# ENIGMA 2000 NEWSLETTER



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 $\ensuremath{\mathbb{C}}$  Remains with donating member

# Russian Embassy Roof Budapest 2023

# ISSUE 148 May 2025

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# <u>Editorial</u>

A quick thank you to those who are taking up the slack on Family three stations; certainly a good experience in message interception and a good format. Using only radio for this I find the Polish language transmission S11a to be much weaker that some of the E11/E11a transmissions although some of the HF propagation conditions have not helped here with frequencies below 11MHz being particularly hit. RNGB, in compiling the Fam 3 column thanked all those involve for their input, which has done us proud.

Lots of Null messages via the monitored Polytone stations too; hopefully not a bad sign. XPA2 Tu/F has images to illustrate how the weak signals are affected as well as a trip down memory lane

Those of the Group who were members of the original ENIGMA Group run by Chris Midgely and Mike Gaufman will be heartened to see Ringway Manchester's latest release on : <u>https://www.youtube.com/watch?v=d1s5g2Nh2c0</u>



I certainly remember the broadcast and of course the BBC's One Show did one more than a few years back that involved myself and my very good friend and E2k member, the late Peter Matthews, plus an appearance by Akim Fernandez. [*Thanks to Daniel in the Argentine for placing the URL to Group*].

Whilst putting this Newsletter together I attended a function at a London University concerning Intelligence matters; an interesting event there were many known authors, *intel personae* and students of Intel *per sae*.

One of the subject matters brought up was the events happening – usually attributed to Russia – damaging of undersea gas pipes and communication cables, fires in factories apparently supporting Ukraine, the odd Ikea shopping mall burning down. 'Wonder what the next one will be?' was the utterance from a person from a friendly embassy I was talking to asked.

The very next day a substation serving Heathrow Airport goes bang! Shuts the airport and denies 16000 home of electricity. One particular screen interview had me giggling – woman asked what happened says '....we have no services, no electricity. What's worse no one bothered to knock to help.' [Is this is what Britain has become, a nation of whiners, unable to eat a can of beams cold and wash in cold water? God help us if this bint is the norm]!

To make any real comment on this matter is beyond these pages; we've seen and heard the usual political waffle from David Miliband and better from those who tackled the event but for an insight I suggest you read Andrei Soldatov and Irina Borogan offering in Foreign Affairs noted here under 'Russia,'

Whilst at this event I spoke with someone concerning communictions and I mentioned that since the Ukraine invasion there had been a cut in Russian transmissions; that is was possible due to certain persons work complete, or more likely use of some other system, be it BGAN, Satphone, possibly internet. The suggestion was Telegram Messaging. Developed by two very canny Russians it relies only on a peculiar identity, given to it by the user, and heavy encryption end to end.

Imagine a further message, perhaps in Number Station format being transmitted, Where does it go, who to and then the decrypts. Ouch! If that wasn't bad enough we have this BBC News report:

#### https://www.bbc.co.uk/news/articles/c627685p21eo

Another 'worth a read' is the account from the Daily Telegraph concerning the loss of BBC World Radio. When I travelled I took a SW radio with me for BBC World Service.

In Guyana 2001 I was alerted to the 'Ducks in a Row' drink bottle bomb plot that stopped all cross Atlantic flights. Once informed I relied on BBC WS for good information. The same in NZ 2005/2008, Thailand 2015/2016/2017, Sri Lanka and Cyprus as well as my trips into the EU. Even good service into the Yemen. Recently the programming has become pathetic. [*I've taken to listening to Radio China International: 17490kHz day and 7350kHz for more accurate*[?] news and good programming. Podcasts and Internet streams are not the same].

Gone are the days of Tirana, Moscow and Peking.

# **Recommended reading**

### https://threadreaderapp.com/thread/1900283972027904384.html

### Well worth a look!

### Take a look at this[highly recommended]:

For those of you with a penchant for Number Stations here is a URL that will lead you to Tony Leung's "The Silent War [Mandarin]'

https://www.youtube.com/watch?v=r4d27wqQX6

Here's a screen grab to whet your appetite.....there was better before, although the received Morse at the opening, not sent as a barred string, didn't need tax my brain for at all.

CONTROL 1426 CONTROL 1426 CONTROL 1426 CONTROL 1426 CONTROL 1003 00/037 08/09 132 UGT SOCTEACO HONGKONG T1093 5203基 6855 を 1472 4 2585 を 6231 条 4814 & 2631 を T118	
06.03.24	01:56:24

China: I claim my Honeypot prize!!

# Newscasts:

# <u>Britain</u>



GCHQ intern took home top secret data in risk to national security Hasaan Arshad, 25, was free to take work mobile phone into secret area of GCHQ and connect it to a workstation

Martin Evans Crime Editor

31 March 2025 1:14pm BST

https://www.telegraph.co.uk/news/2025/03/31/gchq-intern-admits-taking-top-secret-data-home/

An intern hired by GCHQ stole top secret data and took it home in a national security breach.

Hasaan Arshad, 25, was free to take his work mobile phone into a top secret area of GCHQ and connect it to a workstation inside the intelligence agency.

Arshad, from Rochdale, Greater Manchester, was then allowed to take his phone home unchallenged. There, he transferred the sensitive information to a hard drive linked to his personal computer. He was arrested a month after downloading the data.

The security breach is potentially embarrassing for GCHQ, based in Cheltenham. The intelligence agency runs a summer internship lasting 10 weeks that is only open to university students from ethnic minority backgrounds.

The GCHQ website says the "summer intelligence internship" allows applicants to "immerse yourself in the work of one of our intelligence mission teams".

It adds: "This isn't just work shadowing. With access to genuine case studies and briefings by various Operational Intelligence teams, you'll be treated like a member of our organisation and expected to get involved with real projects.

"If you're in your final (or penultimate) year of university and from a black, Asian, mixed heritage, or ethnic minority background, and from a socially or economically disadvantaged background, this is your opportunity to discover if a career in intelligence is right for you. We'll even cover your accommodation – all you need to bring is your fresh perspective."

Nina Grahame KC, Arshad's lawyer, told the court he had admitted the offence on the "basis of recklessness".

The court was told that Arshad had previously admitted two charges of making an indecent photograph of a child in relation to a number of images found between Sept 7 and 23 2022.

Mrs Justice McGowan adjourned sentencing for all the charges to June 13. Previously, the senior judge had ruled that some parts of Arshad's case would be heard behind closed doors, in the absence of the press and public.

"Top secret" is the classification for the Government's most sensitive information, when compromise might cause widespread loss of life or threaten the security or economic well-being of the country or friendly nations, according to Ministry of Justice security guidance.

https://www.telegraph.co.uk/news/2025/03/31/gchq-intern-admits-taking-top-secret-data-home/

[Tnx E, MaleAnon]

# Expats to be cut off from BBC radio within weeks International audiences to lose access to all broadcaster's music stations and some podcasts

James Warrington Senior Business Reporter

20 March 2025 4:48pm GMT

https://www.telegraph.co.uk/business/2025/03/20/expats-to-be-cut-off-from-bbc-radio-within-weeks/

Starting in a matter of weeks, the BBC will no longer allow access to Sounds - its audio streaming service - from abroad.

Instead, international audiences will need to tune into radio and podcasts on a new advertising-funded service on BBC.com or the broadcaster's app.

Rights restrictions means some programming, including all music radio stations and some podcasts, will be removed completely. Others will only be available through third-party subscription services such as Apple and Spotify.

The BBC said expats will still have access to talk radio stations such as Radio 4 and the World Service, as well as more than 1,000 podcasts, including Global News Podcast, The Global Story and Infinite Monkey Cage.

Nevertheless, the move has fuelled concerns that international audiences will be cut off from large swathes of their favourite programming.

#### 'Vital lifeline'

Kirsty Lang, the broadcaster who fronts Radio 4 shows - including Front Row, Last Word and Round Britain Quiz - described the decision as "devastating for all our overseas listeners".

She added: "BBC Radio is a vital lifeline to so many overseas listeners. I have no idea why they're cutting it or why they can't introduce a subscription for people living outside the UK."

Expats will be able to continue accessing BBC services through the use of a virtual private network (VPN), which masks a user's IP address and allows them to bypass geo-blocked material. However, such measures are likely to be difficult for less tech-savvy listeners.

BBC Sounds users will also lose access to their subscriptions and bookmarked programmes, and will have to set them up again manually.

The BBC said: "BBC Sounds is a UK licence fee-funded service. To offer better value for our UK listeners, BBC Sounds will be repositioned and made available exclusively to UK audiences."

It marks the latest controversial shake-up of the BBC's audio output, after the corporation outlined plans to place adverts around some of its radio and podcast programmes when they are streamed via services such as Apple and Spotify in the UK.

The proposals triggered a furious response from commercial rivals, who warned of a "catastrophic" distortion of the advertising market. Gary Lineker's production company Goalhanger, which makes podcasts including The Rest is Politics and The Rest is History, was among 20 media companies to condemn the plans.

The BBC is looking to boost its commercial income as part of efforts to plug a £500m black hole in its finances.

The corporation is also in discussions with ministers about the future of the licence fee funding model ahead of the end of the current charter period in 2027.

https://www.telegraph.co.uk/business/2025/03/20/expats-to-be-cut-off-from-bbc-radio-within-weeks/

Ed. When I travelled, I took a SW radio with me for BBC World Service. In Guyana 2001 I was alerted to the 'Ducks in a Row' drink bottle bomb plot that stopped all cross Atlantic flights. Once informed I relied on BBC WS for good information. The same in NZ 2005/2008, Thailand 2015/2016/2017, Sri Lanka and Cyprus as well as my trips into the EU. Even good service into the Yemen.

Recently the programming has become pathetic. I've taken to listening to Radio China International: 17490kHz day and 7350kHz for more accurate news and good programming.

Podcasts and Internet streams are not the same, no fades, interference or change in conditions!.

### Bulgarians guilty of spying for Russia in the UK

Daniel De Simone Investigations correspondent Amy Walker BBC News Published 7 March 2025

#### https://www.bbc.co.uk/news/articles/cx2gx52xqqpo

Three Bulgarian nationals have been found guilty of spying for Russia, in what police have described as "one of the largest" foreign intelligence operations in the UK.

Vanya Gaberova, 30, Katrin Ivanova, 33, and Tihomir Ivanchev, 39, who were all living in London, were part of a group who travelled Europe carrying out surveillance on journalists, a former politician and a US military base in Germany between 2020 and 2023.

While the trio had day jobs as a beautician, a healthcare worker, and a decorator, the cell they were part of plotted to kidnap and kill targets, as well as planned to ensnare them in so-called honeytraps.

The methods they used were the sort of thing you would "expect to see in a spy novel", said the Metropolitan Police's Cdr Dominic Murphy.

How spy ring living double lives did Kremlin's dirty work

Gaberova, of Euston, north London, Ivanova, of Harrow, north London, and Ivanchev, of Acton, west London, were convicted of conspiracy to spy, while Ivanova was also convicted of possessing multiple false identity documents.

They were working for fellow Bulgarian Orlin Roussev, 47, who ran the spy ring from a 33-room former guest house in Great Yarmouth, Norfolk.

Here police found a "treasure trove" of spying gadgets and equipment, including cameras hidden in ties, a camera hidden in a fake rock, and glasses containing recording equipment.

They also found a number of Minions cuddly toys, including one which contained a spy camera. Roussev had referred to those working for him as his "minions", like the yellow sidekicks of dastardly villain Gru in the Despicable Me children's film franchise.

Roussev previously admitted conspiracy to spy, alongside Biser Dzhambazov, 43, of Harrow, while a sixth defendant, Ivan Stoyanov, 34, of Greenford, west London, admitted spying before the trial.

The cell's key targets were investigative journalists Christo Grozev and Roman Dobrokhotov, whose work includes exposing Russia's role in the nerve agent attacks on Russian opposition leader Alexei Navalny in 2020 and Sergei Skripal in Salisbury in 2018.

As part of the surveillance, Gaberova was instructed to befriend Mr Grozev, with Roussev describing him as "hooked and in love" with her in WhatsApp messages.

Another operation included carrying out surveillance to identify Ukrainian soldiers at a military site where they were being trained, around the time of Russia's invasion of the country in 2022.

During the trial, prosecutor Alison Morgan KC said the spy cell was "sophisticated in their methodology; carrying out surveillance activity of individuals and places; manufacturing and using false identities and deploying advanced technology to acquire information".

The police investigation received 221 mobile phones, 495 sim cards, 11 drones, and devices allowing data to be extracted from phones and eavesdropping on wi-fi activity.

Met counter-terrorism chief Cdr Murphy said the case was an "extremely sophisticated" operation that "posed a threat to national security and individuals".

Roussev received instructions from Jan Marsalek, who is wanted in Germany for his alleged fraud linked to the financial services company Wirecard.

The Austrian national was described by prosecutors as an "intermediary for the Russian intelligence services".

Roussev and Marsalek met a decade ago, with Roussev subsequently recruited as a spy. He then recruited other Bulgarians to undertake espionage operations.

Orlin Roussev was arrested by police in a guesthouse in Great Yarmouth.

Roussev was at one stage the chief technology officer for a city of London financial firm.

Stoyanov worked as a medical courier, but also fought in mixed martial arts fights using the nickname "The Destroyer".

Dzhambazov and Ivanova lived together as a couple and worked in healthcare jobs, but also ran a Bulgarian community organisation that provided courses on "British values".

But Dzhambazov was also in a relationship with Gaberova – they were found in bed together when police made arrests – and Ivanchev had separately been in a relationship with her in the past.

During their trial, Ivanova and Gaberova admitted undertaking surveillance operations but denied knowing it was for the benefit of Russia.

Ivanchev did not give evidence during the trial but outlined a similar position during police interviews after being arrested. He was arrested a year after the other five defendants and told police he had several conversations with MI5.

The prosecution case focused on six operations carried out by the spies:

Operation 1

This targeted the Bulgarian journalist Christo Grozev.

Marsalek and Roussev exchanged messages discussing their options in relation to Mr Grozev, including the placing of team members in seats next to him on planes. He was followed throughout Europe and properties connected to him were watched in Austria and Bulgaria.

The spy cell also discussed potentially robbing him of his laptop and phone and taking it to the Russian Embassy, burning his property, kidnapping him and taking him to Moscow, or killing him.

Operation 2

This targeted journalist Roman Dobrokhotov, a Russian national.

The cell followed him in various countries, and discussed kidnapping him in the UK and smuggling him out of the country using a small boat.

At one stage, Ivanova was so close to him on a plane that she could see the Pin code for his phone.

Operation 3

This targeted a man called Bergey Ryskaliyev in November 2021, the court heard.

Mr Ryskaliyev is a Kazakhstan national and former politician. He fled to the United Kingdom where he was later granted asylum.

There is and was a clear motive for Russia to develop relations with Kazakhstan, the court heard.

Prosecutors said that targeting a political dissident on behalf of Kazakhstan cultivates those relations by providing Kazakhstan with what it might consider to be assistance.

#### Operation 4

This involved plans for disruptive activity at the Kazakh embassy in London in September 2022.

The court heard that the plan was to stage a demonstration outside the embassy - a "fake protest" - to create a pretence that they were in possession of genuine intelligence about those responsible, which they would then pass on to the Kazakhstan intelligence to try to gain favour with Kazakhstan on behalf of Russia.

Operation 5

This involved surveillance at the Patch Barracks, a US Military Base in Stuttgart in late 2022.

This is a US military airbase, which jurors heard was believed by the defendants to be a location where Ukrainian forces were being trained in the use of surface to air weapons, at the very time of Russia's invasion into Ukraine.

Prosecutors say the defendants' plan was to target the airbase using a range of highly sophisticated technology designed to capture key intelligence about those present on the base.

#### Operation 6

Jurors were told this plan was targeting a man called Kirill Kachur.

He is a Russian national who spent time in Montenegro who was employed by the Investigative Committee of Russia but left the country in 2021 and was designated as a "foreign agent" by Russia in November 2023.

https://www.bbc.co.uk/news/articles/cx2gx52xqqpo

It is likely sentencing will be soon ---- will be appended to this report when.

#### Norwegian teen arrested in UK hotel over national security case

Daniel De Simone & Jeremy Britton BBC News Published 8 April 2025

#### https://www.bbc.co.uk/news/articles/c9w8p0kqdd9o

A Norwegian teenager has been arrested in a West Yorkshire hotel room and charged with firearms offences in a case connected to national security, the BBC can reveal.

Johannes Kongsnes Natland, 18, was arrested by firearms officers in Huddersfield on 19 March.

The Metropolitan Police's Counter Terrorism Command, which deals with espionage and threats from hostile states, took over the case after the arrest.

But "the matter is not being treated as terrorist-related at this time", the force said in a statement.

Mr Natland is charged with possessing a Luger semi-automatic pistol, a revolver, and ammunition.

He was initially also arrested by West Yorkshire Police on suspicion of conspiracy to murder, but has not been charged with such an offence at this time.

He had flown into Manchester Airport from Stavanger, Norway, on 17 March.

In a statement, the Met said: "Due to various ongoing lines of inquiry - including a number of international enquiries relating to this - the investigation is being dealt with by detectives from Counter Terrorism Policing, although the matter is not being treated as terrorist-related at this time.

"Officers from the Met's Counter Terrorism Command are leading the investigation, with support from colleagues in North East CTP and West Yorkshire Police, and enquiries remain ongoing."

Mr Natland appeared at Westminster Magistrates' Court on 21 March. He is next due to appear at the Old Bailey on 11 April.

https://www.bbc.co.uk/news/articles/c9w8p0kqdd9o

Thanks AnonNI

Nothing to do with espionage:

#### 'Exploding' Tunnock's teacakes cleared by tests to fly again

RAF pilots have been advised to keep the Tunnock's teacakes in their wrappers until they are eaten

By Catherine Lyst BBC Scotland News Published 4 April 2025

#### https://www.bbc.co.uk/news/articles/c20x5x0g3kqo

The story goes that 60 years ago, Tunnock's teacakes were banned from RAF flights after a cockpit marshmallow explosion.

The chocolate-covered treats were apparently all the rage, eaten by nuclear bomber crewmen on training sorties at the height of the Cold War.

But in the summer of 1965, a captain and student pilot forgot they had placed unwrapped teacakes above their instrument panels.

When the captain pulled an emergency depressurising switch the iconic Scottish treat erupted - leaving a sticky mess over the airmen, the instruments and cockpit canopy.

Now the RAF Centre of Aerospace Medicine has now given them the all-clear to fly again, after tests in an altitude chamber found the teacakes did not explode.

The experiments were covered by the British Forces Broadcasting Service (BFBS), external at the centre based at RAF Henlow in Bedfordshire.

Hannah King and Dr Oliver Bird carry out the teacake experiment

First the teacakes were put into an altitude chamber - normally used in the training of new fast jet pilots - and were lifted to 8,000ft, climbing at 4,000ft per minute,

They were then rapidly decompressed to 25,000ft in three seconds to see if they would blow up.

As air pressure in the chamber decreased, the air inside the teacakes expanded until the chocolate cracked and the mallow filling puffed out.

BFBS reporter Hannah King, who witnessed the tests, said while the mallow escaped from the chocolate casing, they "did not appear to explode and cause a risk to in-flight safety".

The chocolate treats were apparently popular with nuclear bomber crewmen during the Cold War.

It was also discovered that when they were frozen before being placed in the chamber, their hardened shells were more resilient to cracking at altitude.

Pilots have been offered some advice by Dr Oliver Bird, an instructor at the RAF Centre of Aerospace Medicine, who carried out the tests.

"The best advice is that the snacks are kept frozen and in their foil wrappings until pilots are ready to consume them," he said.

Fergus Loudon, sales director at Tunnock's, which is based in Uddingston, near Glasgow, said: "If we really are talking about the people who fly our supersonic jet fighter bombers, then I'm inclined to think that Tunnock's Tea Cakes wouldn't be the highest thing on their list of worries, but I'm glad to hear that they can now enjoy them, like everybody else, with official approval."

An RAF spokesman said he was not aware of any "banned confectionery list", adding that the tests were not carried out in an official capacity

https://www.bbc.co.uk/news/articles/c20x5x0g3kqo

I take a couple of Tunnocks Caramel Bars to Bletchley Park when I go every month!

### <u>China</u>

#### We start with one of interest to ENIGMA2000 members [really?]:

### Foreign espionage agencies conduct intelligence collection under guise of surveys and hobby groups: China's MSS

By Global Times Published: Mar 20, 2025 10:25 AM

#### https://www.globaltimes.cn/page/202503/1330460.shtml?id=11

China's Ministry of State Security (MSS) warned on Thursday that foreign espionage agencies are using disguised surveys, academic exchanges, and hobby groups as a cover for intelligence gathering. These activities subtly turn unsuspecting participants into conduits for information theft.

As technology becomes more widespread, many organizations and individuals are using online platforms for scientific discussions and knowledge sharing, making specialized information more accessible. However, some of these activities involve research on sensitive information such as national meteorological data, seismic data, and marine data. Foreign espionage agencies have seized these opportunities by embedding intelligence collection within surveys and exchange programs, gradually enlisting participants as unwitting information sources, the MSS revealed in a statement published on its official Wechat account on Thursday.

MSS investigations have revealed that espionage agencies use seemingly harmless and modest "questionnaire-style inquiries," cater to the public's pursuit of professional hobbies, thereby developing individuals with weak awareness of confidentiality and security into intelligence collectors without the need for recruitment or coercion.

Foreign espionage agencies may conduct surveys on the public's hobbies, professional fields, and internet usage habits through methods such as sending emails. They offer small rewards to encourage participation, gradually drawing individuals into deeper engagement, the MSS noted.

Once individuals have been profiled through initial surveys, espionage networks invite them to professional exchange groups. By setting up information exchange traps and offering ongoing rewards, they cultivate key individuals' interests, making them deeply engaged in data collection and group activities.

When the group exchanges reach a certain stage, foreign espionage agencies organize data-sharing exchange meetings, even sending related hardware products from abroad for enthusiasts to set up. They establish corresponding reward mechanisms based on the volume and sensitivity of the shared data, such as upgrading membership levels, obtaining high-end equipment, or becoming regional administrators, satisfying users materially and psychologically, leading them to become addicted and turn into tools for secret theft, the MSS warned.

The MSS urges the public to exercise extreme caution when receiving survey emails from unknown foreign entities and avoid unnecessary participation and disclosing personal identity information, workplace, family status, etc., to protect personal privacy data. For personal professional interests, especially those involving core sensitive areas, it emphasizes the need for sound judgment, adherence to security protocols, and caution against being lured by curiosity into compromising national security adhere to the bottom line, the MSS said.

#### Global Times

https://www.globaltimes.cn/page/202503/1330460.shtml?id=11

and then [!!!]

# Radio amateurs punished for illegally setting up stations to gather sensitive data, spread false information: MSS

By Global Times Published: Mar 23, 2025 11:33 AM

#### https://www.globaltimes.cn/page/202503/1330661.shtml

China's state security agency on Sunday revealed two cases of radio enthusiasts setting up illegal stations under foreign direction to gather sensitive data and spread disinformation.

According to the Ministry of State Security (MSS), radio technology underpins vital infrastructure. From supporting infrastructure operations to aiding emergency response, from ensuring secure communications to maintaining social stability, radio technology has a profound impact on national security and societal stability. However, unauthorized use poses a serious threat.

Some radio hobbyists see foreign radio equipment as "novel toys" unknowingly exposing themselves and the country to risk, the MSS warned.

One case involved suspicious devices near a naval port, continuously intercepting sensitive signals.

Investigators found the equipment belonged to Zheng, who is a radio enthusiast living near the naval port. He had accidentally received an email from a foreign data company offering him free radio equipment worth 1,000 yuan (\$138).

He submitted his details and received and assembled the device on his balcony as instructed within a month.

During its operation, the equipment collected a large amount of dynamic information of ship location in the waters near the port and transmitted the data abroad via Wi-Fi, threatening military security.

Security authorities confiscated the equipment and penalized Zheng.

In another case, the state security agencies discovered that a Chinese national surnamed Zhang illegally set up a radio station to spread false information and disrupted social orders under the direction of foreign forces. To promptly eliminate the threat, the state security agencies, in coordination with relevant departments, arrested Zhang.

Zhang admitted that he met a foreign agent online who promised big rewards for broadcasting relevant content. He then bought the parts online, built the station under the agent's guidance, and received the content to broadcast.

Zhang knew the material was false. However, tempted by money and thinking he'd get away with it. He now faces serious legal consequences.

According to China's Criminal Law, whoever, in violation of the state regulations, sets up and uses a radio station or occupies radio frequencies without authorization, thereby interfering with the normal operation of radio communications, if the consequences are serious, shall be sentenced to fixed-term imprisonment of not more than three years, short-term custody, or non-custodial correction, and concurrently, a fine, or shall be sentenced to a fine only. If the circumstances are especially serious, the offender shall be sentenced to fixed-term imprisonment of not less than three years but not more than seven years, and concurrently, a fine.

Global Times

https://www.globaltimes.cn/page/202503/1330661.shtml

## **Chinese Patents Show Aim To Cut Undersea Cables**

By Didi Kirsten Tatlow

Senior Reporter, International Affairs / Investigations

https://www.newsweek.com/china-conflict-undersea-cables-cutting-internet-data-subsea-marine-baltic-taiwan-2012396

With Chinese ships suspected to have cut key undersea communications cables around the world, a Newsweek review of Chinese-language patent applications shows that engineers in China invented devices to sever such cables quickly and cheaply.

Cables have been damaged in the Baltic Sea, off Norway and around Taiwan. Chinese or Russian ships have been identified criss-crossing the locations prior to the damage, making them the main suspects and raising questions over whether it was sabotage. China has said at least one of the incidents was an accident.

While the fact that patents were sought for anchor-like devices for cutting submarine cables does not mean that they were used in these incidents, it does indicate an interest in cutting them, marine experts said.

The cables are vital for providing data connections and internet service in an increasingly connected world.

#### Submarine Cable Cutting

A "dragging type submarine cable cutting device" was developed in 2020 by a team of engineers at Lishui University in coastal Zhejiang province, which is opposite Taiwan.

"With the development of science and technology, more and more submarine cables and communication cables are laid on the seabed of all parts of the world and the cables need to be cut off in some emergency situations," the Lishui University authors wrote.

"The traditional cutting method needs first to detect the position of the cables, then excavate and salvage them for cutting. The process is complex, a lot of expensive equipment is needed, and the cost is too high. There is a need for a fast, low cost cutting apparatus for submarine cables to accomplish this task," Zhang Shusen, Dai Ying, Fu Changrong, Gao Zikun, Li Xuping and Ji Guangyao wrote.

Copper residue on the cutting anchor would indicate if the cut was successful, the patent application said. Copper is the preferred conductor material used in subsea cables.

Reached by telephone for comment, the deputy director of Lishui University's Scientific Research Division, Wang Yan, said, "No need," then hung up.

The 2020 effort built on a previous patent application, in 2009, for an anchor-shaped "ocean towing type cutting device" by marine engineers at the South China Sea branch of the State Oceanic Administration of China.

The reason given for needing such a device was the existence of illegal cables off China that needed to be destroyed, He Honghui, Liu Yuqiang, Sheng Yanfeng, and Wang Rongcan wrote in their patent application. Both applications were dropped or turned down for reasons that are unclear, according to records.

A Norwegian expert on subsea cables who spoke on condition of anonymity because of the sensitivity of the situation said that the reasoning that the devices were necessary to remove illegal cables was absurd because the method was random and could also lead to damage to useful cables.

Asked about the cable-cutting incidents and the patents, Liu Pengyu of the Chinese embassy in Washington, D.C., said in an email that he was not familiar with the situation but offered what he said was "China's principled position on the issue of submarine cables."

"The Chinese government had always welcomed and supported other countries and telecommunications companies laying international submarine cables in waters under China's jurisdiction," and had "provided good legal protection."

"In the future, China will continue to work with the international community to actively promote the construction of global information infrastructure such as submarine cables, jointly protect submarine cables, and work together to build a community with a shared future in cyberspace," Liu said.

#### China and Russia

Such kinds of incidents are not completely new, with Russian ships suspected of using doctored anchors to damage underwater infrastructure for decades, the Norwegian expert said. Russia and China call each other comprehensive strategic partners.

Chinese ships, including the Xing Shun 39, the Newnew Polar Bear and the Yi Peng 3, were present at the exact times and locations of recent incidents in different parts of the world. The Chinese government has said that damage to Baltic cables in 2023 by the Newnew Polar Bear was caused by an anchor but that it was an accident.

In self-ruled Taiwan, which China claims, the Coast Guard said that a telecoms cable was severed off its northern coast on January 3, with the Xing Shun 39 suspected. Analysts said it was a possible grey-zone, or hybrid, attack.

"China certainly has the technical capacity and motivation to take on such a hybrid threat operation, in which a nominally commercial vessel is suddenly utilized for subsea infrastructure sabotage around Taiwan - after all this is the trend we continue to see play out in European waters, and also mirrors other recent incidents in the cross Strait region, such as the 2023 cutting of subsea telecoms cables to the Matsu islands by a purported Chinese fishing vessel," said Benjamin L. Schmitt, Senior Fellow at the University of Pennsylvania's Kleinman Center for Energy Policy, in an email to Newsweek. The Matsu islands lie in the Taiwan Strait between Taiwan and China, just a few miles off the China coast.

"The fact that there are multiple technical patents that Chinese engineers applied for to conduct such a subsea cable cutting operation only adds to the suspicion that Beijing may have not only the motivation, but also is actively developing technical options for completing these sort of subsea warfare operations in the future," Schmitt said.

"It's an urgent issue," said Gregory Falco, an Assistant Professor at the Sibley School of Mechanical and Aerospace Engineering and the Systems Engineering Program at Cornell University. "This is a perfect example of the dual use exploits China has been perfecting over the years."

Falco said that the technology was commercially "valid" as it could for example be used to remove old cables in a situation where divers or remotely operated underwater vehicles could not be used. "But it's obviously going to be used for other purposes," he said.

#### China's arsenal

Said Schmitt, "The fact that China has developed mechanical systems such as an 'ocean towing type cutting device' and a 'towed submarine cable cutting device and cable cutting method thereof' suggest that Beijing is keeping multiple technical options in its arsenal for manifesting seabed warfare threats toward subsea energy and telecommunications infrastructure worldwide."

"It is vital that global democracies mount a significant response to deter future attempts by Russia and China to disrupt Western critical subsea infrastructure, acts which aim to undermine democratic resilience," Schmitt said, recommending NATO consultative mechanisms and increased offshore and satellite monitoring.

"Inaction will only embolden Moscow and Beijing to continue to engage in these disruptive sabotage operations worldwide to the detriment of global security," he said.

Subsea Cable Cutting Device Patent 2009

An image of a 2009 subsea cable cutting device designed by engineers at the South China Sea Branch of China's State Oceanic Administration. Credit: State Oceanic Administration

Update 01/10/25 5:27 p.m. ET: This article has been updated with comment from Liu Pengyu.

https://www.newsweek.com/china-conflict-undersea-cables-cutting-internet-data-subsea-marine-baltic-taiwan-2012396

# **Russia**

#### Arsonist, Killer, Saboteur, Spy

While Trump Courts Him, Putin Is Escalating Russia's Hybrid War Against the West Andrei Soldatov and Irina Borogan March 20, 2025

Maxim Shemetov / Reuter

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#### https://www.foreignaffairs.com/russia/arsonist-killer-saboteur-spy-vladimir-putin-donald-trump

In late January, barely a week into Donald Trump's second term as U.S. president, a senior NATO official told members of the European Parliament that Russia's intensifying use of hybrid warfare poses a major threat to the West. In the hearing, James Appathurai, NATO deputy assistant secretary-general for innovation, hybrid, and cyber, described "incidents of sabotage taking place across NATO countries over a period of the last couple of years," including train derailments, arson, attacks on infrastructure, and even assassination plots against leading industrialists. Since Russian President Vladimir Putin launched his full-scale war in Ukraine in 2022, sabotage operations linked to Russian intelligence have been recorded in 15 countries. Speaking to the press after the January hearing, Appathurai said it was time for NATO to move to a "war footing" to deal with these escalating attacks.

In the weeks since then, Trump's dramatic overtures to Putin have pushed the sabotage campaign into the background. Instead, in aiming to quickly secure a deal with Russia to end the war in Ukraine, the Trump administration has talked of a new era of relations between Washington and Moscow. At the same time, the White House has taken steps to dismantle efforts within the FBI and the Department of Homeland Security to counter cyberwarfare, disinformation, and election interference against the United States—all of which have previously been tied to Moscow. Indeed, Trump has suggested that Russia can be trusted to uphold any peace deal and that Putin is "going to be more generous than he has to be."

But any assumption that a Trump-Putin deal will cause the Kremlin's spies and saboteurs to step back is dangerously mistaken. For one thing, their political masters would not allow it. Very few in Moscow's security establishment believe that a durable peace can be achieved with the United States or the broader West. In February, Fyodor Lukyanov, head of research at the Valdai Club, a pro-Kremlin think tank, said that there was no chance for a "second Yalta"—a global deal that would redefine the borders and spheres of influence in Europe. And Dmitry Suslov, another prominent voice of Kremlin foreign policy, has said that any thaw in U.S.-Russian relations would be short-lived and unlikely to survive the U.S. midterm elections in 2026.

At the same time, in Russia's security services, mistrust of American intentions runs deep. For centuries, Russia has viewed the West as intent on Russia's subjugation or outright destruction, and Soviet and Russian intelligence services have operated for decades on the assumption that the West is an implacable foe. To Moscow's spies, Trump's courting of Putin has provided an opportunity to expand and strengthen their subversion campaign in Europe. Given the Trump administration's skepticism toward NATO and the defense of its transatlantic allies, a U.S.-Russian agreement could increase Moscow's willingness to launch unconventional attacks in Europe.

After three years of full-scale war in Ukraine, Russia's spy agencies are now fully mobilized in Europe and have built sabotage and hybrid warfare into a comprehensive strategy. These attacks are not merely designed to keep European governments off-kilter. They are also aimed at diminishing Europeans' support for Ukraine by raising costs on the governments and industries in ways that are not easy to counter, harassing the population, and seeking vulnerabilities in European defense. Unless the West is prepared to come up with a cohesive strategy to counter those attacks with a signal strong enough to serve as an effective deterrent, Moscow will see few downsides to accelerating this campaign in any post-deal future.

#### MOSCOW'S NEW KILLERS

Ever since Russia's annexation of Crimea in 2014, Moscow's spy agencies have been experimenting with sabotage operations abroad as a way to pressure the West. At first, this included occasional attacks, such as the blowing up, by agents of Russia's GRU military intelligence agency, of ammunition depots in the Czech Republic that had been supplying Ukrainian forces then fighting Russia in the Donbas. After its 2022 invasion of Ukraine stalled, Moscow was at first cut off from the West, with its diplomats expelled and its spies forced to regroup. But in 2023, its intelligence services, including the Federal Security Service, or FSB, the Foreign Intelligence Service, or SVR, and the GRU, began redeploying in Europe in what became a new kind of hybrid warfare campaign.

So far, the most brazen operation was Russia's attempted assassination in the spring of 2024 of Armin Papperger, the head of Rheinmetall, Germany's largest arms manufacturer. The plot was thwarted by German and American intelligence services, as Appathurai, the NATO hybrid warfare official, publicly confirmed in January. In his testimony, Appathurai noted that there have been "other plots" against European industry leaders, as well. This threat seems unlikely to go away: notably, along with other European defense companies, Rheinmetall is likely to play an even larger role in arming Ukraine in a post-deal future, and its growth projections have surged since the Trump administration has come to power.

In his January testimony, Appathurai also confirmed that Russia has been recruiting "criminal gangs or unwitting youth or migrants" to conduct many of these operations. In March 2024, for example, two British men were arrested for setting fire to a Ukrainian-linked parcel delivery warehouse in east London—an attack that was connected to the Wagner paramilitary company, traditionally a front for the Russian military intelligence agency. One reason for this is that local criminals

could be recruited via social media for one-off jobs without even knowing who they are working for, making it more difficult to counter, and it became harder to infiltrate Russian nationals into these countries.

In addition to targeting European infrastructure and military logistics, Moscow's spy agencies may also be seeking to use sabotage operations to influence the political landscape in target countries. In the run-up to Germany's federal election in February, for example, there was a series of attacks against civilians in Germany by Afghans and other immigrants. According to a senior German intelligence official we spoke to shortly before the election, the German agencies believed that Russian security agents may have instigated these attacks in order to inflate support for the far right, which opposes German support for Ukraine.

These attacks don't necessarily have to be violent to be effective. For example, there are indications that Russian agencies could use social media to recruit teenagers, including those belonging to post-Soviet diasporas, to spray hateful slogans on the walls of apartment buildings in neighborhoods with a significant migrant population, threatening or humiliating locals to incite hatred against refugees from Ukraine or Syria. These attacks don't require much preparation and may cost only a few thousand dollars. More ambitious recruits might be paid to undertake more violent actions, such as committing arson or throwing Molotov cocktails.

European intelligence officials believe that Germany, along with Poland and the United Kingdom, will remain one of Moscow's primary targets. Given the country's large immigrant population from former Soviet republics, including Russia and Ukraine, and the rising tensions about immigration, Russia's spy agencies may see particular potential for influencing the political situation and public opinion. Moreover, in view of incoming Chancellor Friedrich Merz's commitment to dramatically increase German defense spending and its role in Western security, the Kremlin may have even greater incentive to try to destabilize the country.

#### HOSTAGE GAMES

Another element of Russia's emerging strategy is its growing use of hostages. Never before have foreigners with European and American passports been seized as extensively in Russia as they are now. Since the start of the invasion, Russia's Federal Security Service has begun arresting numerous citizens of target countries under various pretexts—such as discovering a piece of gum with cannabis in a purse or finding a donation of a few hundred dollars to a Ukrainian charity on the detainee's smartphone.

During the Cold War, the business of prisoner swaps was mostly limited to quiet exchanges between rival Western and Soviet spy agencies that happened on the sidelines of geopolitics. For instance, the KGB did not bring spy swaps to the Strategic Arms Limitation Talks (SALT) between U.S. President Richard Nixon and Soviet leader Leonid Brezhnev. Since the war in Ukraine began, that has changed. Following the negotiations over the release of the detained American basketball star Brittney Griner, Russian intelligence agencies—especially the SVR and the FSB—have recognized that hostage trades can powerfully affect public opinion in target countries. As a result, Moscow has turned captured foreigners, including from France and Germany as well as the United States, into a substantial form of leverage in geopolitical negotiations.

Now, the role of Russia's spy agencies in capturing and trading hostages is becoming institutionalized. The FSB emerged as a backchannel between the United States and Russia several years ago, so it is no surprise that it played a major role in talks for the release of the American journalist Evan Gershkovich in 2024. Indeed, Sergei Naryshkin, the head of the SVR, has been involved in such negotiations with Washington for quite some time, including in 2022, when then CIA director William Burns met Naryshkin in Ankara. Among the items on the agenda for that meeting, alongside the use of nuclear weapons, was the issue of U.S. prisoners in Russia.

More recently, when Kremlin officials held preliminary talks with Trump administration officials in Riyadh about a Ukraine deal, Naryshkin was included on the Russian side, presumably, among other things, to make use of the hostage issue. Notably, those talks were preceded by the release of the American teacher Marc Fogel, who had been detained in Russia for possessing medical cannabis; in a public ceremony, Trump touted Fogel's return and greeted him at the White House. Indeed, hostage swaps draw on some of the quid-pro-quo dynamics that Trump prefers in his approach to dealmaking, making it all the more likely that Russia will continue to accumulate Western prisoners. On March 11, Naryshkin had his first phone conversation with Trump's CIA director, John Ratliff, and according to Russia's state news agency, TASS, the two agreed to "maintain a regular contact."

#### MORE DARKNESS, MORE DECEPTION

Since 2022, Russia's intelligence agencies have also linked the sabotage option firmly with their more long-standing campaign of transnational repression. The Kremlin has a long tradition of using various tools against its enemies and opposition members in exile, often in the same countries where it is now practicing sabotage, including Germany, the United Kingdom, and the Baltic countries. Russia's secret police may have the dubious honor of having invented transnational repression: beginning in the second half of the nineteenth century, tsarist secret police infiltrated and harassed Russian political émigrés in France and Switzerland. Their Soviet successors significantly escalated those tactics, up to and including political assassinations. Since the early years of this century, Putin's spies have done the same, attacking opposition figures who have sought refuge abroad.

But now Russia's transnational repression is becoming more sophisticated and often involves efforts to deflect blame toward other parties. In early February, for example, the SVR publicly accused Ukraine's intelligence agencies of "preparing attacks" against Russian opposition or business figures who have sought refuge abroad. The SVR asserted that the would-be attackers, in the event of arrest, would "blame the Russian special services, allegedly on whose orders these attacks were prepared."

The Russian exile communities across Europe quickly grasped the significance of this announcement: the SVR was laying the groundwork for a new round of attacks on Russian exiles, with the blame being placed on Ukraine in advance. Moscow's practice of blaming Ukraine for Russian operations in the West seems only likely to expand. From now on, these attacks, including assassination attempts, arson, and attacks on infrastructure, will likely be blamed on Ukrainian intelligence in an effort to turn European public opinion against Ukraine.

#### Most of the sabotage operations lack direct traces to Russia.

These efforts suggest a change in Russian strategy. For several years after 2016, Moscow's intelligence agents seemed to be increasingly brazen and sloppy, as if they did not really care about being exposed or caught. Consider the Russian assassin on a bicycle who shot a Chechen separatist in the center of Berlin in broad daylight and was almost immediately arrested by German police while he was dumping his pistol and his bike in the nearby river Spree. To some extent, Russian operatives like him didn't care: they were determined to show, by their brazen actions, that Western efforts to expose and criminally charge them were not working.

Now, however, the spy agencies are switching back to a more secretive mode. The war in Ukraine has made it harder for Russians to set up their own operations in Europe, and the recent changes in spy tradecraft—such as outsourcing operations to European nationals for one-off jobs, out of the established spy networks in the target countries—have helped them get around this.

In his notes he had smuggled from Moscow, the KGB archivist and defector Vasili Mitrokhin described the Soviets' meticulous preparations in the 1960s for a sabotage attack on the NATO Integrated Air Defense site on Mount Parnitha, near Athens. The chosen method for disabling it was arson using technical devices developed by the KGB's "F" Service laboratory. These devices were disguised as Greek-style cigarette packs, containing highly flammable charges that could be ignited at any time using built-in mechanisms, accounting for the rarefied air. The operation would require, of course, several highly trained special forces operators. If this attack ever took place, it would have been difficult not to attribute it to a hostile state.

This was the same model used by Putin during his early years in power. In the first decade of this century, when Russian spy agencies carried out assassinations abroad, those attacks had an obvious Russian state signature, as when the attackers used polonium, or the military-grade nerve agent Novichok. But this is no longer the case. Most of the sabotage operations the Kremlin has launched over the past two years lack direct traces to Russia. Many also involve local perpetrators who have been recruited via social media for one-off jobs for a few hundred dollars.

#### EYE OFF THE BALL

Despite overwhelming evidence that the Kremlin has developed a systematic and increasingly lethal hybrid warfare strategy, Western leaders have failed to devise an adequate strategy for containing it. For now, the naming and shaming tactics that the United States and its European allies adopted after Russia's interference in the 2016 U.S. election remain a significant part of the Western response.

In November 2024, a London court put on trial a group of Bulgarians who had been charged with spying for Russian agencies—including surveilling the U.S. military base in Stuttgart where the Ukrainian military was believed to be trained, planning an attack at the Kazakh embassy in London, and attacking two investigative journalists opposing the Kremlin, as well as a Kazakh politician in exile in London. In early March, the defendants were all found guilty in what has become a larger effort to expose and punish those who collude with Moscow. Some European countries also seem to be attempting to reduce the effect of sabotage attacks carried out by Russian agents, by denying or downplaying their scale.

More promising are recent efforts to double down on security. Several European countries, for example, have taken new measures to protect telecommunications cables, pipelines, and other critical infrastructure in the Baltics, near Russia. This includes the launch in January of a British-led reaction system to track potential threats to undersea infrastructure and to monitor the Russian shadow fleet—aging and poorly maintained vessels operating with flags of convenience and murky ownership and management—as part of the ten-nation-strong Joint Expeditionary Force.

But the turmoil within the U.S. intelligence community caused by Trump's reorientation toward Moscow has made it more difficult to shape a comprehensive Western response. Public reports of the Trump administration's buyout offers to members of the CIA have been met with glee in Russia. Meanwhile, the administration has set new priorities for U.S. intelligence—including targeting drug cartels in Mexico and focusing more on China—rather than on Russia and support for Ukraine. For Moscow's spy agencies, these moves could be exploited as opportunities to increase their activities in the West.

If Trump's moves lead to a dramatic decline in surveilling Russia, it will not be the first time the U.S. intelligence community will have taken its eye off the ball. In the 1990s, after the end of the Cold War, there was a similar shift in attention away from Russia, one that resulted in a significant loss of expertise in Russian affairs and underestimation of risks on the part of Washington. This intelligence decline very likely contributed to the West's misjudging of Putin during his early years in power, when he laid the foundations for renewed Russian autocracy and confrontation with Europe and the United States. It would be disastrous to repeat the same mistake today.

https://www.foreignaffairs.com/russia/arsonist-killer-saboteur-spy-vladimir-putin-donald-trump

# <u>Taiwan</u>

# Taiwanese president's security guards discovered to be Chinese spies Confidential information leaked to Beijing in exchange for financial gains

Our Foreign Staff Related Topics Taiwan, China, Asia 27 March 2025 8:27am GMT

https://www.telegraph.co.uk/world-news/2025/03/27/taiwanese-presidents-security-convicted-spying-china/

Four Taiwanese soldiers have been sentenced to prison for leaking confidential information to China.

Three soldiers in charge of security for the presidential office and another in the defence ministry's information and telecommunications command were convicted for violating national security law, the Taipei district court said on Wednesday.

The number of people prosecuted for spying for Beijing has risen sharply in recent years, with retired and serving members of the military targeted by Chinese infiltration efforts, official figures show.

"Their acts betrayed the country and endangered national security," the court said in a statement.

It comes after Lai Ching-te, Taiwan's president, announced in March his plans to reinstate military judges to hear Chinese espionage cases and other offences involving Taiwanese service members.

The soldiers received sentences ranging from five years and 10 months to seven years.

Violation of duty

They passed confidential "internal military information to Chinese intelligence agents for several months", from 2022 to 2024, for which they were paid between NT260,000 and 660,000 (£6,080 – £15,495), the court said.

It has not known what type of information was leaked.

The defendants had worked for "extremely sensitive and important units but violated their duties to accept bribes and stole secrets by photographing" the information.

Prosecutors said the soldiers had used their mobile phones to photograph military information.

Three of the soldiers were discharged from the military before an investigation was launched in August last year following a tip-off to the defence ministry and the fourth was suspended.

Taiwan's intelligence agency previously reported that 64 people were prosecuted for Chinese espionage in 2024, compared with 48 in 2023 and 10 in 2022.

Beijing claims the self-ruled island is part of its territory and has threatened to use force to bring it under its control.

Both sides of the Taiwan Strait have been spying on each other for decades. But analysts have warned that espionage is a bigger problem for Taiwan, which faces the existential threat of a Chinese invasion.

https://www.telegraph.co.uk/world-news/2025/03/27/taiwanese-presidents-security-convicted-spying-china/

### Ex-navy officer's sentence for espionage finalized

CCP LINKS: Separately, three DPP staff members, reportedly including a Presidential Office consultant, have been detained amid a probe into alleged espionage for China

By Wu Sheng-ju and Hollie Younger / Staff reporter, with staff writer and CNA

Sat, Apr 05, 2025 page1

#### https://www.taipeitimes.com/News/front/archives/2025/04/05/2003834649

Former Naval Education, Training and Doctrine Command general division commander Chang Pei-ning (張培凝) is to serve three years and 10 months in prison for setting up a spy ring for China after the Supreme Court denied his appeal, Chinese-language media reported yesterday.

Chang denied the charges in the first trial, but the Kaohsiung District Court rejected his defense, convicting him of contraventions of the National Security Act (國家安全法).

The Kaohsiung branch of the High Court in the second trial after Chang appealed the initial ruling upheld the sentence from the first trial of three years and 10 months.

The Supreme Court found the sentence not improper.

Chang can no longer appeal.

Chang has filed a lawsuit against the Republic of China Navy Command after it ordered him to return NT\$7.72 million (US\$233,317) in retirement pay.

The Taipei High Administrative Court has ruled against him in the lawsuit, although he can appeal the decision.

Chang in 2006 was recruited by Hong Kong businessman Hsieh Hsi-chang (謝錫璋) to develop an espionage cell in Taiwan, prosecutors said.

Cheng introduced Colonel Ho Chung-chi (何忠枝), head of the Navy Command Headquarters planning division, and Ho's wife, Chang Hsiu-yun (莊秀雲), to Hsieh in 2008, prosecutors said.

The couple were bribed with banquets and an all-expenses-paid trip to Thailand, prosecutors said.

Both pled guilty in the first trial, with Ho sentenced to 10 months and Chang to three months, with their failure to recruit any spies for the Chinese Communist Party (CCP) a mitigating factor.

Ho appealed, but the High Court handed him a four-year suspended sentence in the second trial.

Separately, three staff members of the Democratic Progressive Party (DPP) have been detained without visitation rights and are being investigated on suspicion of spying for the CCP, a source with knowledge of the matter said on Thursday.

Their detention comes as several DPP members have been accused of contravening the National Security Act.

The Chinese-language Mirror Media named Presidential Office consultant Wu Shang-yu (吳尚雨), former DPP staff member Chiu Shih-yuan (邱世元) and councilor assistant Huang Chu-jing (黃取榮) as the suspects.

Chiu is a former vice president of the DPP's Taiwan Institute of Democracy, while Huang is an assistant to New Taipei City Councilor Lee Yu-tien (李余典).

The case is being investigated by the Taipei District Prosecutors' Office, which questioned the three suspects.

Due to the seriousness of the allegations and the risk of collusion, prosecutors requested that they be detained without visitation rights, which was granted, the report said.

The prosecutors' office said that the investigation is ongoing and it would not comment on the report.

However, a source said that several members of the DPP have been involved in national security breaches, including leaking sensitive information such as travel itineraries of President William Lai (賴清德).

Those people were detained in the middle of February and prosecutors are investigating the extent of the alleged breaches, the source said.

The investigation might be expanded, the source added.

Sheng Chu-ying (盛礎纓), an assistant to former legislative speaker You Si-kun, was released on bail amid an investigation into allegations that he was recruited by Chinese intelligence agents during a trip to China, Chinese-language media reported on Wednesday.

Sheng is accused of exchanging sensitive legislative information for cash and cryptocurrency beginning in 2019.

The office is continuing investigations into Sheng, who has been barred from leaving the country.

Additional reporting by Chen Cheng-yu

https://www.taipeitimes.com/News/front/archives/2025/04/05/2003834649

# **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.

#### UNID CW

#### Two Submitted Intercepts - M32 or M89?

We received two videos of intercepts from a friend of the group from Japan with the YouTube channel 'Plato 1959' & who has featured before in this column.

The intercepts are unfortunately quite short, as often such Morse exchanges are, & after an initial identification of M32 – Russian Intelligence, your editor had second thoughts & decided they were more likely to be M89.

Although the two examples follow the pattern of M32, M89 also follows a very similar format. In particular the use of 4-character group code, which may explain the groups sent in the 2nd video N33T and 5TA4.

Also given the location, that should have been taken into account, it would seem more likely these were actually M89 & with Jean-Paul, (JPL), informing us that there was currently an exercise taking place, resulting in increased activity during the duration of the exercise, this was another reason to favour an M89 identification.

On the other hand, several non-standard characters could be from the Cyrillic Morse alphabet & the letter 'T' could be the short zero used by the Russian stations, although the Chinese likely also have equivalent non-standard Morse characters that would equally fit the bill.

Sometimes identifying stations can prove difficult - if not impossible, especially with short contacts such as these.

So were these M89 – or possibly M32? A consultation with JPL confirms that the first video featured M32 while the second video was M89. It's no wonder your editor was so confused. *Thanks JPL*.

Rather than move each intercept to their respective sections, both are featured together here along with a short explanation of the story behind finally separating & identifying these two stations.

Transcription of the Morse is the best we could manage but parts are ambiguous & open to interpretation – particularly the non-standard Morse characters, depending on the language used.

Video 1	<u>M32 – Russian Military / Intelligence</u>	https://www.youtube.com/watch?v=3uLawRFndNw		
7116kHz	1610z 25 Mar		Plato 1959	TUE
	ÜÖÜ			
	AMG ÜT BÜ A Ö W TP P O K			
	H8NO CK			
	S5IK DE H8NO QRU K			
	ОК			
Video 2	<u> M89 – Chinese Military</u>	https://www.youtube.com/watch?v=RABohdixDSA&t=5s	Plato 1959	FRI
7022kHz	1600z (Approx) 28 Mar	(Received on Siemens E311 Receiver)		
	V 7760 7760 N33T N33T AR K			
	R 5TA4 5TA4 K			
	R U7GGA K			
Watch the	ese videos & check out the channel for some	other interesting radio based videos. https://www.youtube.com/@Plato1959/vid	leos	

Our thanks to 'Plato 1959' for submitting these intercepts & for allowing them to be included in the newsletter.

#### Cyrillic Morse Transmissions - Day 1

8250	1650 – 1856z	21 Apr	Endless Cyrillic 5-Letter groups in USB CW	AB	MON
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We were alerted to this curious transmission by Ary, (AB), on the evening of Easter Monday, 21 April. The transmission consisted of continuous 5-letter groups sent on 8250kHz using the Cyrillic alphabet.

As can be seen in the screen-shot above the transmission was in upper side band, with a number of tones approximately 650Hz apart.

The Morse was machine generated & sent at a brisk speed. Transmission ceased abruptly at 1856z

There was no identification given. Signals were strong in UK & the Netherlands. Using on-line SDRs strong signals were noted in Denmark, with much weaker signals received via Poland & Finland receivers.

	the second of the second	ing the second second second second	ter den sig stationale stranderer av Generale
		a provide a superior	
A TOP I TO A TO A REAL OF	AND ADDRESS OF A DECK	Barren Carlos	and the second sec
		A Contractory and	Street Relieves
			The second second
and the second state of the second states and	and the second second	in Auropean and an	and frances
			and the other is set of the local set of the local set
and the contraction of the			et the provide the production
energy and the second second second second		simple contraction is appendix	W MAT I WARD I WARD
and a provide the second state		ALT & REPORT OF THE OWNER	and is some this
8245	8250	8255	826
	$\downarrow$ $\land$		
8250kHz 1811z 21 April	Cyrillic Morse Transmission		Courtesy BR
			Monitored by AB, BR, Gary,
Cyrillic Morse Transmissions – Day 2			· · ·

The transmissions reappeared the following day – This time logged on three separate frequencies sequentially.

8250	0458 - 0525z	22 Apr	Endless Cyrillic 5-Letter groups in USB CW	AB	TUE	
11250	0527 – 0556z	22 Apr	Endless Cyrillic 5-Letter groups in USB CW	AB	TUE	
17250	0600 - 0817z	22 Apr	Endless Cyrillic 5-Letter groups in USB CW	AB	TUE	
Nothing more was heard of this station until 29 April – When it appeared again a previously unused frequency:-						
11420	1135 – 1316z	29 Apr	Endless Cyrillic 5-letter groups in USB CW	AB	TUE	

No further transmissions were heard or reported - The source & purpose of the transmissions remains unknown.

Our thanks to Ary for these reports.

# **Morse - Number Stations**

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

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

#### March 2025:

5020	2000z 2000z 2000z 2000z 2000z 2000z 2000z 2000z	04 Mar 06 Mar 11 Mar 13 Mar 18 Mar 20 Mar 25 Mar 27 Mar	$\begin{array}{ll} '463' & 323 & 30 = = 86795 & 47562 & \dots & 43094 & 20015 = = & & & & & & & & & & & & & & & & & $	, V.fast. Excellent Morse. = = omitted from msg. , fast. Grp12 54632 56432. Extra zero added at end , fast. Errors in call-up & grps08-09, 14, 25 & 30 fast. Errors noted. Turned to strings at end of msg. , fast. Corrected error grp01 – Otherwise good , fast. Errors in call-up & in grps 26, 29-30	HFD BR BR BR BR BR BR BR	TUE THU TUE THU TUE THU TUE THU
5475	1800z 1800z 1800z 1800z 1800z 1800z 1800z	04 Mar 06 Mar 11 Mar 13 Mar 18 Mar 25 Mar 27 Mar	$\begin{array}{ll} {}^{\prime}463{}^{\prime}&457&30 & 68978&15423 \dots 49857&60098 & {\rm Good}, \\ {}^{\prime}463{}^{\prime}&532&30==46752&34243\dots 67534\dots 556== & {\rm Good}, \\ {}^{\prime}463{}^{\prime}&264&30==64857&12387\dots 753162\dots 301== & {\rm Fair}, {\rm fai}, \\ {}^{\prime}463{}^{\prime}&899&30==68790&25343\dots 90798 & 979== & {\rm Fair}, {\rm fai}, \\ {}^{\prime}463{}^{\prime}&413&30==75683&24435\dots 87695&05454== & {\rm Good}, \end{array}$	, V.fast. Excellent Morse. = = omitted from msg. , fast. Good grps turning into strings towards end fast. Errorsin call-up & Grps22-23 & 29-30 fast. Several errors noted turning to strings at end , fast. Numerous errors including incomplete grps	BR BR BR BR BR BR	TUE THU TUE THU TUE TUE THU
6260	1500z 1500z 1500z	01 Mar 08 Mar 22 Mar	'463' 196 30 = = 68594 59301 4731574874 = Fair wi	ith QSB, fast. Into strings of figures from grp25	BR/HFD BR BR	SAT SAT SAT
6510	0700z 0700z 0700z	02 Mar 09 Mar 23 Mar	'463' 890 30 = = 63594 23173 59079 67584 = Fair, fa	fast. Errors in Call-up. Only 28 grps sent	BR/HFD BR BR	SUN SUN SUN
<u>April 202</u>	<u>25:</u>					
5020	2000z	01 Apr	'463' 817 30 = = 57483 48391 48736 28719 Fair, fa	ast. Errors noted. Many grps start 48, 57 or 58	BR	TUE

5020	20002	01 Apr	405 817 50	5/405 40591 40	5/50 20/19	Fair, last. Errors noted. Many gips start 48, 57 or 58	DK	TOL
	2000z	08 Apr	'463' 56.30 = =	90032 64537 65	5845 75467 = =	Far, fast. Poor copy due to strong OTHR QRM	BR	TUE
	2000z	17 Apr	'463' 696 30	00493 84393 94	4381 94035	Good, fast. Excellent Morse. Error grp09. = = missing	BR	THU
	2000z	24 Apr	'463' 080 30 = =	75684 34512 76	6583 7653 = =	Fair, fast. Good until grp12 then Jumbled & cut grps	BR	THU

	2000z	29 Apr	'463' 543 $30 = 5409853401 \dots 54361546121 = Good, fast.$ Jumbled mess from grp12. Numerous errors	BR T	UE
5475	1800z	01 Apr	'463' 891 30 = = 57949 58901 57463 57819 Good, fast. Errors noted. Many grps start 47, 48, 57, 58	BR T	UE
	1800z	03 Apr	'463' $653$ $30 = 57687$ $25436$ $13240$ $90987$ Good, fast. Several errors noted. No = = at end of msg	BR T	ΉU
	1800z	08 Apr	$463' 645 30 = 87690 41321 \dots 67580 86793 = Fair, fast. Excellent Morse. Errors Grp02 & 16$	BR T	UE
	1800z	15 Apr	463' $472$ $30 = 54672$ $16514$ $30184$ $27163 = 54672$ Fair with QSB, fast. Good Morse. No errors	BR T	UE
	1800z	17 Apr	'463' 626 30 40930 84390 54300 95403 Fair, fast. Excellent Morse. = = missing. 31 grps sent.	BR T	ΉU
	1800z	22 Apr	'463' 676 30 10045 85430 85493 91345 Fair with QSB. = = missing otherwise perfect sending	BR T	UE
	1800z	29 Apr	'463' $344\ 30 = 65743\ 23421\ \dots\ 54675\ 07989 = Fair with QSB.$ Jumbled mess from grp15. Many errors	BR T	UE
6260	1500z	05 Apr	NRH	BR S.	AT
	1500z	20 Apr	$463' 401 30 = 51091 15427 \dots 46371 60919 = Weak, fast. Grp05 30182 301911 plus error in end DK$	BR S	AT
6510	0700z	06 Apr	'463' 404 30 = = 9632 . 87410 76592 84320 = Very weak, fast. Poor copy. Corrected error grp21	BR S	UN
	07 <b>03</b> z	27 Apr	$463' 859 30 = 73647 82883 \dots 28374 57489 = Weak, noisy.$ Fast delivery. Late start. Numerous errors	BR S	UN

#### AM /SSB M01 Transmission

HFD reports the M01 sched with ID 475 sporadically on Sat and Sun at 0715z has been found on 7115 kHz. (Thanks HFD)

7115 0715z 20 Apr '475' 217 50 = = 28173	Very weak, AR QRM HFD SUN
M01/2 5020kHz 2000z 20 March 2025	M01/2 6510kHz 0700z 30 March 2025
463 (R4m) 568 568 30 30 = =	463 (R4m) 589 589 30 30
57485 12473 28495 38471 29343 48573 19847 39085 38172 38904 89076 45673 12348 69873 19087 55732 34518 58764 18905 47384 57483 48905 48732 18948 58903 48371 48732 48752 38984 57482 = 568 568 30 30 000	57839 49038 18372 57483 48590 67321 57843 58948 57483 58498 57839 19034 57684 57843 19834 57483 58574 19847 48734 58743 58745 39812 58473 12984 57847 38193 58743 19845 57843 19047 589 589 30 30 000
Note: Corrected error in Grp01 57485 57483 etc. Courtesy BR	Courtesy BR

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

18767/17467/16267	0300/20/40z	04 Mar	742 1		(Via SDR Japan)	HFD	TUE
18324/16112/13472	0200/20/40z	23 Mar	314 1	[Note 1]	(Via SDR Japan)	HFD	SUN
18767/17467/16267	0300/20/40z	08 Apr	742 1		(Via SDR Japan)	HFD	TUE
12217/11467/10348	<b>0800/20/40z</b> <b>0800/20/40z</b> 0800/20/40z 0800/20/40z 0800/20/40z	<b>11 Apr 14 Apr</b> 18 Apr 25 Apr 28 Apr	243 1 (4042 151)51974 72269234 1 (1070 103)32187 15593234 1 (1070 103)32187 15593234 1 (6789 147)97582 13673234 1 (5373 127)75052 89612	[Note 2]	(Via SDR Japan) (Via SDR Japan) (Via SDR Japan) (Via SDR Japan) (Via SDR Japan)	BR/HFD BR BR BR BR	FRI MON FRI FRI MON

This sched also audible in UK -Although very weak

[Note 1] The M12 Pacific Mon/Fri sked at 0010/0030/0050z, formerly in March with ID 297 on 16284/15984/14784 kHz, has changed to 0200/0220/0240z on 18324/16112/13472 kHz with ID 314. Note the different ten and one digits! HFD

[Note 2] The M12 Pacific Mon/Fri sked formerly at 0010z on 14837/13937/12137 kHz with ID 891 has changed to 0800z 12217/11467/10348 kHz with ID 243. Note the different ten and one digits! HFD

#### European M12 Logs

## March 2025: New scheds in bold type

8126/7526/6826	2200/20/40z	01 Mar	178 1 (3054 93) 16737 40643	BR/HFD	SAT
	2200/20/40z	07 Mar	178 1 (3054 93) 16737 40643	BR	FRI
	2200/20/40z	08 Mar	178 1 (3054 93) 16737 40643	BR	SAT
	2200/20/40z	14 Mar	178 000	BR	FRI
	2200/20/40z	15 Mar	178 000	BR	SAT
	2200/20/40z	21 Mar	178 000	BR	FRI
	2200/20/40z	22 Mar	178 000	BR	SAT
	2200/20/40z	28 Mar	178 1 (6002 67) 85454 38893	BR	FRI
	2200/20/40z	29 Mar	178 1 (6002 67) 85454 38893	BR	SAT

9157/7957/6857	2300/20/40z	03 Mar	917 1 (672 76)	29382 80581		BR/HFD	MON
9137/1937/0037							
	2300/20/40z	06 Mar	917 1 (672 76)	29382 80581		BR	THU
	2300/20/40z	10 Mar	917 1 (672 76)	29382 80581		BR	MON
	2300/20/40z	13 Mar	917 1 (672 76)	29382 80581		BR	THU
	2300/20/40z	17 Mar	917 000			BR	MON
	2300/20/40z	20 Mar	917 000			BR	THU
	2300/20/40z	24 Mar	917 1 (448 38)	37210 93619		BR	MON
				5/210 95019			
	2300/20/40z	31 Mar	917 000			BR	MON
10238/9138/7838	2000/20/40z	05 Mar	218 000			BR/HFD	WED
	2000/20/40z	07 Mar	218 000			BR	FRI
	2000/20/40z	12 Mar	218 1 (170 36)	38984 70513		BR	WED
	2000/20/40z	14 Mar	218 1 (170 36)	38984 70513		BR	FRI
	2000/20/40z	19 Mar	218 1 (170 36)	38984 70513		BR	WED
	2000/20/40z	26 Mar	218 1 (2530 41)	87452 08826		BR	WED
	2000/20/40z	28 Mar	218 1 (2530 41)	87452 08826		BR	FRI
			( )				
11435/10598/9327	1800/20/40z	06 Mar	938 1 (3284 81)	56810 59464		BR/HFD	THU
11135/10570/7521	1800/20/40z	13 Mar		20810 78222		BR	THU
			· · · · ·				
	1800/20/40z	20 Mar	938 1 (6384 80)	61134 28041		BR	THU
11519/12194/13407	1100/20/40z	04 Mar	289 1 (4512 61)	68404 90688 75497 11357 000	000	Gert/HFD	TUE
	1100/20/40z	11 Mar	289 1 (5800 58)	45164 37395		BR	TUE
	1100/20/40z	18 Mar	289 1 (7842 62)	56462 49006		BR	TUE
	1100/20/40z	25 Mar	289 1 2304 56)			BR	TUE
	1100/20/402	23 Wiai	269 1 2304 30)	93033 18890		DK	TUE
10571/10171/10071	0010/00/50	02.14	<b>510 1</b>				CIDI
13571/12171/10871	2310/30/50z	02 Mar	518 1			HFD	SUN
	2310/30/50z	05 Mar	518 1 (6 1)		Very poor copy	BR	WED
	2310/30/50z	19 Mar	518 1 (348 141)	12040 01729	••• •••	BR	WED
	2310/30/50z	23 Mar	5181()		Very poor copy	BR	SUN
	2510/50/502	23 Wiai	5161()		very poor copy	DK	301
4							
<u>April 2025:</u>							
7575/8175/9175	2100/20/40z	04 Apr	511 1 (6002 67)	85454 38893		BR/HFD	FRI
	2100/20/40z	05 Apr	511 1 (6002 67)	85454 38893		BR	SAT
	2100/20/40z	11 Apr	511 1 (3966 237	) 46495 66535		BR	FRI
	2100/20/40z	12 Apr		) 46495 66535		BR	SAT
		-					
	2100/20/40z	18 Apr		) 46495 66535		BR	FRI
	2100/20/40z	19 Apr	511 1 (3966 237	) 46495 66535		BR	SAT
	2100/20/40z	25 Apr	511 1 (1484 117	) 66948 94998		BR	FRI
	2100/20/40z	26 Apr	NRH	,		BR	SAT
		· 1					
11435/10598/9327	1800/20/40z	03 Apr	938 1 (8580 78)	17137 82433		BR	THU
11455/10576/9527		1	· · · · ·				
	1800/20/40z	10 Apr	938 1 (3215 83)			BR	THU
	1800/20/40z	17 Apr	938 1 (4106 80)	20378 95312		BR	THU
	1800/20/40z	24 Apr	938 1 (6656 81)	80091 82643		BR	THU
11519/12194/13407	1100/20/40z	08 Apr	289 1 (8840 57)	66868 54356		BR	TUE
	1100/20/40z	22 Apr	289 1 (3420 62)			BR	TUE
			· · · · · ·			BR	TUE
	1100/20/40z	29 Apr	209 1 (0401 39)	14561 89383		DK	IUE
12139/11139/10239	2000/20/40z	03 Apr	234 000			HFD	THU
	2000/20/40z	07 Apr	234 1 (945 36)	73393 70413		BR	MON
	2000/20/40z	10 Apr	234 1 (945 36)	73394 70413		BR	THU
	2000/20/40z	14 Apr	234 1 (945 36)	73394 70413		BR	MON
			234 1 (945 36)			BR	
	2000/20/40z	17 Apr	( )	73394 70413			THU
	2000/20/40z	21 Apr	234 1 (587 43)	31051 77777		BR	MON
	2000/20/40z	24 Apr	234 1 (587 43)	31051 77777		BR	THU
	2000/20/40z	28 Apr	234 1 (587 43)	31051 77777		BR	MON
		1	· · · · ·				
12162/11566/10711	1900/20/40z	30 Apr	546 1 (8877 59)	49475 77170		BR	WED
12102/11300/10/11	1700/20/402	50 Mpi	5401 (0077 57)	19119 //1/0		DI	11 LD
12217/11/27/102/0	0000/20/40-	11 4	<b>343 1</b> (4042 151	51074 72260 72624 05222 000	000	٨D	EDI
12217/11467/10348	0800/20/40z	11 Apr		) 51974 7226973634 05232 000		AB	FRI
	0800/20/40z	14 Apr	243 1 (10/0 103	) 32187 1559311368 12832 000	000	AB	MON
13564/12164/11164	1900/20/40z	02 Apr	511 1			HFD	WED
	1900/20/40z	09 Apr	511 1 (263 33)	46495 66535		BR	WED
	1900/20/40z	11 Apr	511 1 (263 33)	46495 66535		BR	FRI
			· · · · ·			BR	
	1900/20/40z	16 Apr	511 000				WED
	1900/20/40z	18 Apr	511 000			BR	FRI
	1900/20/40z	23 Apr	511 1 (9630 49)	06260 73197		BR	WED
	1900/20/40z	25 Apr	511 1 (9630 49)	06260 73197		BR	FRI
	1900/20/40z	30 Apr	· · ·	) 69989 55282		BR	WED
	1200,20,102	20 mpi	211 1 (2200 100	,		2	
14772/12022/12022	2210/20/50-	02 4	702 1 (671		Vorumoor	DD	WED
14723/13923/12223	2310/30/50z	02 Apr	792 1 (671 )		Very poor copy	BR	WED
	2310/30/50z	09 Apr	792 1			HFD	WED
		1					
	2310/30/50z	20 Apr	792 1 (432)		Very poor copy	BR	SUN
	2310/30/50z	20 Apr	· · · ·				
		1	792 1 (432) 792 1 ( ) .		Very poor copy Very Poor copy	BR BR	SUN WED

M12 11519/12194/13407kHz 1100/1120/1140z 04 Mar 2025	M12 12217/11467/10348 kHz 0800/0820/0840z 14 Apr 2025
289 289 289 1 (R2m) 4512 61 4512 61	243 243 243 1 (R2m) 1070 103 1070 103
68404 90688 36702 85494 09382 38413 33318 93632 76130 16035 79507 43165 03003 74783 92702 93428 60846 73000 25444 02048 87262 51128 58231 93794 75609 33884 27055 40638 63188 05246 04781 93377 06024 01210 71342 49198 36099 79818 78577 79542 76173 76739 96695 11463 69378 49351 55552 44868 19198 57270 58279 37601 05167 86709 76893 17276 32456 42907 09885 75497 11357 000 000 Courtesy Gert	32187       15593       77087       53539       99321       08109       44942       76186       47345       40035         03209       72761       47675       69903       83838       31564       44491       64648       63725       40644         86451       10436       49452       81100       03533       27970       70503       91950       98620       01849         55536       92993       56505       86199       60719       48607       11247       80229       27511       98912         52397       06448       56257       18915       11009       89159       86991       81947       80259       67708         12073       31087       26612       13715       86287       96871       19037       02687       59697       89212         83051       64815       64789       10920       07306       45466       31475       85707       57705       54297         53120       78153       98695       98670       76062       87116       80357       18433       41250       11245
	39059 32603 59746 91893 56917 02219 77769 29740 02414 90746 28776 49300 40823 64478 65699 76395 77321 15445 79886 33822 15508 11368 12832 000 000 Courtesy AB

M14 IA MCW / ICW Short 0

#### March 2025:

12211 10243	0500z 0520z	03 Mar 03 Mar	952 (703 54) = 27176 952 (703 54) = 27176	(Via SDR Japan) (Via SDR Japan)	HFD HFD	MON MON
<u>April 20</u>	<u> 25:</u>					
17458	0930z	10 Apr	617 00000	(Via SDR Japan)	HFD	THU

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

Plenty of activity recorded in this period starting with a return to 10755kHz in March. Once again our thanks to Ary, (AB), for alerting us to the transmissions & for the detailed logs. Our logs start from Wednesday, 19 March, although Ary reports that he has received a log for Friday, 14 March, with the same text, in progress at 1651z,.

Ary reports that the partial text shown for the 19 March log was the complete transmission – The numbers and full text appeared on the 20th March.

10755	1537z	19 Mar	YAWLS AWACS CROWN KAWIS SWAGS WIDGE WAGON WRAPS AWELE KAYAK POEME AIKAI EPODE GESTE HAIKU SLMNE LAMBE KAIKU RANDO $[\mathit{off}]$	AB	WED
10755	1515 - 1542z	20 Mar	55555 05005 05505 05555 00000 55550 00005 05500 05555 55005 00550 50505 <i>etc. [16m40s]</i> SALUT LA COMPAGNIE PORTE POINT SORTE ARBRE SUITE GAHDE RHIEN SIGNE LIGNE MIEN PARME SACR MON <i>etc. [Ended at 1542z]</i>	AB	THU
10755	1519 – 1544z	21 Mar	55555 05050 55005 05555 00000 55550 00005 05500 05555 55005 00550 50505 etc [16m32s] SALUT LA COMPAGNIE etc [Ended at 1544z]	AB	FRI
10755	1513 – 1540z	22 Mar	55555 05050 55005 05555 00000 55550 00005 05500 05555 55005 00550 50505 etc. [16m11s] SALUT LA COMPAGNIE etc. [Ended at 1540z]	AB	SAT
10755	1520 (IP) – 1540z	23 Mar	Signal present but copy patchy due to poor conditions - Appeared to be same message content	BR	SUN
10755	1520 – 1545z	24 Mar	55555 05050 55005 05555 00000 55550 00005 50550 00555 55005 00550 50505 [etc] SALUT LA COMPAGNIE PORTE POINT SORTE <i>etc</i>	BR	MON

#### Transcript of transmission 10755kHz 1520 – 1545z Mon 24 March 2025

55555 05050 55005 05555 00000 55550 00005 50550 00555 55005 00550 50505 00550 55005 05505 55055 00550 50005 O5555O (Sent x 5)

SALUT LA COMPAGNIE PORTE POINT SORTE ARBRE SUITE GARDE CHIEN SIGNE LIGNE MIEN PARMI SACRE MONDE TIEDE GUIDE METRE POUCE POULE REVER STADE TRAIN NOTRE VOTRE ENTRE CONTRE DESIR RIDES CONTER RENTE VOTER TENOR RIANT DATES VERRE LOUPE COUPE TERME DIUE DIETE DE MON CASER PRIOR MINE LINGE 5INGE CHINE NICHE GRADE SITUE BARRE STORE PITON OPTER YAWLS AWACS CROWN KAWIS SWAGS WIDGE WAGON WRAPS AWELE KAYAK POEME AIKAI EPODE GESTE HAIKU SLMNE LAMBE KAIKU RANDO *[off]* 

Note: The numbers sent consist of 20 groups of 5 figures. There is no pause after every 4th group - so suggests 5 x groups of 4? The groups are made up of various combinations of just zero & five - with the exception of the last two groups where a letter O is substituted for zero.

The 20 groups were repeated 4 times – but on the last group the last two groups were omitted.

Courtesy AB/BR

Brian, (BR), logging an E11 station on Monday 31 March noticed a strong Morse signal slightly HF of the E11 frequency sending a series of French words before ending abruptly. At first thought to be UM05 it was confirmed by Ary, (AB), from his recordings to be M23. Monitoring the following day found the station sending the same sequence of 5-figure groups, followed by the French words that were sent on 10755kHz from March 19.

Ary was also able to find from his recordings that the station was present on 10222kHz with the same transmission from Sunday 30 March. Transmissions continued to be heard on both 10222kHz & 10775kHz

Activity continued daily. Below is a representative sample of activity & logs which has been quite extensive over this period.

#### Early Schedule:

10222	$\begin{array}{l} 0750 \; (IP) - 0754z \\ 0728 - 0754z \end{array}$	31 Mar 31 Mar	Series of French words – Ended abruptly 0754z 55555 05050 55005 05555 00000 55550 00005 05500 05555 55005 00550 50505 etc. S55500 SALUT LA COMPAGNIE etc. (ended at 0754z)	BR AB	MON MON
10222	0729 – 0754z	01 Apr	55555 05050 55005 05555 00000 55550 00005 05500 05555 55005 00550 50505 etc. S55500 SALUT LA COMPAGNIE etc. (ended at 0755z)	AB/BR	TUE
10222	0728 – 0754z	02 Apr	55555 05050 55005 05555 00000 55550 00005 05500 05555 55005 00550 50505 etc. S555OO SALUT LA COMPAGNIE etc. (ended at 0754z)	AB/BR	WED
10222	0730z	03 Apr	Nothing heard	AB/BR	THU
Late Sch	edule:				
10755	1528 – 1554z	01 Apr	55555 05050 55005 05555 00000 55550 00005 05500 05555 55005 00550 50505 etc. S555OO SALUT LA COMPAGNIE etc. (ended at 1554z)	AB	TUE
10755	1530 – 1555z	02 Apr	55555 05050 55005 05555 00000 55550 00005 05500 05555 55005 00550 50505 etc. S55500 SALUT LA COMPAGNIE etc. (ended at 1555z)	AB	WED
10755	1502 – 1529z	03 Apr	55555 05050 55005 05555 00000 55550 00005 05500 05555 55005 00550 50505 etc. S55500 SALUT LA COMPAGNIE etc. (ended at 1529z)	AB	THU

#### Change of Schedules

After a few days off M23 returned with new numbers & new schedules:-

#### Early Schedule:

10222	0600 - 0627z	13 Apr	55555 05050 55005 05555 00000 55550 00005 50550 00555 55005 00550 50505 etc. 55500 TAG JAZZY KAYAK JUNKY KHOBZ FAXEZ ZOGUE AMINE etc. (ended at 0627z)	AB	SUN
10222	0600 - 0631z	14 Apr	55555 05050 55005 05555 00000 etc. TAG JAZZY KAYAK JUNKY KHOBZ FAXEZ etc.	AB	MON

#### Transcript of transmission 10222kHz 0600 - 0627z Mon 13 April 2025

55555 05050 55005 05555 00000 55550 00005 50550 00555 55005 00550 50505 00550 55005 05505 55055 00550 55005 (repeated)

TAG JAZZY KAYAK JUNKY KHOBZ FAXEZ ZOGUE AMINE TRIOL ERGOL OXYDE HAKKA VOYEZ BAYEZ BUZZE DAYAK EPOXY GAZEZ GYOZA KEKES VICHY HAKKA VOYEZ BAYEZ BUZZE DAYAK ERNEE PARIS TULLE NIMES DIJON ROUEN LILLE NANCY MELUN REIMS SEDAN BREST BLEDS CHINE YEMEN ETATS NAURU MARO LIBAT CHILI PIONT GABON DONAX PINNE TARET ROUEN LILLE DACY MELUN REIMS JUNKY KHOBZ FAXEZ NIMES DIJON JAZZY KAYAK JUNKY KHOBZ FAXEZ HAKKA VOYEZ BAYEZ JAZZY KAYAK JUNKY (ended at 0627z)

Courtesy AB

#### Late Schedules:

10755	1430 - 1455z 1430 - 1455z 1430 - 1455z 1454 (IP) - 1556z 1430 - 1455z 1430 - 1455z 1430 - 1455z 1430 - 1455z 1430 - 1455z	10 Apr 12 Apr 13 Apr 15 Apr 16 Apr 18 Apr 21 Apr 22 Apr 28 Apr	15081 86915 08176 91508 17691 17690P         15081 76915 08176 91508 17691 50817 69150 81769 (repeated)         15081 76915 08176 91508 17691 50817 69150 81769 (repeated)         (In Progress) 5-fig groups under strong wideband OTHR.        769 & 691.0 logged       Mostly unreadable         15081 76915 08176 91508 17691 50817 69150 81769 (Rptd)         15081 76915 08176 91508 17691 50817 69150 81769 (Rptd)         15081 76915 08176 91508 17691 50817 69150 81769 (Rptd)         15081 76915 08176 91508 17691 50817 69150 81769 (Rptd)         15081 76915 08176 91508 17691 50817 69150 81769 (Rptd)         15081 76915 08176 91508 17691 50817 69150 81769 (Rptd)         15081 76915 08176 91508 17691 50817 69150 81769 (Rptd)         15081 76915 08176 91508 17691 50817 69150 81769 (Rptd)	AB AB BR BR BR BR BR BR BR	THU SAT SUN TUE WED FRI MON TUE MON
	1430 - 1455z 1430 - 1455z	20 Apr 30 Apr	NRH	AB	WED
7668	1620z (IP) 1600 – 1624z	12 Apr 13 Apr	(i.p.) 55555 05050 55005 Reported by Pille on UDXF. On air but unreadable in Holland (Vis 55555 05050 55005 05555 00000 55550 00005 05505 05555 55005 00550 50505 etc. (just numbers, no Salut etc)	a AB) AB	SAT SUN
	$\begin{array}{l} 1600-1625z\\ \end{array}$	14-30 Apr 15 Apr 16 Apr 18 Apr 20 Apr 22 Apr 24 Apr 27 Apr 29 Apr	Gust numbers, in Same (ce)Number groups only (Repeated) – No words. Fair over digital QRM55555 05050 55005 etc.Good over strong digital QRM	BR BR BR BR BR BR BR BR BR	MON TUE WED FRI SUN TUE THU SUN TUE

6937	Active since 07 April 1800 – 1825z	l 20 Apr		5	oiseaux chanten etc. LA1511114 76915081 (repeated). Ended at 18	825z	AB	SUN
	1800z 1812 (IP) – 1825z	26 Apr 29 Apr		O DU JOUR EST 17 LA1511114 (re	BON ET LES OISEAUX CHANTENT (etc.) peated)	(Transcript below) Strong	AB BR	SAT TUE
	Transcript of trans	mission	6937kHz	1800 - 1825	Sat 26 April 2025			]
	LA METEO DU JOU LES ARBRES SON' LA SOUPE AUX CI	T EN FLEU		DISEAUX CHAN	TENT			
	LE PERE NOEL ES LE DINER DE CON		DURE					
	LES BRONZES FOI							
	BIENVENU A GAL LES HOMMES VIE			E LES FEMMES	DE VENUS			
	LO48636017 LA151	1114 (repe	ated) 150817	69 (repeated).		Courtesy AB		

#### Possible Coordinates Given in Message

If the figures following LO & LA are taken to represent Longitude & Latitude, this gives us a location within France.

48.6360° N, 1.5111° E comes back to an industrial area in Nogent Le Roi, SW of Paris.



Google Earth image showing the Location at 48.6360° N, 1.5111° E

Nogent Le Roi - France

All schedules continued daily to the end of April, with the exception of 10755kHz, 1430z, which Ary reports as missing on Wednesday, 30 April.

However, there was a change of activity on new frequencies noted on 01 May which will be covered in the next newsletter.

Thanks to Ary, (AB) for uncovering & alerting us to these schedules

#### The French Connection

With the changing transmissions over recent years, it is becoming evident that M23 is operated by French Military operations, either for Morse training, DF, bandsweeping or similar. It also seems possible that M23, UM05 & M51 may all be operated by the same group.

M23 has come a long way from the original format with occasional 5-figure messages being sent. These may have had a different purpose then, perhaps, but would also fit the exercise model.

The original format sent codes of five figures, repeated, following which a message would sometimes be sent consisting of five figure groups, a format that suggested the station was a numbers station. At other times the five figure call was replaced by two or three figure calls or even random letters.

Formats used since those early transmissions have varied greatly, resulting in today's transmissions listed above.

Ary, (AB) believes that UM06 & M23 are the same station or closely related. His historic logs showing the same combinations of letters have been used by both these stations.

Although M23 is still featured in the 'Number Stations' section of this column, recent transmissions would indicate it is most likely a French military exercise / training station.

# 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

1130 - 1204z	15 Apr	Mardi-Leçon	22-2/1 Codé	22-2/2 Clair,	22-2/3 Codé,	22-2/4 Clair (600 grps/hr)	BR	TUE
1130 - 1207z	16 Apr	Mercredi- Leçon	23-2/1 Codé,	23-2/2 Clair,	23-2/3 Codé,	23-2/4 Clair (720 grps/hr)	BR	WED
1130 - 1157z	17 Apr	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

1//6825				
0852z	12 Apr	Non-stop 5-character groups composed of M51a messages	BR	SAT
1814z	15 Apr	Non-stop 5-character groups composed of M51a messages (3881kHz only - 6825kHz not audible)	BR	TUE

#### M51 Easter Activity – A Report from PoSW

#### French CW on 6825 and 3881:-

This Morse station continues to be busy although appears to take time off for a few days every so often; something of a surprise that it was on continuously over the extended weekend of Easter - although I think that in the past it has been reported busy over Christmas:-

- 18-April-25, Friday:- Good Friday 0706 UTC, 6825 kHz very strong signal, fast 5-character groups // 3881 weaker. Stopped at approx. 0830 then started up with slow "VVV DE FAV22...QLH 3881/ 6825 kHz" routine. 1907 UTC, still on with fast CW, 6825 very strong, 3881 weaker. Still on at 2110 UTC.
- 19-Apr-25, Saturday:- 0540 UTC Still on, 3881 strongest, 6825 weaker. 1953 UTC, Strong signal on 3881, over S9, nothing audible on 6825, probably under the local RF noise interference.
- 20-Apr-25, Easter Sunday:- 0543 UTC, 3881 strong signal, 6835 weaker. Was going into slow "VVV DE FAV22..." when checked just after 0700 UTC. 0738 UTC, fast CW, good signal on both frequencies. 2215 UTC, still on with fast CW, 11.15 PM here, presumably an hour later "Sur le continent".
- 21-Apr-25, Monday:- 0617 UTC, fast CW, 3881 strong, 6825 weaker. 2200 UTC, 3881 strong signal, 6825 weaker.

ENDS

Thanks for the report, Peter

#### <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).

#### **Exercise in Progress April**

Jean-Paul reports that an exercise is taking place with the expected increase in traffic.

4435	5004 5223 5888	8031 8090 8130 8199 8374 8453	9049
		8453 8919	

#### New Scheds for Mar / Apr 2025:

#### From logs submitted from JPL

4122	New Call sign & frequency	First heard 20 April	V C5ER (x3) DE 9UTL (x2)
6817	New frequency for this call sign	First heard 21 Apr	V C5ER (x3) DE 9UTL (x2)
4357//5742	Duplex frequencies confirmed	First heard 02 April	V 3JWV (x3) DE QSV9 (x2)
4357// <b>5672</b>	Change of // frequency (Previously on 4357//5742 & returned to th	First heard 19 April lose frequencies on 21 April)	V 3JWV (x3) DE QSVP (x2)

From logs submitted from JPL

Freq in KHz	Call	<u>Slip</u>	Freq in kH	Iz <u>Call Slip</u>		
4122	V C	5ER (x3) DI	E 9UTL (x2) 4860// 684	0 V Q2M (x3) DE NYZ (x2)		
4357	V 3J	WV (x3) D	E QSV9 (x2) 5742	V 3JWV (x3) DE QSV9 (x2)		
4357// <b>5672</b>	V 3J	IWV (x3) D	E QSV9 (x2) 6817	V C5ER (x3) DE 9UTL (x2)		
4357//5742 V 3JWV (x3) D		IWV (x3) D	E QSV9 (x2)		Courtesy JPI	L
gs:						]
2	<b>1530z</b> 1726z	<b>20 Apr</b> 21 Apr	V C5ER (x3) DE 9UTL (x2) V C5ER (x3) DE 9UTL (x2)	(Remote tuner Novosibirsk) (Remote tuner Novosibirsk)		SUN MOI
7	1125z 1552z	24 Apr 25 Apr	V 3JWV (x3) DE QSVP (x2) V 3JWV (x3) DE QSVP (x2)	(Remote tuner South Korea) (Remote tuner Japan)	) JPL JPL	THU FRI
7//5742	1902z	12 Mar	V 3JWV (x3) DE QSVP (x2)	(Remote tuner Taiwan)	JPL	WEI
	1950z	17 Mar	V3JWV (x3) DE QSVP (x2_	(Remote tuner Taiwan	JPL	MO
	1720z	19 Mar	V3JWV (x3) DE QSVP (x2_	(Remote tuner Taiwan	JPL	WEI
	1545z	25 Mar	V 3JWV (x3) DE QSVP (x2)	(Remote tuner Taiwan)	JPL	TUE
	1456z	04 Apr 07 Apr	V 3JWV (x3) DE QSVP (x2) V 3JWV (x3) DE OSVP (x2)	(Remote tuner Japan)	JPL	FRI
	1648z	07 Apr 12 Apr	V 3JWV (x3) DE QSVP (x2) V 3JWV (x3) DE QSVP (x2)	(Remote tuner Japan) (Remote tuner Japan)	JPL IDI	MOI
	1850z	12 Apr 13 Apr	V 3JWV (x3) DE QSVP (x2) V 3JWV (x3) DE QSVP (x2)	(Remote tuner Japan) (Remote tuner Japan)	JPL JPL	SAT
	1448z	13 Apr 14 Apr	V 3JWV (x3) DE QSVP (x2) V 3JWV (x3) DE QSVP (x2)	· · · · · · · · · · · · · · · · · · ·	JPL JPL	SUN MOI
	1127z 1400z	14 Apr 17 Apr	V 3JWV (x3) DE QSVP (x2) V 3JWV (x3) DE QSVP (x2)	(Remote tuner Japan) (Remote tuner Japan)	JPL JPL	THU
	1400z 1836z	17 Apr 18 Apr	V 3JWV (x3) DE QSVP (x2) V 3JWV (x3) DE QSVP (x2)	(Remote tuner Japan) (Remote tuner Japan)	JPL JPL	FRI
	18502 1545z	21 Apr	V 3JWV (x3) DE QSVP (x2) V 3JWV (x3) DE QSVP (x2) Note: Back on us		JPL JPL	MO
7// <b>5672</b>	Note: Cl	hange in fre	equency - Previously on 4357//5742kHz			
	1412z	19 Apr	V 3JWV (x3) DE QSVP (x2)	(Remote tuner Japan)	JPL	SAT
	1420z	19 Apr	NR CK 09 2220 RMKS 5222 TO 5995 TO	O 5561 BT (Remote tuner Japan)	JPL	SAT
	1527z	20 Apr	V 3JWV (x3) DE QSVP (x2)	(Remote tuner Japan)	JPL	SUN
5 (In tfc)	1356z	17 Apr	NR 2012 CK 71 66 05 172100 RMKS 8.82 TO 867	72 BT (Remote tuner Japan)	JPL	THU
0//6840	1520z	04 Apr	V Q2M (x3) DE NYZ (x2)	(Remote tuner Hong Kong)	JPL	FRI
	1820z	12 Apr	V Q2M (x3) DE NYZ (x2)	(Remote tuner Japan)	JPL	SAT
	1120z	13 Apr	V Q2M (x3) DE NYZ (x2)	(Remote tuner Japan)	JPL	SUN
	1620z	17 Apr	V Q2M (x3) DE NYZ (x2)	(Remote tuner Hong Kong)	JPL	THU
	1520z	20 Apr	V Q2M (x3) DE NYZ (x2)	(Remote tuner Japan)	JPL	SUN
	1120z	22 Apr	V Q2M (x3) DE NYZ (x2)	(Remote tuner Japan)	JPL	TUE
	1120z	24 Apr	V Q2M (x3) DE NYZ (x2)	(Remote tuner South Korea)		THU
	1120z	25 Apr	V Q2M (x3) DE NYZ (x2) V Q2M (x2) DE NYZ (x2)	(Remote tuner Taiwan)	JPL	FRI
	1120z	29 Apr	V Q2M (x3) DE NYZ (x2)	(Remote tuner Taiwan)	JPL	TUE
4	1515z	04 Apr	(In tfc) HR SVC RACW91/2308/1316 QSL?	(Remote tuner Hong Kong)	JPL	FRI
3 (In tfc)	1828z	12 Apr	MSG NR 245 CK 139 82 0403 0335 RMKS 0780 35NT 5UN5 7344 (Cont'd) (Both stns)	TO 0783 BT (Remote tuner Japan)	JPL	SAT
2	1648z 1743z	07 Apr 27 Apr	V 3JWV (x3) DE QSVP (x2) V 3JWV (x3) DE QSVP (x2)	(Remote tuner Japan) (Remote tuner Japan)	JPL JPL	MOI SUN
8 (In tfc)	1635z	17 Apr	NR 6376/EX 0027 BT JK3/LM4 AR (x2)	(Remote tuner Hong Kong)	JPL	THU
7	1600z	21 Apr	V C5ER (x3) DE 9UTL (x2)	(Remote tuner Novosibirsk)	JPL	MO
	1109z	22 Apr	V C5ER ( $x_3$ ) DE 90TL ( $x_2$ )	(Remote tuner Japan)	JPL	TUE
	1118z	24 Apr	V C5ER (x3) DE 9UTL (x2)	(Remote tuner South Korea)		THU
8 (In tfc)	1402z	17 Apr	NR .062 CK 51 11 0417 2200 RMKS 3408 TO 1	<b>551 BT</b> (Remote tuner Japan)	JPL	THU
1 (In tfc)	1404z	17 Apr	NR CK .5 44 0417 1203 RMKS 666. TO 5611	BT (Remote tuner Japan)	JPL	THU
0	0002z	02 Apr	(In tfc -Handset) EEE NR 1094/EX 0803 BT 3RGJ/8 TWJ7 AR Q	(Remote tuner Hong Kong) SY 37 QSY 37	JPL	WEI
(In tfa)	1142z	22 Apr	MSG NR 336 CK 95 66 04221942 RMKS 3224		JPL	TUE
0 (In tfc)						
9	0004z	02 Apr	(In tfc -Handset) EEE NR 1085/EX 0805 BT 4WI9/7FD2 AR QSY	(Remote tuner Hong Kong) (Remote tuner Hong Kong)	JPL	WEI

8919	(In tfc)	1045z	08 Apr	NR 218 HR 7G GA 7G NR 292 CK 25 8 0408 1845 RMKS 4889 TO 6468 BT 4AND 3DA4 (Cond't)	(Remote tuner South Korea)	JPL	TUE
8374	(In tfc)	1102z	08 Apr	EEE NR 4086/EX 1903 RMKS CQ BT J2F/PSJ AR QSL 194 QSL 1904 HR MSG MSG NR 4887 CK 69 54 0408 1900 RMKS CQ BT 650A ND76 (Cont'd)	(Remote tuner South Korea)	JPL	TUE
9049	(In tfc)	1139z	14 Apr	7G NR445 CK 91 73 0414 1930 RMKS 7755 TO 6926 K 653N 6473 U7BA (Cont'd)	(Remote tuner Japan)	JPL	MON

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

### M95 Morse Logs (Bold type indicates new logging)

3903//6886	Call Sign V WCJJ	(x3) DE HI	<b>BDD</b> (x2) Replaced YHXD DE SAQC on 3968, 693	6, 5479 & 10722kHz		
	1852z	12 Mar	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Novosibirsk)	JPL	WED
	1800z	12 Mar	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Novosibirsk)	JPL	THU
	1950z	17 Mar	V WCJJ (X3) DE HBDD (X2) V WCJJ (X3) DE HBDD (X2)	(Remote tuner Novosibirsk)	JPL	MON
				· · · · · · · · · · · · · · · · · · ·		
	1658z	19 Mar	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Novosibirsk)	JPL	WED
	1542z	25 Mar	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Novosibirsk)	JPL	TUE
	1714z	01 Apr	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Novosibirsk)	JPL	TUE
	1458z	04 Apr	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Novosibirsk)	JPL	FRI
	1632z	07 Apr	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Novosibirsk)	JPL	MON
	1906z	12 Apr	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Novosibirsk)	JPL	SAT
	1528z	13 Apr	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Novosibirsk)	JPL	SUN
	1347z	17 Apr	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Novosibirsk)	JPL	THU
	1842z	18 Apr	V WCJJ (x3) DE HBDD (x2) V WCJJ (x3) DE HBDD (x2)	(Remote tuner Novosibirsk)	JPL	FRI
	1519z	-			JPL	
		20 Apr	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Novosibirsk)		SUN
	1609z	21 Apr	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Novosibirsk)	JPL	MON
	1549z	25 Apr	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Novosibirsk)	JPL	FRI
	1738z	27 Apr	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Novosibirsk)	JPL	SUN
4125 (In tfc)	1050z	22 Apr	MSG NR 0827/CCK CK 90 04 04 221850 RMKS	3456 TO 3518 K		
				(Remote tuner Japan)	JPL	TUE
4156	1147z	25 Apr	Into M95 1138z	(Remote tuner Taiwan)	JPL	FRI
		1	NR 50 CK 153 35 04 25 1502 BT			
	1151z	28 Apr	Into M95 1151z	(Remote tuner Taiwan)	JPL	MON
		<u>F</u> -	NR 26 CK 45 35 0428 1519 BT	()		
	1151z	29 Apr	Into M95 1151z	(Remote tuner Taiwan)	JPL	TUE
			NR 18 CK 35 35 04 29 1510 BT NR 58 CK 216 35 0429 1520 BT			
			NK 50 CK 210 55 0427 1520 D1			
4156//9042			Previously on 9054 // 4243			
4156//9042	<b>Note: Change in fr</b> 1140z	equency - H 19 Apr	(In tfc) Into V26 - Into Q26 1143z	(Remote tuner Japan)	JPL	SAT
4156//9042				(Remote tuner Japan)	JPL	SAT
4156//9042 4542		19 Apr	(In tfc) Into V26 - Into Q26 1143z		JPL	SAT
	1140z	19 Apr	(In tfc) Into V26 - Into Q26 1143z Into M95 1149z - Into V26 1215z		JPL JPL	SAT THU
	1140z Call Sign XS30	19 Apr Believe t	(In tfc) Into V26 - Into Q26 1143z Into M95 1149z - Into V26 1215z his is new frequency and call for XSV85 the sked pro Into V26 - Into Q26 1133z - Into M95 1139z	eviously on 8073 & 4364kHz. (Remote tuner Hong Kong) (Remote tuner Hong Kong)		
	1140z Call Sign XS30 1130z	19 Apr Believe t 24 Apr	(In tfc) Into V26 - Into Q26 1143z Into M95 1149z - Into V26 1215z his is new frequency and call for XSV85 the sked pro- Into V26 - Into Q26 1133z - Into M95 1139z Due to technical issues, I did not copy the message. Into V26 - Into Q26 1130z - Into M95 1138z	eviously on 8073 & 4364kHz. (Remote tuner Hong Kong) (Remote tuner Hong Kong) BT (Remote tuner Hong Kong)	JPL	THU
	1140z Call Sign XS30 1130z 1129z	19 Apr Believe t 24 Apr 25 Apr	<ul> <li>(In tfc) Into V26 - Into Q26 1143z</li> <li>Into M95 1149z - Into V26 1215z</li> <li>his is new frequency and call for XSV85 the sked product of the Into V26 - Into Q26 1133z - Into M95 1139z</li> <li>Due to technical issues, I did not copy the message.</li> <li>Into V26 - Into Q26 1130z - Into M95 1138z</li> <li>V BYAR DE XS30 NR 0358 CK 249 35 04 25 1035</li> <li>Into Q26 1130z - Into M95 1138z</li> </ul>	eviously on 8073 & 4364kHz. (Remote tuner Hong Kong) (Remote tuner Hong Kong) BT (Remote tuner Hong Kong) 3 CK 318 35 04 28 1620 BT (Remote tuner Hong Kong)	JPL JPL	THU FRI
	1140z Call Sign XS30 1130z 1129z 1133z	19 Apr Believe t 24 Apr 25 Apr 28 Apr	<ul> <li>(In tfc) Into V26 - Into Q26 1143z</li> <li>Into M95 1149z - Into V26 1215z</li> <li>his is new frequency and call for XSV85 the sked produce of the second state of the second s</li></ul>	eviously on 8073 & 4364kHz. (Remote tuner Hong Kong) (Remote tuner Hong Kong) BT (Remote tuner Hong Kong) 3 CK 318 35 04 28 1620 BT (Remote tuner Hong Kong) BT	JPL JPL JPL	THU FRI MON
	1140z Call Sign XS30 1130z 1129z 1133z	19 Apr Believe t 24 Apr 25 Apr 28 Apr 29 Apr	<ul> <li>(In tfc) Into V26 - Into Q26 1143z Into M95 1149z - Into V26 1215z</li> <li>his is new frequency and call for XSV85 the sked profile Into V26 - Into Q26 1133z - Into M95 1139z Due to technical issues, I did not copy the message.</li> <li>Into V26 - Into Q26 1130z - Into M95 1138z</li> <li>V BYAR DE XS30 NR 0358 CK 249 35 04 25 1035</li> <li>Into Q26 1130z - Into M95 1138z</li> <li>V BNGC DE XS30 HR MSG GA PSE CY NR 036</li> <li>Into Q26 1131z - Into M95 1138z</li> <li>V BNGC DE XS30 NR 0366 CK 015 35 04 29 1527</li> <li>Note: At times the call is sent as TUS30 or XS30. Un</li> </ul>	eviously on 8073 & 4364kHz. (Remote tuner Hong Kong) (Remote tuner Hong Kong) BT (Remote tuner Hong Kong) 3 CK 318 35 04 28 1620 BT (Remote tuner Hong Kong) 'BT able to find //	JPL JPL JPL	THU FRI MON
4542	1140z Call Sign XS30 1130z 1129z 1133z 1131z Call Sign V WCJJ	<ol> <li>19 Apr</li> <li>Believe t</li> <li>24 Apr</li> <li>25 Apr</li> <li>28 Apr</li> <li>29 Apr</li> <li>(x3) DE HI</li> <li>24 Apr</li> </ol>	<ul> <li>(In tfc) Into V26 - Into Q26 1143z Into M95 1149z - Into V26 1215z</li> <li>his is new frequency and call for XSV85 the sked produced into V26 - Into Q26 1133z - Into M95 1139z Due to technical issues, I did not copy the message.</li> <li>Into V26 - Into Q26 1130z - Into M95 1138z</li> <li>V BYAR DE XS30 NR 0358 CK 249 35 04 25 1035</li> <li>Into Q26 1130z - Into M95 1138z</li> <li>V BNGC DE XS30 HR MSG GA PSE CY NR 036</li> <li>Into Q26 1131z - Into M95 1138z</li> <li>V BNGC DE XS30 NR 0366 CK 015 35 04 29 1527</li> <li>Note: At times the call is sent as TUS30 or XS30. Un</li> <li>BDD (x2) Replaced YHXD DE SAQC on 3968, 69 V WCJJ (x3) DE HBDD (x2)</li> </ul>	eviously on 8073 & 4364kHz. (Remote tuner Hong Kong) (Remote tuner Hong Kong) BT (Remote tuner Hong Kong) 3 CK 318 35 04 28 1620 BT (Remote tuner Hong Kong) BT able to find // 36, 5479 & 10722kHz (Remote tuner Novosibirsk)	JPL JPL JPL JPL	THU FRI MON TUE
4542 6557	1140z Call Sign XS30 1130z 1129z 1133z 1131z Call Sign V WCJJ 1055z Call Sign V WCJJ	<ol> <li>19 Apr</li> <li>Believe t</li> <li>24 Apr</li> <li>25 Apr</li> <li>28 Apr</li> <li>29 Apr</li> <li>(x3) DE HI</li> <li>24 Apr</li> <li>(x3) DE HI</li> </ol>	<ul> <li>(In tfc) Into V26 - Into Q26 1143z Into M95 1149z - Into V26 1215z</li> <li>his is new frequency and call for XSV85 the sked produced into V26 - Into Q26 1133z - Into M95 1139z Due to technical issues, I did not copy the message.</li> <li>Into V26 - Into Q26 1130z - Into M95 1138z</li> <li>V BYAR DE XS30 NR 0358 CK 249 35 04 25 1035</li> <li>Into Q26 1130z - Into M95 1138z</li> <li>V BNGC DE XS30 HR MSG GA PSE CY NR 036</li> <li>Into Q26 1131z - Into M95 1138z</li> <li>V BNGC DE XS30 NR 0366 CK 015 35 04 29 1527</li> <li>Note: At times the call is sent as TUS30 or XS30. Un</li> <li>BDD (x2) Replaced YHXD DE SAQC on 3968, 69 V WCJJ (x3) DE HBDD (x2)</li> </ul>	eviously on 8073 & 4364kHz. (Remote tuner Hong Kong) (Remote tuner Hong Kong) BT (Remote tuner Hong Kong) 3 CK 318 35 04 28 1620 BT (Remote tuner Hong Kong) 4 BT able to find // 36, 5479 & 10722kHz (Remote tuner Novosibirsk) 36, 5479 & 10722kHz (Remote tuner Novosibirsk)	JPL JPL JPL JPL	THU FRI MON TUE THU
4542 6557 6557//11475 7696 (In tfc)	1140z Call Sign XS30 1130z 1129z 1133z 1131z Call Sign V WCJJ 1055z Call Sign V WCJJ 1158z 1557z	<ol> <li>19 Apr</li> <li>Believe t</li> <li>24 Apr</li> <li>25 Apr</li> <li>28 Apr</li> <li>29 Apr</li> <li>(x3) DE HI</li> <li>24 Apr</li> <li>(x3) DE HI</li> <li>18 Apr</li> <li>22 Apr</li> </ol>	<ul> <li>(In tfc) Into V26 - Into Q26 1143z Into M95 1149z - Into V26 1215z</li> <li>his is new frequency and call for XSV85 the sked profile into V26 - Into Q26 1133z - Into M95 1139z Due to technical issues, I did not copy the message.</li> <li>Into V26 - Into Q26 1130z - Into M95 1138z V BYAR DE XS30 NR 0358 CK 249 35 04 25 1035</li> <li>Into Q26 1130z - Into M95 1138z V BNGC DE XS30 HR MSG GA PSE CY NR 036</li> <li>Into Q26 1131z - Into M95 1138z V BNGC DE XS30 NR 0366 CK 015 35 04 29 1527</li> <li>Note: At times the call is sent as TUS30 or XS30. Un</li> <li>BDD (x2) Replaced YHXD DE SAQC on 3968, 69 V WCJJ (x3) DE HBDD (x2)</li> <li>BDD (x2) Replaced YHXD DE SAQC on 3968, 69</li> <li>V WCJJ (x3) DE HBDD (x2)</li> <li>NR 176/CCK CK 81 13 0422 2334 RMKS 3553 TO</li> </ul>	eviously on 8073 & 4364kHz. (Remote tuner Hong Kong) (Remote tuner Hong Kong) BT (Remote tuner Hong Kong) 3 CK 318 35 04 28 1620 BT (Remote tuner Hong Kong) 4 BT able to find // 36, 5479 & 10722kHz (Remote tuner Novosibirsk) 36, 5479 & 10722kHz (Remote tuner Novosibirsk) 36, 5479 & 10722kHz (Remote tuner Novosibirsk) 4795 BT (Remote tuner Japan)	JPL JPL JPL JPL JPL	THU FRI MON TUE THU FRI
4542 6557 6557//11475	1140z Call Sign XS30 1130z 1129z 1133z 1131z Call Sign V WCJJ 1055z Call Sign V WCJJ 1158z 1557z Call Sign V WCJJ	<ul> <li>19 Apr</li> <li>Believe t</li> <li>24 Apr</li> <li>25 Apr</li> <li>28 Apr</li> <li>29 Apr</li> <li>(x3) DE HI</li> <li>24 Apr</li> <li>(x3) DE HI</li> <li>18 Apr</li> <li>22 Apr</li> <li>(x3) DE HI</li> </ul>	<ul> <li>(In tfc) Into V26 - Into Q26 1143z Into M95 1149z - Into V26 1215z</li> <li>his is new frequency and call for XSV85 the sked profile into V26 - Into Q26 1133z - Into M95 1139z Due to technical issues, I did not copy the message.</li> <li>Into V26 - Into Q26 1130z - Into M95 1138z</li> <li>V BYAR DE XS30 NR 0358 CK 249 35 04 25 1035</li> <li>Into Q26 1130z - Into M95 1138z</li> <li>V BNGC DE XS30 HR MSG GA PSE CY NR 036</li> <li>Into Q26 1131z - Into M95 1138z</li> <li>V BNGC DE XS30 NR 0366 CK 015 35 04 29 1527</li> <li>Note: At times the call is sent as TUS30 or XS30. Un</li> <li>BDD (x2) Replaced YHXD DE SAQC on 3968, 69 V WCJJ (x3) DE HBDD (x2)</li> <li>BDD (x2) Replaced YHXD DE SAQC on 3968, 69</li> <li>V WCJJ (x3) DE HBDD (x2)</li> <li>BDD (x2) Replaced YHXD DE SAQC on 3968, 69</li> <li>V WCJJ (x3) DE HBDD (x2)</li> <li>BDD (x2) Replaced YHXD DE SAQC on 3968, 69</li> <li>V WCJJ (x3) DE HBDD (x2)</li> </ul>	eviously on 8073 & 4364kHz. (Remote tuner Hong Kong) (Remote tuner Hong Kong) BT (Remote tuner Hong Kong) 3 CK 318 35 04 28 1620 BT (Remote tuner Hong Kong) BT able to find // 36, 5479 & 10722kHz (Remote tuner Novosibirsk) 36, 5479 & 10722kHz (Remote tuner Novosibirsk) 0 4795 BT (Remote tuner Japan) 36, 5479 & 10722kHz	JPL JPL JPL JPL JPL JPL	THU FRI MON TUE THU FRI TUE
4542 6557 6557//11475 7696 (In tfc)	<ul> <li>1140z</li> <li>Call Sign XS30</li> <li>1130z</li> <li>1129z</li> <li>1133z</li> <li>1131z</li> <li>Call Sign V WCJJ</li> <li>1055z</li> <li>Call Sign V WCJJ</li> <li>1158z</li> <li>1557z</li> <li>Call Sign V WCJJ</li> <li>1407z</li> </ul>	<ol> <li>19 Apr</li> <li>Believe t</li> <li>24 Apr</li> <li>25 Apr</li> <li>28 Apr</li> <li>29 Apr</li> <li>(x3) DE HI</li> <li>18 Apr</li> <li>22 Apr</li> <li>(x3) DE HI</li> <li>19 Apr</li> </ol>	<ul> <li>(In tfc) Into V26 - Into Q26 1143z Into M95 1149z - Into V26 1215z</li> <li>his is new frequency and call for XSV85 the sked profile Into V26 - Into Q26 1133z - Into M95 1139z Due to technical issues, I did not copy the message.</li> <li>Into V26 - Into Q26 1130z - Into M95 1138z V BYAR DE XS30 NR 0358 CK 249 35 04 25 1035</li> <li>Into Q26 1130z - Into M95 1138z V BNGC DE XS30 HR MSG GA PSE CY NR 036</li> <li>Into Q26 1131z - Into M95 1138z V BNGC DE XS30 NR 0366 CK 015 35 04 29 1527</li> <li>Note: At times the call is sent as TUS30 or XS30. Un</li> <li>BDD (x2) Replaced YHXD DE SAQC on 3968, 69 V WCJJ (x3) DE HBDD (x2)</li> <li>BDD (x2) Replaced YHXD DE SAQC on 3968, 69 V WCJJ (x3) DE HBDD (x2)</li> <li>BDD (x2) Replaced YHXD DE SAQC on 3968, 69 V WCJJ (x3) DE HBDD (x2)</li> <li>BDD (x2) Replaced YHXD DE SAQC on 3968, 69 V WCJJ (x3) DE HBDD (x2)</li> </ul>	eviously on 8073 & 4364kHz. (Remote tuner Hong Kong) (Remote tuner Hong Kong) BT (Remote tuner Hong Kong) 3 CK 318 35 04 28 1620 BT (Remote tuner Hong Kong) BT able to find // 36, 5479 & 10722kHz (Remote tuner Novosibirsk) 36, 5479 & 10722kHz (Remote tuner Novosibirsk) 0 4795 BT (Remote tuner Japan) 36, 5479 & 10722kHz (Remote tuner Novosibirsk)	JPL JPL JPL JPL JPL JPL JPL	THU FRI MON TUE THU FRI TUE SAT
4542 6557 6557//11475 7696 (In tfc)	1140z Call Sign XS30 1130z 1129z 1133z 1131z Call Sign V WCJJ 1055z Call Sign V WCJJ 1158z 1557z Call Sign V WCJJ	<ul> <li>19 Apr</li> <li>Believe t</li> <li>24 Apr</li> <li>25 Apr</li> <li>28 Apr</li> <li>29 Apr</li> <li>(x3) DE HI</li> <li>24 Apr</li> <li>(x3) DE HI</li> <li>18 Apr</li> <li>22 Apr</li> <li>(x3) DE HI</li> </ul>	<ul> <li>(In tfc) Into V26 - Into Q26 1143z Into M95 1149z - Into V26 1215z</li> <li>his is new frequency and call for XSV85 the sked profile into V26 - Into Q26 1133z - Into M95 1139z Due to technical issues, I did not copy the message.</li> <li>Into V26 - Into Q26 1130z - Into M95 1138z</li> <li>V BYAR DE XS30 NR 0358 CK 249 35 04 25 1035</li> <li>Into Q26 1130z - Into M95 1138z</li> <li>V BNGC DE XS30 HR MSG GA PSE CY NR 036</li> <li>Into Q26 1131z - Into M95 1138z</li> <li>V BNGC DE XS30 NR 0366 CK 015 35 04 29 1527</li> <li>Note: At times the call is sent as TUS30 or XS30. Un</li> <li>BDD (x2) Replaced YHXD DE SAQC on 3968, 69 V WCJJ (x3) DE HBDD (x2)</li> <li>BDD (x2) Replaced YHXD DE SAQC on 3968, 69</li> <li>V WCJJ (x3) DE HBDD (x2)</li> <li>BDD (x2) Replaced YHXD DE SAQC on 3968, 69</li> <li>V WCJJ (x3) DE HBDD (x2)</li> <li>BDD (x2) Replaced YHXD DE SAQC on 3968, 69</li> <li>V WCJJ (x3) DE HBDD (x2)</li> </ul>	eviously on 8073 & 4364kHz. (Remote tuner Hong Kong) (Remote tuner Hong Kong) BT (Remote tuner Hong Kong) 3 CK 318 35 04 28 1620 BT (Remote tuner Hong Kong) BT able to find // 36, 5479 & 10722kHz (Remote tuner Novosibirsk) 36, 5479 & 10722kHz (Remote tuner Novosibirsk) 0 4795 BT (Remote tuner Japan) 36, 5479 & 10722kHz	JPL JPL JPL JPL JPL JPL	THU FRI MON TUE THU FRI TUE

# Marker Beacons (MX MXI)

4557.7	0003z	27 Apr	MXI	CW	Beacon	"D"	Sevastopol		Weak	PLdn	SUN
5153.7	1857z	12 Mar	MVI	CW	Beacon	"D"	Sevastopol		Fair	BR	WED
5155.7											
	2121z	11 Apr			Beacon		Sevastopol		Fair	BR	FRI
5154.1	2122z	11 Apr	MXI	CW	Beacon	"A"	Astrakhan			BR	FRI
5156.7	1858z	12 Mar	MX	CW	Beacon	"L"	St Petersburg		Good	BR	WED
	2123z	1 Apr			Beacon	"L"	St Petersburg		Fair	BR	FRI
	21202	· · · · · ·		0.11	Deacon	2	beretensoung			Dit	
5445	1900z	12 Mar	MX	CW	Beacon	"V"		Slow, space	ed. Fair	BR	THU
5472	1809z	13 Mar	MX	CW	Beacon	"V"		Very mechanical sounding	Strong	BR	THU
7508.7	1903z	12 Mar	MXI	CW	Beacon	"D"	Sevastopol		Strong	BR	WED
	1003z	15 Mar					Sevastopol		V.Weak	BR	SAT
	2129z	11 Apr					Sevastopol		Fair	BR	FRI
7508.9	21202 2130z	-					Severomorsk		Weak	BR	FRI
		11 Apr									
7509	2132z	11 Apr			Beacon				Weak	BR	FRI
7509.1	1904z	12 Mar					Astrakhan		Strong	BR	WED
	2131z	11 Apr	MXI	CW	Beacon	"A" A	Astrakhan		Weak	BR	FRI
8494.7	1905z	12 Mar	MXI	CW	Beacon	"D"	Sevastopol			BR	WED
8407 º	10027	15 Mar	MV	CW	Beacon	"T "	St Dotonshung		Weak	BR	SAT
8497.8	1002z	15 Mar				"L"	St Petersburg				SAT
	2133z	11 Apr			Beacon	"L"	St Petersburg		Good	BR	FRI
	0846z	12 Apr			Beacon	"L"	St Petersburg		Fair	BR	SAT
	2236z	18 Apr	MX	CW	Beacon	"L"	St Petersburg	'L' Repeating	Weak	PLdn	FRI
10871.7	2134z	11 Apr	MXI	CW	Beacon	"D"	Sevastopol		Good	BR	FRI
	0844z	12 Apr			Beacon		Sevastopol		Fair	BR	SAT
	1052z	24 Apr			Beacon		Sevastopol		Weak	BR	THU
10871.8	1000z	15 Mar			Beacon		Kaliningrad		Weak	BR	SAT
100/1.0	0845z	12 Apr			Beacon		Kaliningrad		Good	BR	SAT
										BR	
10071.0	1051z	24 Apr			Beacon		Kaliningrad		Fair		THU
10871.9	1001z	15 Mar			Beacon		Severomorsk		Weak	BR	SAT
	2135z	11 Apr	MAI	Cw	Beacon	3	Severomorsk		Weak	BR	FRI
13527.7	0959z	15 Mar			Beacon		Sevastopol		Weak	BR	SAT
	0840z	12 Apr			Beacon		Sevastopol	QRM OTHR	Weak	BR	SAT
	1049z	24 Apr	MXI	CW	Beacon	"D"	Sevastopol	QRM OTHR	Fair	BR	THU
13527.8	0956z	15 Mar	MXI	CW	Beacon	"P"	Kaliningrad		Fair	BR	SAT
13527.9	1049z	24 Apr	MXI	CW	Beacon	"S"	Severomorsk		Weak	BR	THU
16331.7	0955z	15 Mar	MXI	CW	Beacon	"D"	Sevastopol		Good	BR	SAT
	1400 -1430z	03 Apr			Beacon		Sevastopol		Strong	Gary	THU
	1400 - 14302 1505z	-			Beacon			West	, QSB2	PLdn	FRI
		04 Apr					Sevastopol	weak	, yod2		
	1355z	05 Apr			Beacon		Sevastopol		XX 7 1	Gary	SAT
	1410z	05 Apr			Beacon		Sevastopol		Weak	PLdn	SAT
	1425z	10 Apr			Beacon		Sevastopol	Weak	, QSB3	PLdn	THU
	1048z	24 Apr			Beacon		Sevastopol		Good	BR	THU
		(Note: M	ultiple	report	ts on this	beaco	on result from free	uency also used by E11 scheds)			
16331.9	1400 - 1430z	03 Apr			Beacon		Severomorsk	Stopped briefly - Long tone - 'S		Gary	THU
	1411z	24 Apr			Beacon		Severomorsk		Fair	BR	THU
16332.1	0839z	12 Apr			Beacon		Astrakhan		Weak	BR	SAT
	1412z	24 Apr	MXI	CW	Beacon	"A"	Astrakhan		Fair	BR	THU
20047.7	0953z	15 Mar	MXI	CW	Beacon	"D"	Sevastopol		Good	BR	SAT
	0838z	12 Apr			Beacon		Sevastopol		Fair	BR	SAT
	1046z	24 Apr			Beacon		Sevastopol		Good	BR	THU
20047.9	0954z	15 Mar			Beacon		Severomorsk		Fair	BR	SAT
20047.7	1047z	24 Apr			Beacon		Severomorsk		Fair	BR	THU
	IUT/L	2 <del>т</del> лрі	141741	C **	DeacOII	5	SCOULOINOISK		1 011	DI	1110

#### Malfunctioning 'D' Beacon?

10873z 2135z 11 Apr Fri LSB? Distorted warbling beacon apparently sending 'D' (Pic) on Twente SDR Confirmed using Fin SDR



# **Oddities**

Before listing our usual listings we start the section with two different oddities logged & reported to us. Both appear to be illicit transmissions – but with somewhat unusual content.

### Pirate/ Underground Radio Broadcast

We are indebted to our friend in Japan, Plato 1959, for sending us this recording of a transmission heard on the 20 metre amateur band.

The transmission is strongly critical of the US policy towards China using language that has had to be muted, in places, to pass YouTube rules.

Although this could be the work of a disgruntled radio amateur or unlicenced operator, the transmission is of good strength & has the feel of a scripted dialogue. Since the dialogue is also highly critical of Xi Jinping, the president of China, it is obviously not from the official side.



Plato 1959's video can be found here: https://www.youtube.com/watch?v=HaOGtm-FI3E

#### An Oddity Inside the 49 Metre Band A Report from PoSW

Tuning around the 49 metre broadcast band in early March noted the following:-

08-March-25, Saturday:- 2008 UTC, 6160 kHz

Surprised to find the "Buzzer", S28, normally resident on 4625 kHz - or something very much like it. Strong signal so not likely being relayed by some pirate operator with his 2 Watt TX purchased off Ali Express or wherever. Was not heard early on the following morning but showed up in the evening and for a few days afterwards.

09-Mar-25, Sunday:- 1917 UTC.

Buzzer with a strong signal, over-riding a weaker broadcast station. Still buzzing away at 2000z, not heard when monitored at 2115.

10-Mar-25, Monday:- 1957 UTC. Strong signal, still on at 2101 and 2145 UTC, had gone when checked at just after 2200.

Nothing heard on the 11th or 12th at similar times, assumed it had gone but was heard again on the 15th:-

15-Mar-25, Saturday:- 2107 UTC. Strong signal, had gone when checked at 2135.

Nothing heard on Sunday the 16th when monitored at 2007, 2040 and 2120 UTC. Has not been heard again although there was something just as odd on this frequency on the 17th:-

17-Mar-25, Monday:- 2021 UTC, 6160 kHz,

No buzzer but a male voice, American accent, with "This is Radio Free Europe Radio Liberty (something) followed by a quick burst of audio tone, repeated over and over; I couldn't make out what that "something" word was. Still on when checked at 2057 and just after 2200 UTC. Has not been heard again.

Thanks for catching that one, Peter!

#### **Our Regular Oddities**

'The Ala	<u>'The Alarm'</u>							
4770	1908z 2147z	12 Mar 11 Apr	Marker Signal (The Alarm) Marker Signal (The Alarm)		USB USB	Fair Fair	BR BR	WED FRI
<u>S28</u>	'The Buzzer'							
4625	1909z 2148z	12 Mar 11 Apr	S28'The Buzzer' Marker(Usual Buzzer tone)S28'The Buzzer' Marker		USB USB	Fair Good	BR BR	WED FRI
<u>S30</u>	<u>'The Pip'</u>							
3756	1910z 2149z	12 Mar 11 Apr	S30'Pip' marker (Night freq)S30'Pip' marker (Night freq)		USB USB	Good Good	BR BR	WED FRI
New Add	ditional 'Pip' Marker	<u>s</u>						
3363	1924z 2152z	12 Mar 11 Apr	'Pip' Marker' 'Pip' Marker'	Weak Weak	USB USB		BR BR	WED FRI
5782.5	1912z	12 Mar	Buzzer Type Marker		USB		BR	WED
6930	1918z	12 Mar	Buzzer Type Marker (On opposite cycle to 5782.5kHz)	)	USB		BR	WED
<u>4325//43</u>	26//4327//4329 <u>'T'</u> N	<u>Iarker</u>						
	2158z	11 Apr	T Marker (Showing on all 4 frequencies)				BR	FRI
<u>6911</u>	'Stalingrad Clock'							
	1926z 2151z	12 Mar 11 Apr	'Stalingrad Clock' 'Stalingrad Clock'		USB USB	Strong Strong	BR BR	WED FRI

**Contributors:** 

AB, BR, Gary, Gert, HFD, JPL, Pille (UDXF), Plato 1959, PLdn, PoSW

Thank you all for your logs.

# **Voice, Polytone, Tones and Hybrids**

# <u>E06</u>

Cotundor

# E06 Mar/Apr log:

05/04	<b>1600z</b> '480' 179 46 05875etc	<b>11487kHz</b> (thar	<b>1630z</b> iks hfd)	9412khz
Sunday	0730z	13945z	0800z	11128kHz

06/04 '480' 179 46 05875 61595 13576 07363 05815 71068 14393 61474 50808 48932 46508 01238 94132 92812 30548 79658 59498 89725 51406 78925 37391 06361 20874 28914 04510 14717 23781 56378 26191 47182 45894 42018 91813 56987 18736 97830 24783 73282 09784 30676 75706 61919 46950 04365 08937 01283 179 46 00000

 Wednesday
 1730z
 12215khz
 1830z
 9079khz

 26/03
 439 285
 106 26560 63539 52599 32305 93187 10538 11606 08402 18018 89174 75693 89578 47922 72893 71420 02398 09470 14810 98787 46854

 76097 61807 31237 96391 00925 40445 95323 04129 30832 50722 91051 16947 92378 66080 18419 61403 59008 13079 77425 10943

 83833 91715 41513 92119 13742 01993 37241 31496 75288 17351 64607 49395 41918 64348 97055 25492 66743 42986 61144 06670

 96651 53263 56871 19487 58199 68621 84238 63944 24828 42177 43245 40041 49654 94255 07334 21219 79561 04534 03061 34036

 41109 46449 30428 78493 07738 93446 62876 28032 32564 72084 26964 35768 62471 55803 22692 48586 97460 97719 50058 66484

 90646 44718 82506 42581 88915 23355 285 106 00000
 (Thanks Ary)

**PoSW writes:** 9-Mar-25, Sunday:- 0807 UTC approx, 12093 kHz, E06 in progress with a message, strong signal, just the occasional dip in signal strength. Ended around 0812 with, "359 359 42 42 00000". Made a point of listening for this one on Sundays 16th and 23rd of March but nothing heard.

Noted that 12093 is suggested in the prediction list in the last newsletter for a S06/E06

"480" call at 0730 UTC on Sundays in the month of March.

Tuesday + Friday Schedule, 1500 UTC Start:-

# <u>E07</u>

**PoSW sends** a splendid set of commented logs for the remainder of the E07 schedules:

Two remaining E07 schedules, both show up in the afternoon, UK time, keep to the predicted frequencies, alternate on a weekly basis between "message" and "no message" formats and both stay on UTC with the change to British Summer Time in late March and so appear one hour later than was the case from November and throughout the winter and early spring.

4-Mar-25, Tuesday:- 1500 UTC, 14571 kHz, "584 584 584 1", message, DK/GC "305 189"
x 2, weak signal, ended just after 1518 UTC.
1520 UTC, 15851, stronger.
1540 UTC, 17451 kHz, message format means a third sending, good signal with interference from a weaker FSK data signal which must be a permanent resident of this frequency because it was there in March of last year too.
11-Mar-25, Tuesday:- 1500 UTC, 14571 kHz, "584 584 584 000", weak signal.
1520 UTC, 15851 kHz, stronger.
14-Mar-25, Friday:- 1500 UTC, 14571 kHz, "584 584 584 000", very weak, only just readable.
1520 UTC, 15851 kHz, much stronger.
18-Mar-25, Tuesday:- 1500 UTC, 14571 kHz, first sending so weak as to be unreadable.
1520 UTC, 15821 kHz, "584 584 584 1", message, good signal. DK/GC "125 100" x 2, ended 1530:50s UTC approx.
1540 UTC, 17451 kHz, strong signal with weaker FSK for company.

21-Mar-25, Friday:- 1500 UTC, 14571 kHz, "584" and "125 100" again, weak but clear signal. 1520 UTC, 15851 kHz, much stronger. 1540 UTC, 17451 kHz, strong, S-meter over S9 at times.

25-Mar-25, Tuesday:- 1500 UTC, 14571 kHz, very weak, unreadable.

1520 UTC, 15851 kHz, much stronger, "584 584 584 000".

1- Apr-25, Tuesday:- 1500 UTC, 16257 kHz, "221 221 221 1", message, DK/GC "164 85" x 2, good signal. 1520 UTC, 18257 kHz, also a good signal, ended at 1429:30s UTC approx. 1540 UTC, 19157 kHz, slightly weaker than the first two sendings.

4-Apr-25, Friday, 1520 UTC, 18257 kHz, missed the 1500z sending, "221" and 164 85" again, good signal. 1540 UTC, 19157 kHz, strong signal with occasional fading.

8-Apr-25, Tuesday:- 1500 UTC,,, 16257 kHz, "221 221 221 000", good signal. 1520 UTC, 18257 kHz, weaker.

11-Apr-25, Friday:- 1500 UTC, 16257 kHz and 1520 UTC, 18257 kHz, "221 221 221 000".

15-Apr-25, Tuesday:- 1500 UTC, 16257 kHz, "221 221 221 1", message, DK/GC "5132 176". Weak signal, ended around 1517 UTC. Very weak signals from the repeats.

18-Apr-25, Friday:- 1500 UTC, 16257 kHz, "221" and "5132 176" again, weak signal, difficult copy. 1520 UTC, 18257 kHz, weak, clear signal. 1540 UTC, 19157 kHz, strongest of the three sendings.

22-Apr-25, Tuesday:- 1500 UTC, 16257 kHz, fair signal, "221 221 221 000". 1520 UTC, 18257 kHz, weak, unreadable at first, became clear before 1522z.

25-Apr-25, Friday:- 1500 UTC, 16257 kHz and 1520 UTC, 1520 kHz, "221 221 221 000".

Saturday + Thursday Schedule, 1410 UTC Start:-

1-Mar-25, Saturday: 1410 UTC, 16284 kHz, "328 328 328 1", message, DK/GC "729 119" x 2, strong signal, went off air after the first 5F group, came back just before 1413z with "328...1" call routine then back into 5Fs. Ended at 1424 UTC, strong signal.

1430 UTC, 14854 kHz, much weaker than the first sending. 1450 UTC, 13384 kHz, S6. 8-Mar-25, Saturday:- 1410 UTC, 16284 kHz, "328 328 328 000". 1430 UTC, 14854 kHz, both sendings indicating 5 to 6 on the S-meter. 15-Mar-25, Saturday:- 1410 UTC, 16284 kHz, "328 328 328 1", message, DK/GC "1003 99", strong signal. 1430 UTC, 14854 kHz, slightly weaker. 1450 UTC, 13384 kHz, S5 to S6. 22-Mar-25, Saturday:- 1410 UTC, 16284 kHz, "328 328 328 000", good signal. 1430 UTC, 14854 kHz, weaker. 29-Mar-25, Saturday:- 1410 UTC, 16284 kHz, "328 328 328 1", message, DK/GC "1696 142" x 2, good signal, ended at approx 1424:20s UTC. 1430 UTC, 14854 kHz, weak. 1450 UTC, 13384 kHz, back up to S7. 10-Apr-25, Thursday:- 1430 UTC, 15831 kHz, arrived home just in time to catch the second sending, "893 893 893 1", DK/GC "2199 166" x 2, S6 with deep fading, ended 1446:20s UTC. 1450 UTC, 14831 kHz, weak. 12-Apr-25, Saturday:- 1430 UTC, 15,831 kHz, "893" and "2199 166" again, signal strength up and down. 1450 UTC, 14831 kHz, weak, clear signal. 17-Apr-25, Thursday:- Nothing readable at 1410 UTC on 16331 kHz, SLT cluster on close frequency, "D" very strong, nothing readable at 1430 on 15831.

19-Apr-25, Saturday:- Again, nothing heard at either 1410 or 1430, strong SLT "D" heard close to 16331.

24-Apr-25, Thursday:- Nothing readable at 1410 UTC on 16331, strong SLT "D" heard together with a weaker "S", nothing heard on the other frequencies. Unless propagation is unusually poor it is starting to look as if this schedule has gone.

26-Apr-25, Saturday:- Nothing heard on any frequency, propagation appeared to be reasonable, the 1430z E11 on 14972 was strong enough as was the SLT "D" close to 16331 at 1410.

Now read on for other logs; with different analysis:

#### Tuesday/Friday

#### March 2025



#### A surprisingly strong signal 584 584 584 000 14571kHz 1500z 27/03/2025 ay PLdn's Crystal Palace QTH

04/03	584 1 189 305 10625 17866 000 000	Weak [18m11s lg]
07/03	584 1 189 305 10625 17866 000 000	1540z Fair, rest Weak 1520z QRM3
11/03	584 000	Weak
14/03	584 000	Fair
18/03	584 1 125 100 49725 12479 000 000	1500z Unworkable, rest Fair/ 1540z TTYQRM2
21/03	584 1 125 100 49725 12479 000 000	Fair, 1540z TTYQRM2
25/03	584 000	Fair
28/03	584 000	1500z Strong, 1520z Weak

#### Before we look at April logs, here is an interesting E07 discovered by Ary. Female voice :

10659 10-04-2025 1300 E07 Female voice 11415 10-04-2025 1320 E07 Female voice 12147 10-04-2025 1340 E07 Female voice 614 614 614 1 1557 94 1557 94 83889 62358 74679 35579 07001 87595 39214 28587 21254 02503 89329 36111 69671 97439 65621 32635 15489 39128 73257 24222 13750 85471 32550 77709 26695 26842 66450 94727 14923 09013 90642 89641 59741 51667 45358 51462 10359 16466 27385 89841 83950 12299 12253 06734 84578 44674 26365 58087 96775 37268 61582 31372 36527 43842 92362 98417 29807 96968 08883 80158 21145 44485 13664 12241 11860 99686 76368 18003 52081 14158 22275 99022 11743 83414 40270 01451 73218 25816 93130 82020 00477 08362 97951 77654 47429 59269 53114 15899 59303 46940 21655 13389 07583 47226 000 000

Courtesy Ary and received with thanks

#### April 2025

1500z	16257kHz	1520z	18257kHz	1540z	19157kHz	Z
01/04	221 1 16	54 85 17961	53075 000 000			1540z Weak, rest Fair 1500z QSB3
04/04	221 1 16	54 85 17961	53075 000 000			1540z Weak, 1500z Unworkable, 1520z NRH
08/04	221 000					Weak
11/04	221 000					1520z Weak 1500z NRH
15/04	221 1	Poor copy	y			1540z NRH, resr Very weak
18/04	221 1 51	132 176 1244	44 00917 000 000			1500z Unworkable, rest Weak 17m06s lg
22/04	221 000					Very weak
25/04	221 000					Weak
29/04	221 1 49	96 155 5245	41456 000 000			1540z Weak, rest NRH

#### Thursday/Saturday

#### March 2025

1410z	16284kHz	1430z	14854kHz	1450z	13384kHz	Z
01/03	328 1 7	29 119 14761	88941 000 000			1430z Weak, rest Fair; 1410z QSB3
06/03	328 000	)				Weak
08/03	328 000	)				Fair
13/03	328 1 1	003 99 46139	0 33336 000 000			Weak, 1410z QSB3
15/03	328 1 1	003 99 46139	0 33336 000 000			Weak
20/03	328 000	)				Fair, 1410z QSB2
22/03	328 000	)				Weak, 1410z QSB2
27/03	328 1 1	696 142 2749	2 70812 000 000			Weak, QRN3 Very poor condx
29/03	328 1 1	696 142 2749	2 70812 000 000			Weak, Very poor copy

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April 2025
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Note: This station has undergone a radical time and frequency change sincw 17.04.25



Note D [774Hz] and S [968Hz] beacons within E07 message '893 893 893 000' as shewn

03/04

10/04

NRH across schedule; poor condx 05/04

893 000

893 1 2199 16- 92991 txt inaudible 000 000 1410z NRH [Beacon heard] rest Weak QSB4 [heard at PLdn QSO...always poor] Ary kindly sent:

893 893 893 1 2199 166 2199 166

92991 34206 33502 22530 50355 13035 87828 84770 16298 19045 63983 11413 17766 26742 79036 75849 18214 52834 55772 66791 80684 79172 80545 98002 01471 24548 59882 51291 48789 96054 32139 65442 96284 61893 90565 84582 35004 76932 63308 34440 35738 35937 43338 71480 56175 92866 86841 16504 21842 60732 23994 43468 83586 67558 63750 65822 61438 11083 22803 31779 75601 01991 86578 15206 33931 72224 85747 07524 00812 90305 64072 91358 34477 27307 01908 38951 05962 48940 60349 27106 70361 89926 81721 73028 59281 01747 74103 96420 92544 95362 23513 41284 88145 03088 61294 05439 14646 43964 32543 26738 15624 64141 25186 05292 47246 49146 39156 98337 76439 41594 54826 32228 59517 08422 62074 89772 06851 93041 48442 49206 97543 23888 71104 77384 70131 63451 97227 57514 08712 51985 17958 88130 11833 13352 14975 69198 79977 76745 63891 20633 83501 74191 19475 68444 06426 94156 69052 78547 22615 30324 69485 57869 70083 12443 60808 92705 70659 64775 10828 47966 45903 09895 08129 34098 96440 91647 000 000 Courtesv Arv

12/04 893 1 2199 166 92991 ... 30675 000 000

17/04

Weak [16m18s lg]

[D beacon heard 16331kHz]

### New Freqs/Times [Apr 2025] as:

NRH

1000z	18273kHz	1020z	17459kHz	1040z	15891kHz
24/04	248 1 918	9 84 27471 5	4556 000 000		Ary
27471 8 58543 8	88618 16512 55029	53327 20992 21 12656 48355 63	727 81522 22717 708 078 44026 45819 160 740 51202 31168 140	91	

36724 05323 92442 61839 92799 47432 65740 51202 31168 14061 23022 36544 91860 35136 48115 85675 49299 98071 26725 23265 16481 00918 88909 59771 82772 05702 32510 34680 60700 49239 83475 52925 15114 55982 83157 83317 46927 94928 82912 97985 28409 44039 87047 26969 30145 66671 99274 21278 69438 88090 17534 84331 47189 61660 98749 03145 63210 19234 90686 81861 56556 06514 73359 54556 000 000

26/04

248 1 9189 84 27471 ... 54556 000 000

# E11 log March/April

4181kHz	1610z 1610z 1610z 1610z 1610z 1610z 1610z 1610z 1610Z	01/03 [394/00] Out 1613z Weak 05/03 [395/00] Out 1613z Weak 08/03 [399/00] Out 1613z Weak 19/03 [390/00] Out 1613z Weak 22/03 [392/00] Out 1613z Weak 26/03 [396/00] Out 1613z Weak 29/03 [394/00] Out 1613z Weak 09/04 [393/31 no copy	PLdn. HfD PLdn PLdn PLdn PLdn PLdn PLdn PLdn	SAT WED SAT WED SAT WED SAT WED
4505kHz	1645z 1645z 1645z 1645z 1645z 1645z 1645z	01/03 [364/00] 02/03 [367/00] Out 1648z Weak 09/03 [365/34no copy] Very weak 23/03 [360/00] Out 1648z Weak 30/03 [360/00] Out 1648z Good 05/04 [368/00] Out 1648z Very weak 06/04 [365/00] Out 1648z Very weak	HfD PLdn PLdn Pldn RNGB PLdn PLdn	SAT SUN SUN SUN SUN SAT SUN
5176kHz	1605z 1605z 1605z 1605z 1605z 1605z	02/03 [236/00] Out 1608z Fair 04/03 [231/00] Out 1608z Weak 09/03 [237/00] Out 1608z Weak 25/03 [230/00] Out 1608z Weak 20/04 [238/00] Out 1608z Weak 27/04 [231/00] Out 1608z Weak	PLdn, HfD PLdn PLdn PLdn PLdn PLdn PLdn	SUN TUE SUN TUE SUN SUN

Fair {freqs courtesy Ary/H-FD]

5371khz	1300z	03/03 [310/00]	HfD	MON
	1300z	06/03 [310/00] Weak	Brian	THU
	1300z	10/03 [311/00] Weak	Brian	MON
	1300z	17/03 [312/00] Fair (Finish SDR)	Brian	MON
	1300z	20/03 [314/00] Weak	PLdn	THU
	1300z	27/03 [312/33 09426 3829970120 54049] Weak	Brian	THU
	1300z	31/03 [310/00] Weak	Brian	MON
	1300z	10/04 [312/00] Very weak	Brian	THU
	1300z	14/04 [312/36 34830 60921 45110 50084 32853 50350 28392 5915992035 29057] Good	Brian	MON
	1300z	21/04 [314/00] Fair (Finish SDR)	Brian	MON
	1300z	28/04 [310/00] Fair (Finish SDR)	Brian	MON



5737kHz 2000z

520/00 OUT 2003z Fair

57271-1	2000-	02/02 [520/00] Out 2002- E-in [See at and]		CUN
5737khz	2000z 2000z	02/03 [520/00] Out 2003z Fair [See above] 06/03 [527/00] Out 2003z Strong	PLdn, HfD PLdn	SUN THU
	2000z 2000z	09/03 [524/00] Out 2003z Strong	PLdn PLdn	SUN THU
		13/03 [521/00] Out 2003z Fair		
	2000z	16/03 [528/00] Out 2003z Fair	PLdn	SUN
	2000z	20/03 [521/00] Out 2003z Fair	PLdn, Brixmis	THU
	2000z	23/03 [527/00] Out 2003z Fair	PLdn	SUN
	2000z	27/03 [520/31 28437 91045 46636 64065 47585 36786	Brixmis, PLdn	THU
	2000z	03/04 [525/33 69227	PLdn	THU
	2000z	10/04 [520/00] Out 2003z Fair to Strong	PLdn	THU
	2000z	17/04 [528/00] Out 2003z Fair	PLdn	THU
	2000z	20/04 [522/00] Out 2003z Weak	Pldn	SUN
	2000z	24/04 [524/00] Out 2003z Fair	PLdn	THU
	2000z	27/04 [525/00] S4	Brixmis, PLdn	SUN
6923kHz	1715z	05/03 [978/00] Out 1718z Strong	PLdn, HfD	WED
	1715z	07/03 [972/00] Weak	Gary H	FRI
	1715z	12/03 [978/30 69970	PLdn	WED
	1715z	19/03 [976/00] Out 1718z Strong	PLdn	WED
	1715z	21/03 [970/00] Out 1718z Fair	PLdn	FRI
	1715z	26/03 [975/00] Weak	Brixmis, Gary H, PLdn	WED
	1715z	28/03 [975/00] Out 1718z Strong	PLdn	FRI
	1715z	02/04 [970/34 3897951906] Out 1725z Fair	PLdn	WED
	1715z	09/04 [978/00] Out 1718z	Pldn	WED
	1715z	11/04 [976/00] Out 1718z Weak	PLdn	FRI
	1715z	16/04 [975/00] Out 1718z Fair	PLdn	WED
	1715z	18/04 [976/00]	Ary, PLdn	FRI
	1715z	23/04 [975/00] Out 1718z Fair	PLdn	WED
	1715z	25/04 [977/00] Out 1718z Fair	PLdn	FRI
	1715z	30/04 [977/00] Out 1718z Fair	PLdn	WED
6940kHz		05/03 [275/00] Out 0933z Weak	PLdn, Brian, HfD	WED
	0930z	06/03 [277/00] Weak	Brian, PLdn	THU
	0930z	12/03 [273/00] Good	RNGB, Brian	WED
	0930z	13/03 [275/00] Good	RNGB	THU
	0930z	19/03 [273/00] Good	RNGB	WED
	0930z	20/03 [271/00] Weak	Brian	THU
	0930z	26/03 [270/33 97582 91838 95956 75314 30248 29572 6555171780 89094] Weak	RNGB, Brian	WED
	0930z	02/04 [277/00] Weak	Brian	WED
	0930z	03/04 [271/00] Weak	Brian	THU
	0930z	09/04 [279/00] Weak	Brian, PLdn	WED
	0930z	10/04 [275/00] Fair	RNGB	THU
	0930z	16/04 [277/39 67430 6537942469 67923] Weak	Brian	WED

	0930z	23/04 [275/00] Weak	Brian	WED
	0930z	24/04 [277/00] Weak	Brian	THU
	0930z	30/04 [276/00] Weak	Brian	WED
7317kHz	1900z	03/03 [648/00] Out 1903z Strong	PLdn, HfD	MON
/31/KHZ				
	1900z	06/03 [640/00] S4	Brixmis, PLdn	THU
	1900z	13/03 [644/00] Out 1903z Strong	PLdn	THU
	1900z	17/03 [647/31 65030	PLdn	MON
	1900z	24/03 [643/00] Strong	PLdn	MON
	1900z	27/03 [644/00] Out 1903z Strong	PLdn	THU
	1900z	31/03 [649/00] Out 1903z Weak	PLdn	MON
	1900z	03/04 [649/00] Weak	Brixmis, PLdn	THU
	1900z	07/04 [643/00] Out 1903z Strong	RNGB	MON
	1900z	10/04 [646/00] S3	Brixmis, PLdn	THU
	1900z	14/04 [640/00] Weak	Brixmis, Pldn	MON
	1900z	17/04 [646/00] Out 1903z Fair	PLdn	THU

hma 39.8	40.0 40.2 40.4 40.5 40.8 41.0	412 414 416 418 420 422 424 426 428 4	૦ તરેટ તરત તરેક તરેક તને૦ તનેટ તને ત	H.E 44.8 450 452 454 45.6 458	46.0 46.2 46.4 46.6 46.8 47.0 47.2 47	4 47.5 47.8 48.0 48.2 48.4 48.5 hrts

E11a 7317kHz 1900z 21/04 '646/38' Six distorted throughout sending

	1900z	21/04 [646/38 6743802337] Out 1911z Strong [see above]	PLdn	MON
	1900z 1900z	28/04 [647/00] Very weak	Brixmis, PLdn	MON
	17002	20/04 [047/00] Vely weak	Dirxinis, i Lan	MON
8180kHz	0700z	04/03 [570/00] Out 0703z Fair	PLdn, HfD	TUE
	0700z	07/03 [576/00] Out 0703z Fair	PLdn	FRI
	0700z	11/03 [574/00] Out 0703z Fair	PLdn	TUE
	0700z	14/03 [573/00] Out 0703z Fair with QRM	PLdn	FRI
	0700z	18/03 [574/39 69659 38125 11313 26966 96408 63430 0745263046] Out 0711	RNGB, PLdn	TUE
	0700z	25/03 [579/00] S3	Brixmis, PLdn	TUE
	0700z	28/03 [574/00] Good	RNGB, PLdn	FRI
	0700z	01/04 [575/33 54504 48598 14911 86263 26542 39789 4448779028] Out 0710z Weak	Brian, PLdn	TUE
	0700z	08/04 [573/00] Out 0703z Weak	PLdn	TUE
	0700z	11/04 [577/00] Good	RNGB, PLdn	FRI
	0700z	15/04 [579/00] Good	RNGB, PLdn	TUE
	0700z	18/04 [571/00] Good	RNGB, Ary, PLdn	FRI
	0700z	22/04 [576/00] Good	RNGB, Pldn	TUE
	0700z	29/04 [570/00] Good	RNGB, PLdn	TUE
8530kHz	10107	02/03 [616/00]	HfD	SUN
OJJOKIIZ	1910z	07/03 [613/00] Out 1913z Fair	PLdn	FRI
	1910z	14/03 [612/40 1931007371] Out 1921z Weak	PLdn	FRI
	1910z	21/03 [613/00] Out 1913z Weak	PLdn	FRI
	1910z	28/03 [618/00] Out 1913z Weak	PLdn	FRI
	1910z	05/04 [617/36 A 15938	PLdn	SAT
	1910z	11/04 [611/00] S2	Brixmis, PLdn	FRI
	1910z	18/04 [613/00]	Ary, PLdn	FRI
	1910z	25/04 [611/00] Out 1913z Weak	PLdn	FRI
	1910z	27/04 [612/00] S3	Brixmis	SUN
0.0001.1	0.000	02/02 (250) 02 ( 0.000 WL 1		ci ni
8680khz	0600z	02/03 [358/00] Out 0603z Weak	PLdn, HfD	SUN
	0600z	07/03 [359/40 60729	PLdn	FRI
	0600z	14/03 [351/00] Out 0603z Fair	PLdn	FRI
	0600z	16/03 [350/00] Out 0603z Weak	PLdn	SUN
	0600z	21/03 [354/00] Out 0603z Fair	PLdn	FRI
	0600z	23/03 [358/00] Out 0603z Weak	PLdn	SUN
	0600z	28/03 [352/00] Out 0603z Weak	PLdn PLdn	FRI
	0600z	30/03 [353/00] Out 0603z Weak	PLdn	SUN
	0600z	04/04 [350/00] Out 0603z Weak	PLdn	FRI
	0600z	11/04 [358/00] Good	RNGB, PLdn	FRI
	0600z	13/04 [355/00] Good	RNGB	SUN
	0600z 0600z	18/04 [353/31 83993 25707 16343 90809 60386 26586 71843 0981290670 22952] Good	RNGB, Ary PLdn	FRI FRI
	00002	25/04 [353/00] Out 0603z Weak	r Luii	ľKI
9079khz	0700z	01/03 [498/00] Out 0703z Very weak	PLdn, HfD	SAT
	0700z	02/03 [496/00] Out 0703z Weak	PLdn, Brixmis	SUN
	0700z	08/03 [490/00] Out 0703z Weak	PLdn	SAT
	0700z	09/03 [497/00] Out 0703z Weak	PLdn	SUN
	0700z	15/03 [498/00] Out 0703z Weak	PLdn	SAT
	0700z	16/03 [496/00] Good	RNGB, PLdn	SUN
	0700z	23/03 [498/40 9786002993] Out 0711z Weak	PLdn	SUN
	0700z	29/03 [492/00] Good	RNGB	SAT
	0700z	30/03 [497/00] Out 0703z Weak	PLdn	SUN
	0700z	13/04 [495/00] Good	RNGB	SUN
	0700z	19/04 [491/34 26845 68272 15554 00234 96517 50045 02828 2443780874 87290] Good	RNGB	SAT
	0700z	26/04 [492/00] Fair	Brian, PLdn	SAT
	0700z	27/04 [490/00] Out 0703z Weak	PLdn	SUN

9399k	hz 1205z	04/03 [460/37 32502 30960 26537 18049 50924 79284 73374 4998659067 77298] Fair	Brian, HfD	TUE
<i>,,,,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1205z	12/03 [463/00] Fair	Brian	WED
	1205z	18/03 [463/00] S4	Brixmis, Brian	TUE
	1205z	19/03 [469/00] Fair	Brian	WED
	1205z	26/03 [466/00] Fair	Brian	WED
	1205z	01/04 [464/00] Fair	Brian	TUE
	1205z	02/04 [462/00] Weak	Brian	WED
			Brian	
	1205z	08/04 [460/00] Weak		TUE
	1205z	09/04 [469/00] Fair	Brian	WED
	1205z	16/04 [461/00] Fair	Brian	WED
	1205z	23/04 [463/32 15132 36515 95988 43040 62591 97329 25529 1290345627 30553] Fair	Brian	WED
	1205z	29/04 [464/00] Out 1208z Fair (Twente SDR)	PLdn. Brian	TUE
	12052	29/04 [404/00] Out 12082 Pair (Twente SDR)	I Luii, Bhaii	IUL
0110	0720	0.000 5400/003	11/25	
9446k		06/03 [438/00]	HfD	THU
	0720z	13/03 [435/34 93111 04455 70065 07535 02338 87210 94396 3666909171 25269] Good	RNGB	THU
	0720z	20/03 [439/00] Strong	RNGB	THU
	0720z	27/03 [430/00] Good	RNGB	THU
	0720z	03/04 [432/00] Good	RNGB, Brian	THU
	0720z	04/04 [431/00] Good	Brian	FRI
	0720z	11/04 [430/35 50497 43185 48839 05211 98215 28235 4367774082 77121 67431]	RNGB	THU
	0720z	18/04 [430/00]	Ary	FRI
	0720z	24/04 [434/00] Good	RNGB, Brian	THU
	0720z	25/04 [436/00] Fair	Brian	FRI
	07202	25/04 [450/00] I an	Brian	1 KI
00511	I.a. 1000	04/02 [206/00] C and	Dates DI de 1105	
9951k	Hz 1000z	04/03 [306/00] Good	Brian, PLdn, HfD	TUE
	1000z	07/03 [307/00] Good	Brian, Pldn	FRI
	1000z	14/03 [302/21 00660 53523 47101 90649 57170 83327 61904 5354762313 37982] Weak	Brian	FRI
	1000z	18/03 [306/00] Out 1003z Weak	PLdn, Brian	TUE
	1000z	21/03 [302/00] Fair	Brian, PLdn	FRI
	1000z	25/03 [309/00] Fair	Brian, PLdn	TUE
	1000z	28/03 [309/00] Fair	Brian	FRI
	1000z	01/04 [306/00] Out 1003z Weak	PLdn, Brian	TUE
	1000z	04/04 [300/00] Fair	Brian	FRI
	1000z	11/04 [308/00] Fair	Brian	FRI
	1000z	15/04 [300/00] Fair	Brian	TUE
	1000z	18/04 [309/00] Fair	Brian	FRI
	1000z	22/04 308/21 49871 13941 14930 63277 79749 52533 32539 1688331434 52380] Fair	Brian	TUE
	1000z	29/04 [308/00] Fair	Brian	TUE
	10002	29/04 [508/00] Fail	Bilali	IUE
10213	kHz 0745z	03/03 [266/00] Out 0748z Fair	PLdn	MON
	0745z	10/03 [260/00] Out 0748z Weak	PLdn, Brian	MON
	0745z	17/03 [260/00] Out 0748z Weak	PLdn	MON
	0745z	24/03 [261/35 84098	PLdn	MON
	0745z	31/03 [269/00] Strong	RNGB, PLdn, Brian	MON
	0745z	07/04 [266/00] Fair	RNGB, Brian	MON
	0745z	14/07 [269/36 57118 77181 96602 90575 68644 48484 17874 2369279916 80592] Strong	RNGB, Brian	MON
	0745z	28/04 [269/00] Strong	RNGB, Brian	MON
	07452	26/04 [209/00] Strong	KNOD, Blian	MON
10000	1.500			
10330	khz 1530z	06/03 [267/00] Out 1533z Weak	PLdn, HfD	THU
	1530z	13/03 [262/00] Out 1533z Weak	PLdn	THU
	1530z	20/03 [268/00] Out 1533z Fair	PLdn, Brian	THU
	1530z	27/03 [261/35 84098 10650 37786 66038 50852 58946 61929 3488360564 97054] Out 1540z		THU
	1530z	03/04 [267/00] S4	Brixmis, Pldn	WED
	1530z	10/04 [261/00] Out 1533z Weak	PLdn	THU
	1530z	24/04 [260/00] Out 1533z Weak	PLdn	THU
10800	khz 0645z	03/03 [412/34 91618 00237 07568 98814 50485 09205 49108 6140056979 11076]	Ary	MON
10000	0645z	10/03 [412/00]	HfD	MON
	0645z	17/03 [413/00] Out 0648z Weak	PLdn	MON
	0645z	19/03 [416/00] Out 0648z Fair	PLdn	WED
	0645z	24/03 [418/00] Out 0648z Weak	PLdn	MON
	0645z	26/03 [410/00] Out 0648z Good	RNGB	WED
	0645z	31/03 [414/00] Out 0648z Weak	PLdn	MON
	0645z	07/04 [410/32 80477 24324 29787 81698 65498 62079 1225196054 62257] Good	RNGB	MON
	0645z	16/04 [418/00] Good	RNGB	WED
	0645z	21/04 [416/00] Good	RNGB	MON
	0645z	28/04 [414/00] Good	RNGB	MON
11114	kHz 1815z	02/03 [922/00] Out 1818z Fair	PLdn, HfD	SUN
11110				
	1815z	07/03 [929/00] Out 1818z Fair	PLdn	FRI
	1815z	09/03 [922/00] Out 1818z Fair	PLdn	SUN
	1815z	14/03 [920/00] Out 1818z Fair	PLdn	FRI
	1815z	16/03 [927/00] Out 1818z Fair	PLdn	SUN
	1815z	21/03 [926/39 84504	PLdn	FRI
	1815z	28/03 [924/00] Out 1818z Fair	PLdn	FRI
	1815z	30/03 [927/00] Out 1818z Fair	PLdn	SUN
	1815z	04/04 [920/39 6848041549] Out 1826z Fair, QSB2	PLdn	FRI
	1815z		PLdn	
		11/04 [925/00] Out 1818z Fair		FRI
	1815z	18/04 [920/00]	Ary, PLdn	FRI
		18/04 [920/00] 20/04 [929/00] Out 1818z Weak	Ary, PLdn PLdn	FRI SUN
	1815z 1815z	20/04 [929/00] Out 1818z Weak	PLdn	SUN
	1815z 1815z 1815z	20/04 [929/00] Out 1818z Weak 25/04 [922/00] Out 1818z Fair	PLdn PLdn	SUN FRI
	1815z 1815z	20/04 [929/00] Out 1818z Weak	PLdn	SUN

122021-11- 0945-	03/03 [719/39 42183 54686 31036 95247 67971 80089 5446948880 70087] Out 0856z Weak	Driven DL dr. LIFD	MON
12202kHz 0845z		Brian, PLdn, HfD	
0845z	10/03 [710/00] Fair	Brian	MON
0845z	12/03 [716/00] Fair	Brian	WED
0845z	17/03 [715/00] Fair	Brian	MON
0845z	19/03 [713/00] Fair with QRM	RNGB, Brian	WED
0845z	24/03 [718/00] Fair	Brian	MON
0845z	26/03 [716/00] Good	RNGB, Brian	WED
0845z	31/03 [718/00] Weak	Brian	MON
0845z	02/04 [719/00] Very weak	Brian	WED
0845z	07/04 [716/00] Fair	Brian	MON
0845z	09/04 [719/00] fair	RNGB, Brian	WED
0845z	14/04 [714/00] Weak	Brian	MON
0845z	16/04 [718/00] Fair	Brian	WED
0845z	21/04 [718/33 31457 1088745531 43810] Fair	Brian	MON
0845z	28/04 [716/00] Fair	Brian	MON
0845z	30/04 [711/00] Fair	Brian	WED
12385kHz 1045z	03/03 [694/00] Out 1048z Fair	PLdn, Brian, HfD	MON
1045z	05/03 [698/00] Out 1048z Weak	PLdn, Brian	WED
1045z	10/03 [694/00] Fair	Brian, Pldn	MON
1045z	12/03 [698/00] Out 1048z Weak	PLdn	WED
1045z	17/03 [698/23 65367 69316 74241 89861 29350 00850 40405 6423575524 53494]	Brian, PLdn	MON
1045z	24/03 [692/00] Out 1048z Weak	PLdn, Brian	MON
1045z	26/03 [696/00] Out 1048z S4	Brixmis, Brian, PLdn	WED
1045z	31/03 [692/00] Out 1048z Fair	PLdn, Brian	MON
1045z	02/04 [692/00] Fair	Brian, PLdn	WED
1045z	09/04 [698/00] Fair	Brian, PLdn	WED
1045z	14/04 [693/00] Fair	Brian, PLdn	MON
1045z	16/04 [693/00] Fair	Brian, Pldn	WED
1045z	21/04 [696/00] Fair	RNGB, Pldn	MON
1045z	23/04 [698/00] Fair	RNGB. Pldn	WED
1045z	28/04 [696/22 6272635519] Out 1053z Weak	PLdn	MON
12530kHz 1230z	04/03 [335/00] Fair	Brian	TUE
1230z	06/03 [333/00] Good	Brian	THU
1230z	11/03 [334/00] Weak	Brian	TUE
1230z	18/03 [331/00] Fair	Brian	TUE
1230z	25/03 [333/40 04406 55493 02167 71733 24655 45599 33850 8547636416 61831] Fair	Brian	TUE
1230z	08/04 [331/00] Fair	Brian	TUE
1230z	10/04 [333/00] Weak	Brian	THU
1230z	15/04 [333/38 38260 61083 46266 81079 48041 04736 33307 98779 36907 67541] Fair	Brian	TUE
1230z		Brian	TUE
1230z	22/04 [331/00] Good	Brian Brian	TUE
1230z	22/04 [331/00] Good 24/04 [333/00] Fair	Brian	THU
	22/04 [331/00] Good		
1230z	22/04 [331/00] Good 24/04 [333/00] Fair	Brian	THU
1230z 1230z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair	Brian Brian	THU TUE
1230z	22/04 [331/00] Good 24/04 [333/00] Fair	Brian	THU
1230z 1230z 12630khz 0315z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00]	Brian Brian HfD	THU TUE MON
1230z 1230z 12630khz 0315z 13117khz 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair	Brian Brian HfD PLdn, Brian, HfD	THU TUE MON WED
1230z 1230z 12630khz 0315z 13117khz 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair	Brian Brian HfD	THU TUE MON WED
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn	THU TUE MON WED MON
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn	THU TUE MON WED WED
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn	THU TUE MON WED MON
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn	THU TUE MON WED WED
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good 17/03 [533/00] Out 0903z Weak 19/03 [537/00] Out 0903z Fair	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn	THU TUE MON WED MON WED WED
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good 17/03 [533/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 19/03 [537/00] Out 0903z Fair 24/03 [532/32 97704 36536 36629 40041 30001 80171 8573572008 43440] Out 0910z Good	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn RNGB, PLdn	THU TUE MON WED MON WED MON
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good 17/03 [533/00] Out 0903z Weak 19/03 [537/00] Out 0903z Fair	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn	THU TUE MON WED MON WED WED
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good 17/03 [533/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 19/03 [537/00] Out 0903z Fair 24/03 [532/32 97704 36536 36629 40041 30001 80171 8573572008 43440] Out 0910z Good	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn RNGB, PLdn	THU TUE MON WED MON WED MON
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good 17/03 [533/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 19/03 [532/32 97704 36536 36629 40041 30001 80171 8573572008 43440] Out 0910z Good 31/03 [530/00] Out 0903z Weak 02/04 [535/00] Very weak	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn RNGB, PLdn PLdn, Brian Brixmis, Ary, Brian	THU TUE MON WED MON WED MON MON WED
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good 17/03 [533/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 19/03 [532/32 97704 36536 36629 40041 30001 80171 8573572008 43440] Out 0910z Good 31/03 [530/00] Out 0903z Weak 02/04 [535/00] Very weak 07/04 [537/00] Good	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn RNGB, PLdn PLdn, Brian Brixmis, Ary, Brian RNGB, Brian	THU TUE MON WED MON WED MON MON WED MON
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good 17/03 [533/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 19/03 [537/00] Out 0903z Fair 24/03 [532/32 97704 36536 36629 40041 30001 80171 8573572008 43440] Out 0910z Good 31/03 [530/00] Out 0903z Weak 02/04 [535/00] Very weak 07/04 [537/00] Good 09/04 [537/00] Fair	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn RNGB, PLdn PLdn, Brian Brixmis, Ary, Brian RNGB, Brian RNGB, Brian	THU TUE MON WED MON WED MON WED MON WED
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good 17/03 [533/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 19/03 [532/32 97704 36536 36629 40041 30001 80171 8573572008 43440] Out 0910z Good 31/03 [530/00] Out 0903z Weak 02/04 [535/00] Very weak 07/04 [537/00] Good	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn RNGB, PLdn PLdn, Brian Brixmis, Ary, Brian RNGB, Brian	THU TUE MON WED MON WED MON MON WED MON
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good 17/03 [533/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 02/04 [535/00] Out 0903z Weak 02/04 [535/00] Very weak 07/04 [537/00] Good 09/04 [537/00] Fair 14/04 [532/00] Fair	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn RNGB, PLdn PLdn, Brian Brixmis, Ary, Brian RNGB, Brian RNGB, Brian Brian, Pldn	THU TUE MON WED MON WED MON WED MON WED MON
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good 17/03 [533/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 19/03 [537/00] Out 0903z Fair 24/03 [532/32 97704 36536 36629 40041 30001 80171 8573572008 43440] Out 0910z Good 31/03 [530/00] Out 0903z Weak 02/04 [535/00] Very weak 07/04 [537/00] Good 09/04 [537/00] Fair 14/04 [532/00] Fair 14/04 [532/00] Fair	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn PLdn, Brian Brixmis, Ary, Brian RNGB, Brian RNGB, Brian Brian, Pldn Brian, Pldn RNGB	THU TUE MON WED MON WED MON WED MON WED MON WED
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good 17/03 [533/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 19/03 [537/00] Out 0903z Fair 24/03 [532/32 97704 36536 36629 40041 30001 80171 8573572008 43440] Out 0910z Good 31/03 [530/00] Out 0903z Weak 02/04 [535/00] Very weak 07/04 [537/00] Good 09/04 [537/00] Fair 14/04 [532/00] Fair 14/04 [532/00] Fair 16/04 [534/00] Fair 21/04 [534/00] Weak	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn PLdn, Brian Brixmis, Ary, Brian RNGB, Brian Brixmis, Ary, Brian RNGB, Brian Brian, Pldn RNGB, Brian Brian, Pldn RNGB	THU TUE MON WED MON WED MON WED MON WED MON WED MON
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good 17/03 [533/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 19/03 [537/00] Out 0903z Fair 24/03 [532/32 97704 36536 36629 40041 30001 80171 8573572008 43440] Out 0910z Good 31/03 [530/00] Out 0903z Weak 02/04 [535/00] Very weak 07/04 [537/00] Good 09/04 [537/00] Fair 14/04 [532/00] Fair 14/04 [532/00] Fair	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn PLdn, Brian Brixmis, Ary, Brian RNGB, Brian RNGB, Brian Brian, Pldn Brian, Pldn RNGB	THU TUE MON WED MON WED MON WED MON WED MON WED
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good 17/03 [533/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 19/03 [537/00] Out 0903z Fair 24/03 [532/32 97704 36536 36629 40041 30001 80171 8573572008 43440] Out 0910z Good 31/03 [530/00] Out 0903z Weak 02/04 [535/00] Very weak 07/04 [537/00] Fair 14/04 [532/00] Fair 14/04 [532/00] Fair 21/04 [534/00] Fair 21/04 [534/00] Fair 21/04 [535/00] Weak 23/04 [535/00] Weak	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn RNGB, PLdn PLdn, Brian Brixmis, Ary, Brian RNGB, Brian Brian, Pldn RNGB Brian Brian, Pldn	THU TUE MON WED MON WED MON WED MON WED MON WED MON WED
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good 17/03 [533/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 19/03 [537/00] Out 0903z Fair 24/03 [532/32 97704 36536 36629 40041 30001 80171 8573572008 43440] Out 0910z Good 31/03 [530/00] Out 0903z Weak 02/04 [535/00] Very weak 07/04 [537/00] Good 09/04 [537/00] Fair 14/04 [532/00] Fair 14/04 [532/00] Fair 16/04 [534/00] Fair 21/04 [534/00] Weak	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn PLdn, Brian Brixmis, Ary, Brian RNGB, Brian Brixmis, Ary, Brian RNGB, Brian Brian, Pldn RNGB, Brian Brian, Pldn RNGB	THU TUE MON WED MON WED MON WED MON WED MON WED MON
1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good 17/03 [533/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 19/03 [537/00] Out 0903z Fair 24/03 [532/32 97704 36536 36629 40041 30001 80171 8573572008 43440] Out 0910z Good 31/03 [530/00] Out 0903z Weak 02/04 [535/00] Out 0903z Weak 02/04 [535/00] Very weak 07/04 [537/00] Good 09/04 [537/00] Fair 14/04 [532/00] Fair 16/04 [534/00] Fair 21/04 [535/00] Weak 23/04 [535/00] Weak 23/04 [535/00] Weak 28/04 [532/32 00830 99382 10010 91275 21451 49681 75899 7608098100 32347]	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn PLdn, Brian Brixmis, Ary, Brian RNGB, Brian Brian, Pldn RNGB Brian Brian, Pldn Brian, Pldn Brian, PLdn	THU TUE MON WED MON WED MON WED MON WED MON WED MON WED MON
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1230z 1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 10/03 [534/00] Fair 12/03 [537/00] Good 17/03 [533/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 19/03 [532/32 97704 36536 36629 40041 30001 80171 8573572008 43440] Out 0910z Good 31/03 [530/00] Out 0903z Weak 02/04 [535/00] Out 0903z Weak 02/04 [535/00] Very weak 07/04 [537/00] Good 09/04 [537/00] Fair 14/04 [532/00] Fair 16/04 [534/00] Fair 21/04 [534/00] Weak 23/04 [535/00] Weak 23/04 [532/32 00830 99382 10010 91275 21451 49681 75899 7608098100 32347] 02/03 [240/00] Out 1748z Fair QRM3	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn PLdn, Brian Brixmis, Ary, Brian RNGB, Brian RNGB, Brian Brian, Pldn Brian, Pldn Brian, PLdn Brian, PLdn Brian, PLdn	THU TUE MON WED MON WED MON WED MON WED MON WED MON WED MON SUN
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1230z 12630khz 0315z 13117khz 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 0900z 13470kHz 1745z 1745z 0645z 1745z 1745z 0645z 1745z 0645z 1745z 1745z 0645z 1745z 1745z 1745z 0645z 1745z 1745z 1745z 0645z 1745z 1745z 0645z 174	22/04 [331/00] Good 24/04 [333/00] Fair 29/04 [337/00] Fair 03/03 [252/00] 05/03 [530/00] Out 0903z Fair 12/03 [537/00] Good 17/03 [537/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 19/03 [537/00] Out 0903z Weak 02/04 [537/00] Out 0903z Weak 02/04 [535/00] Very weak 07/04 [537/00] Good 09/04 [537/00] Fair 14/04 [537/00] Fair 14/04 [537/00] Fair 14/04 [537/00] Fair 14/04 [537/00] Fair 14/04 [537/00] Fair 14/04 [537/00] Fair 16/04 [537/00] Weak 23/04 [535/00] Weak 23/04 [535/00] Weak 23/04 [535/00] Weak 28/04 [532/32 00830 99382 10010 91275 21451 49681 75899 7608098100 32347] 02/03 [240/00] Out 1748z Fair QRM3 03/03 [247/35 03107etc] Weak QRM3/4 04/03 [518/00] Out 0648z Fair 09/03 [247/35 0310768110] Out 1755z Fair 11/03 [518/00] Out 0648z Weak 13/03 [518/00] Out 1748z Weak 13/03 [518/00] Out 1748z Weak 13/03 [518/00] Out 1748z Fair QRM2 18/03 [514/00] Out 1748z Fair 24/03 [245/00] Out 1748z Fair 24/03 [245/00] Out 1748z Weak 13/03 [518/00] Out 1748z Weak 13/03 [518/00] Out 1748z Weak 13/03 [518/00] Out 1748z Weak 13/03 [249/00] Out 1748z Fair 24/03 [249/00] Out 1748z Fair 24/03 [249/00] Out 1748z Weak 13/03 [518/00] Out 1748z Weak 13/03 [518/00] Out 0648z Weak 13/03 [518/00] Out 1748z Weak 13/03 [519/00] St 13/03 [249/00] Out 1748z Weak 13/03 [249/00] Out 1748z Weak 13/03 [249/00] Out 1748z Weak	Brian Brian HfD PLdn, Brian, HfD Brian, PLdn RNGB, Brian, PLdn PLdn, Brian Brian, PLdn RNGB, PLdn PLdn, Brian Brixmis, Ary, Brian RNGB, Brian Brian, Pldn Brian, Pldn Brian, Pldn Brian, PLdn PLdn, HfD PLdn PLdn, HfD PLdn PLdn PLdn PLdn PLdn PLdn PLdn PLdn	THU TUE MON WED MON WED MON WED MON WED MON WED MON WED MON WED MON WED MON TUE THU SUN TUE THU SUN TUE THU SUN MON TUE SUN MON TUE SUN MON TUE SUN

0645z 0645z 0645z 1745z 1745z 0645z	15/04 [517/00] Weak 17/04 [511/00] Out 0648z Weak 22/04 [518/37 38464 94928 16735 54781 52799 12094 86884 7827518447 78593] Out 0656z 27/04 [247/00] Out 1748z Weak 28/04 [240/00] S2 29/04 [511/00] Fair	RNGB, PLdn PLdn Brixmis, PLdn PLdn Brixmis, PLdn RNGB, PLdn	TUE THU TUE SUN MON TUE
14666kHz 0715z 0715z 0715z 0715z 0715z 0715z	04/04 [631/00] Weak 11/04 [630/00] Fair 15/04 [637/37 39445 06467 44046 50672 61415 83155 9520843754 37832] Fair 25/04 [639/00] Good 29/04 [639/00] Fair	Brian RNGB, Brian RNGB, Brian, Ary RNGB RNGB, Brian	FRI FRI TUE FRI TUE
14865kHz 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z	04/03 [225/39 9170071711] Out 0756z Weak 11/03 [229/00] Out 0748z Fair 13/03 [228/00] Fair 20/03 [224/00] Fair 20/03 [224/00] Fair 25/03 [228/00] S3 27/03 [224/00] Fair 01/04 [228/00] Out 0748z Fair 03/04 [227/00] Good 08/04 [224/35 44319 48273 67449 61799 80000 24082 7682470813 39298] Weak 15/04 [223/00] Weak 17/04 [225/00] Very weak 22/04 [228/00] Out 0748z Weak 24/04 [225/00] Fair 29/04 [220/04] Weak	PLdn, HfD PLdn RNGB RNGB, Pldn RNGB Brixmis, PLdn RNGB, Brian PLdn, Brian RNGB, Brian RNGB, Brian Brian PLdn, Brian RNGB, Brian Brian RNGB, Brian, Pldn Brian	TUE TUE THU TUE THU TUE THU TUE THU TUE THU TUE
14972khz 1430z 1430z 1430z 1430z 1430z 1430z 1430z 1430z 1430z 1430z	01/03 [917/00] 04/03 [915/00] Out 1433z Weak 11/03 [917/00] Out 1433z Weak 18/03 [910/33 17052 1827738569 38016] Weak 25/03 [915/00] S4 01/04 [915/00] S5 08/04 [917/00] Out 1433z Weak 22/04 [918/00] Weak 29/04 [918/00] Weak	HfD PLdn PLdn Brian, PLdn Brixmis, PLdn Brixmis, PLdn PLdn, Brian Brian, PLdn PLdn	SAT TUE TUE TUE TUE TUE TUE TUE
15720kHz 0715z 0715z 0715z 0715z 0715z 0715z 0715z	04/03 [631/36 33235etc] Last grps not heard, QRM4 14/03 [639/00] Out 0718z Fair 18/03 [639/00] Out 0718z Fair 21/03 [630/00] Good 25/03 [633/00] S3 28/03 [639/00] Weak	PLdn, HfD PLdn PLdn RNGB, PLdn Brixmis, PLdn RNGB	TUE FRI TUE FRI TUE FRI
17410kHz 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z 0745z	05/03 [343/00] 07/03 [342/00] Weak 12/03 [347/00] Weak 21/03 [348/36 18821 76509 61794 36494 69030 56604 79961 0263260627 20705 34269] 26/03 [340/00] Fair 28/03 [346/00] Weak 02/04 [340/00] Very weak 04/04 [344/00] Fair 09/04 [347/33 27927 50105 63501 53672 76199 68320 08360 0870619631 31622] Fair 18/04 [344/00] 23/04 [343/00] Very weak 25/04 [342/00] Fair 30/04 [344/00] Weak	HfD Brian RNGB RNGB RNGB Brian RNGB, Brian RNGB, Brian RNGB, Brian RNGB, Brian RNGB, Brian	WED FRI WED FRI WED FRI WED FRI WED FRI WED
18168kHz 0845z 0845z 0845z 0845z 0845z 0845z 0845z 0845z 0845z	04/03 [156/30 17029 94379 75142 84434 71076 60674 59328 4339869336 08298] Good 11/03 [155/00] Weak 13/03 [154/00] Fair 18/03 [157/00] Weak 20/03 [150/00] Weak 25/03 [157/00] Fair 27/03 [154/00] Weak	RNGB, Brian, PLdn, HfD Brian, PLdn RNGB Brian Brian RNGB, Brian, PLdn Brian	TUE TUE THU TUE THU TUE THU



#### 18186kHz 0845z 01/04/2025 156/00

0845z	01/04 [156/00] S6	[see above]	Brixmis	TUE
0845z	03/04 [155/00] Good		Brian, PLnd	THU
0845z	08/04 [159/00] Good	(Polish SDR)	RNGB, Brian	TUE
0845z	10/04 [159/00] Weak		Brian	THU
0845z	17/04 [156/36 45903 47626	95046 25811] Extremely weak – Fair via SDR Poland	Brian	THU
0845z	22/04 [152/00] Weak		Brian	TUE
0845z	29/04 [154/00] Out 0848z W	eak	PLdn, Brian	TUE
19184kHz 0820z	04/03 [131/00] Fair		RNGB, Brian, PLdn, HfD	TUE
0820z	05/03 [130/00] Weak		Brian	WED
0820z		00782 99090 99844 85496 8310655501 10624] Weak	RNGB, Brian, PLdn	TUE
0820z	18/03 [136/00] Fair	50782 77070 77844 85470 85100	RNGB, Brian	TUE
08202 0820z	19/03 [130/00] Weak		RNGB, Brian	WED
08202 0820z	25/03 [135/00] Fair		RNGB, Brixmis, Brian	TUE
0820Z 0820Z	26/03 [134/00] Fair		RNGB, Brian	WED
0820Z 0820Z	01/04 [135/00] Out 0823z Fa	:	PLdn	TUE
0820Z 0820Z	£ 3	11	Brian	WED
	02/04 [138/00] Very weak			
0820z	08/04 [132/00] Good	(Polish SDR)	RNGB	TUE
0820z	09/04 [135/00] Good	(Polish SDR)	RNGB	WED
0820z	16/04 [134/00] Fair		Brian	WED
0820z	22/04 [138/00] Very weak		Brian	TUE
0820z	30/04 [136/39 69834 28062 5	51639 05272 22775 40330 95233 74159] faded out	Brixmis	WED
19515kHz 0715z	03/03 [754/33 88098	etc] thro QSB to nil	PLdn, HfD	MON
0715z	12/03 [755/00] Weak		RNGB	WED
0715z	26/03 [751/00] Fair		RNGB	WED
0715z	31/03 [759/00] Fair		RNGB	MON
0715z	02/04 [752/00] Weak		RNGB	WED
0715z	07/04 [750/00] Good	(Polish SDR)	RNGB	MON
0715z	09/04 [757/00] Good	(Polish SDR)	RNGB	WED
0715z	14/04 [750/00] Weak		RNGB, Brian	MON
0715z	16/04 [756/00] Very weak		RNGB	WED
0715z	23/04 [750/00] Weak	(Polish SDR)	Brian	WED
0715z	28/04 [750/38 15636 00370 3	39804 49074 31868 18687 6364154316 37802] Weak	RNGB	MON
20170khz 0830z	03/03 [184/00] Fair		RNGB, HfD	MON
0830z	07/03 [184/00] Weak		Brian	FRI
0830z	1 J	56910 91994 33336 30124 6790893977 39772] Weak	RNGB, Brian	MON
0830z	17/03 [180/00] Weak		RNGB, Brian	MON
0830z	21/03 [182/00] Weak		Brian	FRI
0830z	24/03 [189/00] Weak		RNGB, Brian	MON
0830z	28/03 [180/00] Weak		RNGB, Brian	FRI
0830z	31/03 [182/00] Weak		Brian	MON
0830z	04/04 [183/00] Very weak		Brian	FRI
0830z	18/04 [183/00] fair		RNGB, Ary	FRI
0830z	21/04 [183/00] Weak		Ary	MON
0830z	25/04 [185/00] Very weak		Brian	FRI
0830Z 0830Z	2 3 5		Brian	MON
0850Z	28/04 [181/00] Very weak		DHan	MON
25839kHz 0600z	03/03 [946/00]		HfD	MON
0600z	21/04 [945/00] Good	(Polish SDR)	RNGB	MON
0600z	1 J	07160 61219 67346 93811 1883617204 44606] Good	RNGB	MON
	L	1		

#### E11 and E11a ENGLISH via PoSW

5176 kHz, 1605 UTC 4-Mar-25, Tue:- "231/00" 9-Mar-25, Sun:- "237/00" 11-Mar-25, Tue:- "231/36", message, "Out" at 1615:25s UTC. 16-Mar-25, Sun:- "231/36" again. 23-Mar-25, Sun:- "236/00"
25-Mar-25, Tue:- "230/00" 1-Apr-25, Tue:- "237/33", message, weak signal, this schedule becoming weaker as we move through spring, sank into noise. 8-Apr-25, Tue:- "235/00" 5737 kHz, 2000 UTC 2-Mar-25, Sun:- "520/00" 9-Mar-25, Sun:- "524/00" 13-Mar-25, Thu:- "521/00" 16-Mar-25, Sun:- "528/00" 27-Mar-25, Thu:- "520/31", message, "Out" at 2009:32s UTC. 30-Mar-25, Sun:- "520/31" again. 6-Apr-25, Sun:- "525/33", message, "Out" at 2009:51s UTC. 17-Apr-25, Thu:- "528/00" 20-Apr-25, Sun:- "522/00" 24-Apr-25, Thu:- "524/00" 6923 kHz, 1715 UTC 5-Mar-25, Wed:- "978/00" 12-Mar-25, Wed:- "978/30", message, Out" at 1724:30s approx. 14-Mar-25, Fri:- "978/30" again. 19-Mar-25, Wed:- "976/00" 28-Mar-25, Fri:- "975/00" 11-Apr-25, Fri:- "976/00" 25-Apr-25, Fri:- "977/00" 7317 kHz, 1900 UTC 3-Mar-25, Mon:- "648/00" 13-Mar-25, Thu:- "644/00" 17-Mar-25, Mon:- "647/31", message, missed the ending. 24-Mar-25, Mon:- "643/00" 27-Mar-25, Thu:- "644/00" 31-Mar-25, Mon:- "649/00" 10-Apr-25, Thu:- "646/00" 14-Apr-25, Mon:- "647/00" 17-Apr-25, Thu:- "646/00" 24-Apr-25, Thu:- "646/38", message, "Out" at 1910:49s UTC. 8180 kHz, 0700 UTC 4-Mar-25, Tue:- "570/00" 11-Mar-25, Tue:- "574/00" 14-Mar-25, Fri:- "573/00" 18-Mar-25, Tue:- "574/39, message, "Out" at 0711:7s UTC. 21-Mar-25, Fri:- "574/39 again. 25-Mar-25, Tue:- "579/00" 28-Mar-25, Fri:- "577/00" 1-Apr-25, Tue:- "575/33", message, "Out" at 0709:50s. 4-Apr-25, Fri:- "575/33" again. 8-Apr-25, Tue:- "573/00" 11-Apr-25, Fri:- "577/00" 15-Apr-25, Tue:- "579/00" 18-Apr-25, Fri:- "571/00 8530 kHz, 1910 UTC 2-Mar-25, Sun:- "616/00" 16-Mar-25, Sun:- "612/40", message, "Out" at 1921:15s UTC. 21-Mar-25, Fri:- "613/00" 23-Mar-25, Sun:- "612/00" 28-Mar-25, Fri:- "618/00" 30-Mar-25, Sun:- "612/00" 4-Apr-25, Fri:- "617/36", message, "Out" at 1920:26s UTC. 6-Apr-25, Sun:- "617/36" again. 11-Apr-25, Fri:- "611/00" 18-Apr-25, Fri:- "613/00" 20-Apr-25, Sun:- "618/00" 25-Apr-25, Fri:- "611/00" 12202 kHz, 0845 UTC 3-Mar-25, Mon:- "719/39", message, "Out" at 0856 UTC. 5-Mar-25, Wed:- "719/39" again. 17-Mar-25, Mon:- "715/00" 19-Mar-25, Wed:- "713/00" 24-Mar-25, Mon:- "718/00" 26-Mar-25, Wed:- "716/00" 31-Mar-25, Mon:- "718/00" 2-Apr-25, Wed:- "719/00" 7-Apr-25, Mon:- "716/00" 9-Apr-25, Wed:- "719/00" 16-Apr-25, Wed:- "718/00" 21-Apr-25, Mon:- "718/33", message, weak signal, sank into noise. 23-Apr-25, Wed:- "718/33" again, stronger signal than on Monday, "Out" at 0854:40s UTC.

13470 kHz, 1745 UTC 3-Mon-25, Mon:- "247/35, message, "Out" at 1755:20s UTC. 10-Mar-25, Mon:- "240/00" 17-Mar-25, Mon:- "248/00" 31-Mar-25, Mon.- 242/00" 20-Apr-25, Sun, "242/37", message, "Out" at 1755:42s UTC. 14865 kHz, 0745 UTC 4-Mar-25, Tue:- "225/39", message, "Out" at 0756:10s UTC. 11-Mar-25, Tue:- "229/00" 18-Mar-25, Tue:- "225/00" 25-Mar-25, Tue:- "228/00" 8-Apr-25, Tue:- 224/35", message, weak signal, became unreadable.
10-Apr-25, Thu, "224/35" as on Tuesday but much stronger, "Out" at 0755:20s UTC. 15-Apr-25, Tue:- "223/00" 14972 kHz, 1430 UTC 1-Mar-25, Sat:- "917/00" 4-Mar-25, Tue:- "915/00" 8-Mar-25, Sat:- "917/00" 11-Mar-25, Tue:- "917/00" 15-Mar-25, Sat:- "918/00" 18-Mar-25, Tue:- "910/33", message, "Out" at 1439:50s UTC.
22-Mar-25, Sat, "910/33" again. 25-Mar-25, Tue:- "915/00" 29-Mar-25, Sat:- "918/00" 1-Apr-25, Tue:- "914/00" 8-Apr-25, Tue:- "917/00" 12-Apr-25, Sat:- "912/00" 15-Apr-25, Tue:- "911/36", message, "Out" at 1440:30s UTC approx. 19-Apr-25, Sat:- "911/36" again. 22-Apr-25, Tue:- "918/00" 26-Apr-25, Sat:- "917/00" 17410 kHz, 0745 UTC

7-Mar-25, Fri:- "342/00" 21-Mar-25, Fri:- "348/36", message, "Out" at 0755:29s UTC. 26-Mar-25, Wed:- "340/00"

This schedule became so weak as to become unreadable in April, nothing readable when monitored on most Wednesdays and Fridays until late in the month:-

25-Apr-25, Fri:- "342/00", strong signal, not quite making the 9 on the S-Meter but not far off, something of a surprise considering the weak signals of the past weeks.

Peter's comment is most interesting; PLdn found the same, mostly too weak to copy. These propagational values suggest a good reason wh and not only for Fam 3, but other schedules elsewhere]:

Note K values between 2 and 4 indicate some disturbance of magnetic conditions And some degradation of the HF bands. Above 4 HF in poor condx.

01/04	SFI 172	SN151	A6	K1	Band 80/40 P (poor)	30/10 G (good)
02/04	SF1182	SN147	A5	K3	Band 80/40 P	30/10 G
03/04	SFI180	SN158	A22	К3	Band 80/40 P	30/10 G
04/04	<i>SFI17</i> 8	SN124	A26	<mark>K4</mark>	Band 80/40 P	30/10 F (fair) Noted poor condx
05/04	SFI184	SN160	A44	K5	Band 80/40 P	30/10 F
06/04	SFI184	SN163	A40	К3	Band 80/40 P	30/10 G
07/04	SFI167	SN158	A20	K2	Band 80/40 P	30/10 G
08/04	SF1162	SN150	A13	K2	Band 80/40 P	30/10 G
09/04	SF1159	SN130	A24	<mark>K4</mark>	Band 80/40 P	30/10 F
10/04	SFI167	SN123	A22	K2	Band 80/40 P	30/10 G
11/04	SF1153	SN112	A17	<mark>K4</mark>	Band 80/40 P	30/10 F
12/04	SF1170	SN120	A18	К3	Band 80/40 P	30/10 G
13/04	SFI165	SN103	A20	К3	Band 80/40 P	30/10 G
14/04	SFI164	SN 80	A15	К3	Band 80/40 P	30/10 G
15/04	SF1152	SN 86	A18	К3	Band 80/40 P	30/10 G
16/04	SFI148	SN 70	A84	<u>K7</u>	Band 80/10 P	

17/04	SF1148	SN 70	A77	<u>K4</u>	Band 80/40 P	30/10 F	
18/04	SF1151	SN118	A11	K3	Band 80/40 P	30/10 G	
19/04	SF1156	SN 97	A13	K4	Band 80/40 P	30/10 F	
20/04	SF1156	SN108	A14	K3	Band 80/40 P	30/10 G	
21/04	SF1156	SN108	A14	<u>K4</u>	Band 80/40 P	30/10 F	
22/04	SF1163	SN137	A35	K3	Band 80/40 P	30/10 G	
23/04	SF1163	SN129	A12	K3	Band 80/40 P	30/10 G	
24/04	SF1167	SN132	A7	K2	Band 80/40 P	30/10 G	
25/04	SF1170	SN152	A13	K1	Band 80/40 P	30/10 G	
26/04	SF1164	SN169	A5	K1	Band 80/40 P	30/10 G	
27/04	NOT REC	CORDED					
28/04	SF1156	SN119	A6	K2	Band 80/40 P	30/10 G	
29/04	SF1154	SN 83	A4	K2	Band 80/40 P	30/10 G	
30/04	SF1149	SN 78	A6	К2	Band 80/40 F	30/15 G 1210 F	7

### <u>S06</u>

### <u>S06 log Mar/April</u>

<b>Friday</b> 07/03	·842' 00000	(used 991	<b>2000z</b> 5kHz)	9925kHz	2100z	7505khz
21/03 04/04	<ul><li>'842' 00000</li><li>'842' 00000</li></ul>		1900z	9925kHz	2000z	7505kHz
Saturday 01/03	'480' 536 42 93176.	etc	<b>1600z</b> (Thanks )	<b>11128kHz</b> HfD)	1630z	9073khz

 Sunday
 0730z
 13945kHz
 0800z
 12093kHz

 30/03
 '480' 697 44 81913 81729 03127 89219
 12074 35491 57854 15769 80606
 68601 18739 98086 81282 45965 74960 69147 79235 61593 38754 05349

 36918 86029 04254 65347 79016 08726 84952 98165 05787
 82567 39251 21207 61072 52657 81410 38537 89491 53765 43294 17626

 09580 86758 93810 90987 697 44 00000
 697 44 00000

13/04 '480' 517 43 68178 92126 67353 19078......etc

27/04 '480' 127 45 15150 96187 43068 28942 14512 18021 14840 74015 63975 02583 56570 40863 07084 51815 17971 57924 12102 53430 95267 97290 59406 37480 07150 95152 85091 05636 63568 13863 89212 67947 95969 71489 48906 39569 59508 68210 60717 52723 27404 35618 75876 14592 83201 02321 01432 12745 00000

<b>Monday</b> 03/03	'480' 153 60 12451etc	<b>0400z</b> ( via Kiwi	<b>11616khz</b> iSDR J ) thanks H	<b>0420z</b> IfD	9322kHz
Wednesda 05/03	<b>ay</b> '480' 271 43 10784etc	0930z	13945khz (thanks HfD)	1030z	15643kHz
02/04	'480' 253 41 34261etc	0930z	12207khz (thanks HfD)	1030z	11128kHz

#### Peter's SO6 intercepts:

First + Third Fridays in the Month Schedule:-Used the same frequencies and call in January and February as in these two months of last year, assuming the same modus operandi would be the case in March and April the expected frequencies would be 9925 and 7505, give or take:-21-Mar-25:- 2000 UTC, 9925 kHz, very weak signal of some kind, local RF noise interference, unable to confirm as S06. 2100 UTC, 7505 kHz, much better, strong signal, "842 842 00000".

4-Apr-25:- Moved by one hour. 2000 UTC, 7505 kHz, "842 842 842 00000", good signal, nothing readable at 1900z on 9925.

18-Apr-25:- 2000 UTC, 7505 kHz, "842 842 842 00000", good signal. Carrier was up on 7505 when checked just after 1930 UTC, tone at 1944, single spoken "842" at 1945. Noticed an SLT cluster on the HF side, "C" and "D" the strongest.

Nothing audible at 1900 on 9925.

# S11a log March/April

6433kHz 0	18307	01/03 [379/00] Good	RNGB, PLdn, HfD	SAT
	)830z	02/03 [377/00] Fair	PLdn	SUN
0	)830z	08/03 [376/00] Weak	PLdn	SAT
0	)830z	09/03 [379/00] Weak	PLdn	SUN
	)830z	15/03 [373/00] Good	RNGB, PLdn	SAT
0	)830z	16/03 [371/00] Weak	Brian	SUN
0	)830z	22/03 [378/00] Strong	RNGB, PLdn	SAT
	)830z	23/03 [372/00] Fair	Brian	SUN
0	)830z	29/03 [373/36 93098 84861 30221 45067 53680 04138 1703946207 06073] Strong	RNGB	SAT
0	)830z	05/04 [376/30 35450 22149 21721 25969 50651 61564 4263392416 66365] Good	RNGB, Brian, PLdn	SAT
0	)830z	12/04 [373/00] Fair	RNGB, Brian	SAT
0	)830z	27/04 [379/00] Good	RNGB	SUN
6480khz 0	)915z	03/03 [482/00]	HfD	MON
0	)915z	14/03 [485/35 50786 24360 97175 18008 78924 11174 4123185101 19378] Good	RNGB	FRI
	)915z	17/03 [486/00] Fair	RNGB	MON
0	)915z	21/03 [483/00]	Brian	FRI
0	)915z	24/03 [484/00] Good	RNGB	MON
	)915z	28/03 [485/00] Good	RNGB, Brian	FRI
	)915z	11/04 [487/00] Very weak	Brian	FRI
0	)915z	18/04 [480/00]	Ary	FRI
8597kHz 0	)700z	03/03 [471/34 43343]	HfD	MON
	)700z	L J	RNGB	THU
		13/03 [476/00] Good		
0	)700z	20/03 [477/00] Strong	RNGB	THU
0	)700z	27/03 [470/00] Good	RNGB	THU
	)700z	03/04 [478/00] Good	RNGB	THU
0	)700z	07/04 [477/00] Fair	RNGB	MON
0	)700z	10/04 [471/00] Good	RNGB	THU
	)700z	14/04 [477/32 71707 70282 64593 82669 45410 02608 04246 1471519413 01437]	Ary	MON
	)700z	21/04 [475/00] Good	RNGB	MON
0	)700z	24/04 [479/00] Good	RNGB	THU
0	)700z	28/04 [478/00] good	RNGB	MON
102121-11-10	050-	01/02/2022/001 E-:-		C A T
10213kHz 18		01/03 [282/00] Fair	PLdn, HfD	SAT
1	850z	05/03 [280/00] Konyets 1853z Fair	PLdn	WED
1	850z	08/03 [287/00] Weak	PLdn	SAT
	850z	16/03 [284/00] Fair	PLdn	SUN
1	850z	19/03 [284/00] Strong	PLdn	WED
1	850z	22/03 [288/00] Fair	PLdn	SAT
	850z	26/03 [280/36 5660860817] Fair	PLdn	WED
1	850z	05/04 [284/34 700216230] Weak, poor condx	PLdn	SAT
1	850z	09/04 [286/00] Fair	PLdn	WED
10728kHz 0	)445z	04/03 [799/00]	HfD	TUE
	)445z	01/04 [795/33 90157etc] Very weak – difficult copy	PLdn	TUE
0	)445z	10/04 [799/00] Strong	PLdn	THU
11420kHz 1-	400z	04/03 [425/00] Weak	PLdn	TUE
	400z	11/03 [422/00] Weak	PLdn	TUE
I.	400z	18/04 [429/00]	Ary	FRI
1-	400z	22/04 [421/00] Weak	PLdn	TUE
1.	400z	25/04 [421/00] Fair	PLdn	FRI
	400z	29/04 [422/00] Konyets 1403z	PLdn	TUE
14	400Z	29/04 [422/00] Konyets 14052	PLalli	IUE
2200411 0	0510	02/04 [CF2/00]		WED
23004khz 0	0510z	02/04 [652/00]	HfD	WED
23353kHz 0	)725z	07/03 [380/00] Weak	HfD	FRI
0	)725z	12/03 [380/00] Weak	RNGB	WED
			RNGB	
	)725z	21/03 [387/00] Weak		FRI
	)725z	26/03 [381/38 88163 3376781300 73227 88307] Very weak	RNGB	WED
0	)725z	02/04 [382/00] Weak (Polish SDR)	RNGB	WED
	)725z	16/04 [384/00] Very weak (Polish SDR)	RNGB	WED
	)725z	18/04 [389/00] Weak (Polish SDR)	RNGB, Ary	FRI
0	)725z	25/04 [385/00] Fair	RNGB	FRI
	)725z	30/04 [380/00] Extremely weak	RNGB	WED
0		·····		

# <u>S25</u>

Long thought inactive Ary logged this station:

19948 26-03-2025 1400 S25 539 60199 (R4) 00

 $17516 \ \ 26\text{-}03\text{-}2025 \ 1500 \ S25 \ \ 539 \ 60199 \ (\text{R4}) \ 00000$ 

# <u>V06</u>

### Not heard.

<u>V07</u> [

### [Tnx DanAR]

March 2025

### Sunday

0200z	19172kHz	0220z	17472kHz	0240z	kHz		
19172kHz	z 0200z 02/03 112	2 1 1541 112	2 34262 9203	6 000 000	QSA3	DanAR	SUN
58063 712 31724 399 36265 054 11050 115 73364 129 49352 077	12 1 489 51991 15830 1905 217 84726 22761 2943 905 64068 45630 0456 418 50619 24202 3921 588 54842 01037 8510 938 24260 17957 6075 749 94571 16637 5604 853 73026 56342 9060	86 55 7 94 91 89					
50643 011 92434 989 64016 687 82752 970 61147 241 85711 583	137 14650 78027 0865 137 14650 78027 0865 984 05442 76036 1389 752 18767 30204 6506 946 13485 94785 9735 146 32470 53164 7661 321 27695 16524 2986 467 17006 72356 5847	50 93 54 55 55 51		Sun 02.03.20 Sun 02.03.20	ed across schedule by 25 0200Z 19172 112: 25 0220Z 17472 112: 25 0240Z 16272 112:	1-1541/112: 1 via KiwiS	
98862 475 12030 049 51252 684 41422 223 43846 743 85762 582 16393 775	407 17000 72536 384 7 533 73825 59064 8874 918 50216 29793 4660 427 32191 67459 2281 355 64095 05874 5638 390 49710 51583 3371 277 81795 62925 2888 505 38625 60798 8438 036 000 000	46 05 .5 35 .5 32					
19172kHz	z 0200z 09/03 112	2 1 9245 80	) 98250 08197	000 000	QSA3	DanAR	SUN
14356 487 00912 141 63570 103 74448 520 91318 737 10879 515 26319 667 25044 395 10704 990 04827 080 35323 061 51319 643 47876 244 99530 033 79836 101 000 000	186 36757 83926 0335 792 44507 90293 9724 123 66554 71742 9916 342 31049 63854 5557 7005 56346 09634 2042 772 62079 67395 8114 599 30463 19055 0881 780 27852 72802 1735 571 43620 82264 9004 060 71793 98684 3191 096 61493 36183 3592 188 12639 71939 9091 349 08070 79001 3312 268 81665 46741 8083 363 40990 25954 6794 102 86929 13480 0819 <i>Courtesy DanA</i>	18 55 71 27 46 6 6 91 18 8 9 99 4 4 23 84 19 97 7 R					
26032 093 29903 701 06896 233 95109 893 43859 124 78730 035 01051 494 60444 588	12 1	01 5 19 00 75 58 81 21 71	4 77418 59324	000 000	QSA3	DanAR	SUN

75776 33000 80129 57961 26094 22142 13616 47600 13852 87323 68766 77051 23567 20094 96573 28808 25881 30385 98170 86822 68489 75975 09448 23243 56000 57323 91776 72314 57417 32512 20755 93687 89727 85083 72827 28555 65375 20523 28347 65654 94706 17892 88843 75405 61681 02841 23547 43645 47669 59517 63587 67861 79044 59324 000 000 Courtesy DanAR

19172kHz 0200z 23/03 112 1 5841 53 03896 ... 87166 000 000

QSA3 DanAR SUN

**17431kHz** 0200z 30/03 112 1 7338 73 88548 ... 78029 000 000

QSA2 DanAR SUN

#### NOTE: OPERATOR MISTAKE : THIS IS APRIL FREQUENCY

39149 87397 31455 16788 37324

Courtesy DanAR

### April 2025

0200z	17431kH	z	0220z	16131kHz	0240z	14431kHz	Z		
17431kH	Iz 0200z	06/04	414 1 885	67 45 56761 55631 0	00 000		QSA3	DanAR	SUN
414 414									
8857 45		20074 0254							
	5875 54431								
	5707 38721 5478 45155								
	5171 58113								
	5684 25272								
	4560 83608								
	9359 54463								
	1488 96257								
	3596 39669								
000 000		rtesy DanA							
17431kH	Iz 0200z	13/04	414 1 473	37 119 04514 13589	000 000		QSA3	DanAR	SUN
414 414	414 1								
4737 11	9								
04154 30	0910 82227	24948 2481	0						
03825 87	7180 69875	92025 8376	50						
93241 30	)839 96502	53322 5006	55						

1B V07 H-FD

Sun 06.04.2025 0200Z 17431 414:1-8857/45= 56761 via KiwiSDR USA Sun 06.04.2025 0220Z 16131 414:1 via KiwiSDR USA Sun 06.04.2025 0240Z 14431 414:1 via KiwiSDR USA

17431kHz 0200z	20/04 414 1 9436 61 29078 01127 000 000	QSA3	DanAR	SUN
414 414 414 1				
9346 61				
29078 42423 62148	21672 74902			
85256 18092 90595	72653 55468			
79508 64254 66034	69944 82130			
23240 40276 18983	45710 92569			
70879 30452 18845	78716 50739			
92367 15497 37707	59200 97711			
79509 47206 61297	23177 93685			
16238 75433 17336	73058 98319			
33246 97590 69469	71944 49195			
35532 94854 76787	97859 77981			
02102 70541 38189	64285 10051			
84421 13754 63008	97781 43455			
01107 000 000 C.				
01127 000 000 Cou	irtesy DanAR			
		0542	DerAD	CUN
17431kHz 0200z	27/04 414 1 4388 39 05591 30340 000 000	QSA3	DanAR	SUN
17431kHz 0200z		QSA3	DanAR	SUN
17431kHz 0200z 414 414 414 1		QSA3	DanAR	SUN
17431kHz 0200z 414 414 414 1 4388 39	27/04 414 1 4388 39 05591 30340 000 000	QSA3	DanAR	SUN
17431kHz 0200z 414 414 414 1	27/04 414 1 4388 39 05591 30340 000 000 35835 69093	QSA3	DanAR	SUN
17431kHz 0200z 414 414 414 1 4388 39 05591 78643 87358	27/04 414 1 4388 39 05591 30340 000 000 35835 69093 47648 65389	QSA3	DanAR	SUN
17431kHz 0200z 414 414 414 1 4388 39 05591 78643 87358 90634 05236 47036	27/04 414 1 4388 39 05591 30340 000 000 35835 69093 47648 65389 83635 45471	QSA3	DanAR	SUN
17431kHz 0200z 414 414 414 1 4388 39 05591 78643 87358 90634 05236 47036 01778 35761 35738	27/04 414 1 4388 39 05591 30340 000 000 35835 69093 47648 65389 83635 45471 89266 80995	QSA3	DanAR	SUN
17431kHz 0200z 414 414 414 1 4388 39 05591 78643 87358 90634 05236 47036 01778 35761 35738 34970 69658 69158	27/04 414 1 4388 39 05591 30340 000 000 35835 69093 47648 65389 83635 45471 89266 80995 94954 67017	QSA3	DanAR	SUN
17431kHz 0200z 414 414 414 1 4388 39 05591 78643 87358 90634 05236 47036 01778 35761 35738 34970 69658 69158 63127 76753 23498	27/04 414 1 4388 39 05591 30340 000 000 35835 69093 47648 65389 83635 45471 89266 80995 94954 67017 36723 36167	QSA3	DanAR	SUN
17431kHz 0200z 414 414 414 1 4388 39 05591 78643 87358 90634 05236 47036 01778 35761 35738 34970 69658 69158 63127 76753 23498 15040 46961 83360	27/04 414 1 4388 39 05591 30340 000 000 35835 69093 47648 65389 83635 45471 89266 80995 94954 67017 36723 36167 32069 97683	QSA3	DanAR	SUN
17431kHz 0200z 414 414 414 1 4388 39 05591 78643 87358 90634 05236 47036 01778 35761 35738 34970 69658 69158 63127 76753 23498 15040 46961 83360 15845 00158 28675 77138 52741 45595	27/04 414 1 4388 39 05591 30340 000 000 35835 69093 47648 65389 83635 45471 89266 80995 94954 67017 36723 36167 32069 97683	QSA3	DanAR	SUN
17431kHz 0200z 414 414 414 1 4388 39 05591 78643 87358 90634 05236 47036 01778 35761 35738 34970 69658 69158 63127 76753 23498 15040 46961 83360 15845 00158 28675 77138 52741 45595	27/04 414 1 4388 39 05591 30340 000 000 35835 69093 47648 65389 83635 45471 89266 80995 94954 67017 36723 36167 32069 97683 30340	QSA3	DanAR	SUN

# <u>V13</u>

# V15 North Korean Intelligence via Radio Pyongyang

No Reports

<u>V24</u>

No Reports



No Reports

# <u>Polytones</u> <u>XPA1 Wed/Fri</u>

#### Wednesday/Friday

#### March 2025

1310z 14451kHz

51kHz 1330z 13451kHz

12151kHz

Strong [Rpt fm 28/02]

1350z

05/03 441 1 00792 00153 92773 ... 40564



07/03	441 1 00792 00153 92773 40564	1310z Weak QRM4, rest Fair [See above]
12/03	441 000 08974 00001 00000 37667	1310z Fair, rest Weak
14/03	441 000 09671 00001 00000 34670	Weak 1310z QSB3
19/03	441 000 07527 00001 00000 37261	1310z Unworkable, rest Weak
21/03	441 000 05600 00001 00000 34255	Fair
26/03	441 000 05722 00001 00000 35266	Fair 1330z MISSED
28/03	441 000 03577 00001 00000 37262	1350z Fair, rest Strong

April 2025

1210z	13368kHz	1230z	12168kHz	1250z	11168kHz
02/04	311 via	H-FD			
04/04	Not more	nitored			
09/04	Unwork	able, poor co	ondx		
11/04	311 007	62 00182 47	610 44704		1250z Unworkable; rest Weak QSB3
311 311 3	311 1 311 311 311 1	311 311 311	1		

00762 00182 47610 77984 74249 69483 34484 13064 93853 32122 09205 11967 67957 38435 90032 70489 43233 28570 48461 60675 22871 28869 58262 71382 23508 39121 76420 46051 71867 46083 53767 87404 34696 96672 40331 64812 80946 21861 98142 43962 20626 97868 20045 33445 99086 43962 64611 15386 48345 06826 14765 04212 82578 28199 26924 84727 87460 63956 12712 84429 35279 35473 20647 80205

65866 80242 90465 71673 24989 78515 24637 55656 62082 08610 85931 79290 84238 78843 51977 87137 77788 42809 00187 75425 29458 46433 30349 29368 89836 85486 94000 21561 77890 53801 46083 02082 39801 36384 12469 68431 19041 92122 71087 12239 74259 56613 89751 93614 99540 15340 40834 44805 88667 23167 85023 55463 57477 21923 96624 68605 72799 89697 66119 85972 24716 76333 41595 73695

95037 87940 90244 88939 63904 49387 92801 39457 68527 76289 50324 55877 05559 55818 22746 83803 48027 49403 23971 83824 95163 28136 83731 46880 26806 51939 16077 31659 96328 50366 76821 06205 46454 83593 97238 61258 45614 57297 37839 53095 50040 15962 65828 59880 31533 38279 46662 75062 30618

36521 36921 69652 77947 62607 43992 74388 44704

Courtesy PLdn

- 18/04 311 00762 00182 47610 ... 44704
- 23/04 1210/1230z Unworkable, 1250z NRH
- 25/04 311 000 06429 00001 00000 ... 37660
- 30/04 311 1 02720 00074 27483 ... 27515

#### 

02720 00074 27483 98370 57824 16628 89788 76398 37353 28066 29560 83921 85143 71249 05499 45235 11416 16672 85916 85523 51873 70408 05653 53302 02335 14180 53554 95356 28585 58309 75875 82476 47649 23675 60379 49343 93000 35946 86877 19255 81428 35566 83397 14379 04298 45259 94440 92835 39592 89638 96267 29340 60282 55881 48431 65130 85587 23386 32998 21526 98669 54091 47900 83298

40619 81007 03190 88771 96505 62039 20193 80545 00780 39839 43131 80855 27515 *Courtesy PLdn* 

# XPA2 Mon/Wed [p]

#### Monday/Wednesday

#### March 2025

0800z	13931kHz	0820z	14831kHz	0840z	16131kHz	I
03/03	08140	00001 00000	31664			Very strong, 0840z MISSED
05/03	09558	00001 00000	37666			Very strong
10/03	05669	00172 62301	00654			Fair
12/03	05669	00172 62301	00654			Very strong
17/03	05669	00172 62301	00654			Very strong
19/03	05669	00172 62301	00654			0840z Very strong, rest Strong
24/03	03290	00001 00000	32264			Very strong
26/03	03714	00001 00000	36654			Very strong
31/03	09602	00001 00000	35261			Very strong

1250z Unworkable, rest Weak

1210z Fair 1230z Weak, 1250z Unworkable

1250z NRH, rest Weak

Poor condx

### April 2025

0700z	11409kHz	0720z	12209kHz	0740z	13409kHz	I
02/04	0817	7 00001 00000	35267			Fair, 0740z QRM2, 0720z MISSED
07/04	0014	4 00086 02814	32127			Very strong
40326 80 17197 02 06196 12 57832 30 15995 22 25474 62 22891 13	0110 46530 53365 2947 94732 59876 5124 27559 05854 0124 07650 97278 7084 58105 71668 3538 46813 92681	09635 67079 41 89467 87880 81 42119 59875 42 84825 60519 04 13629 17624 85 89326 49429 12 78698 69305 96	761 03745 12669 029 173 96110 38614 771 114 12081 93355 990 440 14103 59085 428 996 39886 17188 242 681 47247 80185 412 832 14965 68615 538 430 44339 30338 336 506 28408 32127 Courtesy PLa	38 97 35 54 16 44 09		
09/04	0014	4 00086 02814	32127			0700z Fair, rest Strong
14/04	Unw	orkable, poor co	ndx			
16/04	0014	4 00086 02814	32127			Fair
21/04	0188	9 00001 00000	41661			Fair
23/04	0809	6 00001 00000 .	34271			Strong
28/04	0275	3 00001 00000 .	36257			Strong
30/04	0344	4 00001 00000	35257			0700z Strong, rest Very strong

# XPA2 Mon/Sat

Monday/Saturday

March 2025

March 20		1(20-	100/21-11-	1640-	02/21-11-	
1600z	12163kHz	1620z	10863kHz	1640z	9363kHz	
	40 09640 33024 7		5432 22690 87727		1640z Fa	ir, rest Weak
80255 121	78 97211 05740 9	96437 12431 8	0005 60681 48547 1272 30260 89471	32317		
27150 166	97 31900 11747 3	37948 56004 1	0668 43402 22444 9783 04437 22011 9993 42560 03535	57518		
58738 890	10 05052 05459	49223 39855 6	5151 53667 86190 5155 91186 26566	10589		
53025 274	25 65774 81506	97164 97450 3	6208 60478 74444 9349 01526 16303	53865		
41687 573	77 62711 68046	02313 61305 4	8668 03372 73095 1113 85674 75858	49996		
	75 22622 80846		4974 61114 49041 3854 91597 88789 <i>Courtesy</i>	02233		
03/03		5 00001 00000	2	1 Lun	1600z St	rong, rest Weak
08/03	09779	9 00001 00000	41270		1600z St	rong, rest Weak
10/03	00602	2 00128 02945	07744		1600z St	rong, rest Weak
			9450 98290 56199 9680 82820 12298			
87908 377	45 24186 26692	45172 15603 9	2283 99917 16013 9079 41452 09692	90307		
27260 372	95 62768 19302	42886 18518 1	0249 31526 55364 8304 80844 51290 1536 14204 22003	48481		
81652 906	97 60718 36665	82588 15093 4	6623 12044 73733 1879 62769 23051	13679		
76768 625	86 72744 08217	28781 53049 2	1403 55195 85259 8525 42621 67672	91711		
			7308 21451 23818 9239 38488 80454 <i>Courtesy</i>	81821		
15/03	00602	2 00128 02945	07744		1600z Fa	ir, rest Weak
17/03	05082	2 00001 00000	32265		Weak, 16	500z QRM2
22/03		4 00001 00000				ir, rest Weak
24/03		0 00089 88713				ir, rest Weak
29/03		00089 88713		74264	1600z Fa	ir, rest Weak
80012 655 83122 938	96 39265 78784 ( 23 81127 24450 (	02476 17602 3 59327 76542 3	7838 03005 10401 5530 17763 84797 1587 68758 81864	39139 54840		
92308 691	68 14285 89009	57948 14374 5	1685 32051 63233 1558 13909 81144	86644		
92890 693	24 83419 91954	59747 39492 6	7936 07132 90525 2709 42309 30444	42000		
	04 81575 97267		6783 14579 14915 3128 38489 10779 <i>Courtesy</i>	25957		
31/03		5 00001 00000	2		1600z St	rong, rest Weak

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### April 2025

1500z	15881kHz	1520z	14881kHz	1540z	13381kHz	Z
05/04	06775	00001 00000 .	37265			1500z MISSED, rest Fair
07/04	05280	00135 61870 .	30675			1500z Strong, rest Weak QRM2
03641 55 33788 45 56637 03 28011 03 83253 70 46888 01 16771 52 68447 42 20467 77 29442 88 29306 23 86693 22	470 61519 34184 0 550 91535 51237 0 158 88861 73966 0 337 75830 82727 1 629 55582 26209 2 697 52225 66883 4 726 63297 58615 8 336 89173 66775 9 317 65561 11679 3 562 37008 67853 5 623 58275 66998 6	1451 92907 11 3718 05888 25 5307 01296 66 8911 09080 14 4189 27479 88 8892 23847 82 6699 12805 69 0773 59447 25 0812 25377 31 3131 22486 88 9344 04664 57 9622 91588 55	730 05366 28867 9 050 16885 89920 6 395 71113 83593 7 483 50950 67777 8 692 77485 28407 1 047 25804 19595 2 974 19731 71632 0 370 82593 37778 6 348 83884 81418 7 335 40725 71495 1 540 24041 22928 7 309 44646 64835 4 796 41277 50469 2 833 30675 Courtesy F	8663 0002 6956 4456 3766 8883 8237 7781 3619 1196 6415 2535		
12/04	05280	00135 61870 .	30675			1520z Weak, 1500z MISSED, 1540z Unworkablr
14/04	08213	00001 00000 .	33661			!500z Strong, rest Fair
19/04	08799	00001 00000 .	41271			1500z Weak, rest Strong
21/04	02677	00127 37434 .	47532			Weak, 1520/1540z QSB3/4
26/04	02677	00127 37434 .	47532			1500z Strong, rest Fair
66606 23 22293 88 76589 62 19937 77 84697 95 19749 33 86482 47 35452 52 97755 24 71684 42 79309 18	960 19398 19643 1 965 14616 14438 9 234 09146 26882 2 787 94550 34664 4 808 23941 63577 5 494 85556 76903 5 981 13877 72320 2 797 87442 48011 7 750 37982 42436 6 681 88478 84178 5 834 31088 65972 8	4849 84552 59 2455 44303 92 5449 40990 94 9109 26343 21 9806 18995 73 5016 29466 86 5209 21225 33 6545 05323 25 9948 21642 52 11616 99144 96 2760 72671 66	258 36909 16931 9: 131 25093 01206 7: 226 40220 04536 4: 681 34842 68808 4: 733 60671 89625 7: 298 85455 84395 8: 468 75836 85455 4: 212 39575 94298 0: 177 90292 03268 0: 465 00121 24395 6: 295 87013 82681 9: 069 09608 05820 5: 470 85165 11781 4: <i>Courtesy F</i>	6954 9426 0494 3176 7084 8334 4443 0288 6353 4351 7985 7532		

28/04/2025

06492 00001 00000 ... 34267

# XPA2 Tue/Fri

March 2025

### Tuesday/Friday

1100z	14639kHz	1120z	13539kHz	1140z	12139kHz
04/03	00718	00200 48887	16475		1120z Weak, rest Fair
07/03	00718	00200 48887	16475		Fair [1120z QRM3]
11/03	00718	00200 48887	16475		1100z Fair, rest Weak
14/03	00718	00200 48887	16475		Weak
18/03	06296	00001 00000	35267		1100z Fair, rest Weak
21/03	02306	00001 00000	35652		1100z Fair, rest Weak
25/03	05389	00073 00989	44527		1100z Strong, rest Weak
28/03	05389	00073 00989	44527		1100z Fair, rest Unworkable

Strong





16394kHz 1140z 01/04/2025 [Red line indicates signal]

01/04	05389 00073 00989 44527	1140z Lost in QRM, see above. Rest Weak
04/04	05389 00073 00989 44527	1140z Weak. Others no copy, antenna 'disconnected.'
08/04	06894 00001 00 00 10140	1140z Weak, rest Unworkable. See image below and read notes.
	06984 00001	10140

Refers to 1140z 13941kHz: This is an interesting intercept. Usually the repeated numbers when seen in a null message consist of an extended tone. The single tone being 100ms long, To double the number it is extended to 200ms, three times 300ms, all to a maximum of 500ms.

This intercept [always poor copy] uses the old method where the repeat function is made by a tone 15Hz lower than the O value, Zero in this case is 1157Hz, the repeat tone 1142Hz. Therefore the second group, usually an extended 1157Hz tone 400ms long plus 1172Hz to give 00001, is shown as five tones, each 100ms long, at 1157 1142 1157 1142 1157 1142 1157 1142 to produce the same values. The third group has faded out but it is obvious the same construct exists as group twosave the last tone, 1157Hz to make 00000

For some time it is usual for the last group [the only valid group indicated by the '1' in the second group – the group count] to start with a 3 or 4, as seen across the polytone sendings. On this intercept the operator has reverted back to the previous, never changing last group: 10140.

For a better meaning of this last group value, see intercepts dated between 18/03 and 28/03/2025 on this Scheduled sending, or compare with null messages sent on other schedules.

11/04 05990 00001 00000 ... 10140

15/04 02597 00035 52639 ... 37336

02597 00035 52639 86799 46921 06897 79159 60156 26980 27148 15951 23329 88949 71372 32385 72618 70915 99472 79007 91600 74418 75311 69881 84912 06703 76325 69433 31141 48358 35375 70758 46360 91700 08660 44489 05300 14053 37336

Courtesy PLdn

18/04

02597 00035 52639 ... 37336

1120z Fair, Rest Unworkable. 1140z OTHR QRM4 [ends 10140].

1100z Fair QSB2, rest Unworkable

1100z Weak, rest Unworkable



22/04

07567 00097 61327 ... 44333

1100z Unworkable, rest weak – 1140z OTHRQRM3 [See image and below] The space between groups is usually a ~100ms long tone, in this case 1065Hz. This was a weak signal with some noise however the space between the penultimate and last group [96<sup>th</sup> and 97<sup>th</sup> grp not counting first three 'admin' groups, was found to be ~200ms. I have not seen this before, Notably the last group on previous null sendings [08/04 & 11/04] was noted to be 10140; an apparent throwback to before proportionate lengthening of number tones in null msgs to indicate repeats of numerals in a group.

Looking at the above sonogram we have 100ms 74945 200ms 44333 100ms end tones.



25/04

07567 00097 61327 ... 44333



The space between groups is usually a ~100ms long tone, in this case 1065Hz.

This was a weak signal with some noise however the space between the penultimate and last group  $[96^{th} \text{ and } 97^{th} \text{ grp not counting first three 'admin' groups, was found to be ~200ms.}$ 

I have not seen this before.

Notably the last group on previous null sendings [08/04 & 11/04] was noted to be 10140; an apparent throwback to before proportionate lengthening of number tones in null msgs to indicate repeats of numerals in a group.

Looking at the above sonogram we have 100ms 74945 200ms 44333 100ms end tones.



This sonogram is taken from the end of the XPA2m transmission on 11576kHz 2120z 23/05/2023. Note the normal 100ms space tone [as expected].

This begs the question if the TuF schedule is being used as a test bed for changes or are these dummy messages?

29/04 01901 00001 00000 ... 10140

Strong, 1140z QRM3

As with the other two Null messages that of the 29/04 was no different with the exception of the 200ms last space returning to the usual 100ms duration.:



### **XPA2 others**

1B XPA2 [per H-FD]

Sat 01.03.2025 0910Z 16261 msg Sat 01.03.2025 0930Z 15961 msg Sat 01.03.2025 0950Z 14861 msg

Sat 01.03.2025 1600Z 12163 msg Sat 01.03.2025 1620Z 10863 msg Sat 01.03.2025 1640Z 9363 msg

Mon 03.03.2025 0910Z 18333 msg

#### 1B XPA2 [per H-FD]

Tue 01.04.2025 1100Z 16341 msg Tue 01.04.2025 1120Z 14841 msg Tue 01.04.2025 1140Z 13941 msg

Wed 02.04.2025 1100Z 17426 msg Wed 02.04.2025 1120Z 16326 msg Wed 02.04.2025 1140Z 14926 msg

Wed 02.04.2025 1800Z 15872 msg Wed 02.04.2025 1820Z 14972 msg Wed 02.04.2025 1840Z 13872 msg

Thu 03.04.2025 1700Z 19372 msg x15819 Thu 03.04.2025 1720Z 18291 msg x14919 Mon 03.03.2025 0930Z 16345 msg Mon 03.03.2025 0950Z 14838 msg

Tue 04.03.2025 1600Z 13994 msg Tue 04.03.2025 1620Z 13494 msg Tue 04.03.2025 1640Z 12194 msg

Wed 05.03.2025 1100Z 15861 msg Wed 05.03.2025 1120Z 14431 msg Wed 05.03.2025 1140Z 13431 msg

Wed 05.03.2025 1200Z 14956 msg Wed 05.03.2025 1220Z 16356 msg Wed 05.03.2025 1240Z 17456 msg

# <u>1B XPB1</u>

#### Wed/Sat

#### March 2025

14621kHz 1200z	01/03	Fair	2m15s	PLdn	SAT
13921kHz 1210z	01/03	Fair	2m15s	PLdn	SAT
13421kHz 1220z	01/03	Fair	2m15s	PLdn	SAT
12121kHz 1230z	01/03	Fair	2m15s	PLdn	WED
11121kHz 1240z	01/03	Weak	2m15s	PLdn	WED
10421kHz 1250z	01/03	Weak	2m15s	PLdn	WED
101211112 12502	01/05	W cuit	211135	T Edit	11 LD
14601111 1000	05/02	г.	0 15	DI 1	WED
14621kHz 1200z	05/03	Fair	2m15s	PLdn	WED
13921kHz 1210z	05/03	Fair	2m15s	PLdn	WED
13421kHz 1220z	05/03	Fair	2m15s	PLdn	WED
12121kHz 1230z	05/03	Fair	2m15s	PLdn	WED
11121kHz 1240z	05/03	Weak	2m15s	PLdn	WED
10421kHz 1250z	05/03	Weak	2m15s	PLdn	WED
10421KHZ 1230Z	05/05	W Cak	211135	I LAII	WED
14601111 1000	00/02	<b>г</b> .	0 15	DI 1	0 A T
14621kHz 1200z	08/03	Fair	2m15s	PLdn	SAT
13921kHz 1210z	08/03	Fair	2m15s	PLdn	SAT
13421kHz 1220z	08/03	Fair	2m15s	PLdn	SAT
12121kHz 1230z	08/03	Fair	2m15s	PLdn	SAT
11121kHz 1240z	08/03	NRH		PLdn	SAT
10421kHz 1250z	08/03	Fair	2m15s	PLdn	SAT
10421KHZ 1230Z	08/05	Fair	200138	PLan	SAT
14621kHz 1200z	12/03	Fair	2m15s	PLdn	WED
13921kHz 1210z	12/03	Weak	2m15s	PLdn	WED
13421kHz 1220z	12/03	Weak	2m15s	PLdn	WED
12121kHz 1230z	12/03	Weak	2m15s	PLdn	WED
11121kHz 1240z	12/03	Weak	2m15s	PLdn	WED
10421kHz 1250z	12/03	Weak	2m15s	PLdn	WED
14621kHz 1200z	15/03	Weak	2m15s	PLdn	SAT
13921kHz 1210z	15/03	Weak	2m15s	PLdn	SAT
13421kHz 1220z	15/03	Weak	2m15s	PLdn	SAT
12121kHz 1230z	15/03	Weak	2m15s	PLdn	SAT
11121kHz 1240z	15/03	Weak	2m15s	PLdn	SAT
10421kHz 1240z			2m15s 2m15s	PLdn	
10421KHZ 1250Z	15/03	Weak	2m15s	PLan	SAT
14621kHz 1200z	19/03	Weak	4m28s	PLdn	WED
13921kHz 1210z	19/03	Weak	4m28s	PLdn	WED
13421kHz 1220z	19/03	Weak	4m28s	PLdn	WED
12121kHz 1230z	19/03	Weak	4m28s	PLdn	WED
11121kHz 1240z	19/03	ORM5	111205	PLdn	WED
10421kHz 1240z		•	4 29	PLdn	
10421KHZ 1250Z	19/03	Weak	4m28s	PLan	WED
		<b>-</b> ·	4	<b>Pr</b> 1	a
14621kHz 1200z	22/03	Fair	4m28s	PLdn	SAT
13921kHz 1210z	22/03	Fair	4m28s	PLdn	SAT
13421kHz 1220z	22/03	Weak	4m28s	PLdn	SAT
12121kHz 1230z	22/03	Fair	4m28s	PLdn	SAT
11121kHz 1240z	22/03	Weak	4m28s	PLdn	SAT
10421kHz 1250z	22/03	Weak	4m28s	PLdn	SAT
14621kHz 1200z	26/03	Fair	4m28s	PLdn	WED
13921kHz 1210z	26/03	Fair	4m28s	PLdn	WED
13421kHz 1220z	26/03	Fair	4m28s	PLdn	WED
12121kHz 1230z	26/03	Weak	4m28s	PLdn	WED
11121kHz 1240z	26/03	Weak	4m28s	PLdn	WED
10421kHz 1250z	26/03	Weak	4m28s	PLdn	WED

14621kHz 1200z 13921kHz 1210z 13421kHz 1220z 12121kHz 1230z 11121kHz 1240z 10421kHz 1250z April 2025	29/03 29/03 29/03 29/03 29/03 29/03	Weak Weak Fair Fair Weak Weak	4m28s 4m28s 4m28s 4m28s 4m28s 4m28s 4m28s	PLdn PLdn PLdn PLdn PLdn PLdn	SAT SAT SAT SAT SAT SAT
13562kHz 1100z 12162kHz 1110z 11562kHz 1120z 11162kHz 1130z 10562kHz 1140z 10262kHz 1150z	02/04 02/04 02/04 02/04 02/04 02/04	Weak Weak Weak Weak Weak NRH	1m40s 1m40s 1m40s 1m40s 1m40s	PLdn PLdn PLdn PLdn PLdn PLdn	WED WED WED WED WED WED
13562kHz 1100z 12162kHz 1110z 11562kHz 1110z 11562kHz 1120z 11162kHz 1130z 10562kHz 1140z 10262kHz 1150z	05/04 05/04 05/04 05/04 05/04 05/04	Fair Weak Weak Weak NRH	1m40s 1m40s 1m40s 1m40s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn	SAT SAT SAT SAT SAT
10262kHz 11302 13562kHz 1100z 12162kHz 1110z 11562kHz 1120z 11162kHz 1130z 10562kHz 1140z 10262kHz 1150z	09/04 09/04 09/04 09/04 09/04 09/04	NRH Weak Weak Weak Weak NRH	1m40s 1m40s 1m40s 1m40s 1m40s	PLdn PLdn PLdn PLdn PLdn PLdn PLdn	SAT WED WED WED WED WED

13562kHz 1100z	12/04	NRH	See image above	PLdn	SAT He
12162kHz 1110z	12/04	Weak	1m40s	PLdn	SAT
11562kHz 1120z	12/04	NRH		PLdn	SAT
11162kHz 1130z	12/04	Weak	1m40s	PLdn	SAT
10562kHz 1140z	12/04	Weak	1m40s	PLdn	SAT
10262kHz 1150z	12/04	ORM5		PLdn	SAT
		C C			
13562kHz 1100z	16/04	V.weak	4m30s	PLdn	WED
12162kHz 1110z	16/04	V.weak	4m30s	PLdn	WED
11562kHz 1120z	16/04	NRH		PLdn	WED
11162kHz 1130z	16/04	NRH		PLdn	WED
10562kHz 1140z	16/04	V.weak	4m30s	PLdn	WED
10262kHz 1150z	16/04	V.weak	4m30s	PLdn	WED
13562kHz 1100z	19/04	Fair	4m28s	PLdn	SAT
12162kHz 1110z	19/04	Fair	4m28s	PLdn	SAT
11562kHz 1120z	19/04	Weak	4m28s	PLdn	SAT
11162kHz 1130z	19/04	NRH		PLdn	SAT
10562kHz 1140z	19/04	NRH		PLdn	SAT
10262kHz 1150z	19/04	NRH		PLdn	SAT
13562kHz 1100z	23/04	Weak	4m28s	PLdn	WED
12162kHz 1110z	23/04	Weak	4m28s	PLdn	WED
11562kHz 1120z	23/04	Weak	4m28s	PLdn	WED
11162kHz 1130z	23/04	Weak	4m28s	PLdn	WED
10562kHz 1140z	23/04	NRH		PLdn	WED
10262kHz 1150z	23/04	NRH		PLdn	WED
13562kHz 1100z	26/04	Weak	4m28s	PLdn	SAT
12162kHz 1110z	26/04	Weak	4m28s	PLdn	SAT
12162kHz 1110z 11562kHz 1120z	26/04	Weak	4m28s 4m28s	PLdn PLdn	SAT
11162kHz 1120z	26/04	NRH	41112.05	PLdn	SAT
10562kHz 1140z	26/04	NRH		PLdn	SAT
10262kHz 1140z	26/04	NRH		PLdn	SAT
10202862 11302	20/04	МКП		F LUII	SAT
13562kHz 1100z	30/04	Fair	4m28s	PLdn	WED
12162kHz 1110z	30/04	Fair	4m28s	PLdn	WED
11562kHz 1120z	30/04	Weak	4m28s	PLdn	WED
11162kHz 1130z	30/04	Weak	4m28s	PLdn	WED
10562kHz 1140z	30/04	Weak	4m28s	PLdn	WED
10262kHz 1150z	30/04	NRH		PLdn	WED
10202MIL 11002	50/01			1 1.000	

AT Het tone for duration of transmission

1:50

2.00

2:10

2.20 2.30 2.40

2:50

3 00

### Other XPB1 [per H-FD]

Mon 03.03.2025 0600Z 18434 MFSK-16 2:09 x13562 Mon 03.03.2025 0610Z 18234 MFSK-16 x14362 Mon 03.03.2025 0620Z 17434 MFSK-16 x14862 Mon 03.03.2025 0630Z 16234 MFSK-16 x15962 Mon 03.03.2025 0640Z 15834 MFSK-16 x16262 Mon 03.03.2025 0650Z 14434 MFSK-16 x17462

Tue 04.03.2025 1300Z 20072 MFSK-16 1:42 Tue 04.03.2025 1310Z 19572 MFSK-16 Tue 04.03.2025 1320Z 18372 MFSK-16 Tue 04.03.2025 1330Z 17472 MFSK-16 Tue 04.03.2025 1340Z 16272 MFSK-16 Tue 04.03.2025 1350Z 14972 MFSK-16 Tue 01.04.2025 0500Z 19517 MFSK-16 4:30 x13527 Tue 01.04.2025 0510Z 19317 MFSK-16 x13927 Tue 01.04.2025 0520Z 18217 MFSK-16 x14717 Tue 01.04.2025 0530Z 17417 MFSK-16 x14927 Tue 01.04.2025 0543Z 16317 MFSK-16 x15827 Tue 01.04.2025 0553Z 15817 MFSK-16 x16327

Tue 01.04.2025 1300Z 20038 MFSK-16 1:44 Tue 01.04.2025 1310Z 19538 MFSK-16 Tue 01.04.2025 1320Z 18268 MFSK-16 Tue 01.04.2025 1330Z 17468 MFSK-16 Tue 01.04.2025 1340Z 16268 MFSK-16 Tue 01.04.2025 1350Z 15868 MFSK-16

# **Tones, Hybrids and FSK**

### X06 Mazielka (1c) logs section

Date	Day	UTC	Freq	Scale	Monitor	Comments
						TX to Beijing, R
20250304	Tue	0856-0906	18527	325614	Andrew/SE	TX to Nairobi, G392
20250304	Tue	0932-0935	13401	154263	Dave/AU	TX to Rome, G7
20250305	Wed	0923-0927	17445	362154	Andrew	TX to Athens, G32
20250305	Wed	1246-1252	19878	231654	Scarach	TX to Abuja, G422
20250305	Wed	1556	14501	214356	Eddy/AU	TX to Amman, G24
					Ary, Dave	TX to Abu Dhabi, G440(1)
20250306	Thu	0812-0820	12219	162543	Ary, Dave	TX to Nicosia, G39
20250306	Thu	1607	16277	436512	RadiotehnikaT	TX to Harare, G44
20250307	Fri	0917-0921	13556	324615	Andrew	TX to Madrid, G52
20250307	Fri	1013-1018	13547	625413	Andrew	TX to Tel Aviv, G56
20250307	Fri	1316-1318	16320	241563	Rycat	TX to Karachi, G50
20250310	Mon	0822-0824	17475	156234	Andrew	TX to Kampala, G68
20250310	Mon	0927-0932	19235	463125	Ary, Andrew	TX to Rabat, G77
20250311	Tue	1035-1045	20813	216354	Dave	TX to Chennai, G388
20250312	Wed	0842-0909	11483	412356	Ary, Andrew	TX to Budapest, G97
20250313	Thu	0815	16153	153624	Dave	TX to Damascus, G249
20250317	Mon	0836-0840	14377	432516	Ary, Dave	TX to Bern, G341
20250317	Mon	0905-0909	13395	532614	Ary, Andrew	TX to Paris, G147(2)
20250319	Wed	0750-0755	15819	256341	Andrew	TX to Beirut, G169
20250319	Wed	1109-1115	14650	215346	RadiotehnikaT	Alert2 (TX to Mumbai, G167) 1
20250319	Wed	1115-1116	16115	215346	Anon53593	2.2
20250319	Wed	1249-1254	15676	231654	Rvcat	TX to Abuja, G423
		1608-1613				TX to Amman, G394
					Ary, Andrew	TX to Ho Chi Minh City, G417
					Ary, Andrew	TX to Dar es Salaam, G179
		1514				Alert2 (TX to Harare, G180) 1
		1520				2.2
		0832-0835			-	TX to Islamabad, G390
		1027-1031				TX to Tel Aviv, G193
		0835-0837				TX to Cairo, G285
		1021-1028				TX to Algiers, G284
					Ary, Andrew	TX to Kampala, G203
					Ary, Andrew	TX to Rabat, G222(3)
		0807-0808				TX to Bagdad, G232
20250327	Thu	0747-0752	14419	521634	Ary, Dave	TX to Bucharest, G261
20250328	Fri	0936-0944	12177	356412	Ary, Dave	TX to Berlin, G271
20250328	Fri	0955-1006	20605	256134	Dave	TX to Abidjan, G270
20250328	Fri	1416	17463	256134	Ary	TX to Abidjan, G270
20240401	Tue	0739-0740	14615	125643	Dave	TX to Ulanbatar, G317
20250402	Wed	1101-1105	16115	215346	Rycat	TX to Mumbai, G25
20250402	Wed	1304	10446	16	ting/Schorschi	X06b before P07
					Ary, Hostog	TX to Abuja, R
20250403	Thu	1429		352416		TX to Dar es Salaam, G43
20250403	Thu			436512		TX to Harare, G44
					Ary, Dave	TX to Bagdad, G87(4)
20250408	Tue	1030	16341	1-616-	RadiotehnikaT	X06b before XPA2
20250408	Tue	1030	17453	1	RadiotehnikaT	X06d
20250410	Thu	0820-0824	16153	153624	Ary,	
						TX to Damascus, G249
20250411	Fri	0641	14635	341265		Alert2 (G442) 1
20250411	Fri	0649		341265		2.2
20250413	Sun	0749	16060	261453	Anon36989	TX to Cairo,G138 (not confirmed)
					Anon54980	TX to Algiers, G135
20250415	Tue	0802-0807	14615	125643	Ary, Andrew	TX to Ulanbatar, G383
		0900-0904				TX to Nairobi, G400
20250417	Thu	1446-1451	18575	352416	Anon11776	TX to Dar es Salaam, G179
20250418	Fri	0651-0846	9252	16	Ary, Andrew	Very long X06b test

20250418 Fri 1	15950	1	Andrew	X06d
20250418 Fri 1	1047 14824	625413	Ary	TX to Tel Aviv, G193
20250418 Fri 1				TX to Karachi, G187
20250422 Tue 0	0814 17523	542136	Ary	TX to Beijing, G88
20250424 Thu 0	0910-0951 13407	153624	Anon52192	TX to Damascus, G249(5)
20250425 Fri 0	0824 12177	356412	Ary	TX to Berlin, G271
20250425 Fri 1	1011-1017 20605	256134	Dave	TX to Abidjan, G270
20250427 Sun 1	1030-1031 15810	145632	Andrew	TX to Algiers, G284
20250428 Mon 0	0926-0931 19235	463125	Ary, Dave	TX to Rabat, G222
20250429 Tue 0	0417 17417	16	Andrew	X06b before XPB1
20250430 Wed 1	13368 13368	61	Andrew	X06b before XPA1

1) On top of CRI in the 16 m broadcast band

2) Terrible audio

3) Splatter, out well before

- 4) 0752-0802 UTC: M42/serdo v2
- 5) Very long (not confirmed)

Many thanks to all contributors as usual.

In the next issue I will report about an interview with a Dutch TV journalist on the Russian numbers stations, which I will have on May 9th. Till then I say: Good-bye and stay safe!

Jochen Schäfer, Numbers-, X06 Database and Teamkopf

### **Digital**

#### 1A F01 [per H-FD]

Wed 05.03.2025 1015Z 10861 FSK 200/500 6:30 via KiwiSDR RUS Wed 05.03.2025 1025Z 8187 FSK 200/500 via KiwiSDR BLR Wed 05.03.2025 1035Z 6939 FSK 200/500 via KiwiSDR POL

Tue 08.04.2025 1015Z 10177 FSK 200/500 7:32 via KiwiSDR RUS Tue 08.04.2025 1025Z 8076 FSK 200/500 via KiwiSDR POL Tue 08.04.2025 1035Z 6974 FSK 200/500 via KiwiSDR BLR

#### Ary's Polish 11 [Many thanks]

5176	18-04-2025 0530 P03	PSK	Polish intel.
5176	18-04-2025 0535 P03	PSK	Polish intel.
9902	18-04-2025 0700 F03j	FSK-4 100Bd/400Hz/448bp	Polish intel.
9902	18-04-2025 0705 F03j	FSK-4 100Bd/400Hz/448bp	Polish intel.
21854	18-04-2025 0810 F03j	FSK-4 100Bd/400Hz/448bp	Polish intel.
21854	18-04-2025 0815 F03j	FSK-4 100Bd/400Hz/448bp	Polish intel.
13424	18-04-2025 0850 F031	FSK-2 100Bd/200Hz/448bp	Polish intel.
13424	18-04-2025 0855 F031	FSK-2 100Bd/200Hz/448bp	Polish intel.
6397	18-04-2025 0930 F031	FSK-2 100Bd/200Hz/448bp	Polish intel.
6397	18-04-2025 0935 F031	FSK-2 100Bd/200Hz/448bp	Polish intel.
6940	18-04-2025 0945 F031	FSK-2 100Bd/200Hz/448bp	Polish intel.
6940	18-04-2025 0950 F031	FSK-2 100Bd/200Hz/448bp	Polish intel.
7850	18-04-2025 1100 P03	PSK	Polish intel.
7850	18-04-2025 1100 P03	PSK	Polish intel.
15915	18-04-2025 1315 F031	FSK-2 100Bd/200Hz/448bp	Polish intel.
15915	18-04-2025 1320 F031	FSK-2 100Bd/200Hz/448bp	Polish intel.
14410	18-04-2025 1345 P031	QPSK 100Bd/464bp	Polish intel.
14410	18-04-2025 1350 P031	QPSK 100Bd/464bp	Polish intel.
10298	18-04-2025 1500 F031	FSK-2 100Bd/200Hz/448bp	Polish intel.
10298	18-04-2025 1505 F031	FSK-2 100Bd/200Hz/448bp	Polish intel.
18405	18-04-2025 1515 P03	PSK	Polish intel.
18405	18-04-2025 1520 P03	PSK	Polish intel.

# <u>HM01</u>

No reports to date

# <u>Gizza Job</u>

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### 'I am not who you think I am' how a deep-cover KGB spy recruited his own son

For the first time, the man the KGB codenamed 'the Inheritor' tells his story By <u>Shaun Walker</u> Thu 10 Apr 2025 05.00 BST

### https://www.theguardian.com/news/2025/apr/10/deep-cover-kgb-spy-recruited-son-peter-herrmann-illegals

Rudi Herrmann took a deep breath and asked his son Peter to sit down. "I have a story to tell you," he said. Rudi had been preparing for this conversation for several years, running over the words in his mind. He was about to tell his 16-year-old son that everything Peter thought he knew about their family was a lie.

The pair sat on a bench, and Peter waited quietly for whatever it was his father wanted to say. He was an academically gifted and unfailingly polite child, but he had been struggling psychologically. He had few friends and felt overwhelmed at home. Rudi, an ambitious German-Canadian film-maker, was charming with colleagues and friends, but with his son he was something of a tyrant: not violent, but psychologically domineering. He was disdainful of American pop culture, insisting that Peter not waste his time on mindrotting pursuits such as reading comics or listening to rock music. It was almost as if he was actively trying to sabotage Peter's efforts to fit in.

The endless upheavals in Peter's childhood had not helped him to feel settled. First, the family had moved from Germany to Canada when he was four. Then, when he started feeling at home in Toronto, he was pulled out of his genteel school and transferred to New York, where his new classmates roughed him up for lunch money. His parents had no living relatives, and the six-year age gap between him and his younger brother made it difficult for them to connect.

The only part of growing up in the Herrmann family that Peter did enjoy was the frequent travel: summer holidays in Europe and road trips across the US to accompany his dad on filming assignments. At home, his father gave orders; on the road, it felt to Peter that they were more like partners.

In spring 1974, they took a trip to Chile. On the way back to New York, they stopped over in Peru. It was here in Lima that Rudi decided the time had come for his big reveal. As they walked through Miraflores, an upmarket neighbourhood of Lima perched on bluffs above the ocean, Rudi ordered his son to sit down on a bench overlooking the water.

Rudi explained to Peter that what he was about to tell him had to stay secret. He could not discuss it with his friends, and certainly not with Michael, his younger brother. Peter nodded, and Rudi began: "I am not who you think I am. I am not a German, and I'm not called Rudi. I am a Czech man named Dalibor Valoušek, and I work for the Soviet Union, for the KGB." His mission as a spy was to work to bring about world peace, he said.

Two thoughts coursed through Peter's mind. For years, he had felt unable to relate to the world and the people in it. Part of that, he was sure, was because he had no family beyond his parents and brother. As his father told him about grandparents, uncles and cousins behind the iron curtain, he wondered whether everything would now change. At the same time, his father's admission was viscerally shocking. The Russians! The KGB! The thoughts hit him like lightning bolts.

Peter had, with the discreet curation of his father, witnessed enough inequality and unfairness in American life to know it wasn't the paradise that some made it out to be. He had read plenty about Watergate and Vietnam. Even so, he was certain that the Russians were the bad guys. But then, his dad wasn't a bad guy, and his dad was working for the Russians. So perhaps they were not so bad after all?

"Does Mother know?" he asked quietly.

"She also is an agent of the KGB," Rudi told his son.

Rudi came to the most important part of the conversation. "Would you be willing to become an intelligence officer like me?" he asked. Peter's head was spinning, and he didn't know what to think or say. But he stayed outwardly calm, and nodded his assent.

After the conversation, Rudi excitedly messaged his handlers that his son had agreed to sign up. From Moscow, a reply came: the family should travel to the Soviet Union that summer, to formalise Peter's induction into the KGB and begin his training.

More than 50 years later, the man who was once known as Peter Herrmann sat opposite me on a sofa at his house in the suburbs of Washington DC. In the half-century since the conversation in Lima, he had only told the full story of how he was dragged into the KGB twice: once to his wife, shortly before they got married, and once in a series of interviews with me over the past few years.

"I was on autopilot," he said, recalling the first months after his teenage recruitment. "It was really just like: Show that you can do this. Because that's what your dad wants you to do.""

Peter's father was what the KGB called an "illegal", part of Moscow's most prestigious and secretive spy programme. The agency trained Soviet bloc citizens for years until they could convincingly impersonate westerners, then dispatched them abroad for missions that could last decades. The KGB recruited Rudi in 1955 when he was a 26-year-old student at Prague's Charles University. They sent him to Halle in East Germany, to undergo intensive language training in preparation for a long mission abroad in which he would pose as a German.

Rudi was given the identity of Rudolf Herrmann, a Nazi soldier who had, in reality, perished in the Soviet Union during the war. In Halle, he began a romance with his German teacher, Inge, and after evaluation by the KGB it was agreed the pair could be dispatched abroad as a couple. The KGB had recently started dispatching illegals in pairs, although it was always assumed that the man would be the lead operative. The thinking was that couples could keep a watchful eye on one another in the field, as well as provide mutual support to overcome psychological crises.

In late 1957, "Rudi", Inge and their newborn son, Peter, crossed into West Germany, where they posed as anti-communist East Germans determined to embark on a new life. Before long, they acquired West German passports, and in February 1962 the family left for Canada. They settled in a suburb of Toronto and bought a German deli on Yonge Street, close to the headquarters of the Canadian Broadcasting Corporation (CBC). Inge got busy in the kitchen, cooking up large batches of potato salad and baking loaves of dark bread.

The deli soon became a hit with Toronto's German immigrant community, particularly those with rightwing views, who were regaled with tales of Rudi's supposed wartime heroics. Sometimes, there were after-hours gatherings for regulars, and the men sang Nazi war songs. But there were also visitors from CBC headquarters, whom Rudi took care to befriend. He was an entertaining storyteller and made friends easily. Before long, he got a job as a sound technician at CBC, and studied film-making in his free time.

The couple enrolled Peter in a local kindergarten, and in 1963 Inge gave birth to a second son, Michael. The Herrmanns had become a model Canadian family, and in February 1967 they became naturalised citizens, taking the oath of allegiance to the queen in a Toronto courthouse. Ten days later, a radio message from the KGB came with new orders: make all necessary preparations to move to the US.

They settled in Hartsdale, an hour's train ride north of New York City. Peter didn't know his father had selected the house with specific criteria in mind: it was surrounded by tall trees on all sides except to the east, from where radio messages would arrive, and was set back from the road up a steep driveway, out of sight of curtain-twitching neighbours.

After they moved, Rudi cultivated friendships with employees at IBM, whose headquarters at Armonk was not far from his new home. The company commissioned him to make training and sales films, as well as shorts that were meant for screening at conventions. He equipped his basement with cutting-edge darkroom equipment, and IBM colleagues who worked with him on the films came to the Hartsdale house to edit footage. The accoutrements of Rudi's life as a spy were kept locked away in a desk upstairs, out of the sight of his guests and his two sons. Once a week, he took out his radio and decoded a message from Moscow.

For illegals, in-person meetings with their KGB handlers were rare, and usually took place in third countries to lower the risk of the FBI catching the scent. At one of these meetings, in Paris, Rudi was informed that his tasks in the US would be to look out for progressives and to try to penetrate the Hudson Institute, a conservative thinktank the KGB believed was a front for the US government. Rudi pointed out what seemed like an obvious flaw in the plan: he had an excellent degree from Charles University in Prague, but under a different identity. Now, he was a freelance cameraman with no educational qualifications and little excuse to infiltrate a thinktank. The handler shrugged. Rudi should do his best.

The awkward exchange reflected the changing nature of the KGB's most prized spying programme. Back in the 1920s and 30s, illegals had been virtuoso operators, waltzing across borders and switching passports at will, frequently taking on new identities. But by the 1960s, the programme had become more regimented, and the missions much longer in duration. It had become harder to conjure up fake identities that could withstand scrutiny, and the cold war brought with it a vigilant counterintelligence environment, particularly in the US.

Many illegals cracked under the pressure of their assignments: some defected, while others had nervous breakdowns or were withdrawn in disgrace. Rudi was one of the success stories, but he was frustrated with his handlers. He wondered if he would ever be able to penetrate government circles in the way they wanted, given his lack of genuine qualifications in the west.

It was around this time that the contours of a plan began to form in Rudi's mind. If he could not deliver what the KGB demanded, perhaps his son could.

Children always created a dilemma for illegals. To tell the truth to them was to take an enormous operational risk. What if they blurted something out to friends or teachers? Often, illegals only revealed their identities to their children once they were travelling back to the Soviet Union at the end of their missions.

But Rudi had a more radical idea. He wanted to reveal to Peter that his parents worked for the KGB, and to train him to continue their work. Rudi thought that turning his son into a second-generation illegal would kill two birds with one stone: it would save Peter from becoming an ordinary American capitalist and being ripped away from him in the process, and it would provide the KGB with a new kind of operative, who had a real American upbringing and could pass government security checks more easily.

Rudi first floated his plan with the KGB two years before he told Peter about it. His handlers were intrigued by the idea of a second-generation illegal, but also wary of causing a potential security breach if it was handled the wrong way. Rudi was told to wait a few years before making his move.

In 1974, he took Peter on a trip to Chile, telling his son they would be selling a short educational film to nursing institutions in the country. That, of course, was a cover story. A few months earlier, Gen Augusto Pinochet had launched a coup to topple the leftwing presidency of Salvador Allende, and diplomatic relations between Chile and the Soviet Union were swiftly severed. Rudi's job was to spend time on the ground and send back a report on the general mood in the country, gauging whether the new regime was going to last. After a fortnight in Pinochet's Chile, where the post-coup atmosphere was still combustible, the pair made

stopovers in Bolivia and in Peru. In Lima, Rudi sat Peter down and made his recruitment pitch, gaining his son's hesitant agreement. Back in New York, Rudi received detailed travel instructions for a family trip to Moscow in the summer of 1974, once school was finished for the year. Peter was relieved that he had pleased his father by agreeing to the scheme.

Peter and Rudi took separate flights to Europe, having agreed to meet in Denmark a few days later. Inge flew with Peter's younger brother, Michael, to Spain. She dropped him off at a summer camp there and told him she was going to West Germany and would see him in a few weeks. Then she headed to Moscow.

A few days after their arrival in Copenhagen, Rudi woke Peter at dawn, and the pair sped to the port and crept aboard a small Soviet freighter docked there. A brusque man showed them to a tiny cabin below deck, sparsely furnished with a bunk bed and small toilet. A grimy half-light emanated from a small porthole. A few times a day, there was a knock at the door, and a tray of food was left for them. At Rudi's request, the man who brought their meals rustled up some English-language pamphlets on Marxism-Leninism, which Peter leafed through without understanding much. It was his first introduction to the ideology he was now expected to spend his life serving. The journey stretched out for three long days before Peter spotted the docks of Leningrad through the cabin's filthy window. When they disembarked, they were met by a pair of low-level functionaries, who took them on a tour of the city.

Peter felt as if he had stepped on to an alien planet. There were no billboards, the streets were vast and the signs were incomprehensible. In South America, Rudi and Peter had explored on foot; here, they were whisked around by stern men in black Volga limousines. After a day in Leningrad, Rudi and Peter were driven to the railway station, where a private compartment in an overnight express train to Moscow awaited them. On arrival, they took a drive to one of the Stalin-era skyscrapers on the river embankment. To Peter, it looked like a vast castle from a fantasy comic. A safe-house apartment in the building was to be their home in Moscow. Inge was already there. A housekeeper cooked meals for the family, and that first evening the table was set for eight with plates of local delicacies and three glasses per person, for tangy Borjomi mineral water, wine and vodka. Several handlers from Directorate S, which ran the illegals programme, soon arrived for dinner.

The handlers asked Peter questions about his life and his plans. He replied politely and with poise, and the Russians seemed impressed. The next morning, a Directorate S man named Andrei came to lambast Rudi about his supposed failures in the field. Rudi screamed back that Andrei was a "miserable peasant" who had no idea how things really worked in the west. Peter, waiting in the next room, could hear the shouting, but he couldn't make out much of what anyone was saying. He sat quietly and waited for the noise to stop.

During their week-long stay in Moscow, the family was discouraged from venturing out alone; the smallest chance that a visiting tourist could recognise them was too much for the handlers to risk. Still, they made occasional outings: the KGB procured tickets for a folk dance performance, which everyone found tedious, and for the circus, which they enjoyed. On another day, Rudi slipped out of the apartment with Peter to show him the Moscow metro. The boy was astounded by the long escalators that seemed to descend into the bowels of the Earth, to eventually reveal the palatial splendour of the platforms. After Moscow, the family flew to spend a couple of days each in Czechoslovakia and East Germany. Peter met the grandparents he never knew he had. Everyone seemed friendly and warm, but the whole experience was difficult for him to digest. He dealt with it by mostly staying quiet.

When they returned to Moscow, the handlers took Peter out for a day to teach him the basics of evading surveillance. Another man came to the apartment to show him how to write using invisible ink. An old and bumbling technical whiz gave Rudi a new "burst" radio, which would shorten the time it took to transcribe the KGB's coded messages. The man reminded Peter of a character in Get Smart, the Mel Brooks satire of James Bond, one of his favourite television programmes. In his mind, Peter had imagined attractive, uniformed female agents instructing him, but his teachers were all men.

Over another big dinner, a trainer explained to Peter some of the risks and challenges of being an illegal, and asked if he was willing to be inducted into the programme. He explained how important Peter's parents' work was, and emphasised that their spying contributed to the preservation of global peace. Peter was told he could make his own decision, but it soon became clear that there was a catch. If the handlers sensed that Peter was not truly willing to become a second-generation illegal, it would be too dangerous for him to return to the US. He already knew too much for that. "You either have to be OK with this, and agree to help with your parents' mission, or you have to stay here," one of the men explained to Peter. If he said no, Rudi and Inge would return to the US without him and invent a tragic accident to explain the disappearance of their son.

Peter did not want to be separated from his family, so he nodded that he was happy to begin training. His tasks for now would be minimal: to return home, and start his studies at McGill University in Montreal. He was to

keep an eye out for left-leaning students and use his newly acquired skills to prepare reports on them, which his father could then forward to Moscow. He should never publicly espouse leftwing or pro-Soviet views publicly, nor should he socialise with communists or Russians. Peter's training would begin in earnest the next summer, it was agreed, when he would be welcomed back to Moscow for a longer trip. At the end of the night, the men announced they had decided on the code name for Peter's KGB file. He would be known as Erbe, German for "the Inheritor".

Afew weeks after the family returned home, Peter headed for college. He had completed his last two years of high school in one, partly because he was clever enough to do so and partly because Rudi and Inge hoped a change in environment would ease the loneliness he had felt at school. But by the time he arrived at McGill, Peter was struggling with numerous dilemmas. Would he be able to fulfil his father's outsized expectations? Would he be able to make friends or meet a girlfriend? Was he really going to work for the KGB for the rest of his life, and would he succeed in not breathing a word of his secret? It was a lot to think about for someone who was still only 16.

As always, Peter was outwardly calm. But something inside him was reaching breaking point. He read Freud and other books on psychoanalysis; he studied literature on neurotic disorders. A few months after starting university, he drew a picture of himself, neck in a noose, dangling lifeless from a hangman's gallows. He gave it the caption "Shit". He mailed it to his parents without any accompanying note. They did not reply.

In May 1975, Peter returned home for the summer. Nobody brought up the cartoon. Peter did not know how to talk about emotions with his father, and Rudi had already forgotten about it, dismissing it to Inge with raised eyebrows as a "college phase". Instead, Rudi got on with training his son in espionage. He took Peter to New Jersey to demonstrate how "dead drop" operations worked. They spent several hours driving in loops, checking for surveillance, and then made their way to the village of Towaco, about 30 miles west of New York City. Rudi told Peter to toss a line of radiator hose at the base of a large oak tree, and then leave an empty Coca-Cola bottle by another tree, a little further down the road, to indicate the drop had been made. They went to drink coffee and then drove past a third tree, where Rudi pointed out a piece of orange peel. It meant an agent had picked up the drop, he explained, and they could safely drive home. Later that week, he showed Peter how to decode radio messages. He was pleased at how well his son was taking it all in.

That summer, Peter made his first solo trip to the Soviet Union. On Rudi's instructions, he first flew to Vienna, where he met a man who handed him false papers identifying him as a German tourist, along with a ticket for the hydrofoil to Budapest the next day. When the boat arrived, he was met at the dock and driven to a villa in the Buda hills. "Wait here," the driver told him, and left.

Peter spent two days in the pleasant villa, where he was both VIP and prisoner. He was waited on by a housekeeper and gorged on cherries from a tree in the garden, but he could not explore the city. On his third day, the driver returned and took Peter to an airfield where he boarded a military transport plane, which took him to an airbase near Moscow. From there, he was driven back to the same apartment he had stayed in the previous year. He was greeted by someone he recognised as one of his father's handlers and by a younger man who introduced himself as Viktor.

Over the next few days, Viktor tutored Peter in spy craft, but told him that most of his training would come on the job, from working with his father. The primary purpose of this visit was to show Peter some of the Soviet Union and inspire loyalty toward the socialist nation. Peter and Viktor first flew south to Volgograd, where they visited The Motherland Calls, a statue of a warrior woman – mouth agape, hair swept back, and brandishing a sword – that towered over the city. It was the tallest monument in the world, Peter was told. Tree-lined paths led up to the base of a complex, a cavernous hall bearing names of the dead.

From Volgograd, they flew to Bratsk in the heart of Siberia, the site of a huge dam and hydroelectric plant. Afterwards, there was a fishing expedition on Lake Baikal. Peter and Viktor cast out on to the vast expanse of the lake in a small boat with a couple of locals to guide them. Nobody caught anything. In the end, they spotted another fishing boat nearby and swapped a few bottles of vodka for some freshly caught fish. Viktor cooked up a stew on the boat, which they ate under the stars.

When Peter got home and described the trip to his parents, Rudi was furious at the handlers for not providing more explicit instruction in Marxism-Leninism. Perhaps the KGB felt perks and red-carpet treatment would be more effective incentives for a second-generation illegal, raised in the US, than earnest exhortations to Soviet ideology. But Rudi muttered angrily that it was more evidence of the incompetence of his handlers.

In early 1976, the centre ordered Rudi to select a new set of dead drop sites, close to the atomic research centre at Oak Ridge, Tennessee. He assumed the KGB had an agent on the inside and needed to find a spot to leave money or instructions for them. He took Peter along, to teach him the art of selecting suitable places. Peter soon got the hang of it, and Rudi was impressed when his son found a perfect spot at the back of a small church. Still, he could sense that Peter did not share his ideological affinity with the work.

That summer, Peter was meant to travel to the Soviet Union again. But when he arrived in Vienna, a man named Max told him that the plans had fallen through: Peter would not be going to Moscow this time. The next day, over a drink, Peter told Max that he had applied to transfer from McGill to Georgetown, partly because he was not enjoying life in Canada and partly because the KGB had expressed a preference that he transfer to a US university, where he could make better contacts. Max was delighted at the news and told him he should look out for interesting students and write quarterly reports on them for the KGB: anyone with fathers in government, anyone who was strongly progressive, and anyone critical of US foreign policy. Max gave him an address in Mexico to memorise, the place where he was to post his reports. Max bade Peter farewell, leaving him to fill his weeks lounging around Vienna, visiting museums and going to the opera.

Peter started at Georgetown in the autumn of 1976. Every now and then, he wrote a letter in invisible ink profiling various fellow students and sent it off to the address Max had given him. He took classes in Arabic, because the KGB felt the language might help him gain access to more interesting government jobs upon graduation. The next spring, Rudi came to visit, and Peter finally found the resolve to tell his father that something was wrong. He explained that the stress of his double life had become too much, and he planned to take a year off from university before his final year. He wanted to spend it somewhere in Europe.

"I need a break, and I need to clear my head," Peter told his father.

Rudi was not happy, but agreed they would talk about it when Peter came to New York for the summer. A few weeks later, Peter took the train north, and as he was coming up the escalator at Penn station, he saw his father waiting for him at the top, flanked by two men in suits.

"Peter, come with us," said Rudi. "These men need to talk to you."

The FBI had followed Rudi for months before approaching him disguised as a group of clients who wanted to commission a film. Once they had him alone, they gave him a choice: either life in prison, or cooperate with them as a double agent. Rudi was a devoted communist, but for years he had been frustrated with the unrealistic demands and lack of gratitude from his handlers. For him, cooperating with the FBI offered a way to put one over on the men in Moscow, who he thought had failed to utilise his talents properly. He made his decision quickly, saying he was ready to work with the FBI as long as he was not expected to give up his Marxist beliefs or "kill for America". The FBI told him to keep his normal communication schedule with the KGB so that Moscow would not suspect anything was wrong.

As always, Inge and Peter were not consulted before Rudi made his decision. Although Inge was the quieter half of the couple, her ideological devotion to communism burned more brightly than Rudi's. She was devastated, worried about the effects on the children and furious at the decision to cooperate with the enemy. Peter was briefly interrogated, but was mostly left to his own devices at Georgetown. Two handlers, one from the FBI and one from the CIA, met with him once a month to check in. The meetings were low-key and sometimes enjoyable; they took Peter to restaurants, a theme park and, on a couple of occasions, even a strip joint. When he graduated, they found him a job at a small lobbying firm in DC. Rudi, in his ongoing communications with Moscow, invented ever more reasons why Peter could not yet return to the Soviet Union for further training.

In 1979, the FBI decided the game had gone on long enough. They told Rudi he should prepare to break off all contact with Moscow. Peter would have to get ready to disappear, too. He had been dating a woman in DC for the previous 18 months, but had not yet told her anything about his strange family background. Unwilling to start now, he deliberately escalated one of their arguments to the point that the relationship disintegrated in acrimony. Now, he would not be missed.

The FBI moved the family to an interim safe house in Annapolis, Maryland. In March 1980, they arranged a strange press conference, at which Rudi talked about his work as an illegal, from behind a cloudy screen and with his voice disguised. The aim was to cause maximum embarrassment to the KGB. The FBI men had a certain grudging respect for Rudi and his "scary" level of discipline, one of those involved in the case told me. They were sceptical that the time and expense required to create illegals was justified by the espionage returns,

but they also realised that an undetected illegal was always one recruitment away from causing enormous damage.

After the press conference, the FBI moved the family again, this time to the west coast. The Herrmanns became the Holars; Rudi chose the surname as it was the name of a Czech artist he liked. Peter wanted something "short but distinctive" for a first name, and decided on Elliot. Moving into witness protection was oddly similar to life as an illegal: starting afresh in a new city, with a new name and the need for a batch of invented but credible tales about childhood and youth should anyone become too curious.

At the age of 22, Elliot Holar packed Peter Herrmann into a box, and planned to lock him away for good.

Ifirst tracked down Elliot in 2019, having read about his case in leaked KGB documents and a 1980s book where his father had been interviewed after defection. I wrote him a letter asking to interview him for a book project I was just starting, about the history of the KGB illegals programme. A few months later, I received a polite rejection. He had no desire to relive these stories, he told me, but he was not opposed to meeting to hear more about the book. In that first meeting, at a coffee shop near his home in the suburbs of Washington DC, he laid out the broad details of his life since he moved into witness protection.

After disappearing in 1980, he had found a job in IT for a company in San Diego and started life afresh. His younger brother, who had been barely a teenager when Rudi was apprehended by the FBI and knew nothing of his parents' double life, struggled to adapt, however, and was constantly getting into trouble. Their parents remained devoted communists, and in 1986 tried to move the whole family back to Czechoslovakia, but they were denied visas. Instead, they all settled in the Washington DC area – Peter and Michael were both adults now, but Rudi still made the decisions for all four of them.

Not long after the move, Elliot began a romance with a woman at work, who a few years later became his wife. They had two children, now grown up, and back when we first met in 2019, Elliot was coming to the end of a long and successful career in the IT sector. His mother died in 2004 and his brother in 2015, after a difficult life complicated by an Asperger's diagnosis and a lack of understanding from his father, who dismissed his younger son's developmental issues as laziness.

Dalibor Valoušek, AKA Rudi Herrmann, AKA Boris Holar died in 2017, in his late 80s. In the final years, he suddenly began talking about the past, regaling meetings of his seniors book club with endless tales of espionage daring. It is not clear whether the other participants realised these revelations were all true or dismissed them as senile inventions. Elliot wondered whether, now that his father was telling anyone who'd listen about his KGB past, it would attract attention and journalists would come knocking, but none did until my letter.

At our first meeting, Elliot told me that even his friends and most of his family did not know about his past, and he did not plan to change that. But gradually, in a series of long discussions over the next few years, he opened up. In the end, he even suggested that I should use his current name, rather than hiding him behind his long-abandoned Peter Herrmann identity. When I first contacted him he was still working, and did not want to draw undue attention to his unusual background in the office, he said. Now, retired, he feels freer. But I also sensed that talking through the events was a way to reclaim parts of his story, after so long feeling like a bit-part player in the shadow of his father.

At a later meeting, I asked if he had been forced to invent a complicated web of lies to avoid talking about the past over the years. He told me that, in fact, he was able to rely on most people's lack of curiosity. He recalled hints not followed up, or anomalies never questioned. "You know, it's surprisingly easy to not have to tell stories that you don't want to tell. I've only realised that recently, but it's really amazing," he said, with a wry smile. "It's amazing what you can do or say and people won't notice."

In our most recent meeting, in late February this year, we chatted on the sofas in the basement room of his current suburban home, a few miles from the house where the whole family had moved back in 1986. I asked him if, looking back at the whole story, he is angry with his parents, or with the KGB, for what they put him through.

"I'm not angry at anybody," he answered quickly. "If I was angry at anybody I'd be angry at a lot of people, and what good does that do me? We watch these murder mysteries, and there's always all these serial killers who decide they're angry and then they invest their whole lives and their intricate skills in these incredibly insane plots to do serial killings ... I'm not like that," he said.

I suggested that there might be an intermediate response between no anger at all and serial killing, and he laughed. When it came to his father, he admitted, he was torn about what he should feel: "In some ways I'm very angry at him, but also I always admired and respected him and thought he was a caring father. And in a

lot of ways he was, but not in all of them. Now that I've had kids, I just can't imagine sending my kids off like he did when I was so young."

While Elliot's case is unusual in the century-long history of Moscow's illegals programme, I told him that all my research suggested that these long-term spying missions had almost always been incompatible with a healthy family life. Illegals could keep their children in the dark, or they could try to drag them into the work. Neither option was conducive to happy outcomes.

"Fundamentally, that's what it comes down to," said Elliot, nodding in agreement. "I just don't see why you thought being an illegal and having children was a good idea. I could fault both my parents for that, honestly, because it's a slippery slope once you start. All the other things that come up later, those are just consequences of that decision."

Adapted from <u>The Illegals: Russia's Most Audacious Spies and the Plot to Infiltrate the West</u> by Shaun Walker, published on 17 April (Profile Books, £22; <u>Knopf in the US</u>). To support the Guardian and Observer, order your copy at <u>guardianbookshop.com</u>. Delivery charges may apply.

Russia's spies: Uncovering Russia's secret espionage programmes. On 22 May, join Shaun Walker, Christo Grozev and Daniela Richterova as they discuss how Russia is using deep undercover agents known as "illegals" to infiltrate the west, live in central London and livestreamed globally. <u>Book tickets here or at Guardian Live</u>

### **Obituaries**

Due to the high number of obituaries this time it was seen to be more helpful to readers to add them to the end of the newsletter section:

Betty Webb, handler of wartime Japanese messages at Bletchley who was later sent to the Pentagon She joined the ATS (Auxiliary Territorial Service) in 1941: 'I wanted to do something more for the war effort than bake sausage rolls'

Telegraph Obituaries Related Topics Second World War, Bletchley Park, Obituary, World War Two 02 April 2025 6:06am BST

https://www.telegraph.co.uk/obituaries/2025/04/02/betty-webb-bletchley-park-second-world-war-japanese-codes/

Betty Webb, who has died aged 101, was an intelligence reporter at the Second World War codebreaking centre at Bletchley Park in Buckinghamshire, reporting on the contents of decoded Japanese army messages; she worked in the Japanese Military Section in Block F, rewriting decoded messages so that no one realised that they had been produced by breaking the codes.

"They had to look as if they'd come from some other source like a human spy," she recalled. "One was given these messages, and you had to put them into different wording so that it could be put out in this disguised form.

"Everything went out under a double-envelope system. There were a lot of numbers on the outside one so that the dispatch rider could tell where it was supposed to go, and then someone else opened it and sent it on to the address on the inside envelope."

Although she was dealing with the actual messages, Betty Webb was never aware of the impact her reports might have had on the war. The strict rules on not discussing anything relating to what they were doing left her entirely in the dark about how important her own role was.

"As with everything we did, we knew very little of the next step," she said. "But while small fry like me didn't fully understand the importance of our own input, we did understand that it was imperative that we kept at it and that we did so in the utmost secrecy."

Her ability was nevertheless respected sufficiently for her to be sent to Washington when the war in Europe was over, to work alongside the US Army codebreakers working on the same messages in the Pentagon.

Life in America was a complete contrast to the austerity of Bletchley. Betty Webb had been used to hard shifts and only a rare weekend off. But in Washington, she had every weekend off and enjoyed food like inch-thick fillet steaks and ice cream that was not available in the UK.

Charlotte Webb, always known as Betty, was born in the village of Aston on Clun, near Ludlow in Shropshire, on May 13 1923. Her father, Leslie Thomas Vine-Stevens, was a bank clerk at Lloyds in Ludlow. Her mother Charlotte, née Harris, was a music teacher. They moved to nearby Rycroft, Advertisement

She had spent a year in Germany during the First World War, so the girls grew up speaking both English and German. In 1937, Betty was sent to Germany to spend three months with a family at Herrnhut, near Dresden.

"I attended school with the two daughters," she said. "We were obliged to stand to attention and give the Hitler salute at the beginning and end of every class. I didn't fully comprehend the German threat but felt it was diplomatic to join with the class requirement to salute."

On her return to England, Betty went to a domestic science college near Shrewsbury, but in the summer of 1941 she joined the Auxiliary Territorial Service, the female equivalent of the Army.

"I wanted to do something more for the war effort than bake sausage rolls," she said. "Basic training was a complete culture shock after a very sheltered life in the country. We had women instructors mostly, but I remember one male instructor smacking me across the backside. I said: 'How dare you?' And that was the end of that!"

At the end of training, she was given a brief interview and a German test in London and sent immediately to Bletchley Park, where she was initially put to work in the military section run by John Tiltman, who is still widely regarded within GCHQ as one of the best codebreakers ever to work for the organisation.

Given her ability in German, she was originally put to work in Ralph Tester's German Police Section, which was breaking hand ciphers, which while not providing the detail of the Enigma messages, was providing information about the elimination of Jews on the Eastern Front.

"It is a great honour to know that I played a small part in breaking the codes that allowed the Allies to comprehend the atrocities committed during the Holocaust," she later said.

After leaving Bletchley Park, Betty took a secretarial course but struggled to find work. "I tried of course but you would go to a prospective employer and they would ask what you were doing during the war and you would say you couldn't tell them. I just said I was not at liberty to say. Faces went blank. They didn't understand and they were quite shirty."

She briefly worked as an assistant matron in a college training nursery nurses but left to take up a secretarial post at Ludlow Grammar School. The then headmaster had worked at Bletchley himself and when he interviewed her they recognised each other.

"That was before the veil of secrecy was lifted. We didn't say anything about it. We just knew that we had both been there, but we didn't talk about it."

She moved to Chester to take up another secretarial post and while there joined the Territorial Army. She was commissioned in the Women's Royal Army Corps, eventually taking up a permanent staff job as the recruiting officer for the West Midlands.

It was there that she met a former Guards officer, Alfred Webb, who had served in France during the D-Day invasion, and on July 18 1970 they were married, setting up home in Redditch. When he died in 1978, Betty worked as an administrative secretary for the Birmingham Law Society until she retired in the early 1990s.

With the ban on speaking about her work at Bletchley lifted in the 1970s, Betty gave more than 200 talks around the country about her time there. As an extremely popular and knowledgeable ambassador for Bletchley Park, she was a frequent guest there.

Betty Webb was appointed MBE in June 2015 and as a Chevalier de la Légion d'Honneur in 2021.

Charlotte "Betty" Webb, born May 13 1923, died March 31 2025

https://www.telegraph.co.uk/obituaries/2025/04/02/betty-webb-bletchley-park-second-world-war-japanese-codes/

### Brenda Lang, Wren at Bletchley who decoded messages on submarine and ship movements Of Bletchley message-sifting she said: 'Most of it was boring: "To so-and-so. Your wife has given birth to a baby girl. Heil Hitler"

Telegraph Obituaries

01 April 2025 6:04am BST

Brenda Lang, who has died aged 100, was a codebreaker at Bletchley Park from 1943 to 1945.

Having joined the Wrens (Women's Royal Naval Service) from school – attracted by the "rather chic" new uniform – she was selected, along with her identical twin sister, Naida, for possible deployment to Station X (as Bletchley was then referred to). The interviewer told her it was important and secret work: "It's also nowhere near the sea, you won't get any promotion and you won't see many sailors."

Owing to the Official Secrets Act, years later even her future husband did not knew what she had done during the war. But in old age Lang recalled some of her routine work. "The submarines and [Admiral] Dönitz was my particular thing. Most of it was boring: 'To so-and-so. Your wife has given birth to a baby girl. Heil Hitler.'"

The interesting work might involve tracing specialist technicians being posted from Paris to Brest, so a deduction could be made that a major German ship was in port and there was an opportunity to attack it.

Brenda Lang's time at Bletchley was enlivened by the informality of the place, the inspirational boss of the Naval Section being Frank Birch, an Old Etonian and West End stage actor noted for his Widow Twankey. Her time was enhanced by having a sister as a co-worker on the same watch, both living (because they were Wrens) at Woburn Abbey, a cushy billet where there were revues, dances and off-duty jaunts on bicycles to drink cider in local pubs.

In 1945 Brenda Lang was relocated to Ceylon, where she looked after liberated prisoners from the war in Japan. These broken, emaciated young men worried that they would never get a date once they got home. Lang instilled in them a rosier assessment of their future love lives, saying: "Look, you are a returning hero and there'll be a ravening horde of girls waiting to catch any man who's still alive."

Her duties in Ceylon involved finding and rerouting mail to widely dispersed servicemen from their mothers, wives and sweethearts. A girl in the Land Army wrote a love letter to a man: "I've never done this before but I promised at that dance I would write to you. But if you don't reply I'll know it was just a passing thing..." Lang pinned the letter to the wall, writing above it: "This man must be found!"

Brenda Lang, née Bentley, was born on February 26 1924. Her father, Frank, a teacher, who had won the Military Cross in the First World War, had moved to a post in Nottinghamshire where the twins went to school at Long Eaton.

Demobbed in 1946, Brenda and her sister Naida took up deferred places at Cambridge. It was university policy to separate twins, so Brenda went to Newnham College to read English and Naida to Girton.

Being identical twins caused inevitable confusion. Armed with vouchers for civilian clothing, Brenda picked out a nice dress in a local shop and got an odd look from the assistant, who explained that she was a bit surprised – "because you bought the same dress yesterday."

She captained the university women's cricket XI (Naida kept wicket) attended lectures by FR Leavis, and took a shine to a good-looking South African student reading law, John Lang. Her mother could not believe she had picked a "foreigner", given the legion of Englishmen she had known at Bletchley. But in 1951 the couple went to Pretoria, where they married, and then raised a family in Johannesburg.

A Presbyterian lawyer very involved in the anti-apartheid movement, John Lang became part of a circle with Nelson Mandela, Joe Slovo and Ruth First. He was jailed twice. Brenda kept the fort at home with calm courage. She joined the Black Sash movement of white ladies who conspicuously opposed the Pass Laws and the apparatus of apartheid.

When life in South Africa became impossible, the family moved to London. They moved back to Africa, to Nairobi, in 1968. After her husband's death in 1996, Brenda Lang lived with her widowed twin in north Oxford for the best part of 30 years.

The pair shared a bed, did crossword puzzles and shared an enthusiasm for watching televised cricket, tennis and heavyweight boxing.

Brenda Lang outlived her twin by seven months. She is survived by her children, Simon, Jonathan and Hilary.

Brenda Lang, born February 26 1924, died February 14 2025

https://www.telegraph.co.uk/obituaries/2025/04/01/brenda-lang-wrns-submarine-nazies-donitz-bletchley/?msockid=1a5e5789785e6184006a424079be60a5

### Double agent Oleg Gordievsky dies aged 86

Frank Gardner Security Correspondent Emily Coady-Stemp

21 March 2023

https://www.bbc.co.uk/news/articles/cqx07eel52xo

Oleg Gordievsky, the long-standing KGB double agent who defected to Britain, has died aged 86.

Gordievsky was said to be Britain's most valuable spy in living memory inside Russia's intelligence agencies.

Counter-terrorism police are assisting the coroner, but his death is not being treated as suspicious.

He died peacefully at his home in Surrey, the BBC understands.

Gordievsky, a colonel in Russia's KGB, spent many years as a double agent, passing vital intelligence to both Britain's MI6 and MI5.

He has lived in Godalming under police protection since Moscow became suspicious of him in 1985 and he narrowly escaped arrest, trial and a firing squad by getting smuggled across the border into Finland in the boot of a car.

Two years earlier, as the KGB resident in London at the height of the Cold War, he warned his British handlers that Moscow had become so paranoid about an imaginary surprise attack by the West that the Soviet Union began making preparations to strike first.

As a result of his tip-off, NATO curtailed its military exercise codenamed Able Archer, and the crisis was averted.

'A very substantial coup'

In 2007, Gordievsky was honoured by the Queen with the Companion of the Most Distinguished Order of St Michael and St George.

The honour is the same title bestowed on fictional British Secret Service agent James Bond.

Information passed on by Gordievsky led to the expulsion of 25 Soviet agents working undercover in the UK.

At the time of his work as a double agent, his defection was hailed by then Foreign Secretary Sir Geoffrey Howe as "a very substantial coup for our security forces".

Gordievsky has since written a number of books about the operations of the KGB.

https://www.bbc.co.uk/news/articles/cqx07eel52xo

Gordievsky appeared as an expert witness at the trial of a British spy and [allegedly] gave his answers from a script backing up the answers from a certain MI5 officer. The accused got 25yrs; reduced on appeal to 20yrs and released after serving just 9yrs,

The perpetrator, has always said he was stitched up. He readily admitted selling the 'secrets' but thought he was dealing with industrial espionage rather than selling to Russia.

As an acquaintance remarked to me, the cost of living in a gated community in Surrey had a personal great cost!

# Finally, if you had reception problems around end of March, beginning April here's a suggestion:

SOLAR RADIATION STORM--IN PROGRESS: The four astronauts of Fram2 are currently flying through a solar radiation storm as energetic protons from the sun rain down on Earth. It's a <u>category 2</u> storm, which means it poses no threat to astronaut health. It is, however, affecting Earth. Take a look at this map:



The red zones are places where shortwave radio transmissions are blacked out--a direct result of protons striking Earth's upper atmosphere and ionizing the air 50 km to 90 km above the ground. This is called a <u>polar cap absorption</u> <u>event</u>. Anyone trying to use a shortwave radio inside the Arctic Circle may find that it doesn't work while the storm is in progress.

The cause of this storm is a bit of a mystery. NOAA analysts believe the protons may be accelerated by <u>a big CME</u>, which narrowly missed Earth on March 31st. The CME didn't hit us, but it may be spraying protons in our direction.

See Page 38 also

# Chart Section Index

Predictions

**M01 Schedule** 

**Family III** 

# Polytones, XPA1, XPA2

# En148

May 2025

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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	x	x	x	х	х	x	x	1300		V13	0		7688/11430/13974
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$								1300/1310/1310				20061/19361/18261	20047/19247/18247
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		Х			Х			1330/1340/1350		XPB1	01B	17461/16261/14961	17447/16247/14947
x       x       x       1400       S11A       03       9448 42#       9448 42#         x       x       x       1400       S11A       03       12984 91#       914         x       x       x       1430       E11       03       12984 91#       91#         x       x       x       1500       M01       14       6435 025       025         x       x       x       x       1500/1600 $\frac{1}{9}$ $\frac{9}{9}$ $\frac{9}{8}$ x       x       x       x       1500/1520/1540       E07       01B       16132/18232/19432       14945/16145/182/1249         x       x       x       1500/1520/1540       XPA2       01B       15938/14538/13438       14892/13492/1212         x       x       1500/1620/1640       XPA2       01B       15938/14538/13438       14892/13492/1212         x       x       x       1600/1620/1640       XPA2       01B       15938/14538/1438       14892/13492/1212         x       x       x       1600/1630       E06 S06       01A       13547/11128 480 check       26#         x       x       x       1610       E11       03       5231 23#									I U				
x       x       x       1400       S11A       03       9448 42#       9448 42#         x       x       x       1400       S11A       03       12984 91#       914         x       x       x       1430       E11       03       12984 91#       91#         x       x       x       1500       M01       14       6435 025       025         x       x       x       x       1500/1600 $\frac{1}{9}$ $\frac{9}{9}$ $\frac{9}{8}$ x       x       x       x       1500/1520/1540       E07       01B       16132/18232/19432       14945/16145/182/1249         x       x       x       1500/1520/1540       XPA2       01B       15938/14538/13438       14892/13492/1212         x       x       1500/1620/1640       XPA2       01B       15938/14538/13438       14892/13492/1212         x       x       x       1600/1620/1640       XPA2       01B       15938/14538/1438       14892/13492/1212         x       x       x       1600/1630       E06 S06       01A       13547/11128 480 check       26#         x       x       x       1610       E11       03       5231 23#		Х	Х	Х					spo	S06	01A		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $								Sporaaro	ч			9448	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		Х			Х			1400		S11A	03		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				-	-								
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		х				х		1430		E11	03		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $													
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $						x		1500		M01	14		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$													025
x       x       1500/1520/1540       E07       01B       16132/18232/19432       14945/16145/182- 912         x       x       1500/1520/1540       XPA2       01B       15938/14538/13438       14892/13492/121- 124         x       x       1530       E11       03       10356 26#       10356 26#       26#         x       x       x       1600/1620/1640       XPA2       01B       13538/14438/14938 13417/14817/1592       13417/14817/1592         x       x       x       1600/1630       E06 806       01A       13547/11128 480       check, 1700z?         x       x       1605       E11       03       5231 23#       5231 23#       23#         x       x       1610       E11       03       9#       39#       39#         x       x       x       1645       E11       03       5082       5082	Х	Х	Х	Х	Х	Х	Х			V13	0	20095	
x       x       1500/1520/1540       E07       01B       16132/18232/19432       14945/16145/182- 912         x       x       1500/1520/1540       XPA2       01B       15938/14538/13438       14892/13492/121- 124         x       x       1530       E11       03       10356 26#       10356 26#       26#         x       x       x       1600/1620/1640       XPA2       01B       13538/14438/14938 13417/14817/1592       13417/14817/1592         x       x       x       1600/1630       E06 806       01A       13547/11128 480       check, 1700z?         x       x       1605       E11       03       5231 23#       5231 23#       23#         x       x       1610       E11       03       9#       39#       39#         x       x       x       1645       E11       03       5082       5082		v	v	v				1500/1600	dic	506	012		13944;11496
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		23		23				sporadic	sr ra	200	V 1 1 1		387
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		v			v			1500/1520/1540		E07	018	16132/18232/19432	14945/16145/18245
x       x       1530       E11       03       10356       10356         x       x       x       1600/1620/1640       XPA2       01B       13538/14438/14938       13417/14817/1593         x       x       x       1600/1620/1640       XPA2       01B       13538/14438/14938       13417/14817/1593         x       x       x       1600/1630       E06       01A       13547/11128       check, 1700z?         x       x       x       1605       E11       03       5231       5231         x       x       1610       E11       03       4783       4783         x       x       1645       E11       03       14575       14575         x       x       x       1645       E11       03       5082       5082		~			~			1000/1020/1040		101	UTD	124	912
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$						х		1500/1520/1540		XPA2	01B	15938/14538/13438	14892/13492/12192
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $								1 5 2 0		<b>D</b> 11	0.2	10356	10356
x       x       1600/1620/1640       XPA2       01B       check, 1700z?       check, 1700z?         x       x       1600/1630 $\stackrel{E06}{S06}$ 01A       13547/11128       13547/11128         x       x       1605       E11       03 $\stackrel{5231}{23\#}$ 5231         x       x       1610       E11       03 $\stackrel{4783}{39\#}$ 4783         x       x       1645       E11       03 $\stackrel{4783}{33\#}$ 39#         x       x       x       1645       E11       03 $\stackrel{5082}{33\#}$ 33#				х				1030		L 1 1	03	26#	26#
x       x       1600/1620/1640       XPA2       01B       check, 1700z?       check, 1700z?         x       x       1600/1630 $\stackrel{E06}{S06}$ 01A       13547/11128       13547/11128         x       x       1605       E11       03 $\stackrel{5231}{23\#}$ 5231         x       x       1610       E11       03 $\stackrel{4783}{39\#}$ 4783         x       x       1645       E11       03 $\stackrel{4783}{33\#}$ 39#         x       x       x       1645       E11       03 $\stackrel{5082}{33\#}$ 33#								1 600 /1 600 /1 51			0.1 -	13538/14438/14938	13417/14817/15917
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		Х		Х				1600/1620/1640		XPA2	01B		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				-						E06			,
x       x       1605       E11       03 $5231$ $23#$ $5231$ $23#$ x       x       x       1610       E11       03 $4783$ $39#$ $4783$ $39#$ x       x       x       1645       E11       03 $14575$ $33#$ $14575$ $33#$ x       x       x       1645       E11       03 $5082$ $5082$						х		1600/1630			01A		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $										200			5231
x       x       1610       E11       03 $\begin{array}{c} 4783\\ 39\# \end{array}$ $\begin{array}{c} 4783\\ 39\# \end{array}$ x       x       x       1645       E11       03 $\begin{array}{c} 4783\\ 39\# \end{array}$ $\begin{array}{c} 14575\\ 33\# \end{array}$ x       x       x       1645       E11       03 $\begin{array}{c} 5082 \end{array}$ 5082		х					х	1605		E11	03		
x       x       1610       E11       03 $39#$ $39#$ x       x       x       1645       E11       03 $39#$ $14575$ $14575$ x       x       x       1645       E11       03 $39#$ $39#$ x       x       x       1645       E11       03 $5082$ $5082$													
x     x     1645     E11     03			х			х		1610		E11	03		
x     x     1645     E11     03     33#     33#       x     x     x     1645     E11     03     33#     33#       x     x     x     1645     E11     03     33#     33#													
x     x     1645     E11     0.3     5082     5082		х		х				1645		E11	03		
E11 03													
36#   36#						x	x	1645		E11	03		
												36#	36#

Ц	e	g	μ	ii	Ļ	IJ	UEO.	1-	Q has		Мау	Jun			
Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	kHz, ID,	kHz, ID,			
	х		Х				1700/1720/1740		XPA2	01B	search	search			
		x		x			1715		E11 03		7863	7863			
		Δ		Λ			1/15		Ľ⊥⊥	0.5	97#	97#			
x						v	1745		E11	03	14410	14410			
~						Λ	1/10			0.5	24#	24#			
	x		x				1800		M01	14	5280	5280			
	~		~				1000		140 1	11	025	025			
		x		x			1800/1820/1840		XPA2	01B	15872/14972/13872	17474/16274/14574			
		Λ		Λ			1000/1020/1040		711712	UID	check				
			x				1800/1820/1840		M12	01B	11435/10598/ 9327	11435/10598/ 9327			
			Δ				1000/1020/1040		1.112	UID	938	938			
				x		v	1815		E11	03	12229	12229			
				21		21	1010			00	92#	92#			
		x			x		1850		S11A	03	12457	12457			
		23			21		1000		01111	00	28#	28#			
x			x				1900		E11	03	7600	7600			
							1900			00	64#	64#			
		x					1900/1920/1940		M12	01B		8047/ 6802/ 5788			
							1300, 1320, 1310			012	463	463			
		x		x			1900/1920/1940		M12	01B		15823/14823/13923			
							1300, 1320, 1310			012	975	889			
				х			1900/2000	1/3	S06	01A	x11149/x9205				
								-, 0			842 search				
				х		x	1910		E11	03	9610	9610			
											61#	61#			
			x			x	2000		E11	03	5409	5409			
											52#	52#			

### 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	Med	Thu	Fri	Sat	Sun	JTC	wk	Stn	Fam	Mar kHz, ID,	Apr kHz, ID,	May kHz, ID,	Jun kHz, ID,	Remarks
x	x				(	)315		E11	03	<b>12630</b> 25#	12630 25#	16125 25# check	16125 25#	since 01/14, last log 04/25
x	c	x			(	)445		S11A	03	10728 79#	10728	9968	9968	since 05/22, last log 04/25
x	,	x				)505		E11	03	/9#	79#	79#	79#	since 10/11, last log 02/25
										23004	23004	16357	16357	Mar/Apr/Sep/Oct at 1230z, Mai-Aug at 1645z
x	x					0510		S11A	03	65# 25839	65# 25839	65# 20170	65# 20170	since 08/19, last log 04/25
x	x				0	0600		E11	03	94#	94#	94# search	94#	since 07/17, last log 04/25
			x		x	0600		E11	03	8680 35#	8680 35#	9150 35#	9150 35#	since 04/15, last log 04/25
x	x					0645		E11	03	10800	10800	x7469	x7469	since 02/10, last log 04/25 2nd transmission Thu 1730z cancelled in
^	Î								0.5	41#	41#	41# search	41#	10/24, now two weekdays for this sked
x	¢	x			0	0645		E11	03	<b>13470</b> 51#	13470 51#	8091 51# <b>check</b>	8091 51#	since 07/09, last log 04/25
x		x			0	0700		S11A	03	8597 47#	8597 47#	9339 47#	9339 47#	since 04/10, last log 04/25
x	c		x		(	0700		E11	03	8180 57#	8180 57#	8680 57#	8680 57#	since 01/12, last log 04/25
				x	x	0700		E11	03	9079	9079	7377	7377	since 07/15, last log 04/25
		-				)715		E11	03	49# 19515	49# 19515	49#	49# 15915	
х	х									75# 15720	75# 14666	75#	75# 12530	since 06/21, last log 04/25
x	٢.		x		0	0715		E11	03	63#	63#	63#	63#	since 02/11, last log 04/25
		х	x		0	0720		E11	03	<b>9446</b> 43#	9446 43#	6252 43# <b>check</b>	6252 43#	since 10/09, last log 04/25
	x		x		0	725		S11A	03	23353 38#	23353 38#	20905 38# <b>check</b>	20905 38#	since 05/14, last log 04/25
x					(	)745		E11	03	10213 26#	10213 26#	9610 26#	9610 26#	since 03/14, last log 04/25
×	e .	x				)745		E11	03	14865	14865	14940	14940	2nd transmission Thu 1530z since 01/20, last log 04/25
										22# 17410	22# 17410	22# 15720	22# 15720	
	x	_	x			)745		E11	03	34# 19184	34#	34# 17378	34# 17378	since 06/17, last log 04/25
x	x				0	)820		E11	03	13#	13#	13#	13#	since 12/18, last log 04/25
x			x		0	0830		E11	03	20170 18#	20170 18#	16335 18#	16335 18#	since 07/15, last log 04/25
				x	x (	0830		S11A	03	6433 37#	6433 37#	5149 37#	5149 37#	since 02/14, last log 04/25
x	x				(	)845		E11	03	12202 71#	12202 71#	12815 71#	12815 71#	since 09/10, last log 04/25
x	,	x				)845		E11	03	18168	18168	19184	19184	since 07/17, last log 04/25
		_							03	15# 13117	15#	15#	15#	
x	x	_				900		E11		53# 6480	53# 6480	53# 6814	53# 6814	since 10/05, last log 04/25
x			x		0	915		S11A	03	48#	48#	48#	48#	since 04/19, last log 04/25
	x	x			0	930		E11	03	6940 27#	6940 27#	6923 27#	6923 27#	since 02/14, last log 04/25
x	¢		x		1	L000		E11	03	9951 30#	9951 30#	12153 30#	12153 30#	since 11/16, last log 04/25
x	x				1	1045		E11	03	12385 69#	12385 69#	10210	10210 69#	since 03/18, last log 04/25
x	( x				1	1205		E11	03	9399	9399	8274	8274	since 03/10, last log 04/25
						1230			03	46# 12530	46# 12530	46#	46#	since 10/11, last log 10/24
x	¢	х			_					33# 5371	33# 5371	5737	5737	May-Aug at 1645z, Nov-Feb at 0505z
x		x			1	1300		E11	03	31#	31#	31#	31#	since 07/14, last log 04/25
х	¢		x		1	L400		S11A	03	11420 42#	11420 42#	9448 42#	42#	since 02/10, last log 04/25
x	¢		[	x	1	1430		E11	03	14972 91#	14972 91#	12984 91#	12984 91#	since 10/15, last log 04/25
$\square$		x			1	1530		E11	03	10330 26#	10330 26#	10356 26#	10356 26#	since 06/14, last log 04/25 2nd transmission Mon 0745z
x	c	+			x	1605		E11	03	5176	5176	5231	5231	since 11/15, last log 04/25
	x			v	_	1610		E11	03	23# 4181	23# 4181	23# 4783	23# 4783	since 02/14, last log 04/25
				^						39#	39#	39# 14575	39# 14575	since 02/14, last log 04/23 since 10/11, last log 08/24
×	٢	х			_	1645		E11	03	4505	4505	33#	33#	Mar/Apr/Sep/Oct at 1230z, Nov-Feb at 0505z
				x	x 1	1645		E11	03	4505 36#	4505 36#	36#	5082 36#	since 03/14, last log 04/25 2nd transmission Thu 1530z
	x		x		1	1715		E11	03	6923 97#	6923 97#	7863 97#	7863 97#	since 02/15, last log 04/25
x	1	1			x	1745		E11	03	13470 24#	13470	14410	14410 24#	since 04/18, last log 04/25
$\vdash$	+	+	x		x	1815		E11	03	11116	11116	12229	12229	since 05/16, last log 04/25
$\vdash$	x	+		x		1850			03	92# 10213	92# 10213	92# 12457	92# 12457	since 06/17, last log 04/25
$\vdash$	×		$\square$	^						28# 7317	28# 7317	28# 7600	28# 7600	
x		х			1	1900		E11	03	64#	64#	64#	64#	since 05/16, last log 04/25
			x		x 1	1910		E11	03	8530 61#	8530 61#	9610 61#	9610 61#	since 04/17, last log 04/25
ιT		x			x 2	2000		E11	03	5737 52#	5737 52#	5409 52#	5409 52#	since 05/15, last log 04/25

### XPA1 Wednesday/Friday schedule

Zulu > Month v	XPA1 Wed/Fri Schedule H+10 H+30 H+50 1210 / 1310z									
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							

### XPA2 p Schedule [Mon/Wed]

Zulu > Month v	XPA2 Sched p Monday/Wednesday H 00 H+20 H+40 0700 / 0800z									
Jan	11493	13393	13993							
Feb	13387	13887	14787							
Mar	13931	14831	16131							
Apr	11409	12209	13409							
May	12148	13448	13948							
June	12148	13448	13948							
July	12148	13448	13948							
Aug	12152	13552	13952							
Sept	12152	13552	13952							
Oct	13372	14672	15872							
Nov	11529	13429	13929							
Dec	11493	13393	13993							

### **Special Matters**

### Thanks to all our contributors:

Ary, BR, Brixmis, DanAR, Daryl, E, Gert, H-FD, HJH, JPL, Koji, PoSW, RNGB, WGD

Apologies to anyone missed.

#### **MESSAGES**

E: Tnx yr input. See next issue!

### RELEVANT WEBSITES

ENIGMA 2000 Website:

Time zone information:

Encyclopedia of Espionage, Intelligence, and Security

http://www.enigma2000.org

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

http://www.faqs.org/espionage/

		Ja	nua	iry					Fe	oru	ary		March							
\$	М	Τ	W	Т	F	S	S	М	T	W	Т	F	S	S	м	Т	W	Т	F	S
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	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	1
	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	2:
	27	28	29	30	31		23	24	25	26	27	28		23	24	25	26	27	28	29
							-						- 2	30	31	-				
			Apri	1						May	1						Jun	e		
13	М	Т	W	Т	F	S	S	М	T	W	Т	F	S	S	Μ	Т	W	Т	F	S
		1	2	3	4	5					1	2	3	1	2	3	4	5	6	7
	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14
	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21
	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28
	28	29	30				25	26	27	28	29	30	31	29	30					
			July	,					A	ugu	st					Sep	ten	ibe		
	М	Т	W	т	F	S	S	M	Т	W	Т	F	S	S	Μ	Т	W	Т	F	S
		1	2	3	4	5						1	2		1	2	3	4	5	6
	7	8	9	10	11	12	3	4	5	6	7	8	9	7	8	9	10	11	12	13
	14	15	16	17	18	19	10	11	12	13	14	15	16	14	15	16	17	18	19	20
ł	21	22	23	24	25	26	17	18	19	20	21	22	23	21	22	23	24	25	26	27
	28	29	30	31			24	25	26	27	28	29	30	28	29	30				
						-	31										_			
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2025

https://www.vertex42.com/calendars/2025.html

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