# ENIGMA 2000 NEWSLETTER



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# STASI Headquarters Ruschestraße 103 East Berlin [More inside]



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# Please note, ENIGMA2000 will remain aloof from the ongoing UKR/RUS matter, making no comment other than on technical matters. Please do not make contact to discuss or offer material.

The same goes for matters affecting Israel.

# <u>Editorial</u>

The year has passed relatively fast for some of us. As ever the news media has rejoiced with a variety of storylines, mostly gloomy and probably suffering the sort of embellishment one offers standing at a bar when telling of events as the booze takes its toll; as my father in law used to say, "The more alcohol, the faster the lins."

The UKR/RUS matter has had a great effect of number schedules with loss of voice and polytone schedules. The news abounds with cases of diplomats and students spying and one must notice the loss of these stations; possibly as a result [?].

#### **NEW ENIGMA DESIGNATION**

M14 – Family 1A New Variant M14d is assigned 30 October 2023 M14d Rare, 3-fig ID with additional 5f group In Call e.g. 801 79462 (R4) 625 34 etc.

(Credit to Pierre of Priyom who logged this variant on 06 Oct 2023) Add to ENIGMA 2000 Active Station List V1.3 at end of M14 section

MORE IN BRIAN'S MORSE SECTION

#### **Observations from PoSW:**

Strange transmission in the 49 metre band, appeared to be some kind of meteorological station, also with a "French connection":-27-Sept-23, Wednesday:- 1503 UTC, 6100 kHz, very strong signal in the 49 metre broadcast band, there is not much going on in this part of the short-wave spectrum in broad daylight, just after 4 PM BST and this drew attention to itself by the fact that it was so very strong; a male voice in the French language with what appeared to be weather information. At approx 1510z a female voice in English with a strong French accent with atmospheric pressures in hectopascals and what sounded like positional references in latitude and longitude.

Back to the OM in French again at around 1520z then the YL returning at 1530z with some kind of numerical information in both French and English. Ending with a cheery "That's all for today". There was then a musical ending which went on until the top of the hour, a selection of theme tunes from TV shows and films, *The Good, the Bad and the Ugly; Star Wars; Gone with the Wind; The Pink Panther* to name but a few, no more than perhaps ten seconds or so of each - to avoid music copyright fees? This stopped around 1600 UTC, there was a short announcement of some kind – missed the details followed by plain carrier then off.

28-Sept-23, Thursday, similar transmission, same voices, ended with the YL voice at approx 1535 UTC with "That's all for today, we won't talk to you tomorrow neither Saturday as we are travelling to (missed it) so see you on Monday". Ended with music, classic rock this time, just the opening few seconds, some of my favourites as it happens, including *Riders on the Storm*, The Doors; *House of the Rising Sun*, The Animals; *You Really Got Me*, The Kinks and *White Room* by Cream - as though someone had been looking through my personal record collection.

29-Sept-23, Friday:- A different male voice, same one in both French and English, perhaps not a fan of music, no long musical ending today, went off air around 1535 UTC.

1-Oct-23, Sunday:- forgot to listen on Saturday the 30<sup>th</sup> - tuned in to 6100 at around 1522z, YL in English back on duty, ended with a long session not of music but wildlife calls, certainly the call of the wood pigeon was heard at around 1543z

2-Oct-23, Monday:- tuned in at approx 1502 UTC, usual very strong signal, OM in French followed by YL in accented English, music from around 1540, went off suddenly at 1555 UTC.

And that was the end of it; I am usually near a radio at 1500 UTC, or soon after, on most days of the week but despite continued monitoring of 6100 kHz this station has not been heard again. Which poses the question - was this really information on weather for the benefit of seafarers or was it some kind of espionage-related number station disguised as such. A service for the matelots and Jack Tars would need to be transmitted at the same time every day to be of any use, for example the German Weather Service has several daily transmissions on 5905 and 6180 kHz, also in the 49 metre band.

#### Not number station related but possibly interesting:-

This year has seen an ongoing decline in traditional, amplitude modulation broadcasting on the medium wave band, something which has been going on for quite a while. The BBC runs a number of local radio stations on FM and DAB and at one time on AM/medium wave also, but many of the AM outlets have been taken off air over the last few years which is unfortunate because it is often the case that good medium wave reception is often possible in locations where FM and DAB can't reach. Also medium wave can be received on radios which consume less power than other types, the older LW/MW transistor radios which can operate for many hours on a set of batteries, certainly for much longer than any DAB radio running on batteries, an important consideration in an emergency situation where mains power might be off. Not that it matters much as regards BBC local radio because no one listens to them anyway - at least that is my observation having conducted surveys among friends, acquaintances and work colleagues in the past.

Most European countries also appear to have closed their medium wave broadcasters, for example The Netherlands, there used to be several stations in the Dutch language which were received with strong signals in the east of England and every radio of a certain vintage had the word Hilversum, a transmitter site in that country, on the tuning dial.

Returning to this year, January saw the end of Absolute Radio on medium wave, a commercial music station which was on 1215 kHz; in late January it was playing a looped message ... "no longer on this frequency" and listing other ways to listen. Going a bit further afield and lower in frequency, in April the Irish broadcaster RTE closed down their long-wave transmitter on 252 kHz which carried the RTE Radio 1 programme and had always put a good signal into eastern England. In the mid-April there was a looped message stating that RTE1 was no longer on long-wave.

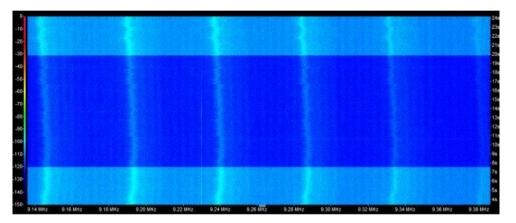
This high powered transmitter had come into being several decades ago as Atlantic 252, a commercial pop music station which was a rather strange enterprise given the limited audio quality available on long-wave when FM broadcasting was around and satellite music TV was becoming "a thing". RTE had announced the decision to close down 252 some time ago but it had been postponed on several occasions because there was a significant audience in the UK of people with connections to Ireland who listened to it, but it was probably the high cost of energy needed to run a powerful long-wave transmitter which probably did for it.

However, there are exceptions to every rule and one fairly recent newcomer to medium-wave/AM is Radio Caroline on 648 kHz, a frequency used by the BBC World Service for many years from a powerful transmitter on the Suffolk Coast, a legacy of the Cold War which closed down over a decade ago. The original Radio Caroline came on air in 1964 from a ship off the Essex coast, the first of several "offshore pirates" and in those days when radio stations identified in terms of wavelength rather than frequency was on 199 metres, "Caroline on one nine nine, your all day music station". The Marine Offences Act a few years later, passed by the Labour government of Harold Wilson with the support of the Conservative Party opposition apart from a handful of libertarian members - the two main political parties were two cheeks of the same backside then just as they are now - forced most of the pirates off the air although some including Caroline continued in some form or other for quite some time afterwards. It took over half a century for Radio Caroline to become legal! [Thanks Peter, interesting account for those of us of a certain age}

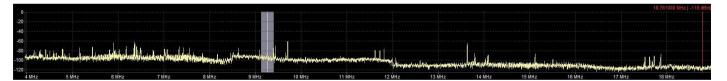
I'd like to thank those of you who help with the production of this newsletter; it's not easy to do and now retired, for me, its more difficult as my wife and I take on the responsibilities as grandparents.

Thank you also for those of you who offer your logs to us. I cannot receive E07 as well as others, a dead spot indeed. Whilst atop one of the highest points in London there are certain problems along with being in the wrong place; that of noise [E and PoSW too, it seems]. We are all being wired for Fibre and one would hope the QRM would disappear but this seems not to be the case as yet [and sadly, if at all].

Below is a screen from my live 9261kHz intercept of the 0600z 17/09 intercept of E07



The light blue being S6 noise; with my phase antenna remover switched in I can realise a S4 environment for a clear, but nonetheless, weak but readable signal, "224 224 224 224 000...." Some modes are more noise resilient, CW, XPA and XPB1 in particular.



Between 8450 and 12000kHz the raised portion is an indication of the QRM received from internet distribution.

When this QRM will end is anyone's guess; there are a few PLT devices around too but not as popular as they once were. I place the router in the centre of my house and the coverage throughout the house, into the garden and some distance away in the street is brilliant.

Finally, a thank you to Rob, a blast from the past, who sent me a GCHQ advert with a rather cryptic comment at 0429 one morning. I was awake as it happens and took a peek. My laughter waking the missus up.

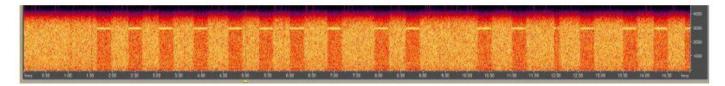
With variable propagation forecasts hrough September and my being away from radio between 05 to 16/10 I was heartened to receive FM transmissions from the US [Vermont] to Austria on 29600 and later on 29610kHz to Northern Ireland at 1630z on 17/10, prompting me to look at the spectral image on my SDR. Some excellent signals and way above the usual noise, as can be seen here:



Increase in propagation c1635z 16/10/23

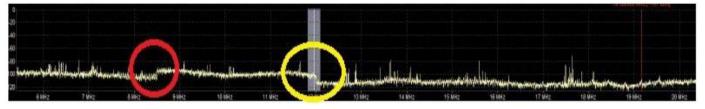
#### More QRM [as we move to Fibre]

Expecting to hear a routine fair to strong 224 000 on the Sunday E07 0600z 03/09/2023, I was surprised to hear no E07 on 10261kHz and in the event of a message 0640z 11461kHz. but 18s bleeps instead:

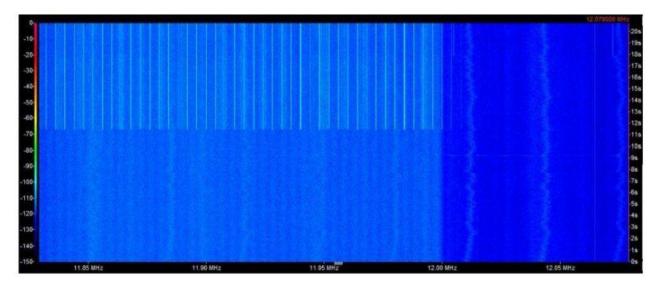


I had previously seen a hint of it on XPB1 for both the Saturday schedules at 1100 and 1200z on the 10 and 11MHz frequencies were used but discounted it as crud.

It needs no explanation. But a quick look across 7 to 30MHz revealed a telling structure between circa 8500kHz to 12000kHz:



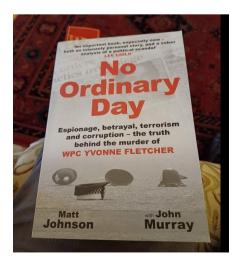
6000 to 20000kHz spectral view



As seen at 12000kHz; 8500kHz the same

Whilst this QRM was new at my QTH it has now thankfully disappeared.

# **Book Review**



#### No Ordinary Day by Matt Johnson and John Murray

'No Ordinary Day' and certainly no ordinary book. The authors take the reader into the history and politics of the sad event of the shooting of WPC Yvonne Fletcher as she stood opposite the Libyan Embassy. I remember the blue tarpaulin shielding the scene at the time.

The authors dissect the event, illustrating the corruption, Libyan politics and more. Shayler & Tunworth, MI5, MI6 & GCHQ. It's all there.

This book outlines the lengths that politicians, of any political persuasion, will use to protect their interests in the name of 'National Security.'

The denials in both Libya and the UK and the total disregard for those who protect us, our police officers who police by consent, as we sleep.

In this book you will see how our our judiciary works and the problems that can occur (as with policing too) when politics become involved. You'll see direct Libyan Govt. intervention and its latest history. Not a pretty story.

This book reads very well, crime, espionage, assassinations, intercepts and inputs from security services. There's foreign travel and the manner of acceptance by national agencies is well described and somewhat surprising.

Everything in the book is fact, it is a splendid piece of work by the authors, well overdue and most readable. I recommend this book most heartedly.

This will be the last newsletter of 2023; the list owner and moderators particularly wish all those who have contributed throughout 2023, our members, those of N&O and Priyom and all other readers Compliments of the Season.



# **Happy Christmas**

Entrance to STASI Hq ...Haus 7

# Newsround

### **Great Britain**

## Russia linked hackers hit UK Ministry of Defence as security secrets leaked

Hackers targeted the database of a firm which handles the security for some of Britain's most secretive sites - including a nuclear submarine base and a chemical weapon lab By

Kevin O'Sullivan Simon MurphySenior News Reporter 21:09, 2 Sep 2023 UPDATED21:21, 2 Sep 2023

https://www.mirror.co.uk/news/uk-news/russia-linked-hackers-hit-uk-30850139

Top secret security information on British military and intelligence sites has been leaked online by hackers linked to Russia.

They released thousands of pages of data which could help criminals get into the HMNB Clyde nuclear submarine base, the Porton Down chemical weapon lab and a GCHQ listening post.

Information about high-security prisons and a military site key to our cyber defences was also stolen in the raid by group LockBit. Hackers targeted the databases of Zaun, a firm which makes fences for maximum security sites. The information was then placed on to the internet's dark web, which can be accessed using special software.

Last night Labour MP Kevan Jones, who sits on the Commons Defence Select Committee, warned: "This is potentially very damaging to the security of some of our most sensitive sites.

"The Government needs to explain why this firm's computer systems were so vulnerable. Any information which gives security arrangements to potential enemies is of huge concern."

We can reveal the information was stolen last month in a major attack on West Midlands-based Zaun, which makes fences and perimeter security measures for high-risk sites and provided security barriers at the London 2012 Olympics. LockBit is described as the world's most dangerous hacking gang and key suspects are Mikhail Matveev in the FBI's Most Wanted list after

Several Russian nationals have been held in America and Canada accused of cyber raids. LockBit is said to have financial links to Russian gangsters. In one leaked document relating to specific equipment bought to protect Porton Down, Wilts, Zaun describes its work there as "very secretive". Also published was a sales order detailing goods bought for HMNB Clyde – better known as Faslane, home to Trident nuclear subs.

The leaked documents also include a sales order report for equipment at GCHQ's communications complex in Bude, Cornwall. GCHQ describes Bude as playing "a critical part" in our security. The leak includes security equipment at RAF Waddington, Lincs, where the Reaper attack drones squadron is based, and Cawdor Barracks, whose 14th Signal Regiment deals in electronic warfare. Detailed drawings for perimeter fencing at Cawdor, in Pembrokeshire, were attached to company emails. There is also a map highlighting installations at the site. Paperwork relating to a string of jails, including Category A Long Lartin, Worcs, and Whitemoor, Cambs, was also leaked.

We have chosen not to publish specific details about the equipment, while Zaun would not discuss ransom demands last night. A security expert labelled the incident a "devastating blow to our national security infrastructure".

And Tory MP Tobias Ellwood, chair of the Defence committee, said: "How does this affect the ability of our defence establishments to continue functioning without threat of attack?

"How do we better defend ourselves from Russian-backed interference no doubt related to our stance in supporting Ukraine? Finally, this is another example of how conflict is no longer limited to the traditional battlefield, it now includes the digital domain and is placing ever greater demands on security apparatus."

LockBit is said to have issued £80million in ransom demands worldwide. It has been on the radar of the FBI since 2020. Russian national Ruslan Magomedovich Astamirov was charged in the US "for involvement in deploying numerous LockBit ransomware and other attacks in the US, Asia, Europe, and Africa".

The US Department of Justice said: "LockBit ransomware variant first appeared around January 2020. LockBit actors have executed over 1,400 attacks, issuing over \$100million in demands and receiving tens of millions in Bitcoin."

In 2022 the US announced charges against Mikhail Vasiliev, a dual Russian and Canadian national. He is being held in Canada and is awaiting extradition to the US. A second Russian, Mikhail Pavlovich Matveev, is wanted "for alleged participation" in separate LockBit

Zaun, which has alerted police, recorded a pre-tax profit of almost £700,000 in its last accounts. The firm said: "LockBit will have potentially gained access to some historic emails, orders, drawings and project files. We do not believe classified documents were stored on the system or have been compromised.

"The National Cyber Security Centre has been contacted and we are taking advice. Zaun is a victim of a sophisticated cyber attack and has taken all reasonable measures to mitigate any attack on our systems."

The Government said: "We do not comment on security matters."

'Every last detail helps enemies breach our defences'

The firm's name might mean "fence" in German, but British company Zaun's security barriers appear to have come crashing down, writes Professor Anthony Glees, Security and Intelligence expert.

It is a devastating blow to our national security infrastructure for details to be leaked on the dark web about security equipment provided to sensitive sites – including the home of Britain's nuclear deterrent. It shows the ease with which Russia-linked hackers can breach high-strength computer systems at will.

The cache of documents relates to equipment made by high-security fencing specialist Zaun supplied to a host of sites. They include Faslane, home of the UK's nuclear submarines, top-secret government lab Porton Down, and GCHQ's Bude outpost.

Any hostile intelligence service would give their right arm to have these kinds of details.

A retired British Intelligence officer once told me that intelligence is like the bones of kippers. In and of them- selves the bones seem to be of little consequence - but, taken together, they are what make the kipper.

In other words, having access to specific security equipment at a sensitive site gives hostile actors a rich picture of what is actually there.

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Every detail about the UK's defence estate is of huge interest to our foes. It follows other serious breaches involving Scotland Yard and the Police Service of Northern Ireland.

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https://www.mirror.co.uk/news/uk-news/russia-linked-hackers-hit-uk-30850139

[Ooops!]

## British diplomats run to defend decision to surrender UK-owned Chagos Islands to close ally of China, after Boris Johnson described it as a 'spineless' move Islands include Diego Garcia, a highly sensitive Anglo-American military base Diplomats have said that whatever the outcome, the base will not be affected

By GLEN OWEN, POLITICAL EDITOR FOR THE MAIL ON SUDAY

PUBLISHED: 00:51, 24 September 2023 | UPDATED: 01:51, 24 September 2023

https://www.dailymail.co.uk/news/article-12553829/British-diplomats-defend-surrender-UK-owned-Chagos-Islands-close-ally-China.html

British diplomats yesterday rushed to try to defend the decision to surrender the UK-owned Chagos Islands to a close ally of China, after Boris Johnson described it as a 'spineless' move.

The former Prime Minister revealed that the negotiations to hand the archipelago to Mauritius as part of a transfer of sovereignty of the British Indian Ocean Territory were 'a done deal'.

The islands include Diego Garcia, a highly sensitive Anglo-American military base that has been called 'the unsinkable aircraft carrier in the Indian Ocean'.

Writing in his Daily Mail column yesterday, Mr Johnson said: 'We are apparently about to perform a U-turn and abandon the British Indian Ocean Territory.

'Just as the Chinese are building runways over every reef and atoll they can find – places that have never been Chinese possessions – we are throwing in the sponge.

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The islands include Diego Garcia, a highly sensitive Anglo-American military base that has been called 'the unsinkable aircraft carrier in the Indian Ocean'

'We are about to haul down the flag, casting doubt on a major western strategic asset.'

In May, in a report that said surrender of the territory was imminent, The Mail on Sunday highlighted that the plan had triggered 'serious concerns' in the White House due to the concentration of Western military hardware on Diego Garcia.

But diplomats insisted last night that whatever the outcome of the talks between the UK and Mauritius, a close ally of China, the base would continue to be operated by Britain and America.

A spokesman for the Foreign Office said: The UK and Mauritius have held five rounds of constructive negotiations on the exercise of sovereignty over the British Indian Ocean Territory/Chagos Archipelago, and officials will meet again soon to continue negotiations.

'The UK and Mauritius have reiterated that any agreement between our two countries will ensure the continued effective operation of the joint UK-US military base on Diego Garcia, which plays a vital role in regional and global security.'

https://www.dailymail.co.uk/news/article-12553829/British-diplomats-defend-surrender-UK-owned-Chagos-Islands-close-ally-China.html

# How a woman-hating loner who worked at GCHQ became obsessed with an American spy and stabbed her at weekly netball match

### Joshua Bowles, 29, was sentenced to life for the 'politically motivated' attack

By BETH HALE and GEORGE ODLING

PUBLISHED: 23:07, 30 October 2023 | UPDATED: 01:28, 31 October 2023

https://www.dailymail.co.uk/news/article-12690591/woman-hating-loner-worked-GCHQ-obsessed-American-spy-stabbed-netball.html

The Cheltenham leisure centre is an unlikely location for a spy drama, but on a dark evening in March, as a young woman prepared to head home after a netball match, she was subjected to a terrifying knife attack that rocked the intelligence community.

The brutal assault took place in the sports centre's car park, just three miles from GCHQ, the UK spy agency base.

The victim was a young American spy, the perpetrator a disturbed computer programmer who has also worked at the secretive listening post.

Joshua Bowles, who was described by his barrister as an Incel -a member of a woman-hating online community of men who consider themselves 'involuntarily celibate' having had their sexual overtures to women rejected - was sentenced to life yesterday for what the judge described as a 'politically motivated' terrorist attack.

It seems Bowles, 29, did not just have a grudge against women, but against his former employer and the wider intelligence community. Inexplicably, he vented his anger on a woman he didn't even know.

His victim was saved from fatal injuries by the intervention of two passers-by, and because Bowles, armed with two knives, 'fortuitously missed any major organ'. The stabbing was captured, at least in part, in chilling detail on CCTV.

The footage culminates in the victim, accompanied by a friend, running for her life back into the leisure centre's reception area, her attacker in pursuit.

One detail that was not revealed at London's Old Bailey, however, was the victim's identity. For obvious reasons, she remains anonymous, known only by a series of numbers: 99230.

A spy she may have been, but the victim was also a young woman living out her dreams, having landed a placement at GCHQ via the NSA (the US National Security Agency).

She was, as that game of netball suggests, happily throwing herself into life in the UK. Along with weekly matches with a local team, there was a UK-based boyfriend with whom she was planning to learn to windsurf. She had entered a half-marathon and was studying for a master's degree.

After the attack, she spent a week in hospital, with wounds to her lower abdomen, chest and right thigh. Her boyfriend's family supported her while her own relatives made frantic efforts to book flights.

In a victim impact statement, she told the court: 'He [Bowles] has had a profound effect on me and completely changed my life. It is very difficult to explain to people just how awful it has been.

'I went from being in the best shape I have ever been in, to the weakest I have ever been... I was hunted by him and I don't know why.'

CCTV showed Bowles at the venue a month before the attack. Prosecutors said the assault had been 'premeditated, targeted and vicious'

The attack saw Bowles lash out with a pair of knives, punching and stabbing the American several times

She and her companion - blacked out in the image above - then run for the leisure centre's reception in a bid to escape

She did not remember ever encountering or speaking to her attacker before, she said, and she has not been able to return to work, leaving her status as a resident in this country in question.

So how did 99230, a woman described in court as 'high-achieving, strong and capable', find herself the victim of the outwardly innocuous Joshua Bowles? And more pertinently, perhaps, how did a man who must have passed rigorous security clearances at GCHQ set out to kill a US spy?

The bearded, pale man in a grey jumper, standing in the dock of the Old Bailey on Friday and again yesterday, to be sentenced for attempted murder and assault occasioning actual bodily harm, was an unassuming figure.

Outwardly, Bowles's life was equally unremarkable. He has a younger sister and, until the events of March 9, lived with his parents at their modest semi-detached home in a suburb of Cheltenham.

He dropped out of his A-levels after becoming obsessed with online gaming, then took an access course, leading to a degree in computer science from Coventry university.

Bowles worked a few shifts at a record shop but, in the words of his defence counsel, he was socially 'isolated'.

He joined GCHQ in 2019 – his first job and a role that required him to pass GCHQ's Developed Vetting process. He had been given the organisation's highest level of clearance, sources told the Mail. His family are struggling to understand how he could have perpetrated such senseless violence.

'He has never done drugs, he has never smoked and he never drank,' his grandfather, retired toolmaker John Bowles, 77, told the Mail. 'GCHQ was the first job he had ever applied for - at the age of 26 - and two and a half years in, his head has gone.'

Insisting his grandson has never been interested in politics, Mr Bowles said: 'That place, GCHQ, in my opinion, has turned his mind and ruined his life.' The first signs of his coming descent occurred in 2021 when Bowles, who the court was told has a high functioning form of autism, took time off work suffering with depression.

When he returned to GCHQ he applied to be a higher-level programmer, but was offered only a temporary role -a rejection that led to his resignation in November of that year.

That grievance festered and was exacerbated by Bowles's obsession with the woman who had previously been in the job his intended victim was doing now -a woman who had spurned his advances.

In entries found on his computer, Bowles wrote: 'Nothing will impress her intellectually, can't impress her physically, therefore it is over, suicide is the way.' In the buildup to the leisure centre attack, Bowles made various disturbing searches online.

He was not only familiar with 'incel' culture, the court heard, but researched serial killer Theodore Kaczynski – a mathematician known as the Unabomber, who lived as a recluse and ran a mail-bombing campaign in the US from the 1970s to the 1990s – along with attacks on women and white supremacy. On the latter, he had written: 'This is war, they are replacing you, demoralising you,  $f^{***}$  their system.'

More chilling still was the preparation Bowles put into his attack.

He researched his victim online, looking up her Facebook and Instagram posts, along with two other US nationals who had also worked for the NSA at GCHQ with him. In the month before the attack, he made almost daily visits in his car to GCHQ and visited the leisure centre on a 'dry run' on February 9, a month before the attack, when his victim's netball team was playing a match.

Whether or not he intended to attack that night is unknown; if he did, he was thwarted by the fact his intended victim was absent.

The attack itself unfolded shortly after 9pm when 99230 and her friend, a fellow American woman identified only as 25869, left the leisure centre to walk to their car.

'Excuse me,' Bowles said to them, before he attacked. The victim described how Bowles just kept coming at her with his knife. 'He just wouldn't stop,' she said.

The attack was temporarily halted by the intervention of a man on his way to play football, who was alerted by her screams.

The women took their chance to run back to the centre, but Bowles followed and resumed his attack. A second bystander, Steve Bunn, restrained Bowles, then asked him if he was OK. Bowles said: 'No, I've just tried to kill her.'

Bowles told Mr Bunn that they both worked at GCHQ and if Mr Bunn 'knew what they did there then he would understand'.

In a rambling statement to the police, Bowles said: 'The system is rigged. I believe the intelligence community helps ensure this rigging, this view has been reinforced by my time working at GCHQ.

'The target was selected for her employment at the NSA. Due to the size and resourcing, American intelligence represents the largest contributor within the intelligence community so made sense as the symbolic target.

I consider GCHQ just as guilty. Any mental health issues I may have, have been induced by the weight of the truth and the bleakness of the situation. Due to fear of retribution from the intelligence community I do not wish to divulge any details of the advanced capabilities I had exposure to whilst working in intelligence.'

Tim Forte, defending, said Bowles's twin motivations were 'rejection by the object of his affections' and a desire to hurt his ex-employer 'for employment reasons'.

Mrs Justice Cheema-Grubb did not agree, sentencing Bowles to a minimum life term of 13 years.

The judge said Bowles's internet history showed he had a 'deep disaffection with society and a desire to challenge authority'.

She told him: 'The court cannot avoid the conclusion that a significant part of your motivation was that your action would have an adverse impact on the intelligence communities of the United Kingdom and the United States. This was a politically motivated attack.'

Additional reporting: Duncan Gardham

https://www.dailymail.co.uk/news/article-12690591/woman-hating-loner-worked-GCHQ-obsessed-American-spy-stabbed-netball.html [Thanks E ... updated as sentence applied].

### <u>Norway</u>

### PST arrests young Malaysian for spying

September 11, 2023

#### https://www.newsinenglish.no/2023/09/11/pst-arrests-young-malaysian-for-spying/

Norway's police intelligence agency PST has charged a 25-year-old Malaysian citizen with spying on the Office of the Prime Minister, the defense ministry and other government offices in Oslo. He allegedly drove around or parked near them in a rental car, and tried to tap into their electronic communications.

Norway's defense ministry was among the government offices believed to be a target of alleged spying from the rental car of a young man with a Malaysian passport

"We face quite an extensive investigation and have just begun," state prosecutor Thomas Fredrik Blom told Norwegian Broadasting (NRK) on Sunday, shortly after a local court ordered the 25-year-old held in custody for at least four weeks while the investigation continues. The defendant will be kept in isolation for the first two weeks.

"We're not quite sure what we're up against," Blom told NRK. "We're in a critical and preliminary phase of the investigation." He added that there's a "real and high" danger of tampering with evidence, so much so that isolating the defendant was deemed necessary.

NRK reported that court papers reveal how police think the young man would want to communicate with others involved in the alleged espionage. Police therefore need "to secure several technical items without the man interfering" with the investigation.

"There's such danger of tampering with evidence that we're being very careful with what we can reveal right now," Blom said.

SENT SIGNALS: PST (Politiets sikkerhetstjeneste) said the man was arrested Friday night, after his rental car's movements were picked up by surveillance cameras mounted outside the government offices he's believed to have targeted. His car was photographed repeatedly within a certain time period and he's charged with signaletterretning from the vehicle. That's the Norwegian term used for trying to tap into electronic signals including mobile phone conversations, text messages, email surveillance or electronic signals from weapons and tracking devices.

Newspaper Aftenposten reported Monday that the most common form of such spying involves mobile phone surveillance with the help of false base stations and so-called ISMI-catchers. The man's car landed on PST's own watch list and he reportedly was under PST surveillance himself before being arrested.

He's claimed to be a student but lacks ties to any Norwegian educational institutions. PST said he had not been in Norway very long and there were concerns he'd try to flee and return to Malaysia, especially since Norway has no extradition treaty with Malaysia.

Norwegian investigators think others were involved in the alleged espionage. It remained unclear who the defendant may have been working with or for. Both PST and Norway's military intelligence agency Etterretningstjenesten (E-tjenesten) have repeatedly warned, long before Russia invaded Ukraine, that both Russia and China represent the biggest security threats to Norway and that both carry out extensive espionage in Norway. Iran and North Korea have also been targeted as countries posing "a considerable espionage threat" against Norway. PST officials stressed that they do not believe authorities in Malaysia are behind the man's alleged spying, suggesting he held a passport of convenience.

Ola Kaldager, a former leader of Norwegian intelligence group E14, told NRK on Monday that there are "considerable" espionage operations going on all over Europe at present and "on both sides" of Russia's war on Ukraine. The Russians, he said, want to follow, for example, the extent of Norway's support for Ukraine and how long it can last. He noted that "a young guy" like the defendant now in custody normally wouldn't arouse supicions, "but if he's not trained and can't do his job, it can quickly go wrong."

The defendant has denied any punitive liability but has so far refused to answer PST's questions. His defense attorney, Aase Karine Sigmond, told NRK that her client was simply too shook up after what he described as a "dramatic" arrest. "He was so afraid and upset after his arrest, and after he was denied access to documentation in the case, that he wasn't able to explain himself," Sigmond told NRK. "We'll attempt a new round of questioning after he's been transferred to prison."

Blom of PST claimed the arrest itself was not dramatic. Details of where and how it occurred were withheld, apart from the time of his apprehension: 9:10pm on Friday. Norway's national security agency NSM (Nasjonal sikkerhetsmyndighet) confirmed to NRK that they're supporting PST in its case against its latest suspected spy.

NewsinEnglish.no/Nina Berglund

https://www.newsinenglish.no/2023/09/11/pst-arrests-young-malaysian-for-spying

See also: https://abcnews.go.com/Business/wireStory/foreign-student-arrested-norway-suspicion-espionage-including-electronic-103069668

### **Scandinavia**

### Scandinavian spy drama: the intelligence chief who came under state surveillance How Lars Findsen and Claus Hjort Frederiksen came to be facing trial for allegedly disclosing 'state secrets' that had been in public domain for years

Harry Davies Mon 2 Oct 2023 12.00 BST

Lars Findsen was in police custody when he discovered that spies from Denmark's domestic intelligence agency had tapped his phone and wired his house with bugs.

The spies, he learned, had spent months eavesdropping on his daily life at home, recording hundreds of hours of his conversations in his home, including with his three children.

It was the kind of intrusive surveillance operation normally reserved for a suspected terrorist or enemy foreign agent. Findsen was neither; he was Denmark's top spy chief.

Findsen had spent decades working at the highest levels of the secret services. He was appointed head of the country's foreign intelligence service in 2015. Previously, he had run its sister domestic agency which, he now understood, had been monitoring his every move.

In custody, Findsen was presented with reports from the operation. "That was the shocking thing," he told the Guardian, "to sit and look at your life transformed into police reports written from surveillance tapes."

This autumn, the 59-year-old spymaster is due to stand trial on charges that he disclosed state secrets to journalists and close relatives including his 84-year old mother, in a series of conversations that appear to have been recorded by the tiny listening devices that were hidden in his home.

The prosecution of such a senior intelligence official may seem extraordinary, but shortly after the proceedings get under way, a separate trial will open in which Findsen's former boss at Denmark's defence ministry will face similar charges.

The veteran government minister Claus Hjort Frederiksen is a towering figure in Danish politics who has held multiple senior cabinet positions. As defence minister until 2019, he oversaw the intelligence service run by Findsen.

The criminal cases have rocked Denmark, a scandal that's turned spy against spy and thrust into the spotlight one of the country's most closely guarded secrets – which both men now stand accused of betraying.

At stake, however, is more than the fate of two individuals. The drama has had a profoundly chilling effect on the Danish media and given rise to a slow-burning political crisis about the lengths to which an otherwise liberal European democracy is prepared to go to control its secrets.

Alarmed by the government's handling of the affair and the criminal proceedings it is now pursuing, one of the country's top legal professors recently asked: "What's going on? Hello, we are in Denmark, a state governed by the rule of law. Not Belarus."

In exclusive interviews with the Guardian, Findsen and Frederiksen have spoken for the first time with international media about how they became entangled in this often confounding series of events.

Neither the intelligence chief nor ex-minister are legally permitted to discuss the specific charges against them, and their respective trials are due to be held in highly unusual secret proceedings.

Prosecutors have charged them with offences amounting to treason under a section of the criminal code not used for more than 40 years. Under the draconian law, those found guilty can be imprisoned for up to 12 years.

Both men believe they're innocent. Findsen has described the charges against him as "completely insane", while Frederiksen believes his case is politically motivated, likening it to a bewildering "hoax". "To understand what's going on with me at the moment," he says, "think of Kafka".

Just one of the bizarre aspects of both cases is that the unmentionable state secrets the men are alleged to have leaked are now open secrets and widely known to relate to a long-standing intelligence partnership between Denmark and the US.

The secret deal – the "crown jewels" of Danish intelligence – was hidden from the public until details began to emerge in 2014, when documents leaked by Edward Snowden revealed how European countries such as Denmark help facilitate the US's globe-spanning electronic surveillance.

The disclosures have cast a long shadow over the scandal that's ensnared Findsen and Frederiksen. The scale of western intelligence agencies' bulk surveillance programmes may have faded from most memories. In Denmark, repercussions of Snowden's leaks are still playing out today.

#### Spy turns whistleblower

On the windswept southern tip of Amager, the island immediately south of Copenhagen, there is a cluster of drab grey buildings surrounded by a high barbed-wire fence and watchful surveillance cameras. Known as "the Farm", the site is home to Denmark's foreign intelligence service, and it's where one of its young officers set the story in motion.

In June 2014, the Danish newspaper Dagbladet Information published a piece based on Snowden's leaks revealing a secret agreement between the intelligence service, known as DDIS, and the US National Security Agency to tap fibre-optic cables transporting internet traffic through Denmark.

The article provided the first glimpse of one of the nation's most sensitive secrets and appears to have caught the attention of the intelligence officer who worked as a hacker in the agency's cyber-division.

Former colleagues said he was viewed as a rising star, though he was also known to be suspicious of the agency's relationship with the NSA and had concerns the US was illegally collecting Danish citizens' data.

The intelligence officer, who was in his 30s, helped launch an internal investigation, codenamed Operation Dunhammer, into whether the NSA was abusing the cable-tapping deal. When its findings were shared with senior managers, his concerns were dismissed as unfounded and he was ordered to cease the investigation.

Rather than drop it, the spy took the extraordinary step of beginning to secretly record conversations with colleagues. Conversations about the NSA partnership with Denmark's most senior spymasters, including Lars Findsen, appear to have been among those captured over a period of several years.

Today, Findsen is sharply critical of the officer and says there was "no basis" for his actions. He was, he says, "unhinged and had his own narrative".

In late 2019, the officer's concerns found their way to the independent oversight body that supervises Danish intelligence, which took possession of his secret recordings – as many as 100 hours of audio – as well as the internal Dunhammer report. Behind closed doors, the spy had turned whistleblower.

#### A 'historic scandal'?

In August 2020, "all hell broke loose", a former intelligence official recalls. The independent watchdog, led by a senior judge, revealed in a brief statement that it had obtained a large amount of material from a whistleblower and listed a series of incendiary allegations about how the DDIS spy service was operating.

Among its findings, the body warned there were "risks in the central part of DDIS's intelligence gathering capabilities that unauthorised intelligence has been gathered on Danish citizens". The statement was not explicit, but according to former officials this was a reference to data collected under the NSA cable-tapping programme.

The fallout was immediate. Findsen and several colleagues at the agency were placed on indefinite leave. "It was not a nice situation," says Findsen.

The media branded the findings a "historic scandal" and suggested the spies were working outside the law, effectively acting as a "state within a state". As one front page read: "Spy chiefs accused of illegal surveillance".

Responding to the coverage, Frederiksen, who had left the defence ministry a year earlier, defended Findsen and the other officials. "This is what triggered my involvement in this case," Frederiksen says. "I knew them as loyal employees, dedicated and honest people, who were unjustly labelled as having done something wrong."

In September 2020, Frederiksen publicly criticised the decision to publish the watchdog's findings and, crucially, while defending the DDIS employees he appeared to provide the first on-the-record confirmation of the existence of the cable-tapping deal with the US glimpsed in the Snowden leaks.

Frederiksen acknowledged the arrangement again in subsequent interviews and went further in another media appearance in December 2021. "I'm going to be careful what I can say, otherwise I'll risk a prison sentence," he said on live TV before remarking that Denmark "greatly benefits from being allied with the NSA".

Shortly before the interview, a government-appointed panel of judges had rejected the independent watchdog's findings, seemingly drawing a line under the controversy.

Behind the scenes, there had been a remarkable twist. People close to Findsen were suddenly unable to contact him. It was as though he'd disappeared.

What only a few in Denmark knew was that, days earlier, a group of armed officers had stopped the spy chief at Copenhagen airport and, before anyone could notice, quietly arrested him.

'Microphones were everywhere'

Speaking to the Guardian as he prepares for trial, Findsen appears relaxed, though there is undoubtedly a quiet anger as he describes the events of the past three years.

Released from prison in February 2022 after 70 days in custody, Findsen technically remains head of the spy agency DDIS, albeit suspended and on two-thirds salary. He says he cannot be certain he's not still under surveillance.

Suddenly finding himself in prison, he says, was strange. "There were no other spy chiefs," he jokes. He says he established good relations with the other prisoners. "They were much younger than me. They were there for things like drugs, arms dealing and kidnapping, so it was a different environment for me."

Findsen's close ties to the domestic service, which he previously ran after 9/11, added to the sense of betrayal when he came to understand colleagues had authorised a surveillance operation against him, which he believes lasted for more than a year.

"The microphones were everywhere," he says, not just in his kitchen and living rooms, but in his car and holiday home.

In custody, he was shown the surveillance reports being used as evidence against him. His daily family life was described in the kind of documents he'd spent a career in intelligence reading. "I was talking to my children when they came back from school and things like that."

Perhaps unusually for a spy chief, Findsen had developed relationships with journalists, on which he's believed to have relied to counter negative stories about DDIS once sent home in 2020 after the watchdog's damning statement.

Prosecutors allege that Findsen shared state secrets with two reporters, as well as close relatives, his girlfriend and an old friend. Much about the case remains shrouded in secrecy but Danish journalists reported last year that prosecutors allege Findsen's conversations related to the NSA cable-tapping partnership.

In April 2021, for example, he is alleged to have spoken to his 84-year-old mother about the whistleblower who raised the alarm about the deal. Many of the conversations, it is alleged, risked causing "significant damage" to Denmark's "security and relations with foreign powers". Unable to discuss the specific charges, Findsen describes them as "crazy and ridiculous".

As for the whistleblower, he remains an elusive protagonist at the heart of the affair. Now in his 40s, he's never spoken publicly. He no longer works at DDIS and appears to be living a quiet life in the countryside running a small cybersecurity business. He did not respond to the Guardian's requests for comment.

#### State secrets in the public domain

In December 2021, a week after the Frederiksen, the former minister, mentioned the NSA cable-tapping deal on television, police officers turned up at his home. Standing outside the thatched fisherman's cottage, the officers informed the 76-year-old he'd been charged with treason.

The charges have been brought under a section of the criminal code last used against an East German Stasi agent in 1979. It is the same law that is being used in Findsen's case but Frederiksen is accused of disclosing classified information in media appearances rather than in private. He denies revealing state secrets in the interviews, since the information he shared – which he can no longer repeat – had been in the public domain since the 2014 Snowden story.

"The present government is of the opinion that a secret is a secret," Frederiksen says. "It might have been described in the newspapers, but they still say it's a secret." In court, the trial is expected to turn on whether an open secret can still be a state secret.

The paradox in both cases is that Findsen and Frederiksen, according to people who know them, are staunch believers in DDIS's US partnership and proud of its special relationship with the NSA. They are not themselves whistleblowers.

Prosecutors are nevertheless seeking custodial sentences for both men. Frederiksen believes the courts will ultimately find it hard to send someone in his mid-70s to prison, and says he will "fight to the bitter end". The strain on him is clear.

After retiring as an MP last year following 22 years in frontline politics, his time is now spent talking to defence lawyers as well as visiting his wife each day at a care home. She has Alzheimer's and does not understand the legal jeopardy her husband faces.

"I thought my retirement would mean peaceful periods where my wife and I could have travelled," he said. "But everything just went wrong and I was accused of serious crimes."

#### A sense of disbelief

The former minister believes that Denmark's centre-left prime minister, Mette Frederiksen, must have ultimately authorised the prosecutions.

"I'm fully convinced that this is a political case," he says. "It's a decision that had to be made at a very high level."

Former officials agreed that the decision to pursue the cases and spy on an intelligence chief is likely to have been signed off by a security committee chaired by the prime minister. They also point to the fact that prosecutions under the rarely used section of the criminal code require the approval of a senior minister.

Denmark's justice minister, Peter Hummelgaardsaid in a statement: "I'd like to emphasise that neither the prime minister, myself, the former minister for justice, nor any other minister in the government has approved investigative steps taken in the cases against Frederiksen and Findsen."

In Copenhagen, among the officials, former spies and journalists who spoke to the Guardian for this article, there's a sense of disbelief about what's transpired.

"Never in my wildest dreams did I think that something like this was possible in Denmark," says Hans Davidsen-Nielsen, a reporter at Politiken.

The veteran security reporter is one of the journalists who prosecutors allege received classified information from Findsen. He may be called as a witness in the trial this autumn, and says he will refuse to testify, preferring to risk punishment rather than discuss his sources.

Shortly after Findsen's arrest in 2021, police summoned several other journalists as witnesses as part of a wider leak investigation. At around the same time, the intelligence agencies held meetings with the top news publishers and warned them that journalists could also be charged for disclosing classified information.

"The case has had a massive impact on the free press in Denmark," according to Davidsen-Nielsen. "Official sources have now to a great extent disappeared because they do not dare talk to us."

Frederiksen believes the forthcoming criminal trials are part of a wider crackdown against leaks from officials. "The idea is to scare officials in the secret services but also in the central ministries in Copenhagen." The government, he says, is trying to warn them: "You should see what happens when you talk to journalists."

Additional reporting by Lucy Hough

# **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 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.

Some odd happenings on the Morse side of short-wave over the last two months, all of which are reported below. As PoSW has been following much of this activity, we thought that starting with his report would be an excellent start to set the scene.

#### Interference Problems & Various Morse Activity. A Report from PoSW

Plenty of number station activity in the last two months and a rather strange Morse signal, first noted in mid-October, close to the frequency often used by M23, which has been transmitting words in the French language, each word being sent for several minutes, slow CW, then changing to something else. Appears to be a round-the-clock operation although signals are often not very strong in the daylight hours.

#### **RF Interference**

RF interference remains a problem; very strong from about 1400 to 3000 kHz, tails off above this to enable reasonable reception of the Shannon VOLMET station on 3413 kHz which is usually a strong or very strong signal in the hours of darkness, and again the interference starts to become strong again above 8550 kHz up to around 11500 kHz when it starts to reduce. That this is internet related being radiated from the overhead phone lines was proved a few weeks ago when the internet failed, the amber LED on the router was flashing which indicates "no internet". This has happened before but only for a minute or two; on this last occasion it was off for the best part of an hour and tuning around on the radio the severe interference was gone. There were other kinds of interference but at a very much lower level which would present no real problem to radio reception. When the internet returned so did the interference. Not much to be done about that, I guess. (*A position we all sympathise with, Peter. VDSL broadband uses short-wave up to 30MHz & radiates from open, usually overhead copper wires – i.e. Antennas! - Ed)* 

#### M23 CW on 5345 kHz:-

This strange Morse station had been noted in early August sending the letters "MY" once every fifteen minutes - approximately - and this carried over into September for a time; it was certainly still going in the second week of that month:-

11-Sept-23, Monday:- 2134 and 25 seconds, approx. "MY" heard and again at 2149:25s. No further monitoring done until the weekend, Saturday the 16th when there was no sign and not heard again over the following days.

The next activity of note was in early October which appeared to be a "one off" unless it was the last appearance of a schedule which had been running for some time:-

5-Oct-23, Thursday:- 1427 UTC, casually trawling through the memories on a receiver while waiting for the 1430z Thursday E07 to start, one of which was 5345, surprised to hear strong slow CW sending "O3S". Returned to 5345 after logging the E07 but it had gone and was not heard again on following days when monitored from around 1415 to 1430 UTC.

Nothing of any great significance noted on this frequency until the start of the third week in October:-

#### Mystery French Morse

15-Oct-23, Sunday:- 0632 UTC, surprised to find slow CW, presumably from the same source as M23 - or maybe not, the frequency seemed to be slightly higher than the regular 5345 kHz used by M23, see comment further down - but not the usual combination of numerals and letters but words in the French language, and at times a single letter. At this time was sending "MANGER".

0719 UTC:- "COUVERTURE", 0809 UTC a single "dit" presumably the letter "E" 0851 UTC:- "SURPRISE". Was still in French vocabulary mode when checked later on in the day:-1741 UTC:- "MONTRE", 1744 UTC:- "Z", 1805 UTC:- "RESTAURANT", 1824 UTC:- "B", 1837 UTC:- "ROCHER", 1857 UTC:- "ARTISTE" 2112 UTC:- "BANANE" Has been heard every day since the 15th, certainly early mornings and in the evenings, in this modus operandi. Most of the words found in my ancient copy of the Collins Gem French Dictionary, published by Collins of London and Glasgow and Hachette of Paris, a few of them not in there.

Signal not as strong as the more usual M23 transmissions of recent times, especially in the daylight hours but reasonably clear in the evenings and early mornings, might be down to the vagaries of the ionosphere and propagation. Also the frequency seemed to be slightly higher than 5345, perhaps "point something" or even 5346 - using conventional receivers with readout to 1 kHz, no doubt someone using SDR will be able to confirm the frequency to the nearest Hz. (Confirmed as 5345.8kHz - Ed).

Update:- Still on with the old French parlez-vous in the last days of October:-

30-Oct-23, Monday:- 0659 UTC, "KANGOUROU"; 0726 UTC, "BUS"; 0827 UTC, "B"; 1926 UTC, "ETOILE"; 1959 UTC, "CHIEN"; 2003 UTC, "HIRONDELLE" - signal very weak here.

Perhaps this has nothing to do with M23; noticed on several occasions that a strong carrier lasting a second or two on 5345 kHz exactly at five minutes before the hour – roughly - which is more in keeping with the behaviour of M23 so perhaps this apparently French station is something else entirely.

#### M51 & F9TM More French Morse Activity

Continuing on a French theme:- the CW station on 6825 kHz seemed to be less active in the summer months, or at least there were several days when there was no activity on that frequency, we are used to hearing sending fast 5 character groups at almost any time of the day. Might have been inaudible due to propagation; whatever the case it seems to be strong enough as we progress through autumn with the parallel frequency 3881 usually a good signal after dark. Also noted an example of that special Thursday thing they do once in a while - or at least when I have heard it in the past it has always been on a Thursday:-

05-Oct-23:- 1735 UTC, strong CW, not the usual fast 5 character groups, hand keyed CW using call-sign F9TM, strong signal, working F call-sign amateur stations who were on another frequency with RST reports, mostly 599, followed by "QRG 3536/00K". 3536 kHz was, of course, the frequency in the 80 metre band on which the French amateurs were transmitting as was F9TM in parallel with 6825kHz. As for "QRG", reference to the ARRL Handbook says "Will you tell me my exact frequency"... "Your exact frequency is...", so presumably a frequency checking exercise.

Thanks, Peter, for your excellent report & observations. We, too, have wondered about any association, (or otherwise), between M23, M51 & the 5345.8kHz 'Mystery Station''.

F9TM is the amateur radio call sign registered to DIRISI CNMOTSR Centre de Contrôle des Fréquences, BP 10019, FAVIERES 28170, France, & is known to be associated with the M51 group of stations. This Thursday evening net is, as Ary, (AB), has previously informed me, a regular event from the F9TM call. (*Editor*)

For more logs & reports on these stations - Read on...

#### UNID CW

#### Mystery French Station - 5345.8 kHz

We were alerted to these transmissions thanks to the Ary's Utility DXers Forum, UDXF@groups.io, who first reported this station on Sunday, 15 October.

Placed just 800 Hz HF of the M23 current active frequency, these transmissions consist of a single French word, a single figure number or a single letter that repeats every few seconds. After 10 minutes the word or figure changes to a new one that is repeated for the next 10 minutes, and so on 24 hours a day.

Although the station is believed be originate from France it appears to avoid any words containing accented letters & the most obvious purpose of the station would seem to be to provide Morse practice – But for whom? The station sends no identification.

The output is auto-sent Morse & as tends to be the case with these systems the clock is not locked to atomic time & AB notes it gaining two minutes in a day.

As we know, the French station M51 has been providing regular daily schedules of Morse practice lessons for a great number of years on 3881//6825kHz, but also wanders onto other frequencies from time to time with the recognisable combination of 5 letter groups interspersed with number groups & punctuation. But this is a totally different pattern to that known format.

There was also a series of transmissions on 4915kHz from 08 - 14 August, that were featured in our last newsletter. So do these transmissions come from either of these two sources or is another organisation behind them?

Examples of the output from this station logged at random are;

16 Oct 9, D, Y, C, 0, Toilettes, ecole, livre, etudiant, acteur, mouche, ordinateur, manteur, lampe, poulet, Mai, taxi, casserole, vehicule

17 Oct T, maladie, education, septembre, pantalon, sujet, tunnel, lac, larguer, K, gris

24 Oct N, silencieux, terre, vitesse, K, Samedi, tui, jardin, viande, brise, V, kookaburra, public, chenille, docteur

Update: The station was still active on 02 November but was missing on 03 November.

Thanks to AB, BR, PLdn, PoSW & particularly UXDF for the reports & logs.

### Morse - Number Stations

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

From the beginning of October 2022, all M01 transmissions sent have used a single carrier vs usual 'Two-Tone' transmission mode.

The construction & delivery of messages from M01 has varied considerably over time. Sometimes perfect messages, other times chaotic rambling strings. The most recent incarnation involves using a form of sequential numbers in almost identical groups, examples of which can be seen in the transcribed examples below.

### September 2023:

5020	2000z 2000z 2000z 2000z 2000z	05 Sep 12 Sep 14 Sep 19 Sep 21 Sep	NRH '463' '463' '463'	$481 \ 30 = = \\619 \ 30 = = \\483 \ 30 = =$	00055 00077 43561	21861 81755 17615	44739 8716 85619 5500 99110 7700 44838 9017	00 = = 00 = = 78 = =	Good, fast. Several errors. = = missing at start / end Strong, fast. V.fast. Excellent Morse Good, fast. Fine but for corrected error in end sequence Good, fast. Msg as 1800z with 10 changed figs. 2 errors	BR/HFD BR BR BR BR	TUE TUE THU TUE THU
	2000z	26 Sep	'463'	759 30 = =	13212	34215	78675 1231	2 = =	Good, fast. Some grps used twice or three times	BR	TUE
5475	1800z 1800z	05 Sep 07 Sep		127 30 733 30 = =			57878 1983	38	Fair, fast. One error noted. = = missing at start / end	BR/HFD HFD	TUE THU
	18 <b>04</b> z	14 Sep	'463'	727 30 = =	00066	81050	00223 6600	= = 00	Good, V.fast. Late start. Error on call-up	BR	THU
	1800z	21 Sep	'463'	483 30 = =	43561	17615	44838 9018	37 = =	Fair, fast with QSB. Good Morse. No errors	BR	THU
	1800z	26 Sep	'463'	337 30 = =	12312	45645	67543 8866	54 = =	Fair/Good, fast. One noted error Grp21 12335 12435	BR	TUE
6260	1500z 1500z	02 Sep 09 Sep					69090 6009 47673 7699		Weak, fast. More sequential groups! (See below) * AB Weak, fast. Good Morse. No errors noted	B/BR/HFD BR	SAT SAT
6510	0700z	03 Sep	'463'	891 30 = =	12090	13090	39090 3009	== 0	More sequential groups! (See below)	BR/HFD	SUN

\* Sat 02 Sep Started with 025 (R 30sec) 000 EEEEEEE 463 etc. AB

#### October 2023:

5020	2000z 2000z 2000z 2000z 2000z 2000z	03 Oct 05 Oct 12 Oct 17 Oct 19 Oct 24 Oct	'463' $34876456548965490345 = 84330000$ Good, fast. No intro, from call-up into grps.'463'93630 = 12312345349987646574 = Fair with QSB, fast. Good Morse. Grp109087 (x2)'463'30230 = 004091859885880400 = Good, fast. Excellent Morse. Grp10040 Grp300400'463'20230 = 12323345335634587564 = Weak/Fair, fast. Excellent Morse. One error grp19'463'73630 = 71767727679976790767 = Weak/Fair, fast. Excellent Morse. Sequential grps.'463'39130 = 40343493436334361343 = Fair, fast. Excellent Morse. Sequential grps. with errors	BR BR BR BR BR BR	TUE THU THU TUE THU TUE
5475	1800z 1800z 1800z 1800z	03 Oct 05 Oct 17 Oct 24 Oct	'463'492 30 = $= 23478$ 65712 67321 56123 = =Fair with QSB & static, fast. Good Morse. No errors'463'661 30 = $= 33771$ 76543 44773 90098 = =Weak/Fair with QSB. Excellent Morse. No errors'463'883 30 = $= 90909$ 99955 45678 90909 = =Fair/Good, fast. Excellent Morse. No errors'463'942 30 = $= 31565$ 32565 9565056550 = =Weak/Fair, fast. Excellent Morse. Sequential grps.	BR BR BR BR	TUE THU TUE TUE
6260	1500z 1500z	07 Oct 14 Oct	'463' 598 30 = = 34765 12876 732 90543 = Weak/Fast. Mostly copied. Some missed – Lively QSB NRH – Strong pirate broadcast station on freq. 'Radio Mi Amigo'	BR BR	SAT SAT
6510	07 <b>01</b> z	22 Oct	'463' $337\ 30 = 55755\ldots$ 0701z start.	HFD	SUN

M01/3 6260kHz 1500z 02 September 2023 Saturday	M01/3 6510kHz 0700z 03 September 2023 Sunday
'463' (R4m) 224 224 30 30 = =	'025' (R4m) 891 891 30 30 = =
41090 42090 44090 44090 45090 46090 47090 48090 49090 40090 51090 52090 53090 54090 55090 56090 57909 58090 59030 50090 61090 62090 63090 64090 65090 66090 67909 68090 69090 60090 = =	12090 13090 11090 14090 15090 16090 17090 18090 19090 10090 21090 22090 23090 24090 25090 26090 27090 28090 29090 20090 31090 32090 33080 34090 35090 36090 37090 38090 39090 30090 = =
224 224 30 30 000 <i>Courtesy BR</i>	891 891 30 30 000 Courtesy AB

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 Logs

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 Logs

14942/13942/12142	0010/30/50z 0010/30/50z 0010/30/50z	01 Sep 04 Sep 29 Sep	991 1 991 000 991 1 (7884 177)	22197 97808	(Via SDR Japan) (Via SDR Japan) (Via SDR Japan)	BR BR BR	FRI MON FRI
17437/15937/14537	0300/20/40z	07 Sep	494 1		(Via SDR Russia)	HFD	THU
17429/16229/15929	0010/30/50z 0010/30/50z	20 Oct 27 Oct	429 1 (299 78) 429:1	56733 01289	(Vis SDR Japan) (Via SDR Japan)	BR HFD	FRI FRI
17437/15937/14537	0300/20/40z	12 Oct	495 1		(Via SDR Japan)	HFD	THU

#### European M12 Logs September 2023: New scheds in bold type

		J				
6942/8142/9284	0030/0050/0110z	01 Sep	( )	56359 66021 00959 18719 000	Gert	FRI
	0030/0050/0110z 0030/0050/0110z	20 Sep 29 Sep	912 1 912 1 (7694 98)	89909 13592	HFD BR/HFD	WED FRI
	0030/0030/01102	29 Sep	912 1 (7094 98)	89909 15592		ГКI
7961/6961/5861	2100/20/40z	01 Sep	988 000		HFD	FRI
	2100/20/40z	02 Sat	988 000		BR	SAT
	2100/20/40z	08 Sep	( )	87909 75353	BR/HFD	FRI
	2100/20/40z	09 Sep	· · · · · · · · · · · · · · · · · · ·	87909 75353	BR	SAT
	2100/20/40z	16 Sep	988 1 (3936 140) 988 1 (3936 140)	39782 70097	BR BR	SAT FRI
	2100/20/40z 2100/20/40z	22 Sep 23 Sep	988 1 (3936 140) 988 1 (3936 140)		BR	SAT
	2100/20/40z	30 Sep	988 1 (3936 140)		BR	SAT
		1	× /			
10831/11531/13431	0600/20/40z	02 Sep	854 1 (594 111)	25586 61497 28412 56320 000	AB/HFD	SAT
	0600/20/40z	30 Sep	854 1 (207 190)	47922 37295	Gert	SAT
11109/10309/9209	2000/20/40z	04 Sep	295 1 (7170 125)	11728 77745	BR/HFD	MON
11109/10309/9209	2000/20/40z	04 Sep 07 Sep	· · · · · · · · · · · · · · · · · · ·	11728 77745	BR	THU
	2000/20/40z	11 Sep	385 000	11/20 /// 10	BR	MON
	2000/20/40z	14 Sep	385 000		BR	THU
	2000/20/40z	21 Sep	385 1 (577 83)	35409 96766	BR	THU
	2000/20/40z	25 Sep	385 1 (8784 119)	90279 00972	BR	MON
11435/10598/9327	1800/20/40z	00 5	938 1 (4777 72)	86480 39916	BR	SAT
11455/10596/9527	1800/20/40z 1800/20/40z	09 Sep 16 Sep	938 1 (4777 72) 938 1 (5264 71)	39682 63044	BR/HFD	SAT
	1800/20/40z	30 Sep	938 1 (4139 72)	29164 80178	BR	SAT
		•••• <b>r</b>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
13367/12167/10567	1900/20/40z	01 Sep	315 1 (6422 65)	75800 59281	BR/HFD	FRI
	1900/20/40z	08 Sep	315 000		BR	FRI
	1900/20/40z	13 Sep	315 1 (2029 87)	97805 72336	BR	WED
	1900/20/40z 1900/20/40z	15 Sep 20 Sep	315 1 (2029 87) 315 000	97805 72336	BR BR	FRI WED
	1900/20/40z	20 Sep 22 Sep	315 000		BR	FRI
	1900/20/40z	27 Sep	315 1 (644 75)	37102 70884	BR	WED
	1900/20/40z	29 Sep	315 1 (644 75)	37102 70884	BR	FRI
13386/12189/11491	1110/30/50z	14 Sep	725 1 (6728 99)	49756 19766	BR	THU
	1110/30/50z 1110/30/50z	21 Sep 28 Sep	725 1 (2458 90) 725 1 (9740 93)	18305 63962 69360 73991	BR BR	THU THU
	1110/30/30Z	20 Sep	725 1 (9740 95)	09300 73991	DK	INU
14927/13927/12227	1600/20/40z	06 Sep	992 1		HFD	WED
	1600/20/40z	10 Sep	992 1 (611 159)	44541 29890	BR	SUN
	1600/20/40z	13 Sep	992 1 (611 159)	44541 29890	BR	WED
	1600/20/40z	17 Sep	992 1 (611 159)	44541 29890	BR	SUN
	1600/20/40z	20 Sep	992 000 992 000		BR BR	WED SUN
	1600/20/40z	24 Sep	992 000		DK	SUN
19546/18446/16346	1600/20/40z	04 Sep	543 1 (2013 93)	20516	HFD	MON
	1600/20/40z	11 Sep	543 1 (585 77)	50761 04274	BR	MON
	1600/20/40z	14 Sep	543 1 (585 77)	50761 04274	BR	THU
	1600/20/40z	25 Sep	543 1 (241 91)	88895 57120	BR	MON
	1600/20/40z	28 Sep	543 1 (241 91)	88895 57120	BR	THU
October 2023:						
<u> </u>						
5794/6794/	2100/20/40z	06 Oct	770 000		HFD	FRI
	2100/20/40z	07 Oct	770 000		BR	SAT
	2100/20/40z	13 Oct	770 000		BR	FRI
	2100/20/40z 2100/20/40z	20 Oct 21 Oct	770 000 770 000		BR BR	FRI SAT
	2100/20/402	21 000	110 000		DR	5/11
6837/8037/9237	0030/0050/0110z	03 Oct	802 1 (7694 98)	89909 13592 90173 93112 000 000	Gert /HFD	TUE
	0030/0050/0110z	20 Oct	802 1 (5203 125)	00241 07213	BR	FRI
	2000/20/10					
10318/9218/8118	2000/20/40z	02 Oct	178 1 (9960 79)		BR/HFD	MON
	2000/20/40z 2000/20/40z	05 Oct 09 Oct	178 1 (9960 79) 178 000	61055 65230	BR BR	THU MON
	2000/20/40z	16 Oct	178 1 (460 67)	92590 02998	BR	MON
	2000/20/40z	19 Oct	178 1 (460 67)	92590 02998	BR	THU
	2000/20/40z	23 Oct	178 1 (461 91)	76663 96331	BR	MON
11105/10005/005	1000/00/100	0.1.0	100 1 (0 150 00)	07170 20004	~~	
11135/10235/9235	1900/20/40z	04 Oct	122 1 (9479 99)	87172 39884	BR BR/UED	WED
	1900/20/40z 1900/20/40z	06 Oct 11 Oct	122 1 (9479 99) 122 1 (9479 99)		BR/HFD BR	FRI WED
	1900/20/40z	13 Oct	122 1 (9479 99)		BR	FRI
	1900/20/40z	18 Oct	122 000		BR	WED
	1900/20/40z	20 Oct	122 000		BR	FRI
	1700/20/402					
11425/10500/0225				46402 12111	חח	C A 77
11435/10598/9327	1800/20/40z 1800/20/40z	07 Oct 14 Oct	938 1 (2901 76) 938 1 (7721 71)		BR BR	SAT SAT

	1800/20/40z	21 Oct	938 1 ( 4934 76)	99396 72178	BR	SAT
	0800/20/40z 0800/20/40z		462 1 (7283 164) 462 1 (7283 164)	70026 42798 48292 28386 000 000 70026 42798	Gert/HFD BR	WED SUN
	1110/30/50z 1110/30/50z		725 1 (9291 95) 725 1 (7558 93)	73967 22292 03728 42582	BR BR	THU THU
20168/19468/16268	1400/20/40z 1400/20/40z 1400/20/40z	02 Oct 09 Oct 16 Oct	142 000	93270 26446 56121 49633	BR/HFD BR BR	MON MON MON

M12 6942/8142/9284kHz 0030/0050/0110z 01 Sep 2023	M12 10831/11531/13431kHz 0600/0620/0640z 02 Sep 2023
912 912 912 1 (R2m) 5301 114 5301 114	854 854 854 1 (R2m) 594 111 594 111
56359       66021       16677       11230       52430       31594       29258       67556       88437       67904         15307       08744       05582       64461       62403       38315       35077       74247       44229       29295         86497       90214       35233       63935       25561       78480       04518       67949       66278       58603         47563       78167       05558       43268       95899       15009       45588       35468       71611       75185         41123       98112       24312       38732       66510       92790       77171       82111       55306       66708         98366       98329       43186       00030       62336       55320       17343       65616       91971       80580         83417       06624       33733       16102       25465       9478       10318       15656       20646       13735         95425       15790       71637       37618       84408       82430       49491       19720       54782       23690         53883       78775       49326       27614       84470       88799       56137       22701       16992	25586 61497 28443 28440 58101 90022 07247 49439 81189 78637 75028 22888 22583 37110 59981 64852 00953 76410 62422 43111 41125 48692 04178 67799 62032 88348 36648 48972 15540 92645 25594 34749 61797 77744 59089 28668 82051 09350 65329 59663 53147 66025 99289 29691 34293 71951 40850 06555 16626 76429 82805 77071 70076 34345 42039 04737 70132 78436 36850 72883 17701 13260 42664 63915 05625 32633 44736 42436 22964 08635 96714 46374 80554 71074 19307 39046 26844 93315 82397 70765 66724 10337 03302 66012 45445 56944 11522 43977 88575 95434 24996 16364 01168 77046 43910 91067 57547 83925 80934 93826 54365 03526 03542 13195 41149 37897 85244 28105 10204 28412
33980 88658 00959 18719 000 000 Courtesy Gert	56320 000 000 Courtesy Ary

#### M14 IA MCW / ICW Short 0

#### September 2023:

12211	0500z 0500z 0500z	01 Sep 13 Sep 29 Sep	952 (816 57) = 24853 952 (616 52) = 89262 952 (867 51) = 41706 13341 54598 98327	(Via SDR Japan) (Via SDR Japan)	HFD HFD Gert	FRI WED FRI
10243	0520z	01 Sep	952 (816 57) = 24853	(Via SDR Japan)	HFD	FRI
	0520z	13 Sep	952 (616 52) = 89262	(Via SDR Japan)	HFD	WED

#### October 2023:

No Logs

M14         12221kHz         0500z         29 September 2023           952         (R4m)         867         51         51 = =												
38614 96651 18938	13341 60226 28248 79342 35505 = =	06082 02291 99971	65065 11342 80268	37262 68370 13029	53318 25407 85892	77335 60132 83801	83035 56771 07845	99179 56607 58193	41107 71929 73789			
867 86	867 867 51 51 00000 Courtesy Gert											

#### Rare M14 Variant - New ENIGMA Designation

We are indebted to Pierre from the Priyom group for the logging of a previously unknown variant of M14.

What makes this a new variant is the addition of an extra five-figure group in the call-up header. This variant has been observed in other stations in this Family I Russian group of stations, namely E06b, G06b & S06g, but has not been previously reported in this Morse equivalent.

9463	1150z	06 Oct	801 <b>79462</b> (625 34) = 76322 84084 92860 50638 = 625 34 00000	Pierre (Priyom)	FRI
	1200z	06 Oct	801 <b>79462</b> (625 34) = 76322 84084 92860 50638 = 625 34 00000		

Full Intercept:

9463 06-10-2023 1150 M14 ICW Two series of fast beeps 9463 06-10-2023 1200 M14 ICW 801 **79462** (R4m) 625 625 34 34 = = 76322 84084 74035 08490 74434 48199 40794 65311 34108 26648 44669 98986 54758 95096 31928 55589 15369 66499 32559 86096 51069 92755 62280 25237 91145 73491 60212 48568 88157 20409 04302 18705 92860 50638 = 625 625 34 (unpaired) 00000 Copied by Pierre from Priyom.

Pierre had also copied this format in April 2023 & the log is shown below for reference;

11073 1850z 15 Apr 352 **12643** (679 41) = = 73268 31407 74710 ... 21314 21613 02848 = = 679 679 41 41 00000 Pierre (Priyom) SAT

#### New Designation - M14d

As there is no existing ENIGMA designation for this previously unreported variant, the following designation has been assigned;

 NEW ENIGMA DESIGNATION

 M14 – Family 1A
 New Variant M14d is assigned 30 October 2023

 M14d
 Rare, 3-fig ID with additional 5f group In Call

 e.g.
 801 79462 (R4) 625 34 etc.

(Credit to Pierre of Priyom who logged this variant on 06 Oct 2023) Add to ENIGMA 2000 Active Station List V1.3 at end of M14 section

For reference the previously assigned variants of M14 are as follows;

M14a Dual message variant

- M14b Rare, added 2<sup>nd</sup> message hand-keyed
- M14c Rare, Dual message Consecutive IDs

All believed to be inactive.

#### <u>M23</u> O ICW

#### The Transmissions Continue

The long-running series of odd schedules reported in our last newsletter, plus the sending of a single 'MY' every 15 minutes day & night on M23's preferred frequency of 5345kHz, continued into the first days of September, however, attempts to monitor daily schedules were hampered by poor conditions, with some schedules not always audible in the UK.

Time	Frequency	Date discovered	Call + Duration	Schedule	Found by	Day Discovered
0157z	5345	29 Jul	ST3 (R20m)	Daily	AB	SAT
0557z	10381	27 Jul	ST3 (R20m)	Daily	AB + Anon	THU
0957z	20456	26 Jul	ST3 (R20m)	Daily	AB + Anon	WED
1357z	11530	31 Jul	OSS (R20m)	Daily	AB + Anon	MON
1757z	6937	26 Jul	S1S (R15m)	Daily	AB + Anon	WED
1957z	4822	27 Jul	S1S (R15m)	Daily	Priyom via AB	THU

#### 'MY' Transmissions Cease

The 15 minute 'MY' transmissions on 5345kHz were not heard from Wednesday, 13 September, although the 0157z 'ST3' schedule continued. Ary, (AB), reports the 'MY' transmission mixing with the 'ST3' schedule on Monday, 04 September. Ary also notes 'MY' was now running 11 minutes late – so no correction made to return the schedule to H, H+15, 30, 45 for some while.

#### All Other Schedules End

Although the 'MY' sequence had finally ended, the daily schedules, (shown in the table above), continued unaffected for another five days with the last transmissions being monitored on Monday, 18 September. Further daily checks failed to find any further transmissions on either 5345kHz or on the frequencies used for the daily schedules bringing this series of transmissions to an end.

An interesting and intriguing series of transmissions adding to the mystery of this station. Many thanks to those involved in the discovery, reporting and monitoring of this latest series.

#### October Activity

With the ending of the previous series of transmissions on 18 September, nothing more was heard until Sunday, 08 October when Ary, (AB), monitored another odd transmission on 5345kHz at 2055z.

Appearing to be a broken or faulty recording or a transmitter problem, it was first wondered if this was, indeed, M23. However, the transmissions reappeared every hour throughout the night & it soon became clear that this was a genuine transmission. The content of the signal was not so easy to determine being jumbled, & also running faster than the usual M23 Morse, but appears to be either the letter 'O' or the letter 'S' repeated. There is a single long tone at the start of the sequence & two long tones at the end, the whole sequence lasting approximately 20 seconds. Between the characters are heard a staccato series of fast 'dits',

If this was a faulty recording or transmission error it nevertheless continued without correction until 15 October.

- 1.0	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0
× poss-M23-2 ▼ Mute Solo	and a state of the				d a				14.14			an	- Juna		diama in			ndit		1			
- +	0.5-					uh(     <b>  </b>													. Harrison	1		L. Skarbillahu	
L R	0.0		<b>i</b> 1 100															mar 🛌	<b>i</b> .		-	P.C. Connector	and a set
Vono, 11025Hz 32-bit float	-0.5-		. hennit			midlill <b>h</b> .				. autimut									Alexandra and				
M23 S	Sunday 0	8 Octo	ber			Full	Sequer	nce of 7	Fransn	nission S	Showi	ng To	ones with	h Stacca	to 'Di	its' betwe	een				Cour	tesy AE	3

This transmitted sequence had changed by Monday, 16 October to a brief burst consisting of a long tone, a Morse 'K' or 'Y' ? then another one or two long tones. As with the previous sequence the whole string is quite muddled & it is difficult to be sure what is actually being sent. The whole sequence, again, still sounds speeded up & lasts approximately 4 seconds & sent at H+55m once every hour.

	dp .	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0
	23-1 ¥ 1.0 Solo												
	+ 0.5-	where the state and a start of	المرابط والمراجع والمعالم	hilling and a summaria						im			
<u>L</u>		أمراحيا فريدان بالدراد معادها مراقرين والمد						-					
Viono, 1102 32-bit float													
<ul> <li>Select</li> </ul>	t -1.0												
M23	Monday 1	6 October		Changed se	quence Show	ing Long T	Cones With M	orse 'K' or	'Y' Between			Courtes	sy AB

This hourly burst continued throughout the remainder of October & is still active at time of writing, 01 November.

### Morse Stations - Not Number Related

#### <u>M51</u> 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

1	130 - 1201z	26 Sep	Mardi-Leçon	22-2/1 Codé	22-2/2 Clair,	22-2/3 Codé,	22-2/4 Clair (600 grps/hr)	BR	TUE
1	130 - 1205z	27 Sep	Mercredi- Leçon	23-2/1 Codé,	23-2/2 Clair,	23-2/3 Codé,	23-2/4 Clair (720 grps/hr)	BR	WED
1	130 - 1157z	28 Sep	Jeudi- Leçon	24-2/1 Codé,	24-2/2 Clair,	24-2/3 Codé,	24-2/4 Clair (840 grps/hr)	BR	THU

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

3881//6825

0111z	28 Sep	Non-stop 5-character groups composed of M51a messages	Strong//Fair	BR	THU

#### <u>M89</u> 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).

5389 5549

Chart of M89 Fre	eq & Call signs heard in Sep / Oct 2023	New Scheds shown in Bold Type	From logs submitted from JPL				
		Freq in kHz	<u>Call Slip</u>				
Freq in KHz	<u>Call Slip</u>	4720//5150	V WNF(x3) DE FXM (x2) (R5)	) (Hand sent)			
3565//4718	V BSA5 (x3) DE TP4C (x2)						
3565//6378	V BSA5 (x3) DE TP4C (x2)	4860// 6840	VVV (x3) Q2M (x3) DE NYZ (	(x2) (R5) QSA ? K			
4718//6378	V BSA5 (x3) DE TP4C (x2)	6378//7045	V BSA5 (x3) DE TP4C (x2)				
4718//7045	V BSA5 (x3) DE TP4C (x2)			Courtesy JPL			
4517 FY3B	1735z (IP) 19 Oct VVV UW2K (x3) 765/X.26/7901/82/	DE FY3B (x2) 28/22/K236A/COMM/7294 AR BT	(Remote tuner Taiwan)	JPL THU			

5549 1451z (IP) 01 Sep RMKS 4170 TO 4219 4221 4292 4295 BT

JPL

(Remote tuner Novosibirsk)

FRI

M89 4517kHz 1735 (IP) - 1737z 19 October 2023	
UW2K (x3) DE FY3B (x2)	
VVV UW2K DE FY3B HR SVC GA HR SVC GA BT 765/X.26/7901/82/28/22/K236A/COMM/7294 AR BT	(IP – 1735z)
765/XK26/7901/82/28/22/K236A/COMM/7294 AR HR WK NR 470 WK NR 470 NIL SK NIL SK	(1737z)
M89 5389kHz 1217 (IP) - 1317z 23 October 2023	
RPT 32W 6274 6274 K K	(IP - 1217z)
RPT 41W 5387 5387 K K RPT 43W 6142 6142 K K	(1218z)
RPT 43W 2605 2605 K K RPT 53W 1604 1604 K K RPT 64W 3521 3521 K K	(1219z)
RPT 70W 9675 9675 K K RPT 78W TO 91W BT UDA6 ND5T 4637 A4UD 6375 6T4A 5U	(Other station N/H on this frequency) I3N ATN4 D73U D75U A7N6 NT56 3D74 DA47 AR K K
R R R R G GA K	(1222z) (1224z)
	(12242) Courtesy JPL

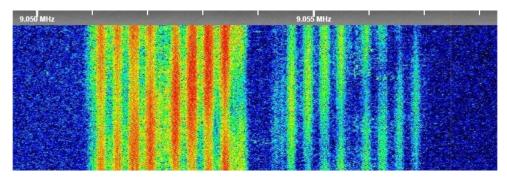
<u>M95</u> O XSV, XSV70, XSV85

M95 Morse Logs	(Bold type indicate	s new logg	ing)			
3642//NRH	Call Sign 3A7D	(Active o	laily - only first marker log has been included)			
3642//7602	Call Sign 3A7D	(Active o	laily - only first marker log has been included)			
4178//7517	Call Sign S2DJ 1448z 1258z 1333z 2236z 1725z	Believe t 01 Sep 03 Sep 29 Sep 02 Oct 10 Oct	his to be new Round Slip and freq for YHXD DE SAQC V XP5B (x3) DE S2DJ (x2) V XP5B (x3) DE S2DJ (x2)	<ul> <li>(Remote tuner Novosibirsk)</li> </ul>	JPL JPL JPL JPL JPL	FRI SUN FRI MON MON
4243//9054	Message number dit 1151 (IP) - 1205z 1144 (IP) - 1149z	ffers from c 16 Oct 23 Oct	urrent XSV70 and XSV85 message numbers. NR 084 CK 40 35 1016 1515 BT NR 32 CK 163 35 1016 1531 BT NR 46 CK 132 35 1023 1521 BT	(Remote tuner South Korea) (Remote tuner South Korea)	JPL JPL	MON MON
4364//8073	Call Sign XSV85 1130 - 1149z 1130 - 1142z 0001 - 0008z	16 Oct 23 Oct 29 Oct	NR 0812 CK 055 35 TTA6 164U BT NR 0813 CK 370 35 TTA6 A643 BT NR 0844 CK 208 35 1023 1520 BT NR 0856 CK 100 35 1029 0702 BT	(Remote tuner Hong Kong) as problem with the number 3) (Remote tuner Hong Kong) (Remote tuner Hong Kong)	JPL JPL JPL	MON MON SUN
5651//12039	Call sign S2DJ 1340z	08 Oct	V XP5B (x3) DE S2DJ (x2) (IP - Cont'd)	(Remote tuner Novosibirsk)	JPL	SUN
9054	Call sign XSV85 (See also 4243//905 2340 - 2357z	54kHz listin 28 Oct	g) NR 058 CK 19 35 1029 0557 BT NR 010 CK 35 35 1029 0630 BT NR 57 CK 054 35 1029 0700 BT	(Remote tuner South Korea)	JPL	SAT
10180	Call Sign 3A7D	(Active o	laily - 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 4364//8073kHz 1130z (IP) 16 October	2023	M95 4243//9054kHz 1151z (IP) 16 October 2023
(In Progress at 1130z)		(In Progress at 1151z)
In Chinese digital 4+4 QPSK 75/3000 LSB	(1130z)	In Chinese digital 4+4 QPSK 75/3000 LSB (1151z)
Switched to CW Hand sent 1150z		Switched to CW Hand sent (1152z)
		VVV HR 7G TO YR PSE CY (1156z)
V BNGC (x3) DE XSV85 (X2)	(Cont'd – 1142z)	NR 084 CK 40 35 1016 1515 BT
HR MSGS GA PSE CY	(1140z)	5AA UTT TA6 3U6 3A4 5T7 5TD 75U 35U 4TA
NR 0812 CK 055 35 TTA6 164U BT		33U 33N N3D 4TN 445 3DT 4D6 5TN 5U 35U
TAT N5U TA6 N53 TA. N54 7TT TTU 746 6TU		33U 34U N3D 446 3DU 336 N3U 445 3DA 4D6
N75 6T6 6TU N75 6AT TA4 6A4 A57 6A4 AT6		5AA 75U 35U 4TN NAT 4TA 445 3DA 4D6 AR 7G AGN
TA6 TT6 6A7 TAA 74D NT4 N6D U33 D44 635		<b>NR 084 CK 40 35 1016 1515 BT</b> (Repeats msg – 1201z)
4A6 DAU D47 DA3 NU6 736 N75 N44 7T5 777		AR A HR 7G GA
TAU 773 TA7 773 TAD 773 TAN 773 TU3 773		NR 32 CK 163 35 1016 1531 BT
756 TU4 773 756 7AN AR	(1146z)	UTU TA6 3.6 3A4 TTU 773 35A N3D 353 4TA (Cont'd – 1205z)
AHR MSG GA	× /	
NR 0813 CK 370 35 TTA6 A643 BT		
(Operator has problem)	with the number 3)	M95 9054kHz (// 4243 N/H) 1151z (IP) 16 October 2023
TA6 3U6 3AN 3U7 TAU 773 353 373	(Cont'd – 1149z)	
	(	Into voice Chinese Female (2340z)
		Into Chinese digital 4+4 QPSK 75/3000 LSB (2343z)
		Switched to CW Hand sent (2346z)
M95 4364//8073kHz 0001z 29 October 202.	3	
		HR MSG TO YR PSE CY (2346z)
Into voice USB Chinese Male	(0001z)	NR 058 CK 19 35 1029 0557 BT
Switched to Chinese digital 4+4 QPSK 75/3000 LSB	(0002z)	UT5 TUN 3U4 3A4 TTA TTU TT3 773 356 36U
Switched to CW Hand sent	(0005z)	4AA 445 34U N3U 446 4D4 3DA N3D 3DU AR (2349z)
		7G AGN NR 058 CK 19 35 1029 0557 BT (Repeats msg)
V BNGC (x3) DE XSV85 (x2)	(Cont'd – 0005z)	AR HR 7G GA
HR MSG GA PSE CY	(0006z)	NR 010 CK 35 35 1029 0630 BT
NR 0856 CK 100 35 1029 0702 BT		5AA UTT TUN 3U4 3A4 5T7 5TD 75U 35A (Cont'd – 2352z)
TUN 3U4 3A4 TAU 773 TU4 773 TU5 773		AR 7G AGN NR 010 CK 35 35 1029 0630 BT (2353z)
353 4T3 NN3 446 3D3 4DT 4D6 TA7 773		AR HR MSG GA
TAD 773 353 4T3 NN3 446 3DU 34A N3D	(Cont'd – 0008z)	NR 57 CK 054 35 1029 0700 BT
	` ´ ´	UTU TUN 3U4 3A4 TTU 773 35A U4T 353 336
		N3U 75D 354 373 4TN 445 336 N3U (Cont'd – 2357z)
	Courtesy JPL	
	~	Courtesy JPL

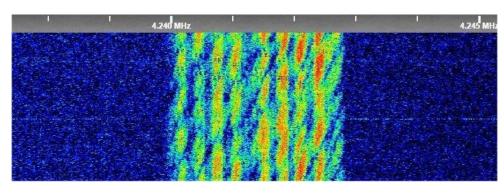
#### Different Modulation Modes in Use on Parallel Frequencies

On Monday, 23 October Jean-Paul, JPL monitored the regular scheduled transmissions on 4243//9054kHz, but noted that the two parallel frequencies were using different modes, with the 4243kHz output using LSB, (Lower Sideband), while 9054kHz was using both LSB & USB, (Upper Sideband).



M95 1144z 23 Oct 2023 Image of 9054 kHz Signal Showing Both LSB & USB

Courtesy JPL



M95 1144z 23 Oct 2023 Image of //4243 kHz Signal Showing Only LSB

Courtesy JPL

### Marker Beacons (MX MXI)

	4557.7	0101z	28 Sep	MXI	CW	Beacon	"D"	Sevastopol				BR	Т	THU
	4557.9	0102z	28 Sep	MXI	CW	Beacon	"S"	Severomorsk				BR	Т	THU
		1001			~			a						
	5153.7	1924z	25 Sep			Beacon		Sevastopol				BR		AON
	5153.9	0103z	28 Sep	MXI	CW	Beacon	"S"	Severomorsk				BR	Ί	THU
	5156.7	0413z	11 Sep	MX	CW	Beacon	"L"	St Petersburg			Good	chpa	Ν	AON
		0416z	14 Sep	MX		Beacon	"L"	St Petersburg			Good	chpa		THU
		0433z	16 Sep			Beacon	"Ľ"	St Petersburg			Good	chpa		SAT
		0452z	21 Sep	MX		Beacon	"Ľ"	St Petersburg			Good	chpa		SAT
		0500z	06 Oct			Beacon	"Ľ"	St Petersburg			Good	chpa		FRI
		0519z	07 Oct			Beacon	"L"	St Petersburg			Good	chpa		SAT
		0519z	07 Oct	MX		Beacon	"L"	St Petersburg			Good	chpa		SAT
		0521z	18 Oct			Beacon	"L"	St Petersburg			Moderate	1		WED
		05212	18 001	MA	CW	Deacon	Г	StTetersburg			Wioderate	cupa	v	
	7508.7	1912z	25 Sep	MXI	CW	Beacon	"D"	Sevastopol				BR	Ν	MON
	7508.9	1913z	25 Sep	MXI	CW	Beacon	"S" 3	Severomorsk				BR	Ν	ИON
	7509.1	1913z	25 Sep	MXI	CW	Beacon	"A" /	Astrakhan				BR	Ν	ИON
	9404.0	1012-	25 8	MVI	CW	. D	"0"	C		U. J OD	л	חח		ION
	8494.9	1912z	25 Sepr	MXI		Beacon				Under QRI	VI	BR		MON
	8495.1	2302z	30 Oct	MXI	Cw	Beacon	A	Astrakhan				BR	2	SUN
	8497.8	0807z	29 Sep	MX	CW	Beacon	"L"	St Petersburg				BR	F	FRI
		1907z	18 Oct	MX	CW	Beacon	"L"	St Petersburg				BR	v	VED
								U						
1	0871.7	1910z	25 Sep	MXI	CW	Beacon	"D"	Sevastopol				BR	Ν	AON
1	0871.9	1910z	25 Sep	MXI	CW	Beacon	"S"	Severomorsk				BR	Ν	MON
1	3527.7	1908z	25 Sep	MVI	CW	Beacon	ייםיי	Sevastopol				BR	N	AON
	3527.7	0806z				Beacon		Severomorsk				BR		FRI
	3528.1	1911z	29 Sep 18 Oct			Beacon		Astrakhan				BR		VED
	5526.1	19112	18 001	MAI	CW	Beacon	A	Astrakilali				DK	v	VED
1	6331.7	0804z	29 Sep	MXI	CW	Beacon	"D"	Sevastopol				BR	F	FRI
1	6331.9	0804z	29 Sep	MXI	CW	Beacon	"S"	Severomorsk				BR	F	FRI
		1350z	12 Sep	MXI	CW	Beacon	"S"	Severomorsk		Fair with	QSB3	PLdn	Т	TUE
1	6332.0	1425z	26 Oct	MXI	CW	Beacon	"C"	Moscow				BR	V	VED
1	6332.1	1425z	26 Oct	MXI	CW	Beacon	"A"	Astrakhan			Weak	BR	V	VED
		0000			~			a					-	
	20047.7	0802z	29 Sep			Beacon		Sevastopol				BR		FRI
4	20047.9	1424z	26 Oct	MXI	Cw	Beacon	S	Severomorsk				BR	1	THU
2	20302	0541z	18 Oct	MX	CW	Beacon	"L"				Good	chpa	v	VED
-					-		_					<u>r</u>		
2	20305	0543z	18 Oct	MX	CW	Beacon	"P"				Weak	chpa	v	VED
														1500 1000
	MARS &	Charles and a second state of the second	Sec. 2554 481.	Section 4	12768	Section 2	1.5	A DESCRIPTION OF THE REAL PROPERTY OF	A DE LA REAL PROPERTY OF THE REAL PROPERTY OF	Lo. Lal. for water	LANS BARA	Sector States in the	ALL SOLLARS	5

16331kHz 1350z 12 Sep

### **Oddities**

#### New Russian Marker Activity

We were alerted to these Saturday from a YouTube video from Lewis, of the 'Ringway -Manchester' channel. Many of his videos are related to Number Stations and are well worth viewing;

ma 02 04 05 08 10 12 14 16 18 20 22 24 26 28 30 22 34 35 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 75 78 80 mm

Courtesy PLdn

Russian 'S' Beacon

https://www.youtube.com/watch?v=oOkefl6bAe4&t=195s

New markers, 'buzzers' appeared on the following frequencies (kHz); 4486 5523 5710 7499 8853

We were able to hear the three lower frequencies, late evening on Sat 07 Oct. But on 7499kHz & 8853kHz nothing was heard.

On Sunday, 08 & Monday, 09 October these three markers were audible shortly before dusk in the UK, disappearing mid-evening, then reappearing later at night. No markers were heard on the two higher frequencies.

The tones on the first three frequencies appeared to be from the same source, whereas, (from recordings on Lewis's video), the last two have different tones & speeds. By running three receivers it was noted that the tones are heard equidistant and sequential across the three frequencies, so perhaps the source was being switched between three transmitters, (or the same transmitter being frequency switched?).

None of these markers were heard from Tuesday, 09 October.

On Wednesday, 11 October at 1700z new buzzers were active on 7502kHz & 8856kHz. Again, the tones were equidistant & sequential when monitored simultaneously on two receivers. By 2100z both frequencies were silent & have not reappeared.

Subsequent monitoring on all the frequencies used has shown many frequently occupied by continuous unidentified wideband signals which may or may not be related. Audibly these signals have a multi-tone drone like sound.

The timing of the appearance of these channel markers is interesting as they appeared following the Hamas attack on Israel on Saturday, 07 October.

#### **Regular Oddities – Logs**

#### 'The Goose'

3242	0408z	11 Sep	'Goose'	Marker – Night Freq		Good	USB	chpa	MON
5212	0412z	14 Sep		Marker – Night Freq		Good	USB	chpa	THU
	0427z	16 Sep		Marker – Night Freq		Good	USB	chpa	SAT
	0446z	21 Sep		Marker – Night Freq	Ver	y Weak	USB	chpa	THU
		~- P				,			
	0455z	06 Oct	'Goose'	Marker – Night Freq		Good	USB	chpa	FRI
	0513z	07 Oct	'Goose'	Marker – Night Freq		Weak	USB	chpa	SAT
	0451z	13 Oct	'Goose'	Marker – Night Freq		Excellent		chpa	FRI
	0516z	18 Oct	'Goose'	Marker – Night Freq		Moderate		chpa	WED
	0441z	22 Oct	'Goose'	Marker – Night Freq		Good	USB	chpa	SUN
4310	1224zz	26 Oct	'Goose'	Marker – Day freq	(Via SDR Finland)	Good	USB	BR	THU
<u>'The Ai</u>	<u>r Horn'</u>								
4930	0108z	28 Sep	Marker	signal (Air Horn)		Fair	USB	BR	THU
'The Ala	arm'								
4770	0412z	11 Sep		Signal (The Alarm)		Good	USB	chpa	MON
	0415z	14 Sep		Signal (The Alarm)		Good	USB	chpa	THU
	0431z	16 Sep		Signal (The Alarm)		Good	USB	chpa	SAT
	0451z	21 Sep	Marker	Signal (The Alarm)		Good	USB	chpa	THU
	0.450	0.6.0				<u> </u>			
	0458z	06 Oct		Signal (The Alarm)		Good	USB	chpa	FRI
	0518z	07 Oct		Signal (The Alarm)		Moderate		chpa	SAT
	0500z	13 Oct		Signal (The Alarm)		Good	USB	chpa	FRI
	0520z	18 Oct		Signal (The Alarm)		Moderate		chpa	WED
	0445z	22 Oct	Marker	Signal (The Alarm)		Good	USB	chpa	SUN
<u>S28</u>	'The Buzzer'								
4625	0411z	11 Sep	S28	'The Buzzer' Marker		Good	USB	chpa	MON
	0414z	14 Sep	S28	'The Buzzer' Marker		Good	USB	chpa	THU
	0430z	16 Sep	S28	'The Buzzer' Marker	Ex	cellent	USB	chpa	SAT
	0449z	21 Sep	S28	'The Buzzer' Marker	<u> </u>	Good	USB	chpa	THU
		1						1	
	0457z	06 Oct	S28	'The Buzzer' Marker		Good	USB	chpa	FRI
	0517z	07 Oct	S28	'The Buzzer' Marker		Moderate		chpa	SAT
	0459z	13 Oct	S28	'The Buzzer' Marker		Moderate		chpa	FRI
	0519z	18 Oct	S28	'The Buzzer' Marker		Moderate		chpa	WED
	0444z	22 Oct	S28	'The Buzzer' Marker		Good	USB	chpa	SUN
<u>S30</u>	'The Pip'								
3756	0110z	28 Sep	<b>S</b> 30	'Pip' marker (Night freq)		Good	USB	BR	THU
5750	01102	20 Bep		Tip marker (Mgnt neq)		0000	CSD	BR	inc
5448	0501z	06 Oct	S30	'Pip' Marker (Day freq)		V.Weak	USB	chpa	FRI
	0446z	22 Oct	S30	'Pip' Marker (Day freq)		Weak	USB	chpa	SUN
<u>4182</u>	<u>'T Marker'</u>								
	0410z	11 Sep		Normal sound from the T Marke		Good	USB	chpa	MON
	0413z	14 Sep		Normal sound from the T Marke	er	Good	USB	chpa	THU
	0429z	16 Sep		Normal sound from the T Marke	er Mo	oderate	USB	chpa	SAT
	0448z	21 Sep		Normal sound from the T Marke	er	Weak	USB	chpa	THU
	0.450	04.0				<b>C</b> 1	LICE	,	
	0459z	06 Oct		Normal sound from the T Marke		Good	USB	chpa	FRI
	0516z	07 Oct		Normal sound from the T Marke		Moderate		chpa	SAT
	0453z	13 Oct		Normal sound from the T Marke		Good	USB	chpa	FRI
	0518z	18 Oct		Normal sound from the T Marke		Moderate		chpa	WED
	0443z	22 Oct		Normal sound from the T Marke	er	Good	USB	chpa	SUN
4102 17	4104.1 1773.5								
<u>4183.1//</u>	<u>4184.1 <sup></sup>T Ma</u>	arker'							
	1922z	23 Sep		T Marker				BR	MON
	2218z	23 Sep 29 Oct		T Marker				BR	SUN
	22102	27 000		i iviaittei				DI	5011

Contributors: AB, BR, chpa, Gert, HFD, JPL, Pierre (Priyom), PLdn, PoSW, UDXF Thank you all for your logs.

# **Voice Number Stations**

# E06 Sept/Oct log:

E06 Sept/Oct log:

Monday	(repeats Tuesday)	0210z	11426kHz	0310z	14477kHz	(frequencies may vary slightly)
12/09	'537' 192 36 75211etc	via KiwiSDR RUS	Thank	ts HfD		
23/10	'537' 109 42 71887etc	<b>0210z</b> via KiwiSDR RUS	11526Hz Thank	<b>0310z</b> s HfD	14613khz	
Thursday	y (repeats Friday)	0300z	13545kHz	0400z	11521kHz	(frequencies may vary slightly)
01/09	'361' 725 30 35270etc	(Thanks hfd)				
		0300z	16219kHz	0400z	13545kHz	
12/10	'361' 705 36 47081etc	via KiwiSDR RUS	Thank	s HfD		

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

 07/09
 '354' 107 62 99261 11421 29073 51347 06436 93772 81353 55879 47398 03278 18264 16961 83393 75921 43540 47279 22941 54761 49785 71456

 72144 60232 63761 21216 54242 06645 22619 85325 03082 88310 98288 00261 60208 83739 12192 92541 30258 51331 07478 08651

 74328 15016 70965 93494 46040 63273 21979 03342 99946 09964 10268 64162 90564 60812 45078 50841 95657 10957 56902 21437

 07534 60810 107 62 00000

- 21/09
   '354' 928 61 15665 24891 47283 89601 23210 77563 86841 75687 31745 93842 51773 95676 96515 82740 26090 39322 89804 98230 17416 08593 15674 06691 62991 91423 97458 18127 54518 29697 36449 73346 42794 86163 65209 04283 08065 39958 43954 09648 07043 65438 73437 13101 32516 73988 22775 96132 46503 23519 95647 22837 72867 25316 83329 98767 60350 02949 77955 31065 51951 82910 44492 928 61 00000
- 0600z
   18425kHz
   0700z
   20230kHz

   05/10
   '186' 790 52 57217 68664 07071 12468 28795 94764 59384 96885 84186 83430 37338 40165 69976 68644 91102 79398 77863 65018 49377 11282

   32318 74867 98511 16464 56083 84439 07424 02896 80690 85253 78013 76627 94182 81461 25743 63483 43230 69188 20088 30050

   31835 98785 39531 77419 83794 55925 20807 06127 61135 22483 07060 75713 790 52 00000
- 19/10 '186' 239 54 93883 29532 85141 36781 21462 96534 47643 96394 03569 68479 22928 93096 00879 86025 75688 32340 25778 11268 92255 00061 54317 31274 17025 38513 74205 41792 89747 26510 54774 40825 32148 06248 49854 86751 57294 23902 69493 00694 00159 76175 81469 17797 92802 80000 28516 17141 32638 07562 72214 84930 17182 53845 99485 90696 239 54 00000

Followed by Peter's logs and comment:

#### First + Third Thursdays in the Month 0500 + 0600 UTC in September, 0600 + 0700 UTC in October Schedule:-

Continues to follow the prediction list:-7-Sept-23:- 0500 UTC, 14370 kHz, call "354", DK/GC "107 107 62 62", weak signal at first then became stronger. Ended before 0515z. 0600 UTC, 16265 kHz, good signal. Repeated on the following day:-8-Dec-23, Friday:- 0500 UTC, 14370 kHz, stronger than yesterday. 0600 UTC, 16265 kHz, also stronger.

5-Oct-23:- 0600 UTC, 18425 kHz:- very weak signal on predicted frequency for the first sending, unreadable. 0700 UTC, 20230 kHz:- Nothing at all heard on the predicted frequency for the second sending. Much better on the following day:-

6-Oct-23, Friday:- 0600 UTC, 18425 kHz, calling "186", DK/GC "790 790 52 52", good signal, ended around 0613 UTC. 0700 UTC, 20230 kHz, strong signal, S-meter well over the 9, what a difference from 24 hours earlier, presumably all down to the ionosphere.

19-Oct-23:- Nothing readable from the first sending at 0600 UTC on 18425. Second sending much better:-0700 UTC, 20230 kHz, call "186", DK/GC "239 239 54 54", strong signal.

# <u>E07</u>

#### We start with Peter's logs and analysis:

<u>Saturday Schedule, 1300 UTC Start:-</u> 2-Sept-23:- 1300 UTC, 12176 kHz, "152 152 152 000", strong signal. 1320 UTC, 11576 kHz, also strong.

9-Sept-23:- 1300 UTC, 12176 kHz, "152 152 152 000", strong. 1320 UTC, 11576 kHz, strong.

16-Sept-23:- 1300 UTC, 12176 kHz and 1320 UTC, 11576 kHz, both very strong, "152 152 152 000".

30-Sept-23:- 1300 UTC, 12176 kHz, "152 152 152 000", strong signal. 1320 UTC, 11576 kHz, slightly weaker but still strong enough to over-ride local RF noise interference.

21-Oct-23:- 1300 UTC, 12176 kHz, "152 152 152 000", strong. 1320 UTC, 11576 kHz, weaker.

28-Oct-23:- 1300 UTC, 12176 kHz, "152 152 152 000", strong. 1320 UTC, also strong.

Sunday Schedule, 0600 UTC Start:-

Always a repeat of the Saturday schedule, above, which so far this year has always been the two minutes of "000 ... no message" routine. The last time these related schedules sent a message appears to be in December of last year when one with a group count of 277 was transmitted on at least three weekends of that month. 3-Sept-23:- 0600 UTC, 9261 kHz, "224 224 224 000", strong enough to be heard above local QRM. 0620 UTC, 10261 kHz, weaker.

10-Sept-23:- 0600 UTC, 9261 kHz, "224 224 224 000", weak. 0620 UTC, 10261 kHz, also weak.

17-Sept-23:- 0600 UTC, 9261 kHz and 0620 UTC, 10261 kHz, both weak, "224 224 224 000".

24-Sept-23:- 0600 UTC, 9261 kHz and 0620 UTC, 10261 kHz, both weak as usual, "224 224 224 000".

1-Oct-23:- 0600 UTC, 10317 kHz, "312 312 312 000", good signal, surprisingly strong in comparison with the weak signals of September's schedule. 0620 UTC, 11117 kHz, also strong.

8-Oct-23:- "0600 UTC, 10317 kHz and 0620 UTC, 11117 kHz, "312 312 312 000".

15-Oct-23:- 0600 UTC, 10317 kHz, "312 312 312 000", stronger than usual. 0620 UTC, 11117 kHz, also somewhat stronger than usual.

Thursday + Saturday: Schedule, 1410 UTC Start:2-Sept-23, Saturday:- 1410 UTC, 16228 kHz, "594 594 594 1", DK/GC "115 92" x 2, good signal, same message as was transmitted on Thursday 31-August.
1430 UTC, 15928 kHz, strong signal.
1450 UTC, 14928 kHz, weakest sending of the three.
7-Sept-23, Thursday:- 1410 UTC, 16228 kHz, "594 594 594 000", good signal.
1430 UTC, 15928 kHz, very strong.
9-Sept-23, Saturday:- 1410 UTC, 16228 kHz, "594...000" again.
1430 UTC, 15928 kHz, interference from a very strong pulse/buzz signal extending from about 15925 to 15965 kHz, can always be found on some part of the short-wave spectrum at any time of day or night and generally supposed to be Ivan's over-the-horizon radar.
14-Sept-23, Thursday:- 1410 UTC, 16228 kHz, "594 594 594 1", message, DK/GC "7134 59" x 2, weak signal at first then became stronger, ended at 1417:25s UTC approx.
1430 UTC, 15928 kHz, signal strength up and down.
1450 UTC, 15928 kHz, signal strength up and down.
1450 UTC, 14928, good signal.

16-Sept-23, Saturday:- 1410 UTC, 16228 kHz, "594" and "/134-59" again, not too strong. 1430 UTC, 15928 kHz, weak. 1450 UTC, 14928 kHz, again not too strong.

21-Sept-23, Thursday:- 1410 UTC, 16228 kHz, "594 594 594 000", good signal. 1430 UTC, 15928 kHz, that OHR has returned to this spot, very strong, extending from about 15920 to 15945 kHz.

28-Sept-23, Thursday:- 1410 UTC, 16228 kHz, "594 594 594 1", message, DK/GC "360 70" x 2, signal up and down, ended around 1418:20s UTC. 1430 UTC, 15928 kHz, S4 to S5. 1450 UTC, 14928 kHz, very strong, pushing the S-meter well over the 9.

30-Sept-23, Saturday:- 1410 UTC, 16228 kHz, "594" and "360 70" again, strong signal. 1430 UTC, 15928 kHz, also strong. 1450 UTC, 14928 kHz, mostly strong with occasional deep fading.

5-Oct-23, Thursday:- 1410 UTC, 15849 kHz, "746 746 746 000", strong signal,

1430 UTC, 14849 kHz, also strong. 12-Oct-23, Thursday:- 1410 UTC, 15849 kHz, "746 746 746 1", message, DK/GC "635 66" x 2, good signal. 1430 UTC, 14849 kHz, good signal. 1450 UTC, 13449 kHz, very strong. 19-Oct-23. Thursday:- 1410 UTC, 15849 kHz and 1430 UTC, 14849 kHz, both strong, "746 746 746 000". 21-Oct-23, Saturday:- 1410 UTC, 15849 kHz, "746 746 746 000", weaker than usual. 1430 UTC, 14849 kHz, much stronger than the first sending. 28-Oct-23, Saturday:- 1414 UTC, 15849 kHz - missed the start having lost track of the time, as you do - message transmission in progress, strong signal with some fading, ended around 1419:50s UTC. 1430 UTC, 14898 kHz, "746 746 746 1", DK/GC "349 88" x 2, strong. 1450 UTC, 13449 kHz, very strong. <u>Tuesday + Friday Schedule, 1500 UTC Start:-</u> 15-Sept-23, Friday:- 1500 UTC, 17452 kHz, "428 428 428 1", DK/GC "3620 99" x 2, signal strength varying. Ended 1510:45s UTC approx. 1520 UTC, 16272 kHz, also varying in signal strength from strong to very weak. Transmission must have failed, was heard in preamble/call mode again around 1526z when signal was weak. 1540 UTC, 14875 kHz, weak, difficult copy. 22-Sept-23, Friday:- 1500 UTC, 17452 kHz, "428 428 428 000", good signal. 1520 UTC, 16272 kHz, weaker. 26-Sept-23, Tuesday:- 1500 UTC, 17452 kHz, "428 428 428 1", message, DK/GC "427 112" x 2, good signal with occasional fading. 1520 UTC, 16272 kHz, strong with occasional fading. 1540 UTC, 14875 kHz, weakest of the three transmissions. 29-Sept-23, Friday:- 1500 UTC, 17452 kHz, weak, sank into noise. 1520 UTC, 16272 kHz, stronger, "428" and "427 112" as on the  $26^{\text{th}}$ . 1540 UTC, 14875 kHz, strongest transmission of the three today. I first became aware of this schedule in October of last year and is following the usual E07 thing of using the same frequencies in the same month. 6-Oct-23, Friday:- 1500 UTC, 17461 kHz, "413 413 413 000", strong signal. 1520 UTC, 16161 kHz, also strong. 10-Oct-23, Tuesday:- 1500 UTC, 17461 kHz, "413 413 1", message, DK/GC "393 150" x 2, a longer message than most, ended just before 1515z, signal strong to very strong. 1520 UTC, 16161 kHz, strong. 1540 UTC, 14361 kHz, very strong. 13-Oct-23, Friday:- 1500 UTC, 17461 kHz, "413" and "393 150" again, good signal. 1520 UTC, 16161 kHz, strong. 1540 UTC, 14361 kHz, very strong. 17-Oct-23, Tuesday:- 1500 UTC, 17461 kHz and 1520 UTC, 16161 kHz, both strong signals, "413 413 413 000". 24-Oct-23, Tuesday:- 1520 UTC, 16161 kHz, arrived home just in time to catch the second sending, "413 413 413 1", DK/GC "537 125" x 2, strong signal, ended just before 1533 UTC. 1540 UTC, 14361 kHz, very strong signal at first, became slightly weaker a few minutes in. 27-Oct-23, Friday:- 1500 UTC, 17461 kHz, "413" and "537 125" again, strong signal 1520 UTC, 16161 kHz, strong. 1540 UTC, 14361 kHz, very strong. Then on to others' logs: Sunday September 2023 0600z 9261kHz 0620z 10261kHz 0640z 11461kHz 03/09 224 000 0620z Weak, 0600z NRH 224 000 0620z only Weak, Poor Cndx 10/09 17/09 224 000 Weak 24/09224 000 Weak, 0620z only

#### October 2023

0 <b>600z</b>	10317kHz	0620z	11117kHz	0640z	12217kHz
01/10	312 000				Fair, QRN2
22/10	312 000				Weak
29/10	312 000				Weak

#### Tuesday/Friday

#### September 2023

1500z	17452kHz	1520z	16242kHz	1540z	18542kHz	
01/09	428 1 9	220 56 0577	8 87345 000 000			1540z Fair, rest Weak
08/09	428 000	)				Weak
12/09	428 1 3	620 99 97342	2 48037 000 000			Weak
15/09	428 1 3	620 99 9734	2 48037 000 000			Weak
22/09	428 000	)				Weak
25/09	NRH					[PLdn]
29/09	428 427	7 112 31213	01095 000 000			Strong [Cardiff]

#### October 2023

1500z	17461kHz		1520z	16161kHz	1540z	14361kHz	
03/10		413 000					1500z Fair, 1520z Strong
06/10		413 000					1500z Strong, 1520z Fair
10/10		413 1 393	150 06651	41751 000 000			Weak
13/10		413 1 393	150 06651	41751 000 000			1500z Weak, rest Fair

#### 413 1 393 15

 $\begin{array}{l} 06651 94694 00034 77252 77525 76226 12735 80987 89526 34479 \\ 06016 26719 64680 59180 99251 00346 06164 14798 25299 80777 \\ 84996 14555 80178 89574 60861 75788 28321 63580 52663 90631 \\ 31113 59177 68009 06718 40710 99432 66366 24713 58011 14370 \\ 43340 48503 21169 01187 53813 73345 56268 52480 47907 15562 \\ 49944 37551 42181 88344 60503 12206 72992 32248 78423 75780 \\ 53480 80148 56180 33893 97989 11586 78079 98267 89075 59366 \\ 69788 28885 50802 32773 27237 83787 98327 21569 05899 65911 \\ 97610 55538 94325 96877 84384 67394 46516 06260 61115 82566 \\ 19998 53230 30150 06533 37767 79804 20202 43894 19246 72706 \\ 53974 74732 71701 67022 22924 65064 51277 25422 52284 42767 \\ 37380 42442 89600 70017 22546 38318 06750 74704 46681 21568 \\ 04399 70842 48517 15256 62796 14122 40838 63985 78532 65705 \\ 63411 33778 77163 29241 32680 83892 41320 48307 66272 29507 \\ 61316 94593 27462 70670 71355 44777 78092 04010 01105 41751 \\ 000 000 Courtesy HJH \end{array}$ 

17/10	413 000	Strong
20/10	413 000	Fair
24/10	413 1 537 125 84455 45495 000 000	1500z Weak QRM, rest Fair
31/10	413 000	Strong

#### Thursday/Saturday

September 2023

1410z	16228kHz	1430z	15928kHz	1450z	14928kHz
02/09	594 1	115 92 57427	81600 000 000		Weak

07/09	594 000	1430z Fair, 1410z Weak
09/09	594 000	Fair
14/09	594 1 7134 59 08102 88943 000 000	Weak, poor condx
16/09	594 1 7134 59 08102 88943 000 000	Weak
21/09	594 000	Weak, 1430z QRM
23/09	594 000	1410z Weak, 1430z Strong
28/09	594 1 360 70 11728 73795 000 000	1450z Fair. 1410z NRH, 1430z Fair at start then QSB to nil
30/09	594 1 360 70 11728 73795 000 000	Fair, 1450z MISSED

October 2023

1410z	15849kHz	1430z	14849kHz	1450z	13449kHz	
05/10	746 00	00			Weak	
07/10	746 00	00			Weak	
12/10	746 1	635 66 64889	88876 000 000		Weak	
14/10	746 1	635 66 64889	88876 000 000		Weak	
19/10	746 00	00			Weak	
21/10	746 00	00			1410z W	eak, 1430z Fair
26/10	746 1	349 88 17980	39398 000 000		Fair	

Saturday

#### September 2023

1300z	12176kHz	1320z	11576kHz	1340z	10276kH	Z
02/09	152 000					Strong
09/09	152 000					Fair
16/09	152 000					Fair
23/09	152 000					1300z Fair, 1320z Strong
30/09	152 000					Strong [Cardiff]
October	2023					
1300z	12176kHz	1320z	11576kHz	1340z	10276kH	Z
07/10	152 000					Weak
21/10	152 000					1300z Strong, 1320z Very strong

# E11 & E11a log Sept/Oct

Peter's logs open this time with some analysis:

This number station continues to be very active on a large number of frequencies although the vast majority of transmissions are of the three minutes and ten seconds "oblique zero zero", "no message" variety. A selection of some heard in the last two months below, mostly early mornings and mid to late evenings UK time:-

4181 kHz, 1910 UTC:-2-Sept-23, Saturday:- "395/00". 9-Sept-23, Saturday:- "359/00". 13-Sept-23, Wednesday:- "391/00". 16-Sept-23, Saturday:- "392/00":- 20-Sept-23, Wednesday:- "394/40", message, "Out" at 1921:13s UTC. 27-Sept-23, Wednesday:- "395/00". 4-Oct-23, Wednesday:- "392/00". 11-Oct-23, Wednesday:- "392/00". 14-Oct-23, Saturday:- "395/00". 18-Oct-23, Wednesday:- "394/32", message, "Out" at 1919:40s UTC. 28-Oct-23, Saturday:- "396/00". 5737 kHz, 2000 UTC:-3-Sept-23, Sunday:- "522/00". 7-Sept-23, Thursday:- "520/32", message. 14-Sept-23, Thursday:- "528/00". 17-Sept-23, Sunday:- "528/00". 21-Sept-23, Thursday:- "527/00". 28-Sept-23, Thursday:- "528/00". 1-Oct-23, Sunday:- "521/00". 5-Oct-23, Thursday:- "527/00" 8-Oct-23, Sunday:- "524/00". 22-Oct-23, Sunday:- "520/37", message. 7317 kHz, 1900 UTC:-14-Sept-23, Thursday:- "647/00". 18-Sept-23, Monday:- "648/00". 25-Sept-23, Monday:- "641/40", message. 28-Sept-23, Thursday:- "641/40" again. 2-Oct-23, Monday:- "640/36", another message. 5-Oct-23, Thursday:- "640/36" again, "Out" at 1910:27s UTC. 19-Oct-23, Thursday:- "648/00". 23-Oct-23, Monday:- "646/00". 26-Oct-23, Thursday:- "644/00". 8180 kHz, 0700 UTC:-5-Sept-23, Tuesday:- "571/00". 8-Sept-23, Friday:- "573/00". 12-Sept-23, Tuesday:- "573/00". 14-Sept-23, Friday:- "577/00". 19-Sept-23, Tuesday:- "577/00". 26-Sept-23, Tuesday:- "571/36", message. 29-Sept-23, Friday:- "571/36" again. 10-Oct-23, Tuesday:- "579/00". 17-Oct-23, Tuesday:- "577/00". 24-Oct-23, Tuesday:- "574/31", message, "Out" just before 0709:30s UTC. 27-Oct-23, Friday:- "574/31" again. 8530 kHz, 1910 UTC:-3-Sept-23, Sunday:- "613/00". 8-Sept-23, Friday:- "617/34", message, "Out" just before 1920 UTC. 17-Sept-23, Sunday:- "612/00". 22-Sept-23, Friday:- "618/00". 29-Sept-23, Friday:- "610/00". 1-Oct-23, Sunday:- "617/00". 6-Oct-23, Friday:- "610/00". 8-Oct-23, Sunday:- "618/00". 20-Oct-23, Friday:- "612/00". 22-Oct-23, Sunday:- "611/00". 27-Oct-23, Friday:- "618/00". 12202 kHz, 0845 UTC:-18-Sept-23, Monday:- "718/00". 25-Sept-23, Monday:- "713/00". 2-Oct-23, Monday:- "710/00". 9-Oct-23, Monday:- "718/00". 23-Oct-23, Monday:- "710/32", message. 30-Oct-23, Monday:- "714/00". 14972 kHz, 1430 UTC:-2-Sept-23, Saturday:- "917/00". 9-Sept-23, Saturday:- "912/00". 16-Sept-23, Saturday:- "915/33", message, "Out" at 1439:52s UTC. 30-Sept-23, Saturday:- "912/00". 10-Oct-23, Tuesday:- "915/38", message, "Out" at 1440:48s UTC. 21-Oct-23, Saturday:- "912/00". 19184 kHz, 0820 UTC:-12-Sept-23, Tuesday:- "130/37", message, very strong signal, "Out" at 0830:30s UTC. 20-Sept-23, Wednesday:- "131/00". 27-Sept-23, Wednesday:- "130/00". 3-Oct-23, Tuesday:- "138/00", very strong. 4-Oct-23, Wednesday:- "136/00", much weaker signal than on Tuesday.

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10-Oct-23, Tuesday:- "134/37", message, strong signal, "Out" at 0830:30s UTC. 11-Oct-23, Wednesday:- "134/37" again. 17-Oct-23, Tuesday:- "131/00". 25-Oct-23, Wednesday:- "132/00".

Now onto logs submitted via RNGB [thanks to all submitting].

4181kHz	1910z	02/09 [395/00] Out 1913z S5	Malc	SAT
	1910z	06/09 [399/00] Out 1913z S5	Malc, HfD	WED
	1910z	09/09 [395/00] Out 1913z S9	Malc	SAT
	1910z	13/09 [391/00] Out 1913z S7	Malc	WED
	1910z	16/09 [392/00] Out 1913z S9	Malc	SAT
	1910z	20/09 [394/40 08350	Malc	WED
	1910z	27/09 [395/00] Out 1913z S9	Brixmis	WED
	1910z	04/10 [392/00] Out 1913z S4	Malc	WED
	1910z	07/10 [390/00] Out 1913z S6	Malc	SAT
	1910z	11/10 [392/00] Out 1911z S7	Malc	WED
	1910z	25/10 [390/00] Out 1913z S9	Malc	WED
4505kHz	1530z	02/09 [366/40 6005068876] Out 1541z S3 (Dutch SDR)	Male, HfD	SAT
	1530z	09/09 [366/00] Out 1533z S9 (Finnish SDR)	Malc	SAT
	1530z	16/09 [368/00] Out 1533z S5 (Dutch SDR)	Malc	SAT
	1530z	17/09 [369/00] Out 1533z S4 (Dutch SDR)	Malc	SUN
	1530z	01/10 [369/00] Out 1533z S3 (Dutch SDR)	Malc	SUN
	1530z	08/10 [369/00] Out 1533z S2	Malc	SUN
	1530z	15/10 [368/00] Out 1533z S2	Malc	SUN
	1530z	22/10 [364/37 3322492013] Out 1541z S2	Malc	SUN
	15502	22/10 [504/57 55224	Whate	5011
5176kHz	16007	03/09 [236/00]	HfD	SUN
J1/0KHZ	1600z		Malc	TUE
		05/09 [233/00] Out 1603z S2		
	1605z	12/09 [237/33 5808637005] Out 1615z S3	Malc	TUE
	1605z	19/09 [233/00] Out 1608z S2	Malc	TUE
	1605z	01/10 [237/00] Out 1608z S2	Malc	SUN
	1605z	08/10 [231/00] Out 1608z S3+QRM	Malc	SUN
	1605z	10/10 [237/00] Out 1608z S2+QRM	Malc	TUE
	1605z	15/10 [236/00] Out 1608z S4+QRM	Malc	SUN
	1605z	22/10 [231/00] Out 1608z S3+QRM	Malc	SUN
	1605z	24/10 [235/32 9902450716] Out 1615z S3+QRM	Malc	TUE
	1605z	31/10 [230/00] Out 1608z S2+QRM	Malc	TUE
5371kHz	1300z	04/09 [313/00] Out 1303z S5 (Finnish SDR)	Malc, HfD	MON
00,11111	1300z	07/09 [310/00] Out 1303z S9 (Finnish SDR)	Malc	THU
	0450z	11/09 [415/00]	HfD	MON
	1300z	11/09 [313/00] Out 1303z S4 (Finnish SDR)	Malc	MON
	1300z		Malc	MON
		18/09 [311/39 86646		
	1300z	02/10 [310/00] Out 1303z S3 (Dutch SDR)	Malc	MON
	1300z	05/10 [310/00] Out 1303z S2	Malc	THU
	1300z	12/10 [310/00] Out 1303z S3 (Dutch SDR)	Malc	THU
	0450z	16/10 [412/00]	HfD	MON
	1300z	23/10 [313/31 0276144241] Out 1309z S3 (Dutch SDR)	Malc	MON
	1300z	20/10 [316/00] Out 1303z S2	Malc	MON
5737kHz	2000z	03/09 [522/00] Out 2003z S5	Malc, HfD	SUN
	2000z	07/09 [520/32 6485432707] Out 2010z S4	Malc	THU
	2000z	21/09 [527/00] Out 2003z S4	Malc	THU
	2000z	01/10 [521/00] Out 2003z S4	Malc	SUN
	2000z	05/10 [527/00] Out 2003z S3	Malc	THU
	2000z	08/10 [524/00] Out 2003z S5	Malc	SUN
	2000z	12/10 [521/00] Out 2003z S3	Malc	THU
	2000z	15/10 [525/00] Out 2003z S3	Malc	SUN
	2000z	19/10 [520/37 89924 59578 76137 33128 41766 83304 16288 7730990276 65350] Out 2010z	Brixmis	THU
	2000z 2000z			SUN
	20002	22/10 [520/37 89924	Malc	SUN
6807kHz	0820z	20/10 [430/39 7848767574] Out 0831z S2	Malc	FRI
(022) 11	1715	01/00 [070/00] 0 / 1710 . 04		
6923kHz		01/09 [970/00] Out 1718z S4	Malc, HfD	FRI
	1715z	13/09 [974/00] Out 1718z S5	Malc	WED
	1715z	20/09 [976/00] Out 1718z S5	Malc	WED
	1715z	04/10 [976/37 6749009750] Out 1718z S7	Malc	WED
	1715z	11/10 [977/00] Out 1718z S9	Malc	WED
	1715z	13/10 [974/00] Out 1718z S7	Malc	FRI
	1715z	20/10 [970/00] Out 1718z S4	Malc	FRI
	1715z	25/10 [977/00] Out 1718z S5	Malc, Brixmis	WED

6940kHz	0930z	06/09 [270/00] Fair	RNGB, HfD	WED
	0930z	07/09 [271/00] Out 0933z S2 (Dutch SDR)	Malc	THU
	0930z	14/09 [275/00] Out 0933z S3 (Dutch SDR)	Malc	THU
	0930z	20/09 [276/00] Out 0933z S5 (Finnish SDR)	Malc	WED
	0930z			
		21/09 [271/00] Out 0933z S3 (Dutch SDR)	Malc	THU
	0930z	04/10 [279/00] Out 0933z S6 (Dutch SDR)	Malc	WED
	0930z	05/10 [275/00] Out 0933z S4 (Finnish SDR]	Malc	THU
	0930z	11/10 [271/00] Out 0933z S2	Malc	WED
	0930z	12/10 [276/00] Out 0933z S5 (Dutch SDR)	Malc	THU
	0930z	25/10 [276/34 21928	Malc	WED
	09302	23/10 [270/34 21928	Maic	WED
7017111	1000	0.100 5241 (001.0.1000.05	D	MON
7317kHz	1900z	04/09 [641/00] Out 1903z S7	Brixmis	MON
	1900z	07/09 [644/00] Out 1903z S5	Malc, HfD	THU
	1900z	11/09 [644/00] Out 1903z S5	Malc	MON
	1900z	14/09 [647/00] Out 1903z S7	Malc	THU
	1900z	18/09 [648/00] Out 1903z S9	Malc	MON
	1900z		Malc	THU
		21/09 [646/00] Out 1903z S4		
	1900z	25/09 [641/40 96864 24346 49587 29405 11570 48787 7435543992 88930] Out 1911z S8	Brixmis	MON
	1900z	02/10 [640/36 2802863313] Out 1910z S5	Malc	MON
	1900z	05/10 [640/36 28028 38496 66921 73639 80663 55104 0033563169 63313] Out 1910z S8	Brixmis, Malc	THU
	1900z	09/10 [641/00] Out 1903z S6	Malc	MON
	1900z	12/10 [648/00] Out 1903z S6	Malc	THU
	1900z	16/10 [644/00] Out 1903z S4	Malc	MON
	1900z	23/10 [646/00] Out 1903z S6	Malc	MON
	1900z	26/10 [644/00] Out 1903z S8	Brixmis	THU
7670khz	0820z	01/09 [434/00] Strong	RNGB, HfD	FRI
	0820z	07/09 [432/00] Out 0823z S2	Malc	THU
	0820z		RNGB	FRI
		08/09 [436/00] Good		
	0820z	14/09 [438/00] Out 0823z S4 (Dutch SDR)	Malc	THU
	0820z	15/09 [434/00] Good	RNGB	FRI
	0820z	21/09 [432/00] Out 0823z S2	Malc	THU
	0820z	28/09 [435/30 56793 31267 66106 42058 66672 75386 76991		
	0820z	05/10 [431/00] Out 0823z S5	Malc	THU
	00202	03/10 [431/00] Out 00232.03	Whate	me
79641-11-	1720-	07/00[410/22]01564 21072] $0 + 1740 - 64$	Mala HED	THU
7864kHz		07/09 [410/32 8156431072] Out 1740z S4	Male, HfD	THU
	1730z	14/09 [415/00] Out 1733z S3	Malc	THU
	1730z	21/09 [416/00] Out 1733z S3	Malc	THU
	1730z	05/10 [414/00] Out 1733z S3	Malc	THU
8180kHz	0700z	01/09 [571/00] Strong	RNGB, Malc, HfD	FRI
OTOOKIIZ		-		
	0700z	05/09 [571/00] Good	RNGB	TUE
	0700z	05/09 [571/00] Out 0703z S3	Malc	TUE
	0700z	12/09 [573/00] Good	RNGB, Malc	TUE
	0700z	15/09 [577/00] Out 0703z S3	Malc	FRI
	0700z	19/09 [577/00] Good	RNGB, Malc	TUE
	0700z	26/09 [571/36 78103 25571 15095 66616 09929 68216 65022 6622188263 94072] Good	RNGB	TUE
	0700z			
		06/10 [576/00] Good	RNGB, Malc	FRI
	0700z	10/10 [579/00] Out 0703z S4	Malc	TUE
	0700z	13/10 [579/00] Good	RNGB	FRI
	0700z	20/10 [570/00] Out 0703 S5	Brixmis, Malc	FRI
	0700z	24/10 [574/31 61196 91051 22848 68451 31019 2699571564 70507 03954] Out 0709z S4	RNGB, Malc	TUE
8423kHz	06457	05/09 [519/00] Out 0648z S5	Malc, HfD	TUE
0 <del>4</del> 23KHZ				
	0645z	07/09 [512/00] Out 0648z S3	Malc	THU
	0645z	12/09 [512/35 6736148305] Out 0656z S3	Malc	TUE
	0645z	19/09 [511/00] Out 0648z S3	Malc	TUE
	0645z	21/09 [510/00] Good	RNGB, Malc	THU
	0645z	28/09 [517/00] Good	RNGB	THU
	0645z	03/10 [519/34 03513 94244 06403 2418235673 20167 42392 7241911397 96827] Good	RNGB	TUE
	0645z	10/10 [518/00] Out 0648z S4	Malc	TUE
	0645z	12/10 [510/00] Out 0648z S4	Malc	THU
	0645z	19/10 [511/00] Good	RNGB, Brixmis	THU
	0645z	24/10 [514/00] Out 0703z S6	Malc	TUE
8530kHz	1910z	01/09 [618/00] Out 1913z S7	Brixmis, Malc, HfD	FRI
	1910z	03/09 [613/00] Out 1913z S5	Malc	SUN
	1910z	17/08 [612/00] Out 1913z S7	Malc	SUN
	1910z	01/10 [617/00] Out 1913z S7	Malc	SUN
	1910z	06/10 [610/00] Out 1913z S7	Malc, Brixmis	FRI
	1910z	08/10 [618/00] Out 1913z S5	Malc	SUN
	1910z	15/10 [610/35 1292044518] Out 1920z S4	Malc	SUN

	1910z	20/10 [612/00] Out 1913z S9	Malc	FRI
	1910z	22/10 [611/00] Out 1913z S6	Malc, Brixmis	SUN
8680kHz	06007	22/10 [352/00] Out 0603z S6	Malc	SUN
OUOUKIIZ	00002	22/10 [552/00] Out 00052 50	Wate	501
005111	1000			
9051kHz	1000z	05/09 [309/23 2164421847] Out 1008z S2	Malc	TUE
9079kHz	0700z	02/09 [490/34 8586018709] Out 0710z S2	Malc	SAT
	0700z	10/09 [498/00] Strong	RNGB	SUN
	0700z	16/09 [495/00] Out 0703z S3	Malc	SAT
	0700z	23/09 [496/00] Good	RNGB, Malc	SAT
	0700z	30/09 [492/00] Good	RNGB	SAT
	0700z	01/10 [498/00] Good	RNGB, Malc	SUN
	0700z	07/10 [491/00] Out 0703z S4	Malc	SAT
	0700z	14/07 [49?/39] 47047 13016 11536 94894 43234 82092 05121 13639 58723 23726] Good	RNGB	SAT
	0700z	22/10 [498/00] Out 0703z S4	Malc	SUN
9399kHz	1205z	06/09 [466/00] Out 1208z S2	Malc	WED
	1205z	12/09 [460/00] Out 1208z S2	Malc	TUE
	1300z	13/09 [469/00] Out 1303z S7 (Dutch SDR)	Malc	WED
	1205z	19/09 [464/00] Out 1208z S3	Malc	TUE
	1205z	20/09 [466/00] Out 1208z S2	Malc	WED
	1205z	04/10 [461/00] Out 1208z S2	Malc	WED
	1205z	10/10 [466/00] Out 1208z S2	Malc	TUE
	1205z	17/10 [469/00] Out 1208z S6	Brixmis	TUE
	1205z	24/10 [469/37 8164045622] Out 1216z S3	Malc	TUE
	1205z	31/10 [463/00] Out 1208z S3	Malc	TUE
9951kHz	1000z	01/09 [300/00] Strong	RNGB, Malc, HfD	FRI
	1000z	12/09 [305/00] Out 1003z S3	Malc	TUE
	1000z	15/09 [307/00] Out 1003z S2	Malc	FRI
	1000z		Malc	TUE
		19/09 [302/00] Out 1003z S2		
	1000z	06/10 [307/00] Out 1003z S2	Malc	FRI
	1000z	10/10 [305/00] Out 1003z S3	Malc	TUE
	1000z	13/10 [300/00] Out 1003z \$3	Malc	FRI
	1000z	20/10 [305/34 1006572787] Out 1010z S3	Malc	FRI
	1000z	24/10 [308/00] Out 1003z S4	Malc	TUE
	1000z	31/10 [305/00] Out 1003z S3	Malc	TUE
9963khz	0715z	01/09 [636/00] Good	RNGB, Malc, HfD	FRI
))03KHZ	0715z	05/09 [637/35 66302 85918 75854 28996 70076 70088 4450087340 72976 54378] Strong	RNGB	TUE
	0715z	12/09 [630/00] Strong	RNGB, Malc	TUE
	0715z	15/09 [639/00] Out 0718z S3	Malc	FRI
	0715z	19/09 [635/00] Fair	RNGB	TUE
	0715z	26/09 [634/00] Strong	RNGB	TUE
	0715z	29/09 [633/00] Good	RNGB	FRI
	0715z	06/10 [635/34 75591	Malc	FRI
	0715z	10/10 [633/00] Out 0718z S3	Malc	TUE
	0715z	17/10 [631/00] Good	RNGB	TUE
	0715z	20/10 [634/00] Good	RNGB, Malc	FRI
	0715z	24/10 [636/00] Out 0718z S4	Malc,RNGB	TUE
	0715z	31/10 [635/00] Out 0718z S3	Malc	TUE
00-00-0	0000	0.1/00.1520.000.0		
9968khz	0900z	04/09 [532/00] Strong	RNGB, Malc	MON
	0900z	06/09 [533/00] Out 0903z S3	Malc	WED
	0900z	11/09 [537/00] Out 0903z S3	Malc	MON
	0900z	13/09 [536/00] Out 0903z S3	Malc	WED
	0900z	18/09 [533/00] Good	RNGB, Malc	MON
	0900z	20/09 [530/00] Good	RNGB	WED
	0900z	02/10 [535/00] Good	RNGB, Malc	MON
	0900z	04/10 [538/00] Out 0903z S4	Malc	WED
	0900z	09/10 [534/00] Out 0903z S4	Malc	MON
	0900z	11/10 [538/00] Out 0903z S5	Malc	WED
	0900z	16/10 [534/34 62129 95390 23276 52453 25785 77692 68872 5406973142 36289] Good	RNGB	MON
	0900z	23/10 [533/00] Out 0903z S4	Malc	MON
	0900z	25/10 [536/00] Good	RNGB, Malc	WED
	0900z	20/10 [536/00] Out 0903z S4	Malc	MON
		- •		
10200kHz	7 10457	04/09 [697/00] Out 1048z S3	Malc, HfD	MON
10200KI12			Malc	
	1045z	06/09 [698/00] Out 1048z S3		WED
	1045z	11/09 [696/00] Out 1048z S5	Malc	MON
	1045z	13/09 [696/00] Out 1048z S2	Malc	WED

1045z	18/09 [696/40 6562149396] Out 1056z S4	Malc	MON
1045z	02/10 [690/00] Out 1048z S3	Malc	MON
1045z	09/10 [692/00] Out 1048z S4	Malc	MON
1045z	11/10 [690/00] Out 1048z S4	Malc	WED
1045z	16/10 [683/29 8715399189] Out 1054z S4	Malc	MON
1045z	23/10 [694/00] Out 1048z S4	Malc	MON
1045z	25/10 [698/00] Out 1048z S4	Malc	WED
1045z	20/10 [696/00] Out 1048z S4	Malc	MON
10213kHz 0745z	04/09 [268/36 1990844478] Out 0756z S5	Malc	MON
0745z	11/09 [267/00] Good	RNGB	MON
0745z	18/09 [268/00] Good	RNGB, Malc	MON
0745z	25/09 [269/00] Good	RNGB	MON
0745z	02/10 [261/00] Good	RNGB, Malc	MON
0745z	09/10 [261/00] Out 0748z S4	Malc	MON
0745z	23/10 [264/32 56767 64199 62907 61942 76061 39255 4865402383 17716] Out 0755z S7	RNGB, Malc	MON
0745z	30/10 [266/00] Out 0748z S7	Malc	MON
10220hHz 1520z	07/00 [260/26 10000 44470] Out 1540- 56	Mala LIFD	THU
10330kHz 1530z	07/09 [268/36 19908	Malc, HfD	
1530z	14/09 [266/00] Out 1533z S6	Malc	THU
1530z	21/09 [260/00] Out 1533z S9	Malc	THU
1530z	05/10 [262/00]	Gary H, Malc	THU
1530z	12/10 [262/00] Out 1533z S6	Malc	THU
11116khz 1815z	01/09 [927/00] Out 1818z S3	Brixmis, Malc, HfD	FRI
1815z	03/09 [927/00] Out 1818z S7	Malc	SUN
1815z	29/09 [929/00] Out 1818z S6	Brixmis	FRI
1815z	01/10 [927/00] Out 1818z S6	Malc	SUN
1815z	06/10 [920/00] Out 1819z S4	Malc, Brixmis	FRI
1815z	08/10 [925/00] Out 1818z S6	Malc	SUN
1815z	15/10 [925/00] Out 1818z S5	Malc	SUN
1815z	20/10 [929/35 93221	Malc	FRI
1815z	22/10 [932/21	Malc	SUN
11581kHz 0315z	18/09 [258/40 46638]	HfD	MON
0315z	23/10 [253/00]	HfD	MON
10000111 0045		11(1)	MON
12202kHz 0845z	04/09 [714/00]	HfD	MON
0845z	06/09 [710/00] Out 0848z S3	Malc	WED
0845z	11/09 [715/33 8205867661] Out 0855z S4+QRM	Malc	MON
0845z	18/09 [718/00] Out 0848z S6	Malc	MON
0845z	20/09 [715/00] Out 0848z S5	Malc	WED
0845z	25/09 [713/00] Weak	RNGB	MON
0845z	02/10 [710/00] Out 0848z S5	Malc	MON
0845z	04/10 [716/00] Out 00482 S9	Malc	WED
0845z	09/10 [718/00] Out 0848z S6	Malc	MON
0845z	11/10 [716/00] Out 0848z S5	Malc	WED
0845z	16/10 [718/00] Out 0848z S9	Malc	MON
0845z	23/10 [710/32 7966237922] Out 0855z S7	Malc	MON
0845z	30/10 [714/00] Out 0848z S4	Malc	MON
125201-11- 1220-	05/00 [222/00] Out 1222a \$5	Mala HfD	TTI IT.
12530kHz 1230z	05/09 [332/00] Out 1233z S5 07/00 [229/00] Out 1232z S5	Male, HfD	TUE
1230z	07/09 [338/00] Out 1233z S5	Malc	THU
1230z	12/09 [338/34 6949946562] Out 1240z S6	Malc	TUE
1230z	19/09 [335/00] Out 1233z S3	Malc	TUE
1230z	21/09 [337/00] Out 1233z S4	Malc	THU
1230z	05/10 [335/00] Out 1233z \$5	Malc	THU
1230z	10/10 [338/34 06483	Malc	TUE
1230z	17/10 [332/00]	Gary H, Brixmis	TUE
1230z	19/10 [331/00]	Gary H	THU
		•	
1230z	24/10 [338/00] Out 1233z S5	Malc, Brixmis	TUE
1230z	31/10 [331/00] Out 1233z \$5	Malc	TUE
13470kHz 1745z	03/09 [247/00] Out 1748z S3	Malc, HfD	SUN
1745z	11/09 [244/00] Out 1748z S5	Malc	MON
1745z	17/09 [244/00] Out 1748z S9	Malc	SUN
1745z	18/09 [240/31 88145	Malc	MON
1745z	25/09 [248/00] Out 1748z S7	Brixmis	MON
1745z	01/10 [244/00] Out 1748z S7	Malc	SUN
1745z	02/10 [240/00] Out 1748z S4	Malc	MON
1745z	08/10 [249/00] Out 1748z S7	Malc	SUN
1745z	09/10 [248/30 83451 95158] Out 1754z S5	Malc	MON

1745z	15/10 [248/30 8345195158] Out 1754z S7	Malc	SUN
1745z	16/10 [244/00] Out 1748z S5	Malc	MON
1745z	22/10 [248/00] Out 1748z S9	Malc	SUN
1745z	23/10 [244/00] Out 1748z S5	Malc	MON
1745z	20/10 [245/00] Out 1748z S8	Malc	MON
14865kHz 0745z	05/09 [229/00] Fair	RNGB, Malc, HfD	TUE
0745z	07/09 [223/00] Out 0748z S3	Malc	THU
0745z	14/09 [225/00] Fair	RNGB, Malc	THU
0745z	19/09 [227/38 74599 65122 95064 17056 05046 66157 00972 6348059301 35792 20009]	RNGB, Malc	TUE
0745z	28/09 [220/00] Fair	RNGB	THU
0745z	05/10 [228/00] Fair	RNGB, Malc	THU
0745z	10/10 [220/00] Out 0748z S4	Malc	TUE
0745z		Male	THU
	12/10 [229/00] Out 0748z S7 24/10 [222/00] Out 0748z S5		
0745z 0745z	24/10 [223/00] Out 0748z S5	Male	TUE TUE
07432	31/10 [229/00] Good	RNGB, Malc	IUE
14972kHz 1430z	02/09 [917/00] Out 1433z S6	Malc, HfD	SAT
1430z	05/09 [918/00] Out 1432z S6	Malc	TUE
1430z	09/09 [912/00] Out 1433z S5	Malc	SAT
1430z	19/09 [917/00] Out 1433z S4	Malc	TUE
1430z	23/09 [917/00] Out 1433z S5	Malc, Gary H	SAT
1430z	26/09 [911/00] Out1433z	Gary H	TUE
1430z	07/10 [917/00] Out 1433z S4	Malc	SAT
1430z	10/10 [915/38 27299 93640 32437 5775? 82751 95102 31216 8739840378 12303]	Gary H	TUE
1430z	17/10 [914/00] Out 1433z S8	Brixmis, Gary H	TUE
1430z	21/10 [912/00]	Gary H	SAT
1430z	24/10 [918/00] Out 1433z S9	Malc, Gary H	TUE
1430z	31/10 [915/00] Out 1433z S7	Malc	TUE
15632kHz 0715z	04/09 [753/35 12828 86865 40659 12962 11265 0998634346] Out 0725z S2	RNGB, Malc	MON
0715z		RNGB	
0715z	11/09 [754/00] Good	RNGB, Malc	MON WED
	13/09 [757/00] Good (Polish SDR)		
0715z	18/09 [752/00] Good	RNGB, Malc	MON
0715z	20/09 [755/00] Out 0703z S3 (Dutch SDR)	Malc	WED
0715z	02/10 [754/00] Fair	RNGB, Malc	MON
0715z	04/10 [755/00] Out 0718z S2	Malc	WED
0715z	09/10 [751/00] Out 0718z S4	Malc	MON
0715z	11/10 [750/00] Out 0718z S8	Malc	WED
0715z	16/10 [751/32 18124 09679 59766 69436 63332 92404 38717 4072712669 54939] Good	RNGB, Malc	MON
0715z	23/10 [757/00] Out 0718z S8	Malc	MON
0715z	25/10 [754/00] Good	RNGB, Malc	WED
0715z	30/10 [750/00] Out 0718z S6	Malc	MON
17410kHz 0745z	01/09 [347/00] Out 0748z S2+QRM	Malc	FRI
0745z	06/09 [344/32 07062 10882 89091 93943 67907 88329 48364 5940752849 79852 47707]	RNGB	WED
0745z	13/09 [346/00] Out 0748z S2 (Finnish SDR)	Malc	WED
0745z	20/09 [347/00] Out 0748z S2	Malc	WED
0745z	29/09 [347/00] Weak	RNGB	FRI
0745z	04/10 [340/36 3309964431] Out 0755z S2 (Dutch SDR)	Malc	WED
0745z	11/10 [344/00] Out 0748z S6	Malc	WED
0745z	13/10 [343/00] Out 0748z S5	Malc	FRI
0745z	18/10 [346/00] Fair	RNGB	WED
0745z	20/10 [348/00] Weak	RNGB, Malc	FRI
0745z	25/10 [340/00] Out 0755z S6	Malc	WED
101/01-11 0045	05/00 [155/00] 0 0242- 52	Male HED	ידי זידי
18168kHz 0845z	05/09 [156/00] Out 0848z S3	Male, HfD	TUE
0845z	07/09 [152/00] Out 0848z S3	Malc	THU
0845z	12/09 [151/00] Weak	RNGB, Malc	TUE
0845z	14/09 [157/00] Out 0848z S2 (Dutch SDR)	Malc	THU
0845z	19/09 [157/00] Out 0848z S4	Malc	TUE
0845z	21/09 [150/00] Out 0848z S2	Malc	THU
0845z	05/10 [152/00] Out 0848z S3	Malc	THU
0845z	10/10 [152/00] Out 0848z S4	Malc	TUE
0845z	12/10 [159/00] Out 0848z S6	Malc	THU
0845z	19/10 [159/26 91262 67365 77820 74919 28840 97080 97079 8649565796 43067] Good	RNGB	THU
0845z	24/10 [156/00] Out 0848z S6	Malc	TUE
0845z	31/10 [159/00] Out 0848z S5	Malc	TUE
19184kHz 0820z	05/09 [138/00] Good (Polish SDR)	RNGB, Malc, HfD	TUE
0820z	06/09 [133/00] Good (Polish SDR)	RNGB	WED
0820z	12/09 [130/37 7877096226] Out 0831z S8	Malc	TUE
	. ,		-

0820z	20/09 [131/00] Fair		RNGB	WED
0820z	26/09 [136/00] Weak		RNGB	TUE
0820z	03/10 [138/00] Fair		RNGB	TUE
0820z	04/10 [136/00] Fair		RNGB, Malc	WED
0820z	10/10 [134/37 2515946676] Out 0831z S2		Malc	TUE
0820z	18/10 [132/00] Fair		RNGB, Brixmis	WED
0820z	24/10 [133/00] Out 0823z S5		Malc	TUE
0820z	25/10 [132/00] Out 0823z S4		Malc	WED
0820z	31/10 [132/00] Weak		RNGB, Malc	TUE
19515kHz 0600z	16/10 [948/00] Out 0603z		Ary	MON
0600z	23/10 [941/00] Fair (Polish SDR)		RNGB, Malc	MON
20170khz 0830z	01/09 [183/00] Weak		RNGB, Malc, HfD	FRI
0830z	04/09 [184/00] Fair		RNGB, Malc	MON
0830z	08/09 [181/00] Fair (Polish SDR)		RNGB	FRI
0830z	11/09 [182/22 40844 68381 19460 90969 06676 53175 5	2441 7848993164 66361] Fair	RNGB	MON
0830z	18/09 [181/00] Good (Polish SDR)		RNGB	MON
0830z	22/09 [188/00] Good (Polish SDR)		RNGB	FRI
0830z	02/10 [189/00] Fair		RNGB, Malc	MON
0830z	06/10 [182/00] Good (Polish SDR)		RNGB, Malc	FRI
0830z	09/10 [188/00] Out 0833z S7		Malc	MON
0830z	13/10 [188/00] Out 0833z S5		Malc	FRI
0830z	16/10 [180/24 33237 79677 70674 32073 48345 84580 4	4800 4973971050 42891] Out 0938z	RNGB, Malc	MON
0830z	23/10 [180/00] Fair		RNGB, Malc	MON
0830z	30/10 [184/00] Fair		RNGB, Malc	MON

The crazy world of 121

9049kHz 0650z 15/09 [121/30 89735 48769 53428 76543 52876 93458 97035 46897 05236 79632 47568 35468 93456 89702 35487 69354 28769 35428 69735 48769 35428 69742 35897 63542 87693 54289 76354 28769 35489 67354] Attention (message repeated) Out 0650z 16/09 [121/32 78954 37682 34758 34268 79543 67890 35648 97635 42768 93457 80954 36897 65438 76935 64789 05897 04352 67895

43678 90543 67890 54368 76954 36789 05643 87906 43789 06437 68964 53789 05643 78907]

0650z 17/09 [121/35 98419 19509 85198 49851 95095 61984 19841 65096 51984 19814 65065 09685 41984 19816 20651 94198 41650 36209 65198 41941 65165 06541 98418 94462 00651 96419 84198 12096 54984 98451 65198 49849 87415 61965 41983]

ID 121 pops up every now and then, often several days in a row.

Ary

# <u>S06</u>

S06 log Sept/Oct 2023

Friday 1st & 3rd		1000		2000	
01/09	<b>'637'</b> 00000	1900z	9412khz	2000z	6985kHz
15/09	·637' 00000				
15/07	007 00000	2000z	9412kHz	2100z	6985kHz
06/10	<b>'637' 00000</b>				
20/10	<b>'637' 00000</b>	(used 9417kHz)			
S06 & S	060				
500 <b>x</b> 5	oue	1325z	15674kHz	1425z	12203khz
04/10	·583 <sup>,</sup> 706 2 66666	6 00056 706 2: [S06e]			
	·583' 291 46 2422	25 54929 94829 70017 6	8261 15353 76964	4 74809 33007 9	4090 01092 24484 10861 52146 42223 19083 01904 64306 21243 72768
	006	56 96698 11445 40259 9	6996 55152 9906	8 13287 27189 8	4037 96288 79251 35932 20298 30069 59281 35385 32326 55344 67870
	721	07 98406 65950 61282 3	7845 28713 291 4	6 00000	(Thanks Gert & Ary)

'583' 291 46 24225.....etc [S06 only] (Thanks Malc)

		0400z	11616kHz	u 0420z	9322kHz
01/09	'480' 973 56 09848etc	via Kiwi	iSDR J	(Thanks HfD)	

And onto Peter's logs:

05/10

First + Third Fridays in the Month Schedule, 1900 + 2000 UTC in September, 2000 + 2100 UTC in October:-

1-Sept-23:- 1900 UTC, 9412 kHz, "637 637 637 00000", weak signal, only just readable. 2000 UTC, 6985 kHz, stronger.

Same frequencies as used in the springtime months, or at least on Fridays 7th and 21st of April.

15-Sept-23:- 1900 UTC, 9412 kHz, "637 637 637 00000", weak. 2000 UTC, 6985 kHz, much stronger.

6-Oct-23:- 2000 UTC, 9412 kHz, very weak signal of some kind, probably S06 but too weak to confirm, carrier only just detectable with RX in USB mode and tuned slightly LF,

appeared to go off air at approx 2004:15s which would suggest S06.

2100 UTC, 6985 kHz, "637 637 637 00000", good signal, interference from strong pulse/buzz signal extending from about 6980 to 7007 kHz.

 $20-Oct-23:- \ Nothing \ heard \ of \ first \ sending \ at \ 2000z \ on \ 9412 \ although \ there \ was \ a \ very \ weak \ signal \ of \ some \ kind \ on \ 9417. \\ 2100 \ UTC, \ 6985 \ kHz, \ ``637 \ 637 \ 637 \ 00000", \ weaker \ than \ usual.$ 

# S11a log Sept/Oct

6433khz	0830z	02/09 [379/00] Good	RNGB, Malc, HfD	SAT
	0830z	09/09 [371/00] Konyetz 0833z S2	Malc	SAT
	0830z	10/09 [372/00] Strong	RNGB	SUN
	0830z	16/09 [378/00] Konyetz 0833z S5 (Dutch SDR)	Malc	SAT
	0830z	17/09 [370/00] Konyetz 0833z S3	Malc	SUN
	0830z	23/09 [376/40 4998334696] Konyetz 0843z S3	Malc	SAT
	0830z	30/09 [370/00] Good	RNGB	SAT
	0830z	01/10 [376/00] Konyetz 0833z S3	Malc	SUN
	0830z	07/10 [370/34 62574	Malc	SAT
	0830z	08/10 [370/34 62574etc] Repeat of Saturday	Malc	SUN
	0830z	15/10 [376/00] Konyetz 0833z	Malc	SUN
	0830z	21/10 [378/00] Strong	RNGB	SAT
	0830z	22/10 [373/00] Konyetz 0833z S3	Malc	SUN
	00502	22/10 [575/00] Konyetz 00552 55	Wate	501
6480khz	0915z	01/09 [480/00] Good	RNGB, Malc, HfD	FRI
0400KHZ	0915z	04/09 [487/00] Konyetz 0918z S2+QRM (Finnish SDR)	Malc	MON
	0915z	11/09 [484/00] Konyetz 0918z S2 (QKV (Timish SDK))	Malc	MON
	0915z	15/09 [483/00] Konyetz 0918z S2 (Duch SDR)	Malc	FRI
	0915z	18/09 [483/38 17592 81421 97664 17326 23255 26945 42092 13682 34109 16232] Fair	RNGB, Malc	MON
	0915z	02/10 [480/00] Konyetz 0918z S4 (Dutch SDR)	Malc	MON
	0915z	06/10 [481/00] Konyetz 0918z S2	Malc	FRI
	0915z	09/10 [487/00] Konyetz 0918z S2+QRM	Malc	MON
	0915z	13/10 [482/00] Konyetz 0918z S2+QRM	Malc	FRI
	0915z	16/10 [482/00] Konyetz 0918z S2+QRM	Malc	MON
	0915z	20/10 [481/00] Konyetz 0918z S2+QRM	Malc	FRI
	0915z	23/10 [483/24 7537519010] Konyetz 0926z S4+QRM (Dutch SDR)	Malc	MON
	0915z	30/10 [482/00] Fair with QRM	RNGB, Malc	MON
8597kHz	0700z	04/09 [471/39 6786596188] Konyetz 0711z S3	Malc	MON
	0700z	11/09 [470/00] Konyetz 0703z S4	Malc	MON
	0700z	14/09 [479/00] Konyetz 0703z S2	Malc	THU
	0700z	18/09 [476/00] Konyetz 0703z S2	Malc	MON
	0700z	21/09 [477/00] Strong	RNGB, Malc	THU
	0700z	25/09 [471/00] Strong	RNGB	MON
	0700z	28/09 [476/00] Good	RNGB	THU
	0700z	02/10 [476/00] Konyetz 0703z S4	Malc	MON
	0700z	05/10 [479/00] Konyetz 0703z S3	Malc	THU
	0700z	09/10 [476/39 38851	Malc	MON
	0700z	12/10 [476/39 38851 50817 77434 56312 08977 20270 37276 2185376646 37886] Good	RNGB	THU
	0700z	16/10 [478/00] Strong	RNGB, Malc	MON
	0700z	19/10 [478/00] Strong	RNGB	THU
	0700z	23/10 [479/00] Good	RNGB, Malc	MON
	0700z	26/10 [472/00] Strong	RNGB	THU
	0700z	30/10 [470/00] Konyetz 0703z S3	Malc	MON
	07002	50/10 [470/00] Konyetz 07052 55	Male	WON
10213kHz	7 18507	06/09 [281/00] Konyetz 1853z S9	Malc, HfD	WED
10213КП2		·		
	1850z	09/09 [287/00] Konyetz 1853z S9	Malc	SAT
	1850z	13/09 [289/00] Konyetz 1853z S5	Malc	WED
	1850z	16/09 [280/00] Konyetz 1853z S7	Malc	SAT
	1850z	20/09 [280/00] Konyetz 1853z S6	Malc	WED
	1850z	23/09 [282/00] Konyetz 1853z S8	Malc	SAT
	1850z	04/10 [392/00] Konyetz 1853z S5	Malc	WED
	1850z	07/10 [287/00] Konyetz 1853z S6	Malc	SAT
	1850z	11/10 [288/00] Konyetz 1853z S4+QRM	Malc	WED
	1850z	25/10 [287/31 0005101596] Konyetz 1901z S6	Malc	WED
10728kHz	7 04457	26/09 [793 36 53561etc]	HfD	TUE
11420kHz		05/09 [426/00] Konyetz 1403z S5	Malc, HfD	TUE
	1400z	15/09 [420/36 8403279745] Konyetz 1412z S4	Malc	FRI
	1400z	19/09 [426/00] Konyetz 1403z S3	Malc	TUE
	1400z	06/10 [425/00] Konyetz 1403z S6	Malc	FRI
	1400z	10/10 [422/00] Konyetz 1403z S4	Malc, Gary H	TUE
	1400z	13/10 [425/00] Konyetz 1403z S5	Malc	FRI

1400z 1400z 1400z	20/10 [420/00] Konyetz 1403z S5 24/10 [422/36 2835510378] Konyetz 1412z S7 31/10 [424/00] Konyetz 1403z S5	Malc, Gary H Malc, Gary H Malc, Gary H	FRI TUE TUE
21854kHz 0725z	01/09 [382/00]	HfD	FRI
0725z	06/09 [380/ 36 11649 13691 51702 78361 48781 4838506524 78129 71384] Weak	RNGB	WED
0725z	15/09 [381/00] Konyetz 0728z S3 (Finnish SDR)	Malc	FRI
0725z	20/09 [380/00] Good (Polish SDR)	RNGB	WED
0725z	04/10 [380/31 82742 79277 12517 45363 15912 07052 46113 1664982638 32791]	RNGB, Malc	WED
0725z	11/10 [381/00] Konyetz 0738z S5	Malc	WED
0725z	13/10 [383/00] Konyetz 0728z S2	Malc	FRI
0725z	18/10 [384/00] Weak	RNGB	WED
0725z	20/10 [381/00] Fair	RNGB, Malc	FRI
0725z	25/10 [384/00] Weak (Polish SDR)	RNGB	WED
23004kHz 0510z	13/09 [659/34 35920etc]	HfD	WED
0510z	16/10 [650/32 85655etc] (via KiwiSDR POL)	HfD	MON

## <u>V07</u>

Sunday

#### September 2023

0	200z	17431kHz		0220z	16131kHz	0240z	14431kHz	
1	0/09				. 76615 000 000 oup 34 the signal is ou	t. At 6′23	restart in gr	Weak oup 26.
3 1 5 2 3 6 4 2 5 6 7 7 2 8	1581 97504 3 5947 46249 4 0314 13206 3 5023 98106 4 4304* 12370 3401 67105 3 5711 79412 7 9957 19091 5 9179 61745 3 5420 90278 ( 7456 19105 8	V1068 43687 96 V1068 43687 96 V13252 24809 23 V15069 73221 90 V17280 77671 73 V17280 77671 73 V1280 74 1196*7 0 V14861 94102 08 V12656 38456 03 V1204 89606 56 V1612 21464 08 V12356 85821 87 V4074 91860 24 V4074 91860 24	371 312 793 956 00194 4796 639 663 916 665 994 932					
1	7/09		414 1 638	115 89477	80745 000 000		,	Weak
6 6 8 8 6 6 7 7 7 8 8 6 6 7 7 7 8 8 1 1 1 5 5 5 1 1 1 5 5 7 7 7 7 7 8 8 8 3 3 3 7 7 7 1 1 1 1 8 8 5 5 5	8950 52906 6 0470 68414 7 6481 99420 7 67556 4641 99420 7 67556 4641 99420 7 9505 7 9501 75443 5 5501 75443 5 5501 75443 5 5501 75443 5 5501 75443 5 5501 75443 5 5507 37504 7 8050 7 5567 37504 7 164 29198 5 5507 02219 2 9773 66986 7 99598 87004 4 0224 07658 2 7361 88901 7 361 8890 7 361 8800 7 361 8 361 8 3618 361 8 361 8 3	12536 93087 30 16374 33962 88 3154 74495 16 16896 73684 72 12251 15598 22 22046 65594 12 15179 59326 97 12257 21848 05 16236 74492 06 12270 21365 47 12708 48496 71 15628 2038 91 15571 28815 11 15628 2038 91 15628 2038 91 1578 1846 99 1580 12000 98 1480 30618 95 16001 34809 06 15180 12000 98 12333 20 10093 18807 54 14406 63868 80 Courtesy Dan	351 766 085 134 417 923 884 820 031 358 881 838 004 987 490 272 093 9969 781 990 990 9745					
J 4 7 9 2 1 1 5 5 1 1 1 5 5 1 1 4	14 414 414 1 358 107 3493 16107 5 2587 67956 6 0528 09314 1 9253 27138 ( 4179 96527 2 9288 41626 2 3046 50623 1 3046 50623 1 207 00724 8 6254 01582 8	transmissio	n heard an 151 978 581 193 199 984 664 567 943		3 80349 000 000 sending irwtpbp	onr tes :	Weak 30630 5 v	srptpblcls 4444 9560956 v su7ggak r

Courtesy DanAR

#### October 2023 [Schedule from Original Token and intercepts via DanAR]:

#### V07 Observations, January of 2023 to October of 2023

Station transmits each Sunday morning (UTC) at the listed time. Transmissions are on the listed frequencies and in USB mode.

-

	V0/ Schedule, Oct 2023, Version 13.5 Token											
Time	January	February	March	April	May	June	July	August	September	October	November	December
UTC	Call	Call 238	Call 112	Call 414	Call 431	Call 942	Call 931	Call 425	Call 414	Call 238	Call	Call
0200		18217	19172	17431					17431	18217		
0220		16317	17472	16131					16131	16317		
0240		15817	16272	14431					14431	15817		
0700					14469	13927	13978	13408				
0720					13369	13427	13378	12208				
0740					12169	12127	12178	11508				

V07 Schodula Oct 2023 Varsian 12.5

As of December 2022, V07 used the same schedule it had been using since about October of 2018. The last transmission in this schedule was observed on December 25, 2022. Nothing was heard from that date until 1 February, 2023. The station may have been active and not noticed, or it may have been inactive during this period.

Starting February of 2023 the station moved from an 0100/0300 schedule to an 0200 schedule. Since 2011 this station has always used odd hours, 0100, 0300, 0500, and / or 0700. This is the first time I am aware of that this outlet of this station has used an even hour, 0200.

In May 2023, V07 moved to a 0700 schedule from the 0200 schedule. It has used 0700 time slots in the past.

#### October 2023

0200z	18217kHz	0220z 1631	7kHz	0240z	15817kHz	
08/10	238	1 364 99 67120	00788 [18]	217kHz 0200z]	Weak	SUN
86988 72269 43395 59007 73008 90881 90276 16675 86779 55417 88400 03131 84727 94081 38594 89497 93810 52316 77153 34233 69757 93180 53755 95131 79156 06235 65313 73222 18531 35955 98674 42197 28186 38244 74123 93093	1 3 55541 09387 28775 3 9525 0684 06084 42464 41280 63894 5 51121 16375 45050 5 9765 41097 26673 2 3899 97080 44272 4 0657 68958 71109 2 3024 10556 99659 5 60243 23624 98533 0 55379 64565 11061 1 6682 83151 35972 5 14890 0739 17524 1 42608 56802 15887 0 6437 19172 20357 2 55272 23147 89994 2 4424 55212 40030 4 6092 64079 02263 7 3016 00788 Courtesy DanAR					
36495 0607( 04292 41488 48807 23043 21676 14733 71556 98188 20880 03233 33855 3102( 45543 71012 81097 03804 29047 66237 34022 41966 59949 23283 80668 71303 40212 10788 25458 88626 47763 29964	238	1 8367 125 27462	89561 000 (	)00 [18217kH	[z 0200z] Weak	SUN

56033 01391 90356 42113 0           81317 28737 69041 05889 3           42641 44751 43745 41562 1           54272 51216 21333 41364 7           87814 50001 35133 87026 4           71354 75027 07244 54517 8           16847 17649 02268 39540 0           000 000         Courtesy Data	31299 18758 73072 48589 82186 89561			
22/10	238 1 719 59 41316 31481 000 000	[18217kHz 0200z]	Weak	SUN
238 238 238 1 719 59 41316 55917 09428 43681 8 79659 06112 82750 97856 2 53513 43713 76958 70087 52149 63063 61067 11930 9 79973 61274 07846 93147 - 11454 52060 39832 51789 9 76267 27438 5489 93630 3 71779 92873 95248 82090 9 76638 55304 324554 84857 5 71779 92873 95248 82090 9 76638 55304 32451 31242 1 88730 79838 24103 18515 9 07568 88574 40685 31481 000 000 Courtesy D	26817 17067 87747 42126 71314 89792 81612 85567 16905 90860			
29/10	238 1 695 87 21631 91935 000 000	[18217kHz 0200z]	Weak	SUN
238 238 238 1 695 87 21631 29781 49905 71966 7 54152 37339 49117 08277 67332 09855 38749 63788 4 21253 80031 12910 57491 1 95256 56863 23682 16953 2 79172 26285 46443 86288 8 63503 84238 21446 31093 3 35693 97553 77742 35810 3 03981 50055 61432 19828 8 24614 66250 32702 18456 9 23528 93728 35634 85628 7 23894 50965 86625 90647 - 50711 56913 40370 81159 7 79723 24804 29499 20501 4 74576 98888 38313 08418 0 79390 41782 40447 49406 6 39592 29263 40676 06733 9 80228 91935 00000	98261 45405 87269 27500 94125 55755 73289 98713 78512 40182 71846 46086 01171 102714 91611			

# <u>V13</u>

Thu 12.10.2023 0500Z 8169 Chinese numbers

[H-FD]

<u>V26</u>

Nil Reports

# **Polytones**

# XPA1 Wed/Fri

#### Wednesday/Friday

#### September 2023

1210z	12137kHz	1230z	11137kHz	1250z	10237kHz	
01/09	112 1	1 04640 00100 4843	30 45141			1210z Weak, QSB3/3, rest NRH
06/09	112 (	000 09711 00001 00	0000 35262			1210z Strong, 1250z Weak, 1230z Unworkable
08/09	112 (	000 07515 00001 00	0000 36260			1210z Weak, rest NRH
13/09	Null	Msg				Unworkable, Condx poor
15/09	Null	Msg				Unworkable, Condx poor
20/09	112 (	000 08454 00001 00	0000 35265			1210z Strong, rest Unworkable
22/09	112 (	000 07808 00001 00	0000 41257			1210z Weak, rest Unworkable

27/09	211 0	00 06387 00001	00000 36266			Weak, 1250z Unworkable		
29/09	112 0	Weak, 1250z Unworkable						
October	2023							
1210z	14564kHz	1230z	13564kHz	1250z	11464kH	Z		
04/10	554 0	00 09674 00001	00000 36270			1250z Weak, rest Strong		
NO MON	NITORING BETW	EEN 05/10 to 15	5/10 INCLUSIVE					
18/10	554 1	05347 00095 7	9196 20007			1250z Fair QSB3, rest Strong		
554 554	554 1 554 554 554	1 554 554 554 1						
87870 3645 02244 9087 62407 9826 83773 2864 71625 5826 86793 1199	05347 00095 79196 79510 49172 80209 68000 86907 10603 32234 87870 36456 39453 79911 94249 40974 15834 36685 85768 95241 02244 90876 74114 47392 26607 12043 82245 29839 19572 92706 62407 98266 82768 56697 04708 82336 67510 27925 87305 32585 83773 28640 29262 66147 17322 07910 56601 87956 75925 58385 71625 58260 14648 64674 82818 15042 34482 25206 07733 88550 86793 11991 55986 97997 64841 90313 13521 61640 47494 83427 75866 17084 31152 67558							
22260 9936	7 22551 73557 56960 072 0 64483 20007	215 67000 92900 508						
20/10	554 1	05347 00095 7	9196 20007			1250z Weak, rest Fair		
25/10	554 1	06605 00056 84	4096 54736			Strong 1230z QRM3		
554 554 554 1 554 554 554 1 554 554 1								
06605 00056 84096 41058 75079 04428 85636 54381 03328 01684 90561 38836 13776 55369 71189 71697 75482 56395 76714 12875 35181 54859 48168 17105 09653 93543 88485 89498 17219 92029 61573 59534 93611 02321 23386 36156 96037 80590 46066 73278 17139 61070 92395 20995 44004 78113 01430 30795 85913 10664 30982 96931 01216 77579 84751 53184 14925 64148 54736 <i>Courtesy PLdn</i>								

27/10

## <u>XPA2 m</u>

554 1 06605 00056 84096 ... 54736

#### Sunday/Tuesday

September 2023

1200z	13914kHz	1220z	15814kHz	1240z	16314kHz	Z
03/09	0028	39 00069 20949 .	47156			1200z Weak QRM4, rest Fair
05/09	018	19 00001 00000 .	41652			Weak QSB3
	and succession in the					

1250z Weak, rest Strong

nms 100 110 12	20 1130	1:40	1:50 2:00	2010	2:20	2:30 2:4	0 2:50	3:00	3:10	3:20	3.30	3:40	3:50	4:00
10/09	07619 000	01 00000	) 40660					Strong, 1	200z Pu	lse QRI	M3, as a	above		
12/09	00359 000	61 19067	7 12571					1240z V	ery stron	g, rest s	strong			
00359 00061 19067 43415 5 94680 93333 15921 54616 1 25786 70099 08357 38881 9 08582 32502 86768 43884 5 29835 93966 96186 29727 8 85041 64581 36874 96649 0 43506 09489 28027 12571	13165 01872 40 96465 97396 70 76044 79977 49 81377 58445 08	702 24044 3 793 62802 0 033 43126 7 973 56310 6 939 70610 9	9495 47237 9458 72023 5389 75128 54214 77664											
17/09	00359 000	61 19067	7 12571					1200z V	ery stron	g, rest l	Fair			
19/09	01197 000	01 00000	) 35262					Strong, 1	200z Mi	issed.				
24/09	09683 000	01 00000	) 35671					1200z St	trong, res	st Very	strong			
26/09	00541 000	89 05529	0 54261					1200z St	trong, res	st fair				

#### October 2023

1200z	14469kHz	1220z	16169kHz	1240z	17469kH	Z
01/10	00541	1 00089 05529	54261			1220z Very strong, rest Strong
75381 6981 01035 6321 37268 3110 65688 8167 92543 1625 11117 0939 23459 4144	9 05529 28081 98863 113 0 07662 55483 06477 102 5 35237 36613 21046 590 8 35537 13281 63256 202 8 12926 27354 74262 600 7 75574 36388 15746 160 3 15485 15488 48274 51 0 55298 21527 23886 78% 1 89175 07459 59833 216 1	208 00107 97365 20 626 09707 91237 66 595 30342 96088 26 919 19731 50942 68 080 79103 16435 15 139 65203 66533 72 279 45999 80666 71 689 25987 78252 82	271 20938 225 43576 832 04311 509 41161 853 82638 236 48256 387 81175			
03/10	05045	5 00001 00000	33661			1240z Very strong, rest strong
NO MOI	NITORING BETW	EEN 05/10 to 1	5/10 INCLUSIVE			
17/10	08467	7 00001 00000	36666			1200z Very strong, rest Strong
22/10	04457	7 00001 00000	36661			Strong
24/10	00658	8 00059 01237	36475			1240z Strong, rest Fair
73473 5792 75131 6050 38071 7745 86330 3968	9 01237 97301 03052 05 4 76216 73864 44064 09 4 19028 64227 02389 52 2 54501 26031 47285 14 2 56373 47507 89300 70 0 20651 60905 68746 598 5	348 56948 90968 72 357 48530 99577 39 006 56469 88673 83 594 36455 63172 98 815 14117 24090 60	468 27047 497 25016 812 84087 153 80954			
29/10	00658	8 00059 01237	36475			Strong
31/10	04161	100001 00000 .	32262			1240z Very strong, rest Strong

## <u>XPA2 p</u>

#### Monday/Wednesday

September 2023

0700z	12152kHz	0720z	13552kHz	0740z	13952kH	Z
04/09	03723	00001 00000	36255			Strong
06/09	03844	00001 00000	37257			0700z Fair, rest Weak
11/09	00254	00105 87901	24705			Strong
46253 7635 06424 3530 33503 2732 88548 5035 06880 6838 02444 3882 84326 0228 00256 0727 80058 2723	5 87901 25820 23807 037 22 82853 28880 03005 803 22 86228 68536 37640 350 6 80366 65622 33473 763 64 57403 88605 35758 240 00 72834 28852 73084 765 86 68428 55580 20878 663 62 45600 52630 75845 576 70 8478 04434 05272 702 6 06657 85268 06060 203 88 78650 52405 77034 728	83 43556 42268 30 82 55007 04403 60 83 88303 86833 00 663 08400 42755 30 52 48664 03484 42 80 23775 53806 57 66 88208 06848 44 20 48076 20265 40 77 46872 24705	5660 37688 5740 00420 2620 08600 7754 77338 0653 20375 2804 48737 7345 64864 5855 22024			
13/09	00254	00105 87901	24705			Fair, 0700z QSB3
18/09	00254	00105 87901	24705			Fair, 0700z QSB2, 0740z QRM3
20/09	00254	00105 87901	24705			0700z Fair, rest Weak
25/09	00254	00105 87901	24705			Weak
27/09	00254	00105 87901	24705			0740z Strong, rest Very strong

#### October 2023

0700z	13372kHz	0720z	14672kHz	0740z	15872kH	Iz
02/10	03750 (	00001 00000	34660			Fair
04/10	01836 (	00001 00000	40254			Weak, 0700/0720z QSB3

NO MONITORING BETWEEN 05/10 to 15/10 INCLUSIVE

00916 00100 94062 ... 07501

00916 00100 94062 37268 89076 23585 55673 45770 16529 75333 93293 90183 80818 25013 03707 13189 93662 02957 68402 59863 81113 26009 83415 93734 48090 68200 97514 02316 24698 11596 12573 43959 69534 34773 11924 13887 73346 69686 26687 01159 70435 02094 85903 49906 51990 32937 50485 54790 43538 06864 07161 10758 13358 85369 67801 47477 83272 11212 83934 72774 85303 12308 13473 38418 95533 59554 60915 55389 34257 53569 33515 16723 12744 95746 69297 37037 31300 25141 62338 88715 33980 01213 96235 46733 85588 32101 94853 42088 92512 30250 29681 65299 06059 35630 34872 16702 34326 97749 01579 53217 10867 52160 07501 Courtesy PLdn

23/10 07275 00001 00000 ... 34666

25/10 07909 00001 00000 ... 42257

## **Other XPA2:**

#### From H-FD

1B XPA2 September Fri 01.09.2023 1100Z 13431 msg Fri 01.09.2023 1120Z 12131 msg Fri 01.09.2023 1140Z 11431 msg

> Fri 01.09.2023 1800Z 16351 msg Fri 01.09.2023 1820Z 14851 msg Fri 01.09.2023 1840Z 13951 msg

> Sat 02.09.2023 0910Z 15859 msg Sat 02.09.2023 0930Z 14659 msg Sat 02.09.2023 0950Z 13459 msg

> Sat 02.09.2023 1500Z 14373 msg Sat 02.09.2023 1520Z 13373 msg Sat 02.09.2023 1540Z 11573 msg

Sun 03.09.2023 0800Z 14374 msg Sun 03.09.2023 0820Z 14974 msg Sun 03.09.2023 0840Z 16274 msg

Tue 12.09.2023 0500Z 10221 msg Tue 12.09.2023 0520Z 11121 msg Tue 12.09.2023 0540Z 12221 msg

Thu 21.09.2023 1100Z 16117 msg Thu 21.09.2023 1120Z 14917 msg Thu 21.09.2023 1140Z 13517 msg

Thu 21.09.2023 1600Z 13887 msg Thu 21.09.2023 1620Z 13387 msg Thu 21.09.2023 1640Z 11587 msg

#### 1B XPA2 October

Wed 04.10.2023 1800Z 14518 msg Wed 04.10.2023 1820Z 13418 msg Wed 04.10.2023 1840Z 12218 msg

Mon 09.10.2023 1500Z 13906 msg Mon 09.10.2023 1520Z 12106 msg Mon 09.10.2023 1540Z 10906 msg

Wed 11.10.2023 0910Z 17438 msg Wed 11.10.2023 0930Z 16338 msg Wed 11.10.2023 0950Z 15938 msg

Wed 11.10.2023 1100Z 14672 msg Wed 11.10.2023 1120Z 13472 msg Wed 11.10.2023 1140Z 12172 msg

Thu 12.10.2023 0500Z 10238 msg Thu 12.10.2023 0520Z 11138 msg Thu 12.10.2023 0540Z 12138 msg

Fri 13.10.2023 0800Z 15958 msg Fri 13.10.2023 0820Z 17458 msg Fri 13.10.2023 0840Z 18758 msg

Tue 17.10.2023 1100Z 14537 msg Tue 17.10.2023 1120Z 13437 msg Tue 17.10.2023 1140Z 10737 msg Very strong

0720z Strong, rest Fair

0720z Weak, rest Fair 0700/0720z QSB4

Tue 17.10.2023 1600Z 11442 msg Tue 17.10.2023 1600Z 13542 msg Tue 17.10.2023 1600Z 12142 msg Tue 17.10.2023 1640Z 11442 msg

Thu 19.10.2023 1600Z 13542 msg Thu 19.10.2023 1620Z 12142 msg Thu 19.10.2023 1640Z 11442 msg

#### XPA2 [Ary]

14518	04-10-2023 1800 XPA2	MFSK-16/20Bd
13418	04-10-2023 1820 XPA2	MFSK-16/20Bd
12218	04-10-2023 1840 XPA2	MFSK-16/20Bd

07664 00123 57546 25452 55381 32048 90612 56802 75262 34503 84829 47870 48446 72753 75496 23111 48757 06117 78886 88896 54700 88557 63275 92070 79455 81071 66170 89038 26863 44056 65114 22398 11159 50016 53887 28334 08586 20557 90585 56353 94772 65033 70952 14305 43695 63987 54825 82767 76100 92371 30255 89216 50720 05780 07293 48230 86249 63426 04608 69487 75080 72846 10211 85208 58558 76165 04059 81258 15288 86279 04609 81995 25314 68662 63124 05385 76758 06287 46582 46549 76221 22351 3555 25011 42505 36386 58366 45683 31846 14021 54178 86635 92458 71907 66481 91994 31810 25496 01086 04854 67214 04192 40527 40248 23337 74564 31900 27647 31722 89141 02249 86063 09585 96456 63857 66750 11832 25526 84905 76921 43145 61524 06625 34813 50292 02035 Courtesy Ary

## <u>XPB1</u>

#### Monday/Saturday

#### Sept 2023

14462kHz 1200z	02/09	Strong	4m28s	PLdn	SAT
13962kHz 1210z	02/09	Strong	4m28s	PLdn	SAT
13462kHz 1220z	02/09	NRH		PLdn	SAT
12162kHz 1230z	02/09	11111	NOT MONITORED	PLdn	SAT
11562kHz 1240z	02/09	Weak	4m28s	PLdn	SAT
10962kHz 1250z	02/09	Weak	4m28s QRM2	PLdn	SAT
10702R112 12502	02/07	weak	111203 QICI12	I Luii	5/11
14462kHz 1200z	04/09	Weak	1m42s	PLdn	MON
13962kHz 1210z	04/09	Weak	1m42s	PLdn	MON
13462kHz 1220z	04/09	Weak	1m42s	PLdn	MON
12162kHz 1230z	04/09	Weak	1m42s	PLdn	MON
11562kHz 1240z	04/09	V.weak	1m42s	PLdn	MON
10962kHz 1250z	04/09	Weak	1m42s	PLdn	MON
14462kHz 1200z	09/09		NOT MONITORED, Lightning	PLdn	SAT
13962kHz 1210z	09/09		NOT MONITORED, Lightning	PLdn	SAT
13462kHz 1220z	09/09		NOT MONITORED, Lightning	PLdn	SAT
12162kHz 1230z	09/09		NOT MONITORED, Lightning	PLdn	SAT
11562kHz 1240z	09/09		NOT MONITORED, Lightning	PLdn	SAT
10962kHz 1250z	09/09		NOT MONITORED, Lightning	PLdn	SAT
14462kHz 1200z	11/09	Weak	4m28s	PLdn	MON
13962kHz 1210z	11/09	Weak	4m28s	PLdn	MON
13462kHz 1220z	11/09	Weak	4m28s	PLdn	MON
12162kHz 1230z	11/09	Weak	4m28s	PLdn	MON
11562kHz 1240z	11/09	Weak	4m28s	PLdn	MON
10962kHz 1250z	11/09	NRH		PLdn	MON
14462kHz 1200z	16/09	Fair	4m28s	PLdn	SAT
13962kHz 1210z	16/09	Fair	4m28s	PLdn	SAT
13462kHz 1220z	16/09	Fair	4m28s XWPQRM2	PLdn	SAT
12162kHz 1230z	16/09	Weak	4m28s	PLdn	SAT
11562kHz 1240z	16/09	Weak	4m28s	PLdn	SAT
10962kHz 1250z	16/09	NRH		PLdn	SAT
14462kHz 1200z	18/09	Weak	1m40s	PLdn	MON
13962kHz 1210z	18/09	Strong	1m40s	PLdn	MON
13462kHz 1220z	18/09	Strong	1m40s QRM2	PLdn	MON
12162kHz 1230z	18/09	Fair	1m40s	PLdn	MON
11562kHz 1240z	18/09	Weak	1m40s	PLdn	MON
10962kHz 1250z	18/09	Weak	1m40s	PLdn	MON

14462kHz 1200z					
	23/09	Weak	1m40s	PLdn	SAT
13962kHz 1210z	23/09	Weak	1m40s	PLdn	SAT
13462kHz 1220z	23/09	Weak	1m40s	PLdn	SAT
12162kHz 1230z	23/09	Weak	1m40s	PLdn	SAT
11562kHz 1240z	23/09	Weak	1m40s	PLdn	SAT
10962kHz 1250z	23/09	Weak	1m40s	PLdn	SAT
14462kHz 1200z	25/09	Weak	4m28s	PLdn	MON
13962kHz 1210z	25/09	Weak	4m28s	PLdn	MON
13462kHz 1220z	25/09	Fair	4m28s QRM2	PLdn	MON
12162kHz 1230z	25/09	Fair	4m28s	PLdn	MON
11562kHz 1240z	25/09	Fair	4m28s	PLdn	MON
10962kHz 1250z	25/09	Fair	4m28s QRM2	PLdn	MON
14462kHz 1200z	30/09	Fair	4m28s	PLdn	SAT
13962kHz 1210z		Fair	4m28s	PLdn	SAT
13462kHz 1220z		NRH		PLdn	SAT
12162kHz 1230z	30/09	Strong	4m28s	PLdn	SAT
11562kHz 1240z	30/09	Weak	4m28s	PLdn	SAT
10962kHz 1250z	30/09	Weak	4m28s	PLdn	SAT
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13462kHz 1220z	02/10 02/10	Fair Fair	1m40s 1m40s	PLdn PLdn	MON MON
12162kHz 1230z	02/10	Weak	1m40s	PLdn	MON
12102kHz 1230z 11562kHz 1240z	02/10	Weak	1m40s	PLdn	MON
	02/10	NRH	TIII40S	PLdn	MON
10962kHz 1250z	02/10	INKI		PLali	MON
NO MONITORING	BY PLON F	RETWEEN	05/10 to 15/10 INCLUSIVE		
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13962kHz 1210z		Fair	1m40s	PLdn	MON
13462kHz 1220z	16/10	MISSED		PLdn	MON
12162kHz 1230z		Fair	1m40s	PLdn	MON
11562kHz 1240z	16/10	Weak	1m40s	PLdn	MON
10962kHz 1250z	16/10	Weak	1m40s	PLdn	MON
14462kHz 1200z	21/10		Not monitored	PLdn	SAT
14462kHz 1200z 13962kHz 1210z	21/10 21/10		Not monitored Not monitored	PLdn PLdn	
	21/10			PLdn	SAT
13962kHz 1210z			Not monitored		
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11021kHz 1140z	06/09	NRH		PLdn	WED
10521kHz 1150z	06/09	Weak	4m28s	PLdn	WED
					~
13521kHz 1100z	09/09		NOT MONITORED, Lightning	PLdn PL-du	SAT
13421kHz 1110z 12221kHz 1120z	09/09 09/09		NOT MONITORED, Lightning NOT MONITORED, Lightning	PLdn PLdn	SAT SAT
11521kHz 1130z	09/09		NOT MONITORED, Lightning	PLdn	SAT
11021kHz 1140z	09/09		NOT MONITORED, Lightning	PLdn	SAT
10521kHz 1150z	09/09		NOT MONITORED, Lightning	PLdn	SAT
13521kHz 1100z	13/09	Weak	4m28s	PLdn	WED
13421kHz 1110z 12221kHz 1120z	13/09 13/09	Weak Weak	4m28s 4m28s	PLdn PLdn	WED WED
11521kHz 1130z	13/09	Weak	4m28s	PLdn	WED
11021kHz 1140z	13/09	Weak	4m28s	PLdn	WED
10521kHz 1150z	13/09	NRH		PLdn	WED
10501111 1100	1.6.000	<b>.</b>	A		
13521kHz 1100z	16/09	Fair	3m07s XWPQRM2	PLdn PL dn	SAT
13421kHz 1110z 12221kHz 1120z	16/09 16/09	Fair Fair	3m07s 3m07s	PLdn PLdn	SAT SAT
11521kHz 1130z	16/09	Weak	3m07s	PLdn	SAT
11021kHz 1140z	16/09	Weak	3m07s	PLdn	SAT
10521kHz 1150z	16/09	Weak	3m07s	PLdn	SAT
		~			
13521kHz 1100z	20/09	Strong	4m28s	PLdn	WED
13421kHz 1110z 12221kHz 1120z	20/09 20/09	Strong Strong	4m28s 4m28s	PLdn PLdn	WED WED
11521kHz 1120z	20/09	Weak	4m28s	PLdn	WED
11021kHz 1140z	20/09	Weak	4m28s	PLdn	WED
10521kHz 1150z	20/09	Weak	4m28s	PLdn	WED
13521kHz 1100z	23/09	Strong	4m28s QRM2	PLdn	SAT
13421kHz 1110z	23/09	Strong	4m28s	PLdn PL-du	SAT
12221kHz 1120z 11521kHz 1130z	23/09 23/09	Weak Weak	4m28s 4m28s	PLdn PLdn	SAT SAT
11021kHz 1140z	23/09	Weak	4m28s	PLdn	SAT
10521kHz 1150z	23/09	Weak	4m28s	PLdn	SAT
13521kHz 1100z	27/09	Strong	4m28s	PLdn	WED
13421kHz 1110z	27/09	Strong	4m28s	PLdn PL-du	WED
12221kHz 1120z 11521kHz 1130z	27/09 27/09	Strong Weak	4m28s 4m28s	PLdn PLdn	WED WED
11021kHz 1140z	27/09	Weak	4m28s	PLdn	WED
10521kHz 1150z	27/09	NRH	111203	PLdn	WED
13521kHz 1100z	30/09	Fair	4m28s	PLdn	SAT
13421kHz 1110z	30/09	Fair	4m28s	PLdn	SAT
12221kHz 1120z	30/09	Fair Week	4m28s 4m28s	PLdn PL dn	SAT
11521kHz 1130z 11021kHz 1140z	30/09 30/09	Weak Weak	4m28s 4m28s	PLdn PLdn	SAT SAT
10521kHz 1150z	30/09	Weak	4m28s	PLdn	SAT
October 2023					
16245kHz 1100z	04/10	Weak	4m28s	PLdn	WED
15825kHz 1110z	04/10	Weak	4m28s QRM3	PLdn	WED
14925kHz 1120z	04/10	Strong	4m28s	PLdn	WED
13525kHz 1130z	04/10	Strong	4m28s QRM2	PLdn	WED
12125kHz 1140z	04/10	Strong	4m28s	PLdn	WED
11425kHz 1150z	04/10	Weak	4m28s	PLdn	WED
NO MONITORINO	BETWEE	N 05/10 to	15/10 INCLUSIVE		
16245kHz 1100z	18/10	Strong	4m28s	PLdn	WED
15825kHz 1110z	18/10	Strong	4m28s QRM3	PLdn	WED
14925kHz 1120z	18/10	Fair	4m28s 4m28s	PLdn PL dn	WED
13525kHz 1130z 12125kHz 1140z	18/10 18/10	Fair Fair	4m28s 4m28s	PLdn PLdn	WED WED
11425kHz 1150z	18/10	Fair	4m28s	PLdn	WED
16245kHz 1100z	21/10		Not monitored	PLdn	SAT
15825kHz 1110z	21/10		Not monitored	PLdn	SAT
15825kHz 1110z 14925kHz 1120z	21/10 21/10		Not monitored Not monitored	PLdn PLdn	SAT SAT
15825kHz 1110z 14925kHz 1120z 13525kHz 1130z	21/10 21/10 21/10		Not monitored Not monitored Not monitored	PLdn PLdn PLdn	SAT SAT SAT
15825kHz 1110z 14925kHz 1120z 13525kHz 1130z 12125kHz 1140z	21/10 21/10 21/10 21/10		Not monitored Not monitored Not monitored Not monitored	PLdn PLdn PLdn PLdn	SAT SAT SAT SAT
15825kHz 1110z 14925kHz 1120z 13525kHz 1130z	21/10 21/10 21/10		Not monitored Not monitored Not monitored	PLdn PLdn PLdn	SAT SAT SAT
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15825kHz 1110z 14925kHz 1120z 13525kHz 1130z 12125kHz 1140z 11425kHz 1150z 16245kHz 1100z 15825kHz 1110z 14925kHz 1120z 13525kHz 1130z	21/10 21/10 21/10 21/10 21/10 25/10 25/10 25/10 25/10	Strong Strong Strong	Not monitored Not monitored Not monitored Not monitored 4m28s 4m28s 4m28s 4m28s 4m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	SAT SAT SAT SAT SAT WED WED WED WED
15825kHz 1110z 14925kHz 1120z 13525kHz 1130z 12125kHz 1140z 11425kHz 1150z 16245kHz 1100z 15825kHz 1110z 14925kHz 1120z	21/10 21/10 21/10 21/10 21/10 25/10 25/10 25/10	Strong Strong	Not monitored Not monitored Not monitored Not monitored 4m28s 4m28s 4m28s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	SAT SAT SAT SAT SAT WED WED WED

16245	28-10-2023 1100 XPB1	MFSK-16
15825	28-10-2023 1110 XPB1	MFSK-16
14925	28-10-2023 1120 XPB1	MFSK-16
13525	28-10-2023 1130 XPB1	MFSK-16
12125	28-10-2023 1140 XPB1	MFSK-16
11425	28-10-2023 1150 XPB1	MFSK-16

Additional September schedule [fm Ary]

 20017
 01-09-2023
 1300
 XPB1

 19317
 01-09-2023
 1310
 XPB1

 18037
 01-09-2023
 1320
 XPB1

 17417
 01-09-2023
 1330
 XPB1

 16217
 01-09-2023
 1340
 XPB1

 15817
 01-09-2023
 1350
 XPB1

Additional September schedule [fm H-FD]

Tue 05.09.2023 0500Z 13435 MFSK-16 1:42 Tue 05.09.2023 0510Z 13935 MFSK-16 y0/20 Tue 05.09.2023 0520Z 14435 MFSK-16 Tue 05.09.2023 0530Z 14835 MFSK-16 Tue 05.09.2023 0540Z 15935 MFSK-16 Tue 05.09.2023 0550Z 16225 MFSK-16

Tue 12.09.2023 1300Z 20017 MFSK-16 1:42 Tue 12.09.2023 1310Z 19317 MFSK-16 Tue 12.09.2023 1320Z 18037 MFSK-16 Tue 12.09.2024 1330Z 17417 MFSK-16 Tue 12.09.2023 1340Z 16217 MFSK-16 Tue 12.09.2023 1350Z 15817 MFSK-16

#### Other XPB1 [Ary]

15864 kHz, 13-10, 1600 UTC XPB1 14381 kHz, 13-10, 1610 UTC 13965 kHz, 13-10, 1620 UTC 13381 kHz, 13-10, 1630 UTC 12157 kHz, 13-10, 1640 UTC 11572 kHz, 13-10, 1650 UTC 19079 kHz, 13-10, 1000 KHz 18697 kHz, 13-10, 1010 KHz 17459 kHz, 13-10, 1020 KHz 16301 kHz, 13-10, 1030 KHz 15825 kHz, 13-10, 1040 KHz 14538 kHz, 13-10, 1050 KHz 19117 kHz, 13-10, 1200 KHz 18197 kHz, 13-10, 1210 KHz 17463 kHz, 13-10, 1220 KHz 16083 kHz, 13-10, 1230 KHz 15875 kHz, 13-10, 1240 KHz 14463 kHz, 13-10, 1250 KHz 17436 14-10-2023 0600 XPB1 18582 14-10-2023 0610 XPB1 19084 14-10-2023 0620 XPB1 *?????* 14-10-2023 0630 XPB1 20381 14-10-2023 0640 XPB1 ~20978 14-10-2023 0650 XPB1 19079 14-10-2023 1000 XPB1 18697 14-10-2023 1010 XPB1 17459 14-10-2023 1020 XPB1 16301 14-10-2023 1030 XPB1 15825 14-10-2023 1040 XPB1

 14538
 14-10-2023
 1050
 XPB1

 19117
 13-10-2023
 1200
 XPB1

 18197
 13-10-2023
 1210
 XPB1

 17463
 13-10-2023
 1220
 XPB1

 16083
 13-10-2023
 1230
 XPB1

 15875
 13-10-2023
 1240
 XPB1

 14463
 13-10-2023
 1240
 XPB1

Additional October schedule [fm H-FD]

Tue 10.10.2023 1300Z 20075 MFSK-16 4:30 Tue 10.10.2023 1310Z 19575 MFSK-16 Tue 10.10.2023 1320Z 18175 MFSK-16 Tue 10.10.2023 1330Z 17475 MFSK-16 Tue 10.10.2023 1340Z 16275 MFSK-16 Tue 10.10.2023 1350Z 14975 MFSK-16

Ary also caught the 1100/1200z Mon/Wed/Sat schedules missed by PLdn due to Lightning

20271	28-10-2023 1100 XPB1	MFSK-16
19606	28-10-2023 1110 XPB1	MFSK-16
18334	28-10-2023 1120 XPB1	MFSK-16
17462	28-10-2023 1130 XPB1	MFSK-16
16349	28-10-2023 1140 XPB1	MFSK-16
15809	28-10-2023 1150 XPB1	MFSK-16
20351	28-10-2023 1300 XPB1	MFSK-16
19484	28-10-2023 1310 XPB1	MFSK-16
18241	28-10-2023 1320 XPB1	MFSK-16
17476	28-10-2023 1330 XPB1	MFSK-16
16346	28-10-2023 1340 XPB1	MFSK-16
15848	28-10-2023 1350 XPB1	MFSK-16
18358	28-10-2023 1500 XPB1	MFSK-16
17461	28-10-2023 1510 XPB1	MFSK-16
16273	28-10-2023 1520 XPB1	MFSK-16
15848	28-10-2023 1530 XPB1	MFSK-16
14373	28-10-2023 1540 XPB1	MFSK-16
13882	28-10-2023 1550 XPB1	MFSK-16
16341	28-10-2023 1700 XPB1	MFSK-16
15845	28-10-2023 1710 XPB1	MFSK-16
14981	28-10-2023 1720 XPB1	MFSK-16
14382	28-10-2023 1730 XPB1	MFSK-16
13893	28-10-2023 1740 XPB1	MFSK-16
12165	28-10-2023 1750 XPB1	MFSK-16

19079	14-10-2023 1000 XPB1
18697	14-10-2023 1010 XPB1
17459	14-10-2023 1020 XPB1
16301	14-10-2023 1030 XPB1
15825	14-10-2023 1040 XPB1
14538	14-10-2023 1050 XPB1
15864	14-10-2023 1600 XPB1
14381	14-10-2023 1610 XPB1
13965	14-10-2023 1620 XPB1
13381	14-10-2023 1630 XPB1
12157	14-10-2023 1640 XPB1
11573	14-10-2023 1650 XPB1
18582 19084 ????? 20381	15-10-2023 0600 XPB1 15-10-2023 0610 XPB1 15-10-2023 0620 XPB1 15-10-2023 0630 XPB1 15-10-2023 0640 XPB1 3 15-10-2023 0650 XPB1
18697 17459 16301 15825	15-10-2023 1000 XPB1 15-10-2023 1010 XPB1 15-10-2023 1020 XPB1 15-10-2023 1030 XPB1 15-10-2023 1040 XPB1 15-10-2023 1050 XPB1
18197 17463 16083 15875	15-10-2023 1200 XPB1 15-10-2023 1210 XPB1 15-10-2023 1220 XPB1 15-10-2023 1230 XPB1 15-10-2023 1240 XPB1 15-10-2023 1250 XPB1
18233 17435 16069 15863	15-10-2023 1400 XPB1 15-10-2023 1410 XPB1 15-10-2023 1420 XPB1 15-10-2023 1430 XPB1 15-10-2023 1440 XPB1 15-10-2023 1450 XPB1
14381 13965 13381 12157	15-10-2023 1600 XPB1 15-10-2023 1610 XPB1 15-10-2023 1620 XPB1 15-10-2023 1630 XPB1 15-10-2023 1640 XPB1 15-10-2023 1650 XPB1
19079	14-10-2023 1000 XPB1
18697	14-10-2023 1010 XPB1
17459	14-10-2023 1020 XPB1
16301	14-10-2023 1030 XPB1
15825	14-10-2023 1040 XPB1
14538	14-10-2023 1050 XPB1
15864	14-10-2023 1600 XPB1
14381	14-10-2023 1610 XPB1
13965	14-10-2023 1620 XPB1
13381	14-10-2023 1630 XPB1
12157	14-10-2023 1640 XPB1
11573	14-10-2023 1650 XPB1

## HM01/SK01 Hybrid

Splendid set of HM01 logs from Peter. Yours truly was visiting family in Lessborough near Tampa US. I was going to take my little Sony [ICF-SW100E and reel antenna] but my wife stated 'me or the radio.' I was tempted but wouldn't chance my luck. [I really had decided not to take a radio at all, but the joke had to be made].

The Tuesday, Thursday and Saturday schedules continued to be heard in early September although nowhere near as strong as in the summer months, presumably due to seasonal changes in propagation with nominal start times of around 0555 to 0559 on 14375 kHz - that's 0559 and not 0659 as I typed in error last time, getting my UTC mixed up with BST, soon not to be an issue when the clocks change on the last Sunday in October, and around 0655 UTC or after on 13435. Both became weaker signals as the month of September progressed.

5-Sept-23, Tuesday:- 0557 UTC, 6.57 AM BST, 14375 kHz, weak signal, difficult copy, was stronger later on:-0627 UTC, starting up after the break, "27885 01451 65701 55188 10601 55479", data sounds after 0629.

0657 UTC, 13435 kHz, starting up routine in progress when tuned in, data sounds at 0659:50s approx, good signal apart from annoying occasional deep fading.

7-Sept-23, Thursday:- 0616 UTC, 14375 kHz, transmission in progress, weak signal, nothing was heard when checked at 0557z, probably started late. Was stronger later:-

0632 UTC, in preamble mode, "27887 01452 65703 03611 10602 81071", data sound around 0635z.

0658 UTC, 13435 kHz, appeared to have already started with data and 5Fs, went into start-up routine at 0701:40s UTC, data sound at 0705z approx, reasonable signal apart from the deep fading down and up, became much weaker around 0710z.

9-Sept-23, Saturday:- 0559 UTC, 14375 kHz, weak signal, some strong CW Morse on the same frequency, HM01 stronger half an hour later:-0629 UTC, back after the break, "27889 01454 65705 03613 10604 81073", data at 0632:30s UTC 0657 UTC, 14375 kHz, still on this frequency and not the expected 13435, went into preamble mode at approx 0659 UTC. Weak signal, data sound at 0702:30s approx. Vanished just before 0705z.

0707 UTC, 13435 kHz, very weak signal, difficult copy but appeared to be starting up again, data sounds heard at 0710:35s UTC.

Nothing heard of HM01 at the expected times on Tuesday the 12<sup>th</sup>.

Nothing heard on Thursday 14- Sept after 0557z on 14375, strong CW heard at 0609z for a few seconds. Nothing heard after 0657z on 13435.

16-Sept-23, Saturday:- 0557 UTC, 14375 kHz:- very weak signal of some kind way down in the noise, unreadable. Was still on this frequency when checked over an hour later:-

0703 UTC, weak signal, difficult copy in preamble/call mode, sounded like "40232 31686 64667 67765" were in there somewhere, but all "query".

Nothing readable heard on any Tuesday, Thursday or Saturday for the remainder of September, very weak carrier sometimes detected, monitoring at the expected start time until ten minutes or so past the hour and sometimes a quick listen on the half-hour or just before. Strong CW continued to be heard from time to time on 14375, slight AC ripple on the keyed carrier, finishes with a "K" so presumably in QSO with one or more stations replying on another frequency.

3-Oct-23, Tuesday:- 0640 UTC, 14375 kHz, transmission in progress, good signal apart from deep frequent deep rapid fading up and down, best copy from HM01 for a while, heard 5Fs "28552 44241 08483 31385 00525 12674". Went into preamble/call mode at 0650z, data sounds at 0654 approx. Stayed on 14375, vanished suddenly after 0707 UTC. 0709 UTC, 13435 kHz, now on this frequency, much weaker than when on 14375.

5-Oct-23, Thursday:- 0735 UTC, 13435 kHz, weak signal, strong FSK signal on close frequency, only one 5F copied, "00527", nothing heard earlier on 14375.

7-Oct-23, Saturday:- Nothing heard on 14375 when checked at 0557 UTC but was on this frequency later:-0701 UTC, 14375 kHz, not 13435, weak, difficult copy, sounded like "00527 20251 28556" were in there.

10-Oct-23, Tuesday:- Nothing heard at 0557 UTC and after on 14375 or at 0657 on 13435.

12-Oct-23, Thursday:- Nothing heard on 14375 when monitored from approx 0557 to 0605 UTC but was heard later on:-0614 UTC, in preamble mode, not at all strong and becoming weaker, sounded like, "88701 44742 01344 65644 20255 58141".

Nothing heard in the remainder of October, either due to propagation issues or HM01 is taking some time off.

Excellent, thanks Peter.

## X06 Mazielka (1c) logs section

Hello all interested in the X06 and other news,

As promised in the last issue, here is a small report about current events in the German media, followed by the usual X06 report.

Podcast about the Russian numbers and tone stations

On Friday, October 6, 2 German journalists visited me here in Marburg for an interview and listening to special Russian stations. The background was a report about the story of the « Anschlag » couple in 2011 (see EN67 ff.). They wanted to listen to the station, which was allegedly heard by « Heidrun Anschlag » : XPA1. On Friday we could only find the X06b intro (with a kind of « echo-double-sound ») and a 0-message of XPA1, but 2 weeks later I could record the message on 11464 kHz. This one I sent them on cassette.

This was made for a common podcast of the West German and North German Radio (WDR and NDR), which will appear in early 2024. If I know the exact date of this German transmission, I will give it to you, together with the link. Of course, I mentioned ENIGMA2000 during the interview. But in this podcast you will also find statements of former neighburs of the « Anschlag » couple in Marburg; so it sounds very amazing and worth to listen to the podcast.

And here is the X06 report :

X06 Mazielka (1c) logs section

```
Day UTC
                      Freq Scale Monitor
                                                  Comments
Date
                      14462 1--6-- tiNG
20230902 Sat 1051
                                                  X06b before XPB1
20230905 Tue 0830-0835 13411 165423 Andrew/SE
                                                  TX to Brussels, G12
20230905 Tue 0831-0837 13401 154263 Andrew
                                                  TX to Rome, G7
20230905 Tue 1152-1156 18523 325614 Andrew, Ary/NL TX to Nairobi, G392
20230906 Wed 1107-1113 16115 215346 Andrew
                                                  Alert2 (TX to Mumbai, G25) 1
20230906 Wed 1113-1114 13979 215346 Andrew
                                                  2.2
```

20230907Thu 0929-093818197645321AndrewTX to Ho Chi Minh City, G410(1)20230910Sun 1055-105711067145632AndrewTX to Algiers, G13520230911Mon 0824-082917475156234AndrewTX to Kampala, G6820230911Mon 0931-094816117463125Dave/AUTX to Rabat, G7720230912Tue 0756-075713420S34216AndrewTX to Bagdad, G8720230912Tue 0080-081317523542136AndrewTX to Sahgabat, G8920230912Tue 1008-101020813216354AndrewTX to Sahgabat, G8920230913Wed 0804-080710172465132AndrewTX to Sahgabat, G8920230913Wed 0804-080710172465132AndrewTX to Addis Abbaba, faint, G39520230914Thu 0820-082314550153624AndrewTX to Brussels, G15120230919Tue 0801-080411462165423AndrewTX to Brussels, G15120230919Tue 0801-080414405256341AndrewTX to Beirut, G16920230920Wed 0628-063014405256341AndrewTX to Abu Dhabi, G43420230921Tue 0736-081019511314265Andrew1X to Abu Dhabi, G43420230921Thu 0812-085819511314265Andrew1X to Abu Dhabi, G43420230921Thu 0825-085819511314265Andrew1X to Algiers, G28420230921Tue 033-134020627436512DaveTX t 20230927 Wed 0844-0901 12423 6--132 Anon60782, Dave X06b 20230927 Wed 0902-0906 18245 134265 Anon60782, Dave TX to Tunis, G90 20230927 Wed 0902-0906 18245 134265 Anon60782, Dave TX to Tunis, G9020230928 Thu 0810-0814 16153 153624 AndrewTX to Damascus, G24920231002 Mon 0715-0719 12122 165324 DaveTX to Vienna, G120231002 Mon 0744-0748 14377 432516 AndrewTX to Bern, G620231002 Mon 0814-0820 11438 532614 DaveTX to Paris, G420231002 Mon 0925-0932 20675 641523 AndrewTX to Lusaka, G520231003 Tue 075113524 125643 AndrewShort TX to Ulanbatar, G31720231003 Tue 0833-0840 13401 154263 AndrewTX to Rome, G7 20231004 Wed 1106-1122 16115 215346 Anon60795, Dave TX to Mumbai, G25 20231004 Wed 1229-1237 19878 231654 Anon36989, Dave TX to Abuja, G422 20231004 Wed 1229-123719878231654 Anon36989, DaveTX to Abuja, G42220231005 Thu 0753-080018575352416 Ary, AndrewTX to Dar es Salaam, G4320231006 Fri 1110-111511464 1--6-KopfX06b before XPA1(3)20231009 Mon 083317475156234 DaveTX to Cairo, G13820231009 Mon 0942-094616117463125 DaveTX to Rabat, G7720231009 Mon 1235-123914683364152 AndrewTX to Rabat, G7720231010 Tue 0806-080813420534216 DaveTX to Bagdad, G8720231010 Tue 0802-082117523542136 DaveTX to Seijing, G8820231010 Tue 0820-08211752354214 DaveTX to Sofia, G10020231011 Wed 0820-082113419465132 DaveTX to Sofia, G10020231017 Tue 0751-075414615125643 AndrewTX to Vanbatar, G38320231017 Tue 0751-075414615125643 AndrewTX to Rome, G14820231018 Wed 1104-111416115215346 AndrewAlert2 (TX to Mumbai, G167) 120231019 Thu 0723-073321825314265 Andrew2.220231019 Thu 0740-074319511314265 AndrewTX to Tal Aviv, G19320231020 Fri 1024-102912194625413 AndrewTX to Rabat, G2220231021 Fri 1024-102912194625413 AndrewTX to Rabat, G2220231022 Sun 1141-114316060261453 AndrewTX to Rabat, G22220231024 Tue 0815-082011545534216 Ary, AndrewTX to Rabat, G22220231024 Tue 0815-082011545534216 Ary, AndrewTX to Cairo, 20231005 Thu 0753-0800 18575 352416 Ary, AndrewTX to Dar es Salaam, G4320231006 Fri 1110-1115 11464 1--6-- KopfX06b before XPA1(3) 

 20231024
 Tue 1144-1200 18260 123456
 Ary
 X06c

 20231025
 Wed 0724-0736 20950 435621
 Ary, Andrew
 TX to Maputo, G244

 20231025
 Wed 0739-0741 13369 154263
 Ary, Andrew
 TX to Rome, R (mistake)

 20231025
 Wed 0743-0744 13369 412356
 Ary, Andrew
 TX to Budapest, G243

 20231025
 Wed 0803-0806 10172 465132
 Ary, Andrew
 TX to Sofia, G246(6)

 20231025
 Wed 0900-0901 18245 134265
 Andrew
 TX to Tunis, G90

 20231026
 Thu 0825-0828 16153 153624
 Andrew, RX39
 TX to Damascus, G249

 TX to Abidjan, G270 20231027 Fri 1008-1017 17463 256134 Andrew

1) 0941-0944 UTC: MFSK66

2) Very long, missed exact end time

3) With echo-double-sound

4) 0726 UTC: serdo selcal (21824 kHz)

5) 0721-0722 UTC: MFSK-66

6) At 0804 UTC: same scale on 10170 kHz, weaker than this one ("ghost" or "mirror" signal) Many thanks as usual to all contributors to the logs' section. Till next issue I say as usual: Good-bye, and please stay healthy and safe. Jochen Schäfer, Numbers-, X06 Database and Teamkopf

# \*Thank you to all our contributors\* <u>Give us a Job!</u>



Image of Plaque erected at site of the 'Bridge over the River Kwae' where allied prisoners of war were used as slave labour by Imperial Japanese



Plaque erected by the Kanchanaburi Municipality of Thailand in Remembrance of those souls who perished and whose remains are interred in the War Graves nearby

# Chart Section Index

**Predictions** 

**M01 Schedule** 

**Family III** 

Polytones, XPA1, XPA2

En139 November 2023

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Nov	Dec
Ŭ	Ē	М€	Ţ	Бц	ŝ	S	010	21.00	Den	1 am	kHz, ID,	kHz, ID,
Х	Х	Х	Х	х			0000		F01	01A	17471	17471
х				x			0010/0030/0050		M12	01B	16275/15975/14675 296	14947/13447/12147 941
Х				х			0025/0035		F01	01A	12101/ 9215	10884/ 8157
	х			x			0030/0050/0110		M12	01B	6874/ 8074/ 9374 803	6832/ 7532/ 8132 851
Х				x			0125/0135		F01	01A	12101/ 9215	10884/ 8157
X	x	x	x	x	х	x	0200		v13	0	13750	13750
							0200/0220/0240		V07	01B	search	search
x	x						0210/0310 tue, when msg		E06	01A	10673/14398 537	9382/13426 537
			x	x			0300/0400		E06	01A	16163/13863 361	14654/12177 361
х	Х	x	Х	х	х	x	0300		V13	0	11430	13750
										Ŭ		14354/12154/11154
	х		х				0300/0320/0340		M12	01B	174	311
х		х					0315		E11	03	x9052 25# <b>search</b>	x9052 25#
					.,		0400		V13	0	11430	11430
Х	Х	Х	Х	Х	Х	X	0400		V13	0	11430	11616/ 9322
х	х	х	х	х			0400/0420		S06	01A	480	480
	x		x				0445		S11A	03	11559	11559
	25		25				0110		01111	00	79#	79#
х							0450		E11	03	4909 41#	4909 41#
x	-	X	-	x		77	0455		HM01	18	10860	10860
~	Х	Λ	х	Λ	х	Λ	0455		HM01	18	11462	11462
X	X	x	X	х	X	v	0500		V13	0	11430	15388
									*10	Ŭ	12211/10243	12211/10243
Х	х	х	х	х			0500/0520		M14	01A	952	952
	х		х				0505		E11	03	12153 33#	12153 33#
											x9057	x9057
Х		х					0510		S11A	03	65# <b>, search</b>	65#
	x			x			0530		M01A	14	9441	9441
	Λ			Δ			0000		110 171		751	751
		х	х				0530		M01A	14	9129 or 9192 498	9129 or 9192 498
							0540		M01A	1 /	7692	7692
L		Х	Х				0.540		MIOTA	14	536	536
Х		х		х		Х	0555		HM01	18	10345	10345
	Х		Х		Х		0555		HM01	18	14375	14375
				x		x	0600		E11	03	7850 35#	7850 35#
Х	х	х	х	х	х	x	0600		V13	0	11430	15388
x	х						0600/0610/0620		XPB1	01B		12118/13418/13918
	x		х				0630/0640/0650 0600/0620/0640		XPA2	01B	15846/16146/17446 11162/12162/13962	14418/14918/15918 9281/10481/11481
	Δ	x	Δ		x		0600/0620/0640		M12	01B	search	search
			x	x			0600/0700	1/3	E06	01B	18285/20140 507	14575/17420 923
	x			x			0620		M01A	14	10233 or 10235	10233 or 10235
											354/458	354/458

Ц	Ð	g	'n	- <u>н</u>	Ļ	Ц			~	_	Nov	Dec
Mon	Tue	Wed	Thu	Εri	Sat	Sun	UTC	wk	Stn	Fam	kHz, ID,	kHz, ID,
1											9421	9421
		Х	Х				0620		M01A	14	135	135
											9447	9447
	х			Х			0630		M01A	14	143/796	143/796
											8111	8111
		Х	Х				0630		M01A	14	902/536	902/536
											7840	7840
	х		Х				0645		E11	03	51#	51#
х		x		x		x	0655		HM01	18	9330	9330
	х		х		х		0655		HM01	18	13435	13435
											9050	9050
х			Х				0700		S11A	03	47#	47#
											6804	6804
	х			Х			0700		E11	03	57#	57#
											5371	5371
					х	х	0700		E11	03	49#	49#
x	х	x	х	х	x	x	0700		V13	0	15250	18040
											5465	5465
						х	0700		M01	01B	197	197
											10268/11068/12168	9326/10426/11526
						х	0700/0720/0740		E07	01B	201	345
-			-	-							10651	10651
	х			Х			0710		M01A	14	297/358	297/358
											9175	9175
		х	Х				0710		M01A	14	146/208	146/208
											11104	11104
х		х					0715		E11	03	75#	75#
											9130	9130
	х			х			0715		E11	03	63#	63#
											9151	9151
	х			х			0720		M01A	14	728	728
		х		Х			0725		S11A	03	search	search
											10213	10213
Х							0745		E11	03	26#	26#
											13908	13908
	х		х				0745		E11	03	22#	22#
											17378	17378
		х		Х			0745		E11	03	34#	34#
х		х		Х		х	0755		HM01	18	9065	9065
	х		Х		х		0755		HM01	18	11365	11365
х	х	х	Х	Х	х	х	0800		V13	0	15250	18040
										015		16234/17434/18234
		х				х	0800/0820/0840		M12	01B	451	242
		Х					0800/0820/0840		XPA2	01B		11493/13393/13993
										0.2	14611	14611
	х	х					0820		E11	03	13#	13#
							0000		<b>D</b> 11	0.2	x5149	x5149
			Х	Х			0820		E11	03	43#, <b>search</b>	43#
							0.020		<b>D</b> 11	0.2		
Х				Х			0830		E11	03	18# search	18#
							0000		011-	0.2	5371	5371
					х	х	0830		S11A	03	37#	37#
							0045		<b>D</b> 11	0.2	12067	12067
Х		х					0845		E11	03	71#	71#
L	·	ı	1	1	ı	1	1	1	1	1	1	

С	U	ъ	ŋ	·H	Ц	Ц					Nov	Dec
Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	kHz, ID,	kHz, ID,
											13046	17378
	х		Х				0845		E11	03	15#	15#
		х		х		х	0855		HM01	18	9240	9240
	х		Х		х		0855		HM01	18	11462	11462
x		х					0900		E11	03	11092	11092
Δ		~					0,000			0.5	53#	53#
				Х		Х	0900/0920/0940		XPA2	01B	16225/17425/19125	16347/18247/19547
		х					0900/1000		S06	01A	search	search
Х		х					0910/0930/0950		XPA2	01B	17413/15852/13363	13562/11583/10281
			Х		Х		0910/0930/0950		XPA2	01B	15985/14885/13885	13919/11519/10719
x				x			0915		S11A	03	6252	6252
23				23			0.910		01111	00	48#	48#
		x	х				0930		E11	03	7469	7469
			23							00	27#	27#
											17438 10.&25.	17438 10.&25.
Х	х	Х	Х	Х	Х	х	0930		M14	01A	15965 11.&26.	15965 11.&26.
											when msg	when msg
						x	0930/1000		E06	01A		9463/ 7377
										-		480
Х		Х		Х		Х	0955		HM01	18	9155	9155
	х		Х		Х		0955		HM01	18	12180	12180
	x			x			1000		E11	03	9079	9079
											30#	30#
	Х	Х	Х	Х	-		1015/1025/1035		F01	01A		12164/10336/ 8016
х		х					1045		E11	03	11100	11100
							1100/1110/1110				69#	69#
х					х		1100/1110/1110		XPB1	01B		14483/13983/13483 12183/11583/1098 <b>3</b>
							1130/1140/1150 1100/1120/1140		XPA2	01B		9265/ 8165/ 7665
	Х			Х			1100/1120/1140		XPAZ XPA2	01B 01B		11579/10979/10279
		Х	Х				1100/1120/1140		AFAZ	OIP		13386/12189/11491
			Х				1110/1130/1150		M12	01B	725	725
x	х	Х	Х	Х	х	v	1200		V13	0	9276,11430	7688
^	^	^	Δ	^	Λ	~	1200/1210/1210		VIJ	0		14978/13978/13378
		х			Х		1230/1240/1250		XPB1	01B		12178/11078/10278
	x					x	1200/1220/1240		XPA2	01B		10807/12207/13507
		x		x			1200/1220/1240		XPA2	01B		14841/16241/18241
											6433	6433
	х	х					1205		E11	03	46# <b>check</b>	46#
											4909	4909
х			Х				1300		E11	03	31#	31#
x	x	x	x	x	x	x	1300		V13	0	7688,11430	7688,11430
							1300/1310/1310				20021/19521/19421	20044/19344/18544
	х			Х			1330/1340/1350		XPB1	01B		17444/16244/14944
						-	T220/T240/T220				T / HZT/ T0321/ T3921	6792/ 5380
					х		1300/1330		E06	01A		480
						-					13875/13375/10875	13465/12165/10265
		Х		Х			1310/1330/1350		XPA1	01B	838	412
							1325/1425					
	х	х	Х				sporadic		S06	01A	search	search
									011-	0.0	6252	6252
	Х			Х			1400		S11A	03	42# <b>check</b>	42#
L	I	I		I		I	I	I	I	1		

Mon	Tue	Wed	Thu	Fri	Sat	gun	UTC	wk	Stn	Fam	Nov	Dec
X	-	Δ	x	Н	01	01	1400/1420/1440		M12	01B	16292/14892/14392	kHz, ID, 15909/14609/13909
					x		1400/1420/1440		E07	01B	283 10323/ 9123/ 8023 310	969 9326/10426/11526 345
			x		x		1410/1430/1450		E07	01B		10226/ 9226/ 8126 674
	x				х		1430		E11	03	13363 91#	13363 91#
					x		1500		M01	14	5810 197	5810 197
	x	x	x				1500/1600 sporadic		S06	01A	13397/ 9194 387	search
	x			x			1500/1520/1540		E07	01B		13539/12139/10239 512
			х				1530		E11	03	5409 26#	5409 26#
					x	x	1530		E11	03	4909 36#	4909 36#
х	х	х	Х	Х	х	х	1555		HM01	18	11435	11435
					Х		1600/1620/1640		XPA2	01B	8126/ 6826/ 5326	6984/ 5884/ 4784
	х		х				1600/1620/1640		XPA2	01B	10223/ 9223/ 8123	8184/ 7864/ 6784
	x					х	1605		E11	03	5432 23#	5432 23#
Х	х	х	Х	Х	х	х	1655		HM01	18	11530	11530
		x		х			1715		E11	03	5082 97#	5082 97#
			х				1730		E11	03	5779 41#	5779 41#
x						х	1745		E11	03	12924 24#	12924 24#
Х	х	Х	Х	Х	Х	Х	1755		HM01	18	11635	11635
	x		х				1800		M01	14	5320 197	5320 197
					х		1800/1820/1840		M12	01B	938	11435/10598/ 9227 938
				х		х	1815		E11	03	6849 92#	6849 92#
		x			x		1850		S11A	03	11486 28#	11486 28#
x			x				1900		E11	03	6849 64#	6849 64#
		х					1900/1920/1940		M12	01B	463	8047/ 6802/ 5788 463
				х			1900/2000	1/3	S06	01A	7812/ 5743 637	4505
		х			х		1910		E11	03	4505 39#	4505 39#
				х		х	1910		E11	03	10487 61#	10487 61#
	х			х			1940/1950/2000	1	F01	01A	8172/ 6791/ 4546	
	~		x	~		x	2000		E11	03	5082 52#	5082 52#
	x		х				2000		M01	14	4490 197	4490 197

Mon	Tue	Wed	Thu	гi	at	un	UTC	wk	Stn	Fam	Nov	Dec
ž	Ė	M	H	Гц	S	Ś	010		0 011	2 0.1.1	kHz, ID,	kHz, ID,
		x		x			2000/2020/2040		M12	01B	6917/ 5817/ 5117	6792/ 5892/ 5092
		~		^			2000/2020/2040		1112	UID	981	780
				x			2000/2100	1/3	S06	01A		7812/ 5743
				~			2000/2100	1/3	500	UIA		637
Х		х		Х		Х	2055		HM01	18	11635	11635
	х		х		х		2055		HM01	18	16180	16180
Х		х		Х		Х	2155		HM01	18	10715	10715
	Х		Х		Х		2155		HM01	18	17480	17480
				x			2200/2220/2240		M12	01B	6859/ 7459/ 9959	5832/ 6832/ 7732
				x	Х		2200/2220/2240		MILZ	UID	849	887
					х		2230/2240		F01	01A	20741/18702	18169/15765
							2300/2320/2340		M1 2	010	10446/ 9046/ 7946	9134/ 8134/ 7534
х			Х				2300/2320/2340		M12	01B	392	457
					Х		2330/2340		F01	01A	20741/18702	18169/15765

## M01 FREQUENCY LIST

## Frequencies may vary by a few kHz

JAN FEB NOV DEC	M01/1	197
DAY	TIME UTC	FREQ kHz
TUE / THU	1800	5320
TUE / THU	2000	4490
SAT	1500	5810
SUN	0700	5465

### MAR APRIL SEPT OCT M01/2 463

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

MAY JUNE JULY AUG

M01/3

025

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

Mon	Tue	Thu	Fri	Sat	UTC	wk Stn	Fam	Sep kHz, ID,	Oct kHz, ID,	Nov kHz, ID,	Dec kHz, ID,	Remarks
x	x	c .			0315	E11	03	<b>11581</b> 25#	11581 25#	<b>8456</b> 25#	8456 25#	since 01/14, last log 10/23
	x	x			0445	S11A	03	10728	10728	11559	11559	since 05/22, last log 10/23
					0450	E11	03	79# 5371	79# 5371	79# 4909	79# 4909	since 02/10, last log 10/23
^								41#	41#	41#	41#	2nd transmission Thu 1730z since 10/11, last log 02/23
	x	x			0505	E11	03	23004	23004	33# <b>21906</b>	33# 21906	Mar/Apr/Sep/Oct at 1230z, Mai-Aug at 1645z
x	x	2			0510	S11A	03	65#	65#	65#	65#	since 08/19, last log 10/23
			x	x	0600	E11	03	8680 35#	8680 35#	7850 35#	7850 35#	since 04/15, last log 10/23
	x	x			0645	E11	03	8423 51#	8423 51#	7840 51#	7840 51#	since 07/09, last log 10/23
x		x			0700	S11A	03	8597	8597	9050	9050	since 04/10, last log 10/23
_					0700		03	47# 8180	47# 8180	47# 6804	47# 6804	
	x		x			E11		57# 9079	57# 9079	57# 5371	57# 5371	since 01/12, last log 10/23
				хх	0700	E11	03	49#	49#	49#	49#	since 07/15, last log 10/23
x	x	2			0715	E11	03	15632 75#	15632 75#	11104 75#	11104 75#	since 06/21, last log 10/23
	x		х		0715	E11	03	9963 63#	9963 63#	9130 63#	9130 63#	since 02/11, last log 10/23
	x	c .	x		0725	S11A	03	21854	21854	23486	23486	since 05/14, last log 10/23
v					0745	E11	03	38# 10213	38# 10213	38# 10213	38# 10213	since 03/14, last log 10/23
	_	+	+	$\vdash$				26# 14865	26# 14865	26# 13908	26# 13908	2nd transmission Thu 1530z
	x	x			0745	E11	03	22# 17410	22# 17410	22# 17378	22# 17378	since 01/20, last log 10/23
	x	2	х		0745	E11	03	34#	34#	34#	34#	since 06/17, last log 10/23
	x x	2			0820	E11	03	19184 13#	19184 13#	14611 13#	14611 13#	since 12/18, last log 10/23
		x	x		0820	E11	03	<b>7670</b> 43#	7670 43#	x5149 43#, search	x5149 43#	since 10/09, last log 10/23
x			x		0830	E11	03	20170	20170			since 07/15, last log 10/23
				x x	0830	S11A	03	18# 6433	18#	18# search 5371	18# 5371	since 02/14, last log 10/23
				^ ^				37#, check 12202	37#	37# 12067	37#	
x	x	5			0845	E11	03	71#	71#	71#	71#	since 09/10, last log 10/23
	х	x			0845	E11	03	18168 15#	15#	15#	17378 15#	since 07/17, last log 10/23
x	x	2			0900	E11	03	9968 53#	9968 53#	11092 53#	11092 53#	since 10/05, last log 10/23
x			x		0915	S11A	03	6480 48#	6480 48#	6252 48#	6252 48#	since 04/19, last log 10/23
	x	x			0930	E11	03	6940	6940	7469	7469	since 02/14, last log 10/23
_	x		x		1000	E11	03	27# 9951	27# 9951	27# 9079	27# 9079	since 11/16, last log 10/23
_		_	^					30# 10200	30#	30# 11100	30# 11100	
x	x	\$			1045	E11	03	69#	69#	69#	69#	since 03/18, last log 10/23
	x x	c.			1205	E11	03	9399 46#	9399 46#	<b>11559</b> 46#	11559 46#	since 03/10, last log 10/23
	x	x			1230	E11	03	12530 33#	12530 33#			since 10/11, last log 10/23 May-Aug at 1645z, Nov-Feb at 0505z
x		x			1300	E11	03	5371 31#	5371 31#	4909 31#	4909 31#	since 07/14, last log 10/23
	x		×		1400	S11A	03	11420	11420	6252	6252	since 02/10, last log 10/23
_								42# 14972	42#	42# check 13363	42# 13363	
+	x	_	+	x	1430	E11	03	91# 10330	91# 10330	91# 5409	91# 5409	since 10/15, last log 10/23 since 06/14, last log 10/23
		x			1530	E11	03	26#	26#	26#	26#	2nd transmission Mon 0745z
				x x	1530	E11	03	4505 36#	4505 36#	4909 36#	4909 36#	since 03/14, last log 10/23
	x	Τ		x	1605	E11	03	5176 23#	5176 23#	5432 23#	5432 23#	since 11/15, last log 10/23
	x	x			1645	E11	03					since 10/11, last log 08/22
	x		x		1715	E11	03	6923	6923	5082	5082	Mar/Apr/Sep/Oct at 1230z, Nov-Feb at 0505z since 02/15, last log 10/23
+	Ĥ							97# 7864	97# 7864	97# 5779	97# 5779	since 03/10, last log 10/23
		x			1730	E11	03	41# 13470	41# 13470	41# 12924	41#	2nd transmission Mon 0450z
x				х	1745	E11	03	24#	24#	24#	24#	since 04/18, last log 10/23
			x	х	1815	E11	03	11116 92#	11116 92#	6849 92#	6849 92#	since 05/16, last log 10/23
	x	c .		x	1850	S11A	03	10213 28#	10213 28#	11486 28#	11486 28#	since 06/17, last log 10/23
x		x			1900	E11	03	7317	7317	6849	6849	since 05/16, last log 10/23
+	x		+	x	1910	E11	03	64# 4181	64# 4181	64# 4505	64# 4505	since 02/14, last log 10/23
+	×	-						39# 8530	39# 8530	39# 10487	39# 10487	
			x	x	1910	E11	03	61#	61#	61#	61#	since 04/17, last log 10/23
		x		x	2000	E11	03	5737 52#	5737 52#	5082 52#	5082 52#	since 05/15, last log 10/23

Zulu > Month v	<b>XPA1</b> H+10 H+ 1210 / 1310z	Wed/Fri Schedule 30 H+50					
Jan	14852	13952	11552				
Feb	14374	13374	11474				
Mar	14451	13451	12151				
Apr	13368	12168	11168				
May	13419	12219	11419				
June	13545	12145	11145				
July	13368	12168	11168				
Aug	13491	12191	10691				
Sept	12137	11137	10237				
Oct	14564	13564	11464				
Nov	13875	13375	10875				
Dec	13465	12165	10265				

## XPA1 Wednesday/Friday schedule

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

Zulu > Month v	XPA2 Schee Sunday/Tuesday H 00 H+20 1200 / 2100	d m H+40		XPA2 Sched p Monday/Wednesday H 00 H+20 H+40 0700 / 0800z						
Jan	10921	12221	13521	11493	13393	13993				
Feb	11163	13363	14563	13387	13887	14787				
Mar	13384	13984	14984	13931	14831	16131				
Apr	14442	15842	16342	11409	12209	13409				
May	13376	11576	10776	12148	13448	13948				
June	13427	12227	10827	12148	13448	13948				
July	13394	12194	10794	12148	13448	13948				
Aug	12159	11559	10559	12152	13552	13952				
Sept	13914	15814	16314	12152	13552	13952				
Oct	14469	16169	17469	13372	14672	15872				
Nov	14783	13883	12183	11529	13429	13929				
Dec	10807	12207	13507	11493	13393	13993				

#### SPECIAL MATTERS

Thanks to all our contributors:

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'E' Thanks for your continual support, pics in next issue A hearty Christmas and a good New Year for you and yours.

#### RELEVANT WEBSITES

ENIGMA 2000 Website:

Mystery Signals

Time zone information:

Encyclopedia of Espionage, Intelligence, and Security

http://www.enigma2000.org

http://www.mysterysignals.signalshed.com/

http://www.timeanddate.com/library/abbreviations/timezones/

http://www.espionageinfo.com/

		20	02	3				~					
January		Feb	rue	arv	,			So		are	rtex c h	12.c	om
	F Sa Su		W	Th	F	Sa	Su	м	Tu	W	Th	F	Sa
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8 9 10 11 12	13 14 5	6 7	8	9	10	11	5	6	7	8	9	10	11
15 16 17 18 19 2	20 21 12	13 14	15	16	17	18	12	13	14	15	16	17	18
22 23 24 25 26 2	27 28 19	20 21	22	23	24	25	19	20	21	22	23	24	25
29 30 31	26	27 28					26	27	28	29	30	31	
April		N	۸ay	,					J	un	e		
	F Sa Su	M Tu	W	r Th	F	Sa	Su	M	Tu	W	Th	F	Sa
	1	1 2	3	4	5	6					1	2	3
2 3 4 5 6	787	8 9	10	11	12	13	4	5	6	7	8	9	10
9 10 11 12 13	14 15 14	15 16	17	18	19	20	11	12	13	14	15	16	17
16 17 18 19 20 3	21 22 21	22 23	24	25	26	27	18	19	20	21	22	23	24
23 24 25 26 27 2	28 29 28	29 30	31				25	26	27	28	29	30	
30													
July		Au	Jgu	st				Se	≥pi	en	nb	er	
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	1	1	2	3	4	5						1	2
	786	7 8	9	10	11	12	3	4	5	6	7	8	9
	14 15 13	14 15	16	17	18	19	10	11	12	13	14	15	16
	21 22 20	21 22		24	25	26	17	18	19	20	21	22	23
	28 29 27	28 29	30	31			24	25	26	27	28	29	30
30 31													
October		Nov	em	be	₽r			D	ec	en	۱be	∍r	
Su M Tu V Th	F Sa Su	M Tu	W	Th	F	Sa	Su	М	Tu	W	Th	F	Sa
1 2 3 4 5	6 7		1	2	3	4						1	2
	13 14 5	6 7	8	9	10	11	3	4	5	6	7	8	9
	20 21 12	13 14	15	16	17	18	10	11	12	13	14	15	16
	27 28 19	20 21		23	24	25	17	18	19	20	21	22	23
29 30 31	26	27 28	29	30			24	25	26	27	28	29	30
							31						44

# 2024

January								Fe	bru	ary		March								
s	М	Т	W	T	E.	S	S	M	T	W	T	F	S	S	М	Т	W	Т	F	S
	1	2	3	4	5	6					1	2	3						1	2
7	8	9	10	11	12	13	4	5	6	7	8	9	10	3	4	5	6	7	8	9
14	15	16	17	18	19	20	11	12	13	14	15	16	17	10	11	12	13	14	15	16
21	22	23	24	25	26	27	18	19	20	21	22	23	24	17	18	19	20	21	22	23
28	29	30	31				25	26	27	28	29			24	25	26	27	28	29	30
														31						
		,	Apri	1		1				May	/						Jun	e		
S	М	Т	W	т	F	S	S	M	Т	W	т	F	S	S	М	T	W	т	F	S
	1	2	3	4	5	6				1	2	3	4							1
7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	23
28	29	30				1000	26	27	28	29	30	31		23	24	25	26	27	28	29
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s	М	Т	W	Т	F	S	S	M	Т	W	T	F	S	S	М	Т	W	Т	F	S
	1	2	3	4	5	6					1	2	3	1	2	3	4	5	6	7
7	8	9	10	11	12	13	4	5	6	7	8	9	10	8	9	10	11	12	13	14
14	15	16	17	18	19	20	11	12	13	14	15	16	17	15	16	17	18	19	20	21
21	22	23	24	25	26	27	18	19	20	21	22	23	24	22	23	24	25	26	27	28
28	29	30	31				25	26	27	28	29	30	31	29	30					
		0	tot	her		-			No	/em	be					De	em	ber		
S	M	Т	w	Т	F	S	S	M	Т	W	T	F	S	S	M	T	W	Т	F	S
~		1	2	3	4	5	9	100	101	100		1	2	1	2	3	4	5	6	7
6	7	8	9	10	11	12	3	4	5	6	7	8	9	8	9	10	11	12	13	14
13	14	15	16	17	18	19	10	11	12	13	14	15	16	15	16	17	18	19	20	21
20	21	22	23	24		26	17	18	19	20	21	22	23	22	23	24		-	27	28
27	28		- 77	100		20	24	25		27	28	122	30	29		31				
41	40	23	30	91			24	20	40	41	28	23	00	29	30	01				

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