81900 43294 01445 42236 49734 50025 28950 02345 08513 58485 26695 51071 98784 08410 70266 52698 58862 53829 06232 63385 07354 98496 43105 28931 16073 09019 98246 33091 28169 43366 56965 41038 50133 43607 35404 73138 19043 59088 45819 49751 06780 17851 84186 20984 55501 47411 57030 52703 13368 22432 97509 20361 74807 53165 77623 44613 47423 32395 82084 68805 89904 29912 31347 63471 74997 98959 86224 28544 19194 78949 22256 17426 92033 99662 52789 41059 47919 89556 05640 97902 47346 76569 75685 23124 72469 41582 42303 29367 15787 66489 62500 79965 36527 53931 92408 26955 40091 14953 49771 16880 22687 31000 35805 11947 35146 46141 53302 11482 86442 00394 42747 52099 39657 18747 57857 05787 80209 61201 53023 65275 58887 94266 46420 98216 77236 33009 35631 14890 51826 15860 36758 09081 42691 61463 02975 82258 13514 18331 30937 12602 54121 40791 18759 56556 80864 89143 05410 <i>Courtesy PLdn</i></p>						
13/12	00491 00158 16675 ... 05410			[1200z Strong]		Very strong
15/12	00136 00144 54451 ... 16046					Very strong
<p>00136 00144 54451 22823 58772 52815 86213 73566 39479 59485 27573 82213 82719 94893 74225 46597 87491 21661 65835 80828 85539 35763 16716 75299 07883 37302 02091 01340 06244 18887 18040 34075 22173 34198 77298 92159 79983 38848 54899 98021 08222 80195 33217 90445 68438 49349 83204 87379 88621 69791 74547 50502 65339 55310 92098 73643 13820 30465 51800 09051 61976 94090 86102 22222 17835 73971 33721 03219 19286 23108 03375 36875 52795 71484 64101 64757 62181 66358 55547 15561 55009 47250 46383 38363 73897 25183 34420 33829 70265 80145 53143 64280 68182 74877 38369 00863 12348 75929 60229 79047 68745 49083 50005 01852 78538 07003 78060 09318 72776 74843 72859 90803 06749 87346 23310 58243 90954 15399 17195 94002 89014 00725 97475 60155 79580 10950 41415 15334 39523 03936 40786 42850 38714 70374 70419 81683 79962 50386 82035 99280 75761 37024 79573 92739 01128 40278 16046 <i>Courtesy PLdn</i></p>						
20/12	00136 00144 54451 ... 16046			[1240z QRM2]		Very strong
22/12	00161 00130 76181 ... 56316					Fair
27/12	00161 00130 76181 ... 56316			[1220z Fair QRM3]		Very strong
29/12	03512 00001 00000 ... 34654			[1240z Strong QRM3]		Very stron

XPA2 p

Monday/Wednesday

November 2020

0800z	11529kHz	0820z	13429kHz	0840z	13929kHz	
02/11	03385 00001 00000 ... 35263				[0800z BCQRM5]	Strong
04/11	01698 00001 00000 ... 40262				[0800z Strong, BCQRM4]	0820z Strong, 0840z Fair
09/11	02964 00001 00000 ... 37666			Poor condx	[0800z BCHETQRM5]	Weak
11/11	01354 00001 00000 ... 34656				[0800z BCHETQRM5]	0820z Fair 0840z Strong

16/11	00106 00056 34162 ... 37725	[0800z BCQRM4]	Fair
18/11	00106 00056 34162 ... 37725	[0800z BCQRM5]	Strong
23/11	00106 00056 34162 ... 37725	[0800z BCQRM2,0840z Weak]	Fair
25/11	00106 00056 34162 ... 37725	[0800z BCQRM5]	Weak
30/11	06198 00089 17144 ... 07677	[0800z Strong BCQRM2]	Very strong

00106 00056 34162 62437 18727 70173 84558 07443 47232 10134
78080 92588 73663 41689 95056 85061 02291 67423 51261 40742
37704 72177 93621 91604 67076 54558 50638 60556 51777 80950
57907 30312 95216 85995 38820 53233 73730 39813 66348 39213
07447 97621 12631 60666 99981 41774 07253 17272 54719 80466
74942 79180 00948 97304 71453 67262 48018 52864 37725
Courtesy PLdn

December 2020

0800z	11493kHz	0820z	13393kHz	0840z	13993kHz	
02/12	06198 00089 17144 ... 07677					[0800z Strong QRM3/4] Very strong
07/12	06198 00089 17144 ... 07677					Very strong
09/12	06198 00089 17144 ... 07677					[0800z Very strong] Fair QRM3
14/12	07382 00001 00000 ... 33667					[0800z Fair] Strong
16/12	08903 00001 00000 ... 37260					Very strong
21/12	09354 00001 00000 ... 34666					Strong
23/12	06063 00001 00000 ... 32664					[0800z Strong] Very strong
28/12	05824 00001 00000 ... 37257					Fair, QRM3
30/12	02397 00001 00000 ... 36263					[0820z QRM3] Very strong

XPA2 Wed/Fri [c/o from Wed/Thu]

November 2020

1200z	10968kHz	1220z	12168kHz	1240z	13368kHz	
04/11	00325 00222 71745 ... 72422					[1200z 10s intro only] 1220z Fair, 1240z Strong
06/11	00325 00222 71745 ... 72422					[1220z Strong] Very strong

00325 00222 71745 01133 74616 60244 04290 64953 87108 88877
32583 34564 20282 08832 65153 93201 96235 01334 50216 11998
72980 14216 50280 30590 47958 60981 80544 82733 74825 55520
88244 38839 99203 65452 57745 57812 44284 03147 48520 60011
84978 80393 09014 88080 30201 43243 54259 33093 47013 52151
25101 01270 79416 83865 81295 59810 99308 26556 91594 45322
20194 51965 45422 82848 75481 78813 68875 04515 52400 80284
26151 66271 16629 38109 89514 54726 35372 96775 79153 89936
22406 92206 53349 29334 86859 89457 73854 35900 32943 85436
65854 50204 41826 16880 47613 89112 44527 04447 88553 60386
97360 65524 10418 00354 47144 28967 29734 15206 87653 19240
52401 64202 85499 52854 54687 28243 90756 87785 87007 70476
05885 25470 32209 88529 02056 48775 87220 55907 46639 72943
70188 74213 58497 05875 12966 03012 98044 40761 49756 39320
66098 63051 59093 52858 30163 11771 44895 56521 72656 86446
88555 34773 81467 57940 48471 16143 27644 38327 37680 81558
03331 53914 44940 01296 29829 61534 28775 41636 29203 38772
58122 96075 85171 94840 32915 13920 14595 26984 77823 95964
63014 11106 26184 40630 62021 02631 60151 03347 15238 45757
30474 47415 56530 18436 36474 03033 86026 15244 96628 25516
21620 28823 05207 82572 16883 71999 49321 54827 34329 02175
63168 87465 43208 82569 83110 73187 85945 95500 42742 44635
64049 54332 11733 16099 72422
Courtesy PLdn

11/11 08691 00202 00902 ... 15141 Very strong

08691 00202 00902 93262 87438 32130 78318 15475 63798 66221 96381 30759 51418 29907 69231 10207 22590 72562 54088 94346 98348 49538 07723 85057 81289 31424 47810 38398 02971 63470 12428 43349 31361 35986 11145 43046 34785 39722 31131 91564 43082 76965 57039 06345 18951 68216 98971 28530 19833 75790 80266 94780 98491 94825 04190 57855 31721 55405 58106 09417 25652 82979 12546 84129 65131 90678 16555 01821 99971 36562 44873 93628 29039 84166 58835 41463 93255 86831 54272 37552 89355 97542 56623 98679 73467 00745 34469 62018 50586 20304 98173 77746 50596 17373 04514 14829 58016 08830 59980 57467 58674 09421 71658 66588 98055 14703 98468 69425 58108 03239 97158 63160 44935 96101 23517 87557 04803 49761 02118 31437 50532 36510 98084 37234 97572 64716 38987 87727 43411 04321 55635 79516 87992 15101 67251 22835 18914 93261 14130 52108 08924 92606 00946 02922 38291 59298 69708 40177 28719 31413 83434 24467 25300 89228 68095 60787 09070 56265 89470 04212 74184 47947 82022 62907 39289 05125 81849 84998 60131 44242 11431 08325 07531 67707 67715 03850 05091 93050 25996 63977 12992 68110 08934 06413 23478 64635 27026 75302 96702 48595 88385 48966 44408 71329 95424 06177 13485 64318 23199 37189 37946 54141 46612 40338 15141

Courtesy PLdn

13/11 08691 00202 00902 ... 15141 Very strong

18/11 NOT MONITORED

20/11 06564 00098 76674 ... 77554 [1220z Strong] Very strong

06564 00098 76674 92143 66624 97530 19844 83749 75152 06196 05675 05987 46135 06500 58343 52846 80731 28525 55890 38422 93241 10529 21285 71297 28286 52969 21461 62906 54438 45739 54523 46525 22329 42096 63593 18577 74040 75629 75638 10911 23579 16800 76738 19156 76429 45760 35410 56241 93418 05247 93499 26727 28300 70435 95808 35267 66075 47814 60363 72650 28236 93621 86609 35187 29682 52719 60777 47970 45189 71829 46107 72301 20688 99079 31894 65440 94777 42487 51359 20191 33430 61320 92097 35178 26957 59061 60382 29643 23446 62098 51329 34108 44295 01555 58830 76025 67817 80220 79546 47543 77554

Courtesy PLdn

25/11 07796 00001 00000 ... 41265 Very strong

27/11 04474 00001 00000 ... 35263 Very strong

December 2020

1200z 9389kHz 1220z 10289kHz 1240z 11589kHz

10289kHz1220z 04/12 QSA1 -weak signal DanAR FRI

11/12 00489 00148 21223 ... 67236 [1200z MISSED] Very strong

00489 00148 21223 58622 51064 67521 96418 93188 22693 43645 20931 45642 55487 03360 66270 04525 10194 07648 71612 48845 67871 33986 17646 93128 08074 09007 04013 44898 58603 99184 96779 17696 53041 07263 03450 51120 36602 37546 76389 57913 37346 06235 28437 24792 80820 15822 88768 15538 20453 14831 31759 56596 11945 71866 82960 20090 15178 45502 18620 42019 87950 67163 54643 99721 90153 84891 25421 45316 09679 00182 81711 82647 71081 75216 41325 60972 15617 24096 47909 15300 11328 73095 28116 19791 57507 80350 36596 85762 07131 52727 96191 83651 00132 98334 25602 87558 43766 28346 88502 31119 09560 37210 72862 51411 32066 47000 29160 23620 44016 93152 90771 59601 68592 31401 75532 82868 29185 64410 71375 97818 69227 77136 00317 37598 78870 36702 08926 59813 46343 85335 04021 95484 98848 23380 11653 79642 95990 85736 46520 74706 94337 08956 57812 86380 52211 10041 51689 07151 33719 90172 62736

Courtesy PLdn

16/12 05928 00088 43083 ... 53101 [1200z Strong] Very strong

05928 00088 43083 94548 84304 17345 77930 80094 02094 68421 37176 01441 17993 52854 72816 35841 69988 67617 09745 76220 63375 90122 47725 41178 35649 82201 03675 60640 51699 13667 91508 98260 67274 17915 35157 01013 82358 36152 35021 57958 03117 80690 43903 18472 07547 26517 07747 28461 20286 97735 93126 47458 85239 96379 69828 72856 63356 35210 84032 05419 13732 55332 63568 29008 47616 31416 91578 39239 37561 61850 44162 04963 19662 76341 95508 75776 60546 67533 87259 00857 45676 69838 16978 15242 26264 08293 33851 74537 19332 52543 53101

Courtesy PLdn

18/12 05928 00088 43083 ... 53101 [1240z Fair, QRM3] Strong

23/12 00233 00086 60815 ... 41325 Very strong

00233 00086 60815 08083 30670 36566 87806 32588 33633 28537 15380 88343 83763 60808 60686 66008 53106 45588 83008 68783 84862 08608 88600 25081 30283 80360 86377 00800 78883 01062 65857 25535 11355 27823 05888 61785 57738 05303 30330 30860 25000 00816 11036 12610 45646 02680 28280 58532 33179 03865 38688 87787 23323 45000 26302 08013 03815 12727 43526 24412 30078 47170 08347 70045 36583 25026 03330 06050 50313 26132 66651 06284 36313 66253 66885 64606 45830 01088 00848 58623 73166 85878 45500 06477 82500 23310 08032 80070 41325

Courtesy PLdn

25/12	00243 00086 60815 ... 41325	[1200z Fair]	Strong
30/12	07143 00001 00000 ... 33263	S7 noise level	Fair

Other Polytones XPA2

0910z 17413kHz 0930z 15852kHz 0950z 13363kHz

02/11 00417 00055 63031 ... 05440 Gert MON

00417 00055 63031 33983 64967 11387 17378 30808 00488 70010
48270 71502 27902 71390 78113 12069 01713 59803 01384 10174
15772 93721 24641 50165 68018 18805 20053 34099 13810 48688
52449 29525 52573 91644 26841 84326 88165 01617 84591 13754
03664 72397 14335 70333 29231 03128 89744 36420 43714 36265
20962 20572 70320 44877 15257 41989 52963 05440
Courtesy Gert

XPA2 other:

14552kHz0520z 16/11 09951 00001 00000 36266 (Via SDR Novosibirsk) Danix MON

1100z 11579kHz 1120z 10979kHz 1140z 10279kHz

02/12 09599 00108 54175 ... 67311 Ary WED

09599 00108 54175 29973 08352 99630 44296 75115 04461 92034
03228 89804 75221 57844 45771 09746 15644 80075 36262 85240
59811 16612 66237 15116 54584 29675 00676 79743 85554 93237
23751 17385 37635 93001 14694 40526 01274 10694 32371 83386
17618 24910 48565 73672 10286 79918 74027 52615 02737 98927
92993 76266 28847 47617 07170 71203 82540 90892 00195 21164
92572 12999 73726 47285 41605 91754 80288 62359 29418 44224
69583 73927 51556 80577 22899 73931 88569 00712 17333 27054
16522 85768 78969 69696 05334 84325 09026 60370 24164 65266
68203 10214 24757 65493 21302 18457 22704 17390 78116 57468
03021 08988 43727 27873 78838 66520 07945 88786 10607 58948
67311 *Courtesy Ary*

1100z 9265kHz 1120z 8165kHz 1140z 7665kHz

02/12 05168 00001 00000 35663 Ary WED

04/12 08207 00001 00000 35661 QSA2 DanAR FRI

XPA2
6984kHz1600z 19/12 09595 00000 00000 36272 Fair QRM3 dmhz SAT

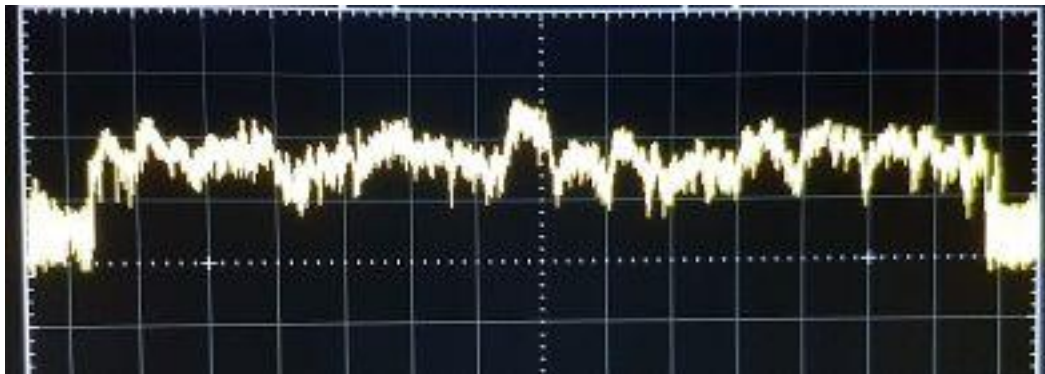
XPA2 logs from H-FD:

Tue 03.11.2020 1600Z 10223 msg
Tue 03.11.2020 1620Z 9223 msg
Tue 03.11.2020 1640Z 8123 msg
Wed 04.11.2020 1200Z 10968 msg, break after 10s
Wed 04.11.2020 1220Z 12168 msg
Wed 04.11.2020 1240Z 13368 msg
Mon 09.11.2020 1600Z 8126 msg
Mon 09.11.2020 1620Z 6826 msg
Mon 09.11.2020 1640Z 5326 msg
Sat 14.11.2020 0910Z 15985 msg
Sat 14.11.2020 0930Z 14885 msg
Sat 14.11.2020 0950Z 13885 msg
Tue 17.11.2020 1100Z 10653 msg
Tue 17.11.2020 1120Z 9353 msg
Tue 17.11.2020 1140Z 8153 msg

XPB1

Sunday/Tuesday

November 2020



Signal strength 4476kHz 2050z 01/11/2020 across 4m28s 5/9+30dB [EFHW via AMU] Noise S7

7876kHz	2000z	01/11	V. strong	4m28s		PLdn	SUN
7576kHz	2010z	01/11	V. strong	4m28s		PLdn	SUN
6876kHz	2020z	01/11	Fair	4m28s	ttyQRM3	PLdn	SUN
5876kHz	2030z	01/11	V. strong	4m28s		PLdn	SUN
5376kHz	2040z	01/11	V. strong	4m28s		PLdn	SUN
4476kHz	2050z	01/11	V. strong	4m28s		PLdn	SUN
7876kHz	2000z	03/11	V. strong	4m28s		PLdn	TUE
7576kHz	2010z	03/11	NOT MONITORED			PLdn	TUE
6876kHz	2020z	03/11	Fair	4m28s	ttyQRM2	PLdn	TUE
5876kHz	2030z	03/11	Fair	4m28s		PLdn	TUE
5376kHz	2040z	03/11	Fair	4m28s		PLdn	TUE
4476kHz	2050z	03/11	Weak	4m28s		PLdn	TUE
7876kHz	2000z	08/11	V. strong	4m28s		PLdn	SUN
7576kHz	2010z	08/11	NOT MONITORED				
6876kHz	2020z	08/11	Fair	4m28s		PLdn	SUN
5876kHz	2030z	08/11	Weak	4m28s		PLdn	SUN
5376kHz	2040z	08/11	Fair	4m28s		PLdn	SUN
4476kHz	2050z	08/11	Strong	4m28s	QRM2	PLdn	SUN
7876kHz	2000z	10/11	V. strong	2m15s		PLdn	TUE
7576kHz	2010z	10/11	V. strong	2m15s		PLdn	TUE
6876kHz	2020z	10/11	Strong	2m15s	QRM2	PLdn	TUE
5876kHz	2030z	10/11	V. strong	2m15s		PLdn	TUE
5376kHz	2040z	10/11	Strong	2m15s	QRM2	PLdn	TUE
4476kHz	2050z	10/11	Strong	2m15s	QRM2	PLdn	TUE
7876kHz	2000z	16/11	Strong	2m15s		PLdn	SUN
7576kHz	2010z	16/11	Strong	2m15s		PLdn	SUN
6876kHz	2020z	16/11	Strong	2m15s		PLdn	SUN
5876kHz	2030z	16/11	Strong	2m15s		PLdn	SUN
5376kHz	2040z	16/11	Strong	2m15s		PLdn	SUN
4476kHz	2050z	16/11	Strong	2m15s	QRM2	PLdn	SUN
7876kHz	2000z	17/11	Weak	2m15s		PLdn	TUE
7576kHz	2010z	17/11	Weak	2m15s	BCQRM4	PLdn	TUE
6876kHz	2020z	17/11	Weak	2m15s		PLdn	TUE
5876kHz	2030z	17/11	Weak	2m15s		PLdn	TUE
5376kHz	2040z	17/11	Weak	2m15s		PLdn	TUE
4476kHz	2050z	17/11	Weak	2m15s	QRM2	PLdn	TUE
7876kHz	2000z	22/11	NRH			PLdn	SUN
7576kHz	2010z	22/11	Weak		BCQRM4	PLdn	SUN
6876kHz	2020z	22/11	Fair	2m15s		PLdn	SUN
5876kHz	2030z	22/11	Fair	2m15s		PLdn	SUN
5376kHz	2040z	22/11	Fair	2m15s		PLdn	SUN
4476kHz	2050z	22/11	Fair	2m15s		PLdn	SUN
7876kHz	2000z	24/11	NRH			PLdn	TUE
7576kHz	2010z	24/11	NRH			PLdn	TUE
6876kHz	2020z	24/11	Weak	1m40s		PLdn	TUE
5876kHz	2030z	24/11	Weak	1m40s		PLdn	TUE
5376kHz	2040z	24/11	Weak	1m40s	QRM3/4	PLdn	TUE
4476kHz	2050z	24/11	Weak	1m40s		PLdn	TUE

7876kHz	2000z	29/11	Strong	2m15s			PLdn	SUN
7576kHz	2010z	29/11	Strong	2m15s			PLdn	SUN
6876kHz	2020z	29/11	Fair	2m15s	QRM3		PLdn	SUN
5876kHz	2030z	29/11	Fair	2m15s	QRM3		PLdn	SUN
5376kHz	2040z	29/11	Strong	2m15s			PLdn	SUN
4476kHz	2050z	29/11	Strong	2m15s			PLdn	SUN

December 2020

8058kHz	2000z	01/12	Strong	4m28s			PLdn	TUE
7558kHz	2010z	01/12	Strong	4m28s			PLdn	TUE
5858kHz	2020z	01/12	Weak	4m28s			PLdn	TUE
5158kHz	2030z	01/12	Strong	4m28s			PLdn	TUE
4858kHz	2040z	01/12	Strong	4m28s			PLdn	TUE
4458kHz	2050z	01/12	Fair	4m28s	QRM2		PLdn	TUE

8058kHz	2000z	06/12	Unworkable				PLdn	SUN
7558kHz	2010z	06/12	V.Weak	4m28s			PLdn	SUN
5858kHz	2020z	06/12	Weak	4m28s			PLdn	SUN
5158kHz	2030z	06/12	Weak	4m28s			PLdn	SUN
4858kHz	2040z	06/12	Strong	4m28s			PLdn	SUN
4458kHz	2050z	06/12	Strong	4m28s			PLdn	SUN

8058kHz	2000z	08/12	NRH				PLdn	TUE
7558kHz	2010z	08/12	Weak	4m28s	QRM3		PLdn	TUE
5858kHz	2020z	08/12	Weak	4m28s	QRM3		PLdn	TUE
5158kHz	2030z	08/12	Weak	4m28s	QRM3		PLdn	TUE
4858kHz	2040z	08/12	Strong	4m28s			PLdn	TUE
4458kHz	2050z	08/12	Strong	4m28s			PLdn	TUE

8058kHz	2000z	13/12	Fair	4m28s			PLdn	SUN
7558kHz	2010z	13/12	Fair	4m28s			PLdn	SUN
5858kHz	2020z	13/12	Weak	4m28s			PLdn	SUN
5158kHz	2030z	13/12	Weak	4m28s			PLdn	SUN
4858kHz	2040z	13/12	Fair	4m28s			PLdn	SUN
4458kHz	2050z	13/12	Fair	4m28s			PLdn	SUN

8058kHz	2000z	15/12	Strong	2m15s			PLdn	TUE
7558kHz	2010z	15/12	Strong	2m15s			PLdn	TUE
5858kHz	2020z	15/12	Weak	2m15s	QRM3		PLdn	TUE
5158kHz	2030z	15/12	V.Strong	2m15s			PLdn	TUE
4858kHz	2040z	15/12	V.Strong	2m15s			PLdn	TUE
4458kHz	2050z	15/12	V.Strong	2m15s			PLdn	TUE

8058kHz	2000z	20/12	Fair	2m15s			PLdn	SUN
7558kHz	2010z	20/12	Fair	2m15s	QRM3		PLdn	SUN
5858kHz	2020z	20/12	V.Strong	2m15s			PLdn	SUN
5158kHz	2030z	20/12	V.Strong	2m15s			PLdn	SUN
4858kHz	2040z	20/12	V.Strong	2m15s			PLdn	SUN
4458kHz	2050z	20/12	Strong	2m15s			PLdn	SUN

8058kHz	2000z	22/12	Fair	2m15s	QRM2		PLdn	TUE
7558kHz	2010z	22/12	Weak	2m15s	QRM2		PLdn	TUE
5858kHz	2020z	22/12	Fair	2m15s	QRM3		PLdn	TUE
5158kHz	2030z	22/12	Fair	2m15s	QRM2		PLdn	TUE
4858kHz	2040z	22/12	Strong	2m15s			PLdn	TUE
4458kHz	2050z	22/12	Strong	2m15s			PLdn	TUE

8058kHz	2000z	27/12	Fair	2m15s	QRM3		PLdn	SUN
7558kHz	2010z	27/12	Fair	2m15s	QRM3		PLdn	SUN
5858kHz	2020z	27/12	Fair	2m15s	QRM2		PLdn	SUN
5158kHz	2030z	27/12	Strong	2m15s	QRM2		PLdn	SUN
4858kHz	2040z	27/12	Strong	2m15s			PLdn	SUN
4458kHz	2050z	27/12	Strong	2m15s			PLdn	SUN

8058kHz	2000z	29/12	Strong	4m28s			PLdn	TUE
7558kHz	2010z	29/12	Strong	4m28s			PLdn	TUE
5858kHz	2020z	29/12	Strong	4m28s			PLdn	TUE
5158kHz	2030z	29/12	Strong	4m28s			PLdn	TUE
4858kHz	2040z	29/12	Strong	4m28s			PLdn	TUE
4458kHz	2050z	29/12	Strong	4m28s			PLdn	TUE

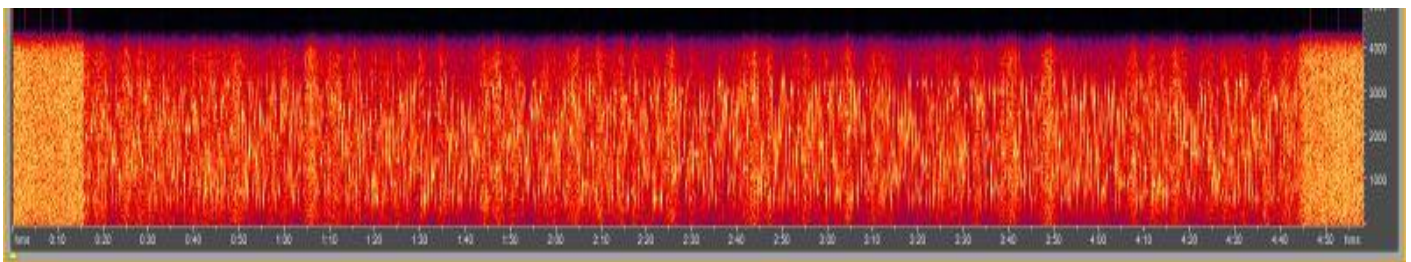
Monday/Saturday

November 2020

13894kHz	1100z	02/11	Fair	4m28s			PLdn	MON
13394kHz	1110z	02/11	Fair	4m28s			PLdn	MON
12194kHz	1120z	02/11	Fair	4m28s			PLdn	MON
11494kHz	1130z	02/11	Weak	4m28s	QRM4		PLdn	MON
11094kHz	1140z	02/11	Fair	4m28s			PLdn	MON
10494kHz	1150z	02/11	Weak	4m28s	QRM4		PLdn	MON

13894kHz	1100z	07/11	Strong	4m28s	QRM3		PLdn	SAT
13394kHz	1110z	07/11	Strong	4m28s	QRM2		PLdn	SAT
12194kHz	1120z	07/11	Strong	4m28s			PLdn	SAT
11494kHz	1130z	07/11	Unworkable				PLdn	SAT
11094kHz	1140z	07/11	Fair	4m28s	QRM3		PLdn	SAT
10494kHz	1150z	07/11	Unworkable				PLdn	SAT
13894kHz	1100z	09/11	Strong	1m40s			PLdn	MON
13394kHz	1110z	09/11	Strong	1m40s			PLdn	MON
12194kHz	1120z	09/11	Strong	1m40s	QRM2		PLdn	MON
11494kHz	1130z	09/11	Unworkable		QRM5		PLdn	MON
11094kHz	1140z	09/11	Unworkable		QRM5		PLdn	MON
10494kHz	1150z	09/11	Weak	1m40s	QRM3/4		PLdn	MON
13894kHz	1100z	14/11	Fair	1m40s	QSB2		PLdn	SAT
13394kHz	1110z	14/11	Strong	1m40s			PLdn	SAT
12194kHz	1120z	14/11	Fair	1m40s	QRM3		PLdn	SAT
11494kHz	1130z	14/11	Fair	1m40s			PLdn	SAT
11094kHz	1140z	14/11	Weak	1m40s	QRM3/4		PLdn	SAT
10494kHz	1150z	14/11	Weak	1m40s	QRM3/4		PLdn	SAT
13894kHz	1100z	16/11	Strong	4m28s			PLdn	MON
13394kHz	1110z	16/11	Strong	4m28s			PLdn	MON
12194kHz	1120z	16/11	Strong	4m28s			PLdn	MON
11494kHz	1130z	16/11	Fair	4m28s			PLdn	MON
11094kHz	1140z	16/11	Fair	4m28s			PLdn	MON
10494kHz	1150z	16/11	Fair	4m28s	QRM2		PLdn	MON
13894kHz	1100z	21/11	V.strong	4m28s			PLdn	SAT
13394kHz	1110z	21/11	V.strong	4m28s			PLdn	SAT
12194kHz	1120z	21/11	V.strong	4m28s			PLdn	SAT
11494kHz	1130z	21/11	Strong	4m28s	QRM3		PLdn	SAT
11094kHz	1140z	21/11	Strong	4m28s	QRM3		PLdn	SAT
10494kHz	1150z	21/11	Fair	4m28s	[Noise floor S7]		PLdn	SAT
13894kHz	1100z	23/11	Strong	2m15s			PLdn	MON
13394kHz	1110z	23/11	Strong	2m15s			PLdn	MON
12194kHz	1120z	23/11	Strong	2m15s			PLdn	MON
11494kHz	1130z	23/11	Weak	2m15s	QRM3		PLdn	MON
11094kHz	1140z	23/11	Weak	2m15s	QRM3		PLdn	MON
10494kHz	1150z	23/11	Weak	2m15s	QRM3/4		PLdn	MON
13894kHz	1100z	28/11	Fair	2m15s	QRM3		PLdn	SAT
13394kHz	1110z	28/11	Fair	2m15s	QRM3		PLdn	SAT
12194kHz	1120z	28/11	Strong	2m15s			PLdn	SAT
11494kHz	1130z	28/11	Unworkable		QRM5		PLdn	SAT
11094kHz	1140z	28/11	Unworkable		QRM5		PLdn	SAT
10494kHz	1150z	28/11	Unworkable		QRM5		PLdn	SAT
13894kHz	1100z	30/11	Strong	4m28s	QRM2		PLdn	MON
13394kHz	1110z	30/11	Strong	4m28s	QRM2		PLdn	MON
12194kHz	1120z	30/11	Fair	4m28s	QRM3		PLdn	MON
11494kHz	1130z	30/11	Unworkable		QRM4/5		PLdn	MON
11094kHz	1140z	30/11	Unworkable		QRM4/5		PLdn	MON
10494kHz	1150z	30/11	Unworkable		QRM4/5		PLdn	MON

December 2020



13483kHz 1120z 05/12 Strong 4m28s

14483kHz	1100z	05/12	Fair	4m28s			PLdn	SAT
13983kHz	1110z	05/12	Fair	4m28s			PLdn	SAT
13483kHz	1120z	05/12	Strong	4m28s			PLdn	SAT
12183kHz	1130z	05/12	Strong	4m28s			PLdn	SAT
11583kHz	1140z	05/12	Weak	4m28s	QRM3		PLdn	SAT
10983kHz	1150z	05/12	Fair	4m28s	QRM3		PLdn	SAT

14483kHz	1100z	07/12	Fair	1m40s		PLdn	MON
13983kHz	1110z	07/12	Fair	1m40s		PLdn	MON
13483kHz	1120z	07/12	Strong	1m40s		PLdn	MON
12183kHz	1130z	07/12	Strong	1m40s	QRM2	PLdn	MON
11583kHz	1140z	07/12	Fair	1m40s	QRM4	PLdn	MON
10983kHz	1150z	07/12	Fair	1m40s	QRM3/4	PLdn	MON
14483kHz	1100z	12/12	Fair	1m40s		PLdn	SAT
13983kHz	1110z	12/12	Fair	1m40s		PLdn	SAT
13483kHz	1120z	12/12	Fair	1m40s		PLdn	SAT
12183kHz	1130z	12/12	Strong	1m40s		PLdn	SAT
11583kHz	1140z	12/12	Fair	1m40s	QRM3	PLdn	SAT
10983kHz	1150z	12/12	Strong	1m40s	QRM2	PLdn	SAT
14483kHz	1100z	14/12	Fair	4m28s		PLdn	MON
13983kHz	1110z	14/12	Fair	4m28s		PLdn	MON
13483kHz	1120z	14/12	Fair	4m28s		PLdn	MON
12183kHz	1130z	14/12	Fair	4m28s	QRM2	PLdn	MON
11583kHz	1140z	14/12	Fair	4m28s	QRM4	PLdn	MON
10983kHz	1150z	14/12	Fair	4m28s	QRM2	PLdn	MON
14483kHz	1100z	19/12	Strong	4m28s		PLdn	SAT
13983kHz	1110z	19/12	Strong	4m28s		PLdn	SAT
13483kHz	1120z	19/12	Fair	4m28s	QRM3	PLdn	SAT
12183kHz	1130z	19/12	Fair	4m28s	QRM3	PLdn	SAT
11583kHz	1140z	19/12	Fair	4m28s	QRM3/4	PLdn	SAT
10983kHz	1150z	19/12	Fair	4m28s	QRM2	PLdn	SAT
14483kHz	1100z	21/12	Fair	1m40s		PLdn	MON
13983kHz	1110z	21/12	Fair	1m40s		PLdn	MON
13483kHz	1120z	21/12	Fair	1m40s		PLdn	MON
12183kHz	1130z	21/12	Fair	1m40s		PLdn	MON
11583kHz	1140z	21/12	Fair	1m40s	QRM3	PLdn	MON
10983kHz	1150z	21/12	Fair	1m40s	QRM3	PLdn	MON
14483kHz	1100z	26/12	Unworkable		QRM5	PLdn	SAT
13983kHz	1110z	26/12	Weak	1m40s		PLdn	SAT
13483kHz	1120z	26/12	Weak	1m40s		PLdn	SAT
12183kHz	1130z	26/12	Weak	1m40s	QRM3	PLdn	SAT
11583kHz	1140z	26/12	Weak	1m40s		PLdn	SAT
10983kHz	1150z	26/12	Weak	1m40s		PLdn	SAT
14483kHz	1100z	28/12	Fair	4m28s		PLdn	MON
13983kHz	1110z	28/12	Fair	4m28s		PLdn	MON
13483kHz	1120z	28/12	Strong	4m28s	QRM2	PLdn	MON
12183kHz	1130z	28/12	Strong	4m28s	QRM2	PLdn	MON
11583kHz	1140z	28/12	Weak	4m28s	QRM4	PLdn	MON
10983kHz	1150z	28/12	Strong	4m28s	QRM2	PLdn	MON

Other logs from H-FD:

Mon 23.11.2020 0600Z 13446 msg 4:30
Mon 23.11.2020 0610Z 14446 msg
Mon 23.11.2020 0620Z 14946 msg
Mon 23.11.2020 0630Z 15846 msg
Mon 23.11.2020 0640Z 16146 msg
Mon 23.11.2020 0650Z 17446 msg

Hybrids and Tones

HM01

The British scene is described by PoSW in his report with signals reported by E [also UK] at end:

Signals from the Cuban mixed-mode station in the UK morning picked up somewhat during November - at least on those days of the week when frequencies in the 9 MHz band are used - and the first few days of December before becoming weaker for the remainder of that month.

8-Nov-20, Sunday:- 0806 UTC, 9065 kHz, transmission in progress, good signal but with deep fading up and down, 5Fs "66012 17241 10803 16171 10125 67090". Stopped after 0818z, started up again around 0828, data sounds after 0831. 0858 UTC, before, 9240 kHz, starting up, 5Fs as earlier, data sounds at 0901:15s approx, rapidly became weak.

16-Nov-20, Monday:- 0727:50s UTC, 9330 kHz, starting up after the break, "66012 17241 10803 16171 10125 67090", strong signal with QSB, data sounds at 0731:10s UTC. 0833 UTC, 9065 kHz, transmission in progress, 5Fs as earlier.

18-Nov-20, Wednesday:- 0734 UTC, 9330 kHz, transmission in progress, strong signal with fading up and down, "66012 17241 10803 16171 10125 67090" - again.

22-Nov-20, Sunday:- 0757 UTC, before, 9065 kHz, "66012 17241 10803 16171 10125 67090".

27-Nov-20, Friday:- 0907 UTC, 9240 kHz, transmission in progress, S9 with deep QSB, "66012 17241 10803 16171 10125 67090".

29-Nov-20, Sunday:- 0758 UTC, 9330 kHz, starting up on the wrong frequency, would expect 9065 to be used at this time. 5Fs as on past days. 0810 UTC, 9065 kHz- now gone from 9330 and on the correct frequency.

30-Nov-20, Monday:- 0859 UTC, 9240 kHz, call-up in progress, S9 with the usual deep fading, "66012 17241 10803 16171 10125 67090".

7-Dec-20, Monday:- 0927:40s UTC, 9240 kHz, starting up after the break, same 5F groups.

9-Dec-20, Wednesday:- 0857 UTC approx, 9065 kHz, starting up on the wrong frequency, usually on 9240 at this time, weak. 0927:35s UTC, 9240 kHz, now on the correct frequency, "66012 17241 10803 16171 10125 67090".

For the rest of December signals were much weaker than had been the case for the previous few weeks, not strong enough for reliable copy.

9065kHz0707z	29/11 1n8n3	QRM	E	SUN
9065kHz0811z	05/12	QRM	E	TUE
9065kHz0807z	07/12 66012 17241 10803 16171 10125 67090		E	MON

Others' Logs [mainly from Argentine]

10715kHz2200z	08/11 (66012 17241 10803 16171 10125 67090) QSA2		DanAR	SUN
1071kHz2200z	22/11 (66012 17241 10803 16171 10125 67090) QSA3 Very low audio		DanAR	SUN
10715kHz2200z	18/12 (66012 17241 10803 16171 10125 67090) QSA2 QRN2		DanAR	FRI
17480kHz2200z	17/11 (66012 17241 10803 16171 10125 67090) QSA3		DanAR	TUE
17480kHz2200z	24/11 (66012 17241 10803 16171 10125 67090) QSA3		DanAR	TUE
17480kHz2200z	02/12 (66012 17241 10803 16171 10125 67090) QSA3		DanAR	WED
17480kHz2200z	15/12 66012 17241 10803 16171 10125 67090	KA7U Idaho Kiwi SDR	dmlhz	TUE
17480kHz2200z	26/12 (66012 17241 10803 16171 10125 67090) QSA2		DanAR	SAT

X06 Mazielka

Since 2020, ENIGMA2000 exists 25 years long. The « for-runner », the Old ENIGMA Group, founded around 1990, existed only less than a decade.

On Dec 28 1980 I began to record my 1st cassette pair. My first X06 recording on the 3rd cassette pair, which still exists, comes from November 7 1981, scale : « 532614 » (as we know today, a message to the Russian embassy in Paris). This one came again on November 25 1981 (same frequency as 18 days before, but I don't know, which freq it was), recorded on the 7th cassette pair.

Here is the X06 report for November/December 2020.

Date	Day	UTC	Freq	Scale	Monitor	Comments
20201103	Tue	0753-0758	13524	125643	Dave/AU	TX to Ulaanbaatar, G317 (SDR)
20201103	Tue	0939-0959	13401	154263	Dave	TX to Rome, G7 (SDR)
20201103	Tue	1104	13883	1--6--	Dave	X06b before XPA2 (SDR)
20201103	Tue	1145-1154	16188	325614	Dave	TX to Nairobi, G392 (SDR)
20201106	Fri	1022-1030	13547	625413	Eddy/AU	TX to Tel Aviv, weak, G56
20201110	Tue	1004-1007	16317	612534	Dave	TX to Ashgabat, G89 (SDR)
20201110	Tue	1014-1023	17470	216354	Dave	TX to Chennai, G388 (SDR)
20201111	Wed	0754-0756	18177	164253	Dave	Alert1 (TX to Addis Abbaba, G395) 1
20201111	Wed	0801-0807	18177	164253	Dave	1.2 (SDR - like 1.1)
20201111	Wed	1115/1126	12168	1--6--	Dave	X06b before XPA2 (SDR)
20201112	Thu	0944-0946	13506	164532	Alexinroma	TX to Dublin, strong, G106
20201112	Thu	0954	14560	621543	Ary/NL	Alert 3 (TX to Lisbon, G426, new) 1
20201112	Thu	1001	12167	621543	Ary	3.2
20201112	Thu	1010	13393	1--6--	Ary	X06b before XPA2
20201112	Thu	1012	15878	621543	Ary	3.3
20201112	Thu	1338	11574	1--6--	Ary	X06b before E07
20201114	Sat	0951	13894	1--6--	Dave	X06b before XPB (SDR)
20201115	Sun	1702	6782	1--6--	Schorschi	X06b with S9 and QRM4
20201116	Mon	0700-0836	14349	116---	Ary,Dave/AU	X06b i. p.(1)
20201116	Mon	0820-0823	11158	263514	Dave	Alert 2 (G425) 1 (SDR)
20201116	Mon	0830-0834	8068	263514	Ary	2.2
20201116	Mon	0836-0900	12152	432516	Ary, Dave	TX to Bern, G341
20201116	Mon	0938	9160	532614	Dave	TX to Paris, G147 (tail end, SDR)
20201116	Mon	1133-1246	14350	1--6--	Ary	X06b(2)
20201117	Tue	0857	14462	165423	Dave	TX to Brussels, G151 (SDR)
20201120	Fri	1046	10653	625413	Ary	TX to Tel Aviv, Shortie, G193
20201120	Fri	1104	12168	1--6--	Dave	X06b before XPA2 (SDR)
20201120	Fri	1105	10968	1--6--	Dave	X06b before XPA2 (SDR)
20201120	Fri	1525	8138	625413	Ary	TX to Tel Aviv, shortie, G193
20201120	Fri	1529	8138	1--6--	Ary	X06b before E07
20201121	Sat	1005	13894	1--6--	Dave	X06b before XPB (SDR)
20201121	Sat	1007	13394	1--6--	Dave	X06b before XPB (SDR)
20201121	Sat	1007	12194	1--6--	Dave	X06b before XPB (SDR)
20201121	Sat	1009	11494	1--6--	Dave	X06b before XPB (SDR)
20201121	Sat	1010	11094	1--6--	Dave	X06b before XPB (SDR)
20201121	Sat	1012	10494	1--6--	Dave	X06b before XPB (SDR)
20201123	Mon	0823-0831	17475	156234	Dave	TX to Kampala, G203 (SDR)
20201123	Mon	0904	11537	421635	Dave	TX to Oslo, G220 (SDR)
20201123	Mon	0929	16117	463125	Dave	Alert 2 (TX to Rabat, G222) 1 (SDR)
20201123	Mon	0935	12224	463125	Dave	2.2 (SDR)
20201123	Mon	1004	10372	431625	Dave	TX to Warsaw, G221 (SDR)
20201123	Mon	1916	7616	1--6--	Schorschi	X06b with S9 before E07
20201124	Tue	0958-1024	9840	1--6--	Ary	X06b
20201124	Tue	1030-1033	8580	1--6--	Ary	X06b
20201124	Tue	1035-1037	7680	1--6--	Ary	X06b
20201124	Tue	1039-1049	7850	1--6--	Ary	X06b
20201124	Tue	1053-1159	8670	1--6--	Ary	Very long X06b
20201124	Tue	1234-1318	10540	1--6--	Ary, Dave	Very long X06b, i. p.
20201125	Wed	0842-0844	10814	412356	Ary	TX to Budapest, G243
20201125	Wed	0905-0919	10172	465132	Ary	TX to Sofia, G246
20201126	Thu	1458/1459	8123	16-1--	Ary	X06b before XPA2
20201127	Fri	1207-1211	12133	153624	Ary	TX to Damascus, G264
20201129	Sun	1046-1052	14414	145632	Dave	TX to Algiers, G411 (SDR)
20201201	Tue	0903	12157	165423	Dave	TX to Brussels, G12 (SDR)
20201201	Tue	0918	14812	246531	Dave	TX to Accra, G16 (SDR)
20201201	Tue	1137-1148	14942	325614	Dave	Alert2 (TX to Nairobi,G392)1 (SDR)
20201201	Tue	1153-1206	17454	325614	Dave	2.2 (SDR)
20201202	Wed	1138-1146	14631	362154	Dave	TX to Athens, G32 (SDR)
20201203	Thu	0817-0829	13448	162543	Dave	TX to Nicosia, G39 (SDR)
20201204	Fri	1107	10289	1--6--	LU5EMM	X06b before XPA2 with QSA2
20201209	Wed	0832-0834	13369	412356	Dave	TX to Budapest, G97 (SDR)
20201210	Thu	0954-1011	18660	621543	Eddy	TX to Lisbon, G426
20201213	Sun	0449	5831	1--6--	Dave	X06b (SDR)
20201213	Sun	0500	4962	1--6--	Dave	X06b (SDR)
20201213	Sun	0722	9197	164532	Dave	TX to Dublin, G137 (SDR)
20201213	Sun	1041-1047	15810	145632	Dave	TX to Algiers, G135 (SDR)
20201213	Sun	1126-1140	15710	261453	Dave	TX to Cairo, G138 (SDR)
20201214	Mon	0623	11493	1--6--	Dave	X06b before XPA2 (SDR)
20201214	Mon	0820-0827	17475	156234	Dave	TX to Kampala, G68 (SDR)
20201214	Mon	0903-0914	11537	421635	Dave	TX to Oslo, G74 (SDR)
20201214	Mon	0903-0938	10650	6-1---	Dave	X06b (SDR)

20201214	Mon	0929-0936	12224	463125	Dave	TX to Rabat, G77 (SDR)
20201214	Mon	0944-0947	10372	431625	Dave	TX to Warsaw, G75 (SDR)
20201214	Mon	1028	14483	1--6--	Dave	X06b before XPB (SDR)
20201214	Mon	1234-1310	12350	6--1--	Dave	X06b (SDR)
20201214	Mon	1248-1251	11492	364152	Dave	TX to New Delhi, G73 (SDR)
20201216	Wed	0744-0903	12150	256341	Ary	TX to Beirut, G169(4)
20201217	Thu	1820-1827	7527	164532	Ary	TX to Dublin, G176
20201221	Mon	0838-0842	12152	432516	Dave	TX to Bern, G341 (SDR)
20201221	Mon	0903-0904	12199	532614	Dave	TX to Paris, G147 (SDR)
20201222	Tue	1010-1019	17470	216354	Dave	TX to Chennai, G228 (SDR)
20201223	Wed	0846-0848	13369	412356	Dave	TX to Budapest, G243 (SDR)
20201223	Wed	1005-1019	10214	263145	Dave	TX to Prague, R (SDR)
20201226	Sat	0655	11121	16-1--	Dave	X06b (SDR)
20201227	Sun	1053	14414	145632	Dave	TX to Algiers, G284 (SDR)
20201227	Sun	1055	13507	1661--	Dave	X06b (SDR)
20201228	Mon	0818-0823	14871	156234	Dave	TX to Kampala, G203 (SDR)
20201228	Mon	0901-0904	11537	421635	Dave	TX to Oslo, G220 (SDR)
20201228	Mon	0928-0939	12224	463125	Dave	TX to Rabat, G222 (SDR) (4)
20201228	Mon	0948-0950	10372	431625	Dave	TX to Warsaw, G221 (SDR) (5)
20201228	Mon	1240-1244	11492	364152	Dave	TX to New Delhi, G73 (SDR) (6)

- 1) Changed at 0744 UTC into "3-3-3"
- 2) Moved to 14349 kHz with "6-6-6"
- 3) Short break at 0758 UTC
- 4) Link cf 17453 kHz end 0953 UTC
- 5) Link cf 12112 kHz end 0955 UTC
- 6) Link cf 12177 kHz 1234-1238 UTC

Many thanks to all contributors as usual.

For all of you a happy and especially healthy new year.

Till 2021 I say: good-bye

Jochen Schäfer, Numbers-, X06 Database and Teamkopf

Thanks Jochen; a Happy New Year to yourself and your monitors.

PoSW follows on with his X06 experiences:

X06 6 Tone Repeating:-

A few loggings of X06 in recent weeks:-

6-Nov-20, Friday:- 0928 UTC, 13556 kHz, strong signal, went off at 0930z approx.

16-Nov-20, Monday:- 0838 UTC, 12152 kHz, very strong, went off a few seconds before 0900 UTC.

4-Dec-20, Friday:- 0955 UTC, 12215 kHz, very strong signal, went off after 1000 UTC.

16-Dec-20, Wednesday:- 0758 UTC, 12150 kHz, strong signal, was on for a long time when checked at roughly 10 minute intervals, still on at 0900 UTC, gone when checked at 0905.

21-Dec-20, Monday:- 0822 UTC, 11158 kHz, strong signal, went off about three minutes after being tuned in.

Tnx Peter

Gizza Job!



NCSC IT Delivery Team Member
Greater Manchester

#journeytoGCHQ
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PoSW's Items of Interest in the Media:-

I am still trying to avoid the mainstream media as much as possible which includes broadcast TV with a few exceptions, there are occasionally some films worth watching on a few of the channels such as Sony Action, Paramount and Talking Pictures TV and some interesting documentaries on Smithsonian and PBS America. It says a lot about the state of TV in this country that most of the stuff worth watching are on channels whose owners are based in Japan and the USA. On the down side, one of the better movie channels, Sony Classics, changed to Sony Christmas towards the end of September so with three months to go until Christmas and with a month of British Summer Time to run someone thought it was a good idea to stop showing classic films and instead go over to a programme of sentimental and I suspect low budget Christmas themed stuff. Commercial TV is all about advertising revenue, as the old saying has it, "The first aim of commercial broadcasting is not to bring entertainment and information to the viewer and listener; the first aim of commercial broadcasting is to bring the viewer and listener to the advertiser", so someone must have done their market research and decided that this format was going to make more income.

Still avoiding the print media - the "dead tree press" as much as possible, although I did purchase a copy of the *I* newspaper on 30-November which contained a story with links to the espionage trade. I have never understood why the political class both in the UK and the West in general have allowed the Chinese - and by extension the Chinese Communist Party to take control of large parts of their economies. Back in the days of the Cold War no Western government would have allowed the Soviet Union to buy up key parts of the economy in the way that the Chinese have been allowed to do, especially in the UK where they have been permitted to take command of such sectors as electricity, water, rail and many industrial manufacturing and food and drink sectors. Even one of our local breweries, Greene King Suffolk Ales, has been bought by Chinese interests which in practice means the Chinese Communist Party since under Chinese law all Chinese are required to put the interests of the Party first, foremost and above everything else. The involvement of China in the UK's Telecom network has long been a cause of concern in some circles in this country and this was the subject in a short piece in the *I*. "Telecoms - Minister sets Huawei deadline is the headline, written by Harriet Line which says, "Telecoms firms must stop installing Huawei equipment in the UK's 5G networks from the end of September, the Government has said.

The Digital Secretary, Oliver Dowden, has set out a roadmap to remove high-risk vendors ahead of the Telecommunications (Security) Bill coming before Parliament. The legislation would create national security powers capable of imposing controls on when - if at all - a Telecoms firm could use material supplied by companies such as Huawei.

In the summer, the Government announced that the Chinese firm was to be banned from the most sensitive core parts of UK networks. It plans to rip out all Huawei equipment from 5G networks by 2027. Members of Parliament debate the Bill at a second reading today."

Two deaths of individuals with connections to the world of espionage were reported in December. The death of author John Le Carre - don't know how to do the acute accent on the final letter of his surname with this keyboard - assumed name of David Cornwell - at the age of 89 was reported on 14-December. Author of many novels on the subject of spying, and he had had connections with the world of espionage earlier in his life. His most famous works include *Tinker, Tailor, Soldier, Spy*, made into a TV mini-series by the BBC in the early 1980's with Sir Alec Guinness playing the central character, George Smiley, and *Smiley's People*, again with Sir Alec, both series have been released on DVD by the BBC.

Also in the news as having received a visit from the Grim Reaper was a name from the past, George Blake, whose death at the age of 98 was reported just after Christmas. It came as something of a surprise to learn that he had still been alive. His exploits have been well documented over the years, tried at the Old Bailey for offences under the Official Secrets Act and given a sentence of 42 years he managed to escape from Wormwood Scrubs Prison in London in 1966 in circumstances which are still something of a mystery and eventually showed up in Moscow. Blake's entry in "*Spy Book - The Encyclopedia of Espionage*", by Norman Polmar and Thomas B. Allen, ends with, "Blake, still clinging to his old ideals, admitted in 1990 to being disillusioned by *perestroika* and the demise of communism.

Point to ponder:- "And if a house be divided against itself, that house cannot stand." - The Gospel According to St. Mark, chapter 3 verse 25.

Many thanks Peter; excellent coverage.

Others:

Defence expert 'took revenge on state by leaking secrets'

Published October 27, 2020

<https://www.metro.news/defence-expert-took-revenge-on-state-by-leaking-secrets/2199037/>

A FORMER Ministry of Defence analyst leaked top secret weapons intelligence because police did not take his homophobic assault claims seriously, the Old Bailey heard.

Simon Finch (pictured), 50, worked on a 'highly sensitive' missiles system for government contractors BAE Systems and QinetiQ from 1999 until 2018, when he lost his job.

He allegedly memorised information and emailed it to nine addresses on October 28, 2018, saying he had been mistreated by the UK state, including police, the NHS and his employers. His complaints included that he had suffered two serious homophobic assaults and his subsequent worsening health was ignored by officers and medics.

Prosecutor Mark Heywood said he decided 'he should have no care for national security if the nation had no care for his security'.

Finch, of Swansea, denies breaching the Official Secrets Act by making a 'damaging' disclosure and recording information which could be 'useful to an enemy' of the state. He also denies failing to give passwords to his electronic devices. The trial continues.

<https://www.metro.news/defence-expert-took-revenge-on-state-by-leaking-secrets/2199037/>

Tnx E

GCHQ spooks are monitoring the movement of British people minute by minute to check if they are complying with government restrictions, according to reports.

The London Telegraph (Paywall) reports that spies from Britain's most secretive intelligence and security organisation, Government Communications Headquarters, have embedded a 'cell' within Number 10 Downing Street in order to provide Prime Minister Boris Johnson with real time information pertaining to the public's movements.

<https://summit.news/2020/11/20/report-government-spies-are-tracking-brits-movements-to-check-if-theyre-complying-with-lockdown/>

The Daily Mail also reports on the development, which notes that GCHQ, normally tasked with spying on terrorists and foreign powers, has been turned on the British public to gauge whether people are following the COVID 'rules' or not.

The report notes that as well as tracking the movement of people, the spies are collecting information on "internet searches for holidays and jobs."

A source told The Telegraph that the spying is aiding 'better policymaking,' concerning the coronavirus pandemic, and will be used in order to make a decision on whether the lockdown will be extended beyond December 2, even though Johnson insisted that it definitely wouldn't.

The report also claims that the GCHQ has collected all the information from the maligned 'Track and Trace' app, and is ensuring that it is 'anonymised', so it cannot be accessed by 'hostile states'.

The spy agency is also being employed to combat 'anti-vaccination conspiracy theories' being spread on social media, in relation to the pandemic.

Speaking anonymously to the London Times earlier this month, a source noted that "GCHQ has been told to take out antivaxers online and on social media. There are ways they have used to monitor and disrupt terrorist propaganda."

The report noted that the spy agency was considering taking down websites and content that isn't pro-vaccination, as well as 'disrupting' those creating the content by "using a toolkit developed to tackle disinformation and recruitment material peddled by Islamic State."

GCHQ has previously been embroiled in controversy where spying on the public is concerned, as it was revealed in 2013 by former NSA contractor Edward Snowden, that the agency was scouring all online and telephone data in the UK via a program code named 'Tempora'.

<https://summit.news/2020/11/20/report-government-spies-are-tracking-brits-movements-to-check-if-theyre-complying-with-lockdown/>

Tnx E

UK reveals new 'National Cyber Force', announces Space Command and mysterious AI agency

Combined Ministry of Defence and GCHQ team has worked since April to 'transform cyber capabilities'

Simon Sharwood, APAC Editor Fri 20 Nov 2020 // 07:39 UTC SHARE

The United Kingdom has announced £16.5 billion (\$22bn) of new defence spending, some of which has gone towards a newly revealed National Cyber Force and some earmarked to create a Space Command and agency dedicated to AI.

https://www.theregister.com/2020/11/20/uk_ai_space_cyber_agency/

Prime Minister Boris Johnson's statement to the house about the new spending revealed that the nation has already created the Cyber Force. The Register understands it has operated since around April 2020.

Intelligence agency GCHQ has provided a little detail on the National Cyber Force's (NCF) operations, saying it will provide unified operational command for personnel from the Ministry of Defence, GCHQ, the Secret Intelligence Service (MI6), and the Defence Science and Technology Laboratory (DSTL).

GCHQ's announcement said the ministry brings operational expertise, while DSTL provides scientific and technical capabilities, and GCHQ tosses in its global intelligence. MI6 will provide "expertise in recruiting and running agents alongside its unique ability to deliver clandestine operational technology."

GCHQ said Cyber Force will get jobs such as:

Interfering with a mobile phone to prevent a terrorist from being able to communicate with their contacts;

Helping to prevent the internet from being used as a global platform for serious crimes, including sexual abuse of children and fraud; and

Keeping UK military aircraft safe from targeting by hostile weapons systems.

Johnson's speech styled the space operation as the "Royal Air Force Space Command" and said its activities will include "launching British satellites and our first rocket from Scotland in 2022."

The Ministry of Defence's announcement labelled the agency "Space Command" and said it will "protect the UK's interests in space and control the UK's first satellite launched from a UK rocket by 2022."

Whatever the niceties of the agency, the plan for a 2022 launch of a domestic rocket from Scotland is plausible as approval has been granted to build a space port near Melness, and UK space startup Orbex has already booked half a dozen launch slots at the facility.

Few details of the AI agency were disclosed. But AI got other mentions in the announcement as Johnson announced the purchase of "a new fighter system, harnessing Artificial Intelligence and drone technology to defeat any adversary in air-to-air combat."

Other new hardware covered by the plan includes eight Type 26 and five Type 31 frigates, plus a commitment to the next-generation Type 32, and apparently also "supports the future solid support ships that will supply our Carrier Strike Group."

All of the above announcements were made in the context of a prime ministerial update on the nation's Integrated Review of foreign, defence, security, and development policy. The full review will be delivered in early 2021. ®

https://www.theregister.com/2020/11/20/uk_ai_space_cyber_agency/

Tnx E

Empty streets during the pandemic make it harder to follow suspects, says MI5 chief

Fiona Hamilton, Crime and Security Editor

Thursday October 15 2020, 12.00am, The Times

<https://www.thetimes.co.uk/article/china-changing-the-climate-of-spying-mi5-boss-warns-09hlzprzw>

MI5 is dealing with new threats created by Covid 19, including protecting British research into a vaccine

Spies have found it more difficult to trail suspects during the pandemic because of the empty streets caused by lockdown, the director-general of MI5 revealed yesterday.

Ken McCallum, who took over the security service in April, also revealed that would-be terrorists were altering their plans because there were fewer crowds to target.

Detailing how MI5's activities had changed, Mr McCallum said his officers spent significant amounts of time on the near-empty streets and "covert surveillance is not straightforward".

<https://www.thetimes.co.uk/article/china-changing-the-climate-of-spying-mi5-boss-warns-09hlzprzw>

ed: Probably as difficult to enter target premises because the targets rarely go out - 'Beef Burger and Ice Slice are on the move --- oops no they're not.....'

<https://www.thetimes.co.uk/article/china-changing-the-climate-of-spying-mi5-boss-warns-09hlzprzw>

Tnx E

GCHQ picked image over cost for its luxury National Cyber Security Centre in London, say MPs

Fiona Hamilton, Security Editor

Thursday November 19 2020, 5.00pm, The Times

<https://www.thetimes.co.uk/article/gchq-picked-image-over-cost-for-its-luxury-national-cyber-security-centre-in-london-say-mps-9nrr02dz0>

Nova South, in Victoria, cost nearly £50 million more than the original budget

George Osborne, the former chancellor, and senior GCHQ officials have been condemned for putting "image over cost" on luxury headquarters for the intelligence agency.

A report by MPs claimed that GCHQ, the government's listening post, was willing to endure cutbacks to secure the headquarters in central London for its National Cyber Security Centre (NCSC)

[£96m at Nova South vs £31m at Canary Wharf]

<https://www.thetimes.co.uk/article/gchq-picked-image-over-cost-for-its-luxury-national-cyber-security-centre-in-london-say-mps-9nrr02dz0>

Tnx E

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January 2021

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Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jan kHz, ID, ...	Feb kHz, ID, ...
		x	x				0315		E11	03	5779 25#	5779 25#
x	x	x	x	x	x	x	0400		V13	0	18040	18040
				x		x	0435		E11	03	6280 35#	6280 35#
x							0450		E11	03	4909 41#	4909 41#
x	x	x	x	x	x	x	0500		V13	0	11430	11430
x		x					0510		S11A	03	9057 65#	9057 65#
x		x		x		x	0455		HM01	18	10860	10860
	x		x		x		0455		HM01	18	11462	11462
	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				0530/0550/0610		E07A	01B	5111/ 5811/ 6911 189	5111/ 5811/ 6911 189
		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	16145/14240 438	16145/14240 438
x	x						0600/0610/0620 0630/0640/0650		XPB1	01B	search	search
	x					x	0600/0620/0640		M12	01B	6786/ 7986/ 9286 792	7546/ 9146/10646 516
			x	x			0600/0700	1/3	E06	01B	13960/16350 139	17470/20085 702
	x			x			0620		M01A	14	10233 or 10235 354/458	10233 or 10235 354/458
		x	x				0620		M01A	14	9421 135	9421 135
	x			x			0630		M01A	14	9447 143/796	9447 143/796
		x	x				0630		M01A	14	8111 902/536	8111 902/536
x							0630/0640		S06S	01A	13470/16515 462	13470/16515 462
x		x					0640		E11	03	11450 94#	11450 94#
	x		x				0645		E11	03	7840 51#	7840 51#
x		x		x		x	0655		HM01	18	9330	9330
	x		x		x		0655		HM01	18	13435	13435
x			x				0700		S11A	03	9050 47#	9050 47#
	x			x			0700		E11	03	6804 57#	6804 57#
x	x	x	x	x	x	x	0700		V13	0	8169, 7502	8169, 7502

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jan kHz, ID, ...	Feb kHz, ID, ...
						x	0700		M01	01B	5465 197	5465 197
	x						0700/0710		S06S	01A	5250/ 6320 452	5250/ 6320 452
	x			x			0700/0720/0740		E07	01B	14472/14972/16272 492	15823/16323/18623 836
						x	0700/0720/0740		E07	01B	9326/10426/11526 345	9326/10426/11526 345
					x	x	0710		E11	03	4505 49#	4505 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			0715		E11	03	9130 63#	9130 63#
x		x					0715		S11A	03	12153 38#	12153 38#
	x			x			0720		M01A	14	9151 728	9151 728
	x						0730/0740		S06S	01A	7410/11532 427	7410/11532 427
x							0745		E11	03	10213 26#	10213 26#
	x		x				0745		E11	03	13908 22#	13908 22#
		x	x				0745		E11	03	17378 34#	17378 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	8169, 7502	8169, 7502
			x				0800/0810		E17Z	01A	11170, 9820 217	11170, 9820 217
	x						0800/0810		S06S	01A	11945/13195 127	11945/13195 127
					x		0800/0810	1	S06S	01A	8680/ 8260 132	8680/ 8260 132
		x				x	0800/0820/0840		M12	01B	16357/17457/18357 343	17415/18215/18715 427
x		x					0800/0820/0840		XPA2	01B	11493/13393/13993	13387/13887/14787
					x		0800/0900		M14	01A	4730/ 4650 523	4730/ 4650 523
					x	x	0805		E11	03	4909 31#	4909 31#
	x		x				0810/0830/0850		XPA1	01B	12157/13462/14374	13397/14413/15972
			x	x			0820		E11	03	5149 43#	5149 43#
	x	x					0820		E11	03	14611 13#	14611 13#
x				x			0830		E11	03	12424 18#	12424 18#
x							0830/0840		S06S	01A	8057/ 8530 764	8057/ 8530 764
		x					0830/0840		S06S	01A	7062/10532 464	7062/10532 464

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jan kHz, ID, ...	Feb kHz, ID, ...
		x					0830/0840		S06S	01A	11535/11830 172	11535/11830 172
				x			0830/0840		S06S	01A	11040/12153 156	11040/12153 156
			x	x			0830/0930		S06	01A	16243/13469 842	17440/15614 842
x		x					0845		E11	03	12067 71#	12067 71#
	x		x				0845		E11	03	12089 15#	12089 15#
x		x		x		x	0855		HM01	18	9240	9240
	x		x		x		0855		HM01	18	11462	11462
x		x					0900		E11	03	8597 53#	8597 53#
x							0900/0910		S06S	01A	14675/12830 232	14675/12830 232
				x			0900/0910		S06S	01A	5765/ 6315 239	5765/ 6315 239
					x		0900/0920/0940		E07A	01B	11123/12123/13423 114	11053/12153/13553 015
x		x					0910/0930/0950		XPA2	01B	14977/13971/13371	16102/14951/13991
			x		x		0910/0930/0950		XPA2	01B	14794/13994/12194	16146/15846/14446
x				x			0915		S11A	03	4242 48#	4242 48#
x	x	x	x	x	x	x	0930		M14	01A	17458/15994 617, only 10., (11.), 25., (26)	17458/15994 617, only 10., (11.), 25., (26)
		x	x				0930		E11	03	7469 27#	7469 27#
			x				0930/0940		S06S	01A	8812/ 9540 698	8812/ 9540 698
						x	0930/1000		S06	01A		10423/ 8167 480
x		x		x		x	0955		HM01	18	9155	9155
	x		x		x		0955		HM01	18	12180	12180
	x			x			1000		E11	03	8597 30#	8597 30#
	x						1000/1010		S06S	01A	6440/ 5660 427	6440/ 5660 427
		x					1000/1010		S06S	01A	12365/14280 276	12365/14280 276
x	x	x	x	x			1015/1025/1035		F01	01A	11079/ 9162/ 7509	12184/10169/ 8079
	x			x			1020		S11A	03	8102 42#	8102 42#
x		x					1045		E11	03	7984 69#	7984 69#
		x		x			1135		S11A	03	5371 37#	5371 37#
	x						1100/1110		S06S	01A	5035/5975 265	5035/5975 265
x					x		1100/1110/1110 1130/1140/1150		XPB1	01B	14769/14369/13969 13369/12169/11169 check	15814/14814/14414 13914/13414/12214 check
	x			x			1100/1120/1140		XPA2	01B	search	search

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jan kHz, ID, ...	Feb kHz, ID, ...
		x	x				1100/1120/1140		XPA2	01B	search	search
x	x	x	x	x	x	x	1200		V13	0	9276	9276
			x				1200/1210		S06S	01A	12155/10920 175	12155/10920 175
	x						1200/1220/1240		M12	01B	14377/13461/12114 317	14377/13461/12114 317
	x					x	1200/1220/1240		XPA2	01B	10921/12221/13521	11163/13363/14563
		x		x			1200/1220/1240		XPA2	01B	10726/11426/12226	11575/13375/13975
	x	x					1205		E11	03	6433 46#	6433 46#
	x		x				1230		E11	03	search 33#	search 33#
x	x	x	x	x	x	x	1300		V13	0	9276	9276
x							1300/1310		S06S	01A	8420/10635 149	8420/10635 149
x							1300/1320/1340		M12	01B	14377/13461/12114 317	14377/13461/12114 317
					x		1300/1330		S06	01A		8116/ 5410 480
		x		x			1310/1330/1350		XPA1	01B	search	search
	x				x		1345		E11	03	13363 91#	13363 91#
					x		1400/1420/1440		E07	01B	10323/ 9123/ 8023 310	11464/10764/ 9264 472
			x		x		1410/1430/1450		E07	01B	11593/10293/ 9293 916	13368/12168/11168 745
					x		1500		M01	14	5810 197	5810 197
	x						1500/1510		S06S	01A	6845/ 9170 914	6845/ 9170 914
x				x			1530		E11	03	5082 52#	5082 52#
			x				1530		E11	03	5409 26#	5409 26#
x	x	x	x	x	x	x	1555		HM01	18	11435	11435
x					x		1600/1620/1640		XPA2	01B	9317/ 8117/ 7517	11461/10261/ 9161
	x		x				1600/1620/1640		XPA2	01B	10465/ 9165/ 8065	12173/18373/ 9373
	x					x	1605		E11	03	5344 23#	5344 23#
				x			1610/1630/1650		E07A	01B	7632/ 6832/ 5832 688	9347/ 8147/ 6847 318
		x				x	1625		E11	03	5082 97#	5082 97#
				x		x	1650		E11	03	6849 92#	6849 92#
x	x	x	x	x	x	x	1655		HM01	18	11530	11530
			x				1700/1720/1740		M12	01B	12162/11566/18711 546	12162/11566/18711 546
				x			1700/1800	1/3	M14	01A	5374/ 4975 382	5374/ 4975 382
		x			x		1705		E11	03	4505 39#	4505 39#
		x					1710/1730/1750		M12	01B	12162/11566/10711 546	12162/11566/10711 546

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jan kHz, ID, ...	Feb kHz, ID, ...
			x				1730		E11	03	5779 41#	5779 41#
x						x	1745		E11	03	12924 24#	12924 24#
x	x	x	x	x	x	x	1755		HM01	18	11635	11635
	x		x				1800		M01	14	5320 197	5320 197
		x				x	1800/1820/1840		E07	01B	6963/ 5863/ 4763 987	8144/ 6944/ 5744 197
			x				1800/1820/1840		M12	01B	12162/11566/10711 546	12162/11566/10711 546
		x					1810/1830/1850		M12	01B	11435/10598/ 9327 938	11435/10598/ 9327 938
	x						1820	2/4	M14	01A	4636 186, deleted?	4636 186, deleted?
			x				1830	2/4	G06	01A	4519 271	4519 271
		x			x		1850		S11A	03	11486 28#	11486 28#
x			x				1900		E11	03	6849 64#	6849 64#
		x					1900/1920/1940		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
				x			1900/2000	1/3	S06	01A		search ??? x7378/5097
			x		x		1910		E11	03	10487 61#	10487 61#
		x					1920	2/4	M14	01A	4761 748, deleted	4761 748, deleted
				x			1930	2/4	G06	01A	4792 436	4792 436
					x	x	1930		E11	03	4909 36#	4909 36#

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

Time UTC			Freq kHz			ID	M	T	W	T	F	S	S
Jan													
1310	1330	1350	13932	13532	12132	951			X		X		
1400	1420	1440	10547	9047	7547	505	X		X				
1800	1820	1840	8047	6802	5788	463	X						
2050	2110	2130	6864	5764	---	875			X		X		
2200	2220	2240	5778	6778	8178	771					X	X	
2210	2230	2250	6937	5737	4537	975	X			X			
Feb													
1310	1330	1350	14489	13489	12189	441			X		X		
1400	1420	1440	13362	11562	10362	353	X		X				
1800	1820	1840	8047	6802	5788	463	X						
2050	2110	2130	6941	5841	---	986			X		X		
2200	2220	2240	5832	6832	7732	887					X	X	
2210	2230	2250	6937	5737	---	975	X			X			
Mar													
1310	1330	1350	13952	13452	12152	941			X		X		
1400	1420	1440	16276	14876	13376	283	X		X				
1700	1720	1740	12162	11566	10711	546				X			
1710	1730	1750	12162	11566	10711	546			X				
1800	1820	1840	12162	11566	10711	546				X			
2050	2110	2130	10172	9072	---	105			X		X		
2200	2220	2240	8126	7526	6826	178					X	X	
2210	2230	2250	8164	6964	5764	197	X			X			
Apr													
1210	1230	1250	12174	11474	---	149			X		X		
1400	1420	1440	18524	17424	15824	548	X		X				
1700	1720	1740	12162	11566	10711	546				X			
1710	1730	1750	12162	11566	10711	546			X				
1800	1820	1840	12162	11566	10711	546				X			
1950	2010	2030	13453	12153	---	414			X		X		
2100	2120	2140	7575	8175	9175	511					X	X	
2110	2130	2150	10572	9372	---	531	X			X			
May													
1210	1230	1250	12187	10987	10287	192			X		X		
1400	1420	1440	17451	15951	14451	494	X		X				
1700	1720	1740	12162	11566	10711	546				X			
1710	1730	1750	12162	11566	10711	546			X				
1800	1820	1840	12162	11566	10711	546				X			
1950	2010	2030	16194	14794	---	173			X		X		
2100	2120	2140	10843	10243	9243	822						X	
2110	2130	2150	13381	12181	10781	317	X			X			
2210	2230	2250	10183	9083	8083	199						X	
Jun													
1210	1230	1250	13384	12184	11484	314			X		X		
1700	1720	1740	12162	11566	10711	546				X			
1710	1730	1750	12162	11566	10711	546			X				
1800	1820	1840	12162	11566	10711	546				X			
1950	2010	2030	16217	14817	---	284			X		X		
2100	2120	2140	11144	10544	9344	153					X	X	
2110	2130	2150	14493	13393	12193	431	X			X			
2210	2230	2250	10223	9323	8023	239						X	

Time UTC			Freq kHz			ID	M	T	W	T	F	S	S
July													
1210	1230	1250	13423	12123	11523	415			X		X		
1700	1720	1740	12162	11566	10711	546				X			
1710	1730	1750	12162	11566	10711	546			X				
1800	1820	1840	12162	11566	10711	546				X			
1950	2010	2030	16323	14923	---	395			X		X		
2100	2120	2140	10767	10167	---	712					X	X	
2110	2130	2150	13381	12181	---	317	X			X			
2210	2230	2250	9284	8084	7584	295						X	
Aug													
1210	1230	1250	12178	11578	10578	155			X		X		
1700	1720	1740	12162	11566	10711	546				X			
1710	1730	1750	12162	11566	10711	546			X				
1800	1820	1840	12162	11566	10711	546				X			
1950	2010	2030	16148	14748	13448	174			X		X		
2100	2120	2140	10314	9114	---	310					X	X	
2110	2130	2150	12214	11014	---	209	X			X			
2210	2230	2250	9052	8052	6952	992						X	
Sep													
1210	1230	1250	12141	11541	10741	157			X		X		
1700	1720	1740	12162	11566	10711	546				X			
1710	1730	1750	12162	11566	10711	546			X				
1800	1820	1840	12162	11566	10711	546				X			
1950	2010	2030	13375	11575	---	352			X		X		
2100	2120	2140	7961	6861	5861	988					X	X	
2110	2130	2150	9246	8146	6846	218	X			X			
2210	2230	2250	12218	11118	10218	212						X	
Oct													
1210	1230	1250	14416	13416	12216	442			X		X		
1700	1720	1740	12162	11566	10711	546				X			
1710	1730	1750	12162	11566	10711	546			X				
1800	1820	1840	12162	11566	10711	546				X			
1950	2010	2030	10984	9384	8084	930			X		X		
2100	5794	2120	6794	2140	8094	770					X	X	
2110	2130	2150	8164	6964	5764	197	X			X			
Nov													
2050	2110	2130	7536	6836	5136	581			X		X		
1700	1720	1740	12162	11566	10711	546				X			
1800	1820	1840	12162	11566	10711	546				X			
2210	2230	2250	6937	5837	---	975	X			X			
2200	2220	2240	6859	7459	7959	849					X	X	
Dec													
2050	2110	2130	6908	5808	---	985			X		X		
2200	2220	2240	5832	6832	7732	887					X	X	
2210	2230	2250	6937	5737	---	975	X			X			

There are still a good number of yearly repeats although the regular schedule changes in April, along with a number of other adjustments over the year make the tracking of regular, yearly patterns less easy to follow.

Although activity is still at a good level it should be noted that that the number of transmissions is still far lower than was seen prior to 2016, when activity dropped to the lowest seen for many years.

Also of note is that the number of IDs in use is now quite low compared to pre-2016 usage – which presumably also reflects a decrease in the number of recipients.

Finally, on a brighter note the output of M12is still the most prolific of the Morse number stations in its output & we hope this will continue to be so.

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jan kHz, ID, ...	Feb kHz, ID, ...	Nov kHz, ID, ...	Dec kHz, ID, ...	Remarks
	x	x					0315		E11	03	5779 25#	5779 25#	5779 25#	5779 25#	since 01/14, last log 12/20
			x		x		0435		E11	03	6280 35#	6280 35#	6280 35#	6280 35#	since 04/15, last log 12/20
x							0450		E11	03	4909 41#	4909 41#	4909 41#	4909 41#	since 02/10, last log 12/20 2nd transmission Thu 1730z
x	x						0510		S11A	03	9057 65#	9057 65#	9057 65#	9057 65#	since 08/19, last log 12/20
x	x						0640		E11	03	11450 94#	11450 94#	11450 94#	11450 94#	since 07/17, last log 12/20
x	x						0645		E11	03	7840 51#	7840 51#	7840 51#	7840 51#	since 07/09, last log 12/20
x		x					0700		S11A	03	9050 47#	9050 47#	9050 47#	9050 47#	since 04/10, last log 12/20
x			x				0700		E11	03	6804 57#	6804 57#	6804 57#	6804 57#	since 01/12, last log 12/20
				x	x		0710		E11	03	4505 49#	4505 49#	4505 49#	4505 49#	since 07/15, last log 12/20
x			x				0715		E11	03	9130 63#	9130 63#	9130 63#	9130 63#	since 02/11, last log 12/20
x	x						0715		S11A	03	12153 38#	12153 38#	12153 38#	12153 38#	reactivated 09/20, last log 12/20
x							0745		E11	03	10213 26#	10213 26#	10213 26#	10213 26#	since 03/14, last log 12/20 2nd transmission Thu 1530z
x	x						0745		E11	03	13908 22#	13908 22#	13908 22#	13908 22#	since 01/20, last log 12/20
	x		x				0745		E11	03	17378 34#	17378 34#	17378 34#	17378 34#	since 06/17, last log 12/20
				x	x		0805		E11	03	4909 31#	4909 31#	4909 31#	4909 31#	since 07/14, last log 12/20
		x	x				0820		E11	03	5149 43#	5149 43#	5149 43#	5149 43#	since 10/09, last log 12/20
x	x						0820		E11	03	14611 13#	14611 13#	14611 13#	14611 13#	since 12/18, last log 12/20
x			x				0830		E11	03	12424 18#	12424 18#	12424 18#	12424 18#	since 07/15, last log 12/20
x	x						0845		E11	03	12067 71#	12067 71#	12067 71#	12067 71#	active 09/10-08/15, reactivated 10/20, last log 12/20
x	x						0845		E11	03	12089 15#	12089 15#	12089 15#	12089 15#	since 07/17, last log 12/20
x	x						0900		E11	03	8597 53#	8597 53#	8597 53#	8597 53#	since 10/05, last log 12/20
x			x				0915		S11A	03	4242 48#	4242 48#	4242 48#	4242 48#	since 04/19, last log 12/20
	x	x					0930		E11	03	7469 27#	7469 27#	7469 27#	7469 27#	since 02/14, last log 12/20
x			x				1000		E11	03	8597 30#	8597 30#	8597 30#	8597 30#	since 11/16, last log 12/20
	x		x				1020		S11A	03	8102 42#	8102 42#	8102 42#	8102 42#	since 02/10, last log 12/20
x	x						1045		E11	03	7984 69#	7984 69#	7984 69#	7984 69#	since 03/18, last log 12/20
	x		x				1135		S11A	03	5371 37#	5371 37#	5371 37#	5371 37#	since 02/14, last log 12/20 until 05/20 1100z
x	x						1205		E11	03	6433 46#	6433 46#	6433 46#	6433 46#	since 03/10, last log 12/20
x	x						1230		E11	03	search 33#	search 33#	search 33#	search 33#	since 10/11, last log 10/20
x				x			1345		E11	03	13363 91#	13363 91#	13363 91#	13363 91#	since 10/15, last log 12/20
x			x				1530		E11	03	5082 52#	5082 52#	5082 52#	5082 52#	since 05/15, last log 12/20
		x					1530		E11	03	5409 26#	5409 26#	5409 26#	5409 26#	since 06/14, last log 12/20 2nd transmission Mon 0745z
x					x		1605		E11	03	5344 23#	5344 23#	5344 23#	5344 23#	since 11/15, last log 12/20
	x				x		1625		E11	03	5082 97#	5082 97#	5082 97#	5082 97#	since 02/15, last log 12/20
			x		x		1650		E11	03	6849 92#	6849 92#	6849 92#	6849 92#	since 05/16, last log 12/20
	x			x			1705		E11	03	4505 39#	4505 39#	4505 39#	4505 39#	since 02/14, last log 12/20
		x					1730		E11	03	5779 41#	5779 41#	5779 41#	5779 41#	since 03/10, last log 12/20 2nd transmission Mon 0450z
x					x		1745		E11	03	12924 24#	12924 24#	12924 24#	12924 24#	since 04/18, last log 12/20
	x			x			1850		S11A	03	11486 28#	11486 28#	11486 28#	11486 28#	since 06/17, last log 12/20
x		x					1900		E11	03	6849 64#	6849 64#	6849 64#	6849 64#	since 05/16, last log 12/20
			x	x			1910		E11	03	10487 61#	10487 61#	10487 61#	10487 61#	since 04/17, last log 12/20
				x	x		1930		E11	03	4909 36#	4909 36#	4909 36#	4909 36#	since 03/14, last log 12/20

XPA1 Sched c and XPA2[Sched m & p] Russian Intelligence and/or Diplomatic Multitone Systems
[Radiogramma] Transmission Schedules.

Zulu >	XPA1 Sched c			XPA2 Sched m			XPA2 Sched p		
Month v	Tuesday/Thursday H+10 H+30 H+50 0710 / 0810z			Sunday/Tuesday H 00 H+20 H+40 1200/2100			Monday/Wednesday H 00 H+20 H+40 0700 / 0800z		
Jan	12157	13462	14374	10921	12221	13521	11493	13393	13993
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:
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Apologies to anyone missed.



MESSAGES:

E: A Happy New Year to you and yours! Your new Rx doing FB

RELEVANT WEBSITES

- ENIGMA 2000 Website: <http://www.enigma2000.org.uk>
- Frequency Details can be downloaded from: <http://www.cvni.net/radio/>
- 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>

2020

2021

January 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	February 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	March 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	January 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	February 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	March 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
April 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	May 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	June 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	April 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	May 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	June 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
July 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	August 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	September 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	July 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	August 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	September 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
October 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	November 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	December 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	October 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	November 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	December 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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