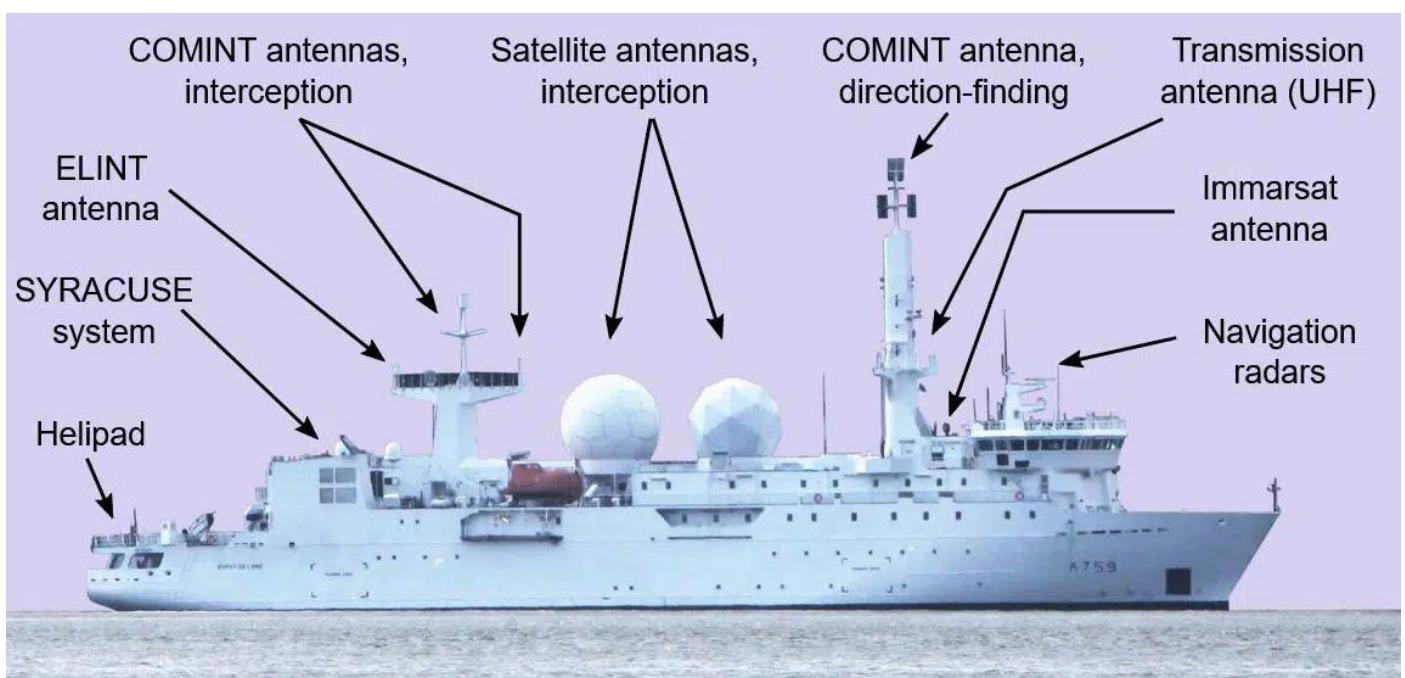


# ENIGMA 2000 NEWSLETTER



<http://www.enigma2000.org>



French SIGINT ship **Dupuy de Lôme**

[Tnx to contributing member]

**ISSUE 141**  
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[www.enigma2000.org](http://www.enigma2000.org)

# Editorial

The number station scene looks as though the long-standing E07 Saturday and related Sunday schedules have gone unless they are very weak; nothing heard on the predicted frequencies in the first two months of this year.

On the positive side the HM01 station from Cuba has emerged again, nothing heard throughout late autumn and in the winter but the Tuesday, Thursday and Saturday transmissions on 13435 were heard in late February although signal strengths were weak.  
The first + third Fridays S06 has survived into the New Year, appears to send a full message every six months or so, last one was in November of last year so most likely another one in May.

At this rate there'll not be much to listen to. Mind you, conscription seems to be a favourite topic in the media at the moment. One has the feeling that few would actually answer the call up papers as the newspaper comments are that Britain does more for these 'gimmigrants' who wash up on our southern shores that it does for our own homeless and veterans.

Then we have the call that the Navy is too small. Lacks fire power in certain warships and that the army is too small, ill equipped and not capable of warfighting with Russia.

It seems the media is all too happy to give negative comment about our defence capability to sell their rags.

With excellent propagation generally being seen for most bands capable of some good DX in Britain we are being lashed by storms with silly names; the last for us in the south being Storm Isha. No so bad if you hadn't lost a roof and that's exactly what happened at Enigma Towers.

Scaffolding up, I have my eye on a particularly long pole which will doubtless easily support a discone. We'll see what can be scrounged.

*NEXT TIME: We have received details of a certain file which we hope to share with in the next email.*

## Newsrounds:

### Cuba

#### Cuba Without Food, but Has Spies

December 19, 2023

By Francisco Acevedo

<https://havanatimes.org/opinion/cuba-without-food-but-has-spies/>

HAVANA TIMES – After the Socialist Camp collapsed in 1991, and with Cuba's unstoppable economic crisis, the battle to get food is ordinary Cubans' main priority, and sometimes this bloody battle reveals interesting things along the way.

A social media figure, "Pedro el comunista" (Pedro Miyares Vega), famous for having tattooed none other than our dear Miguel Diaz-Canel and the Cuban Communist Party's logo (PCC) on his chest, to show his loyalty to the Revolution, dropped one of these pearls recently.

Well, it seems that this man can't bear the current situation anymore, and amidst quite a few curse words, he asked the leader and his clique to stop improvising because they are starving the Cuban people.

After showing his empty freezer, he added that they won't give him a job (I don't know why because they could have at least made sure this man had enough to get by for having got the tattoo), and that his children were sick. This is how Rome pays its traitors, the old saying goes, although this time Rome is the traitor.

The famous tattoo, which the Ministry of Interior (MININT) bragged about on June 6th, its 62nd Anniversary, clearly hasn't done him much good, and now he's not only talking about food, but also about repression, the lack of democracy and the domestic blockade. What will he do now with this indelible mark on his chest? By the way, he wasn't 15 when he got it done, he was already a family man.

A few days later, he said he'd get Canel removed (but not now because he doesn't have money to do that, according to his own words), but he confessed he was a Fidelista, so it seems he's in the same boat as Amaury Perez and Edmundo Garcia, who feel betrayed by the current puppet, but they really want everything to stay the same.

With a father and brother on international missions, and some of his family living abroad, who clearly aren't helping out (maybe because of the tattoo), Miyares said, when he went viral on social media, that during his youth, he suffered a neurological disorder, so he felt indebted to the Cuban Government (for the medical care), but now his stomach was aching.

Let's remember that "Pedro el comunista" also became famous when Spanish journalist and documentary maker Ana Hurtado visited him, amazed by his act of loyalty. But I don't know what he'll say now, nor when the documentary comes out, which she shot here.

Diverting attention, planting fear

In the meantime, Cuban TV on the island is trying to scare people and they are trying to convince us, in the middle of the holiday season, that there will be terrorist attacks in this country based on the story of a person who entered the island with four handguns to try and bring the Government down. It doesn't matter, the objective was to begin to involve people included in the terrorist list published recently in the Cuban Republic's Official Gazette. It doesn't matter if an investigation is underway because this will never be covered by a Cuban media outlet until things have advanced a great deal. Well, at least it has always been this way, maybe they changed strategy.

Maybe it's an attempt to cover up the investigation of a former US Ambassador who has been accused of spying for the Cuban dictatorship for four decades. As part of his statements, the former US diplomat, Victor Manuel Rocha, explicitly admitted that the Cuban Government orchestrated lots of these kinds of

pantomimes, and he gave a clear example of when he bought a boat for 12,000 USD to send a group of Cubans with the desire to change things. However, they were naive in the end, because State Security was waiting for them with open arms to expose them to the world as proof that the island was under attack and thus, they had a carte blanche to continue to buy military equipment instead of ambulances, for example.

It's a repetitive plan that they put into action every now and again to divert people's attention, especially when there is danger of a social uprising or an international scandal. Even though it might not seem like it because of just how absurd it is, the strategy does manage to scare some people who want to protest or rebel, planting a seed of doubt.

This week, Cuban TV also showed images from the trial of three Cuban citizens (a man and two women) for "endangering citizen security", by throwing Molotov cocktails in the People's Courtroom in Central Havana and putting up posters at the provincial headquarters of the Committees for the Defense of the Revolution (CDR) and other state bodies, receiving sentences between 20-30 years in prison.

But what can you expect from a country where, on International Human Rights Day, it's the main perpetrators of human rights abuses (the police) who parade?

Going back to agent Rocha, his hearing was postponed until January 12th, with fifteen charges for six crimes, which would bring his maximum penalty to 60 years in prison if he's found guilty during the trial, which is scheduled for January 29th.

Rocha is a 73-year-old Colombian man who became a US citizen in 1978. He worked for the US Department of State between 1981 and 2003 and held various positions in embassies in the Dominican Republic, Honduras, Mexico and Argentina.

He was arrested in Miami on December 1st after confessing his activities to a Federal Bureau of Investigation (FBI) agent, who was undercover as another Cuban spy.

This is another investigation underway, and the postponement of his hearing might be to help him reach some kind of confidentiality agreement in exchange for information, but things aren't looking great for dictatorship right now. Ah, if anybody was wondering, this case hasn't been covered on the News on Cuban TV.

<https://havanatimes.org/opinion/cuba-without-food-but-has-spies/>

Thank you E

## Great Britain

### Chinese spy investigation to be considered by prosecutors after file handed to CPS Allegations rocked Westminster last year after researcher with links to Tory MPs was arrested on suspicion of spying for Beijing

Will Bolton,  
CRIME CORRESPONDENT  
4 January 2024 • 2:55pm

<https://www.telegraph.co.uk/news/2024/01/04/chinese-spy-investigation-prosecutors-file-cps-parliament/>

Prosecutors are considering an investigation into a parliamentary researcher arrested on suspicion of spying for China.

Detectives have passed a file to the Crown Prosecution Service (CPS) after two men were detained last year under the Official Secrets Act, Scotland Yard said.

The researcher, who is in his 20s, has not been officially named by police, and has insisted he is "completely innocent" of any wrongdoing.

He was arrested in Edinburgh on March 13 last year, while a second man, in his 30s, was detained in Oxfordshire, Scotland Yard said. Searches were also carried out at an east London property.

In an update from Scotland Yard on Thursday, a spokesman said: "Officers have been in liaison with [the] CPS in relation to this investigation and a case file has now been passed to them for consideration.

"Both men remain on police bail at this time and inquiries continue."

Suspect had links to senior Tory MPs  
The researcher has previously lived and worked in China and has been working with parliamentarians for a number of years.

He is understood to have links to senior Conservative MPs who have access to highly sensitive or classified material, including Tom Tugendhat, now the Security Minister, and Alicia Kearns, the chairman of the foreign affairs select committee.

In his role with MPs, the man may have had access to "highly sensitive" documents as well as private briefings from ministers, senior officials, and dissidents critical of China's ruling Communist Party.

'I am completely innocent'  
In a previous statement released through his lawyers, the privately educated researcher, said: "I feel forced to respond to the media accusations that I am a 'Chinese spy'.

"It is wrong that I should be obliged to make any form of public comment on the misreporting that has taken place.

"However, given what has been reported, it is vital that it is known that I am completely innocent.

"I have spent my career to date trying to educate others about the challenge and threats presented by the Chinese Communist Party.

"To do what has been claimed against me in extravagant news reporting would be against everything I stand for."

He is being represented by Birnberg Peirce, one of Britain's leading human rights law firms whose clients have included Julian Assange, the WikiLeaks founder, and Shamima Begum, the east London schoolgirl who joined Islamic State.

<https://www.telegraph.co.uk/news/2024/01/04/chinese-spy-investigation-prosecutors-file-cps-parliament/>

## Refugee suspected to be Russian spy worked for MI6 and Foreign Office

Liz Perkins

7 February 2024 • 11:55pm

<https://www.telegraph.co.uk/news/2024/02/07/refugee-suspected-russian-spy-foreign-office-mi6/>

An alleged Russian spy is claimed to have lied to gain asylum in Britain before working for the country's spy agencies and meeting with the future King, it was reported on Wednesday night.

The Afghanistan refugee is alleged to have acted as a spy for Russia while working for GCHQ and MI6.

He also had access to working alongside two ministers along with the then Prince Charles and Prince William, during his time in Afghanistan working for the British government.

It is said he had both Russian and British citizenship but went on to be stripped of his UK passport in 2019.

The step was taken as MI5 believed he had acted for the GRU, the Russian military intelligence agency, which was said to be behind the nerve agent attack in Salisbury a year earlier.

He admitted in a hearing before the Special Immigration Appeals Commission (SIAC) on Tuesday that he had lied in his asylum application and said he had opted not to say he had been living in Russia over fear he would have to leave the country.

Rory Dunlop KC, for the government, questioned if he was a Russian agent.

He claims: "I could see that he was fishing for information, seeking to find out what weapons we used and what would be handed over to the Afghan government."

Mr Dunlop suggested that the interaction proved C2 was not "naive" and could "figure out when someone is fishing for information".

He went on to work in Afghanistan, which led him to work closely with Russian officials, and he visited Russia around six times.

National security assessments in his case had said C2 "is considered" to be a GRU agent but it was altered to past tense and he said his security assessment was "overegged".

During the hearing he admitted handing over two cash bribes to two Russian military attachés, only to be later advised that they were working for GRU by MI5. He also held a meeting with an official in the Russian Foreign Ministry.

On being asked about Russia's aims in Afghanistan, he said: "There are even now disputes between Russia and the West, but what does that have to do with me?"

<https://www.telegraph.co.uk/news/2024/02/07/refugee-suspected-russian-spy-foreign-office-mi6/>

## Unseen images of code breaking computer that helped win WW2

By Shiona McCallum  
Technology reporter

<https://www.bbc.co.uk/news/technology-67997406>

GCHQ has released never before seen images of Colossus, the UK's secret code-breaking computer credited with helping the Allies win World War Two.

The intelligence agency is publishing them to mark the 80th anniversary of the device's invention.

It says they "shed new light" on the "genesis and workings of Colossus", which is considered by many to be the first digital computer.

Its existence was kept largely secret until the early 2000s.

Anne Keast-Butler, director of GCHQ, said the pictures were a reminder of the "creativity and ingenuity" required to keep the country safe.

"Technological innovation has always been at the centre of our work here at GCHQ, and Colossus is a perfect example of how our staff keep us at the forefront of new technology - even when we can't talk about it", she said.

The first Colossus began operating from Bletchley Park, the home of the UK's codebreakers, in early 1944. By the end of the war there were 10 computers helping to decipher the Nazi messages.

Fitted with 2,500 valves and standing at more than 2 metres tall, Colossus required a team of skilled operators and technicians to run and maintain it.

Often they were members of the Women's Royal Naval Service (Wrens) - one of the new images shows Wrens working on the machine.

Keeping the Colossus computers working was a big task

Blueprints of its inner workings have also been made public for the first time, along with a letter referring to "rather alarming German instructions" intercepted by Colossus, as well as an audio clip of the machine at work.

By the end of the war, 63 million characters of high grade German messages had been decrypted by the 550 people working on the computers.

One of its notable successes was helping the Allies know that Hitler had swallowed the bait that the D-Day landings in June 1944 would be at Calais rather than Normandy.

Historians think the computers shortened the war and saved many lives.

In the dark

Despite its huge impact, engineers and codebreakers who had worked on the Colossus programme were sworn to secrecy and the existence of this vital piece of machinery was kept from the history books for almost six decades.

Colossus wasn't formally acknowledged by the UK intelligence services until the 2000's.

After the war eight of the 10 computers were destroyed.

The engineer who designed it, Tommy Flowers, was ordered to hand over all documentation on the machinery to GCHQ.

The attempts to keep it secret were so successful that Bill Marshall, a former GCHQ engineer who worked on Colossus in the 1960s, said he had no idea about its wartime role.

He said he was now "very proud to have been involved with Colossus even in just a small way."

Andrew Herbert, chairman of trustees at the National Museum of Computing, which is based at Bletchley Park, said the release of the images was another opportunity to celebrate the lasting impact Colossus had had.

"From a technical perspective, Colossus was an important precursor of the modern electronic digital computer," he said.

"Many of those who used Colossus at Bletchley Park went on to become important pioneers and leaders of British computing in the decades following the war, often leading the world in their work", he added.

<https://www.bbc.co.uk/news/technology-67997406>

*There is excellent imagery in this article of Colossus and operational block diagrams*

Thanks to submitting member!

## MORE on China!

**UK's 'golden era' with China harmed British intelligence, says former spy chief  
EXCLUSIVEThe ex-deputy head of MI6 sounds a warning over Britain's ability to counter the security threat**

Rob Hastings

Rob is Special Projects Editor at i. He won the Legal Reporting Award in 2019 and was shortlisted for the Washington Post's Laurence Stern Fellowship and Amnesty's Gaby Rado Prize in 2015.

January 26, 2024 5:08 pm(Updated January 27, 2024 9:03 am)

<https://inews.co.uk/news/uk-china-intelligence-mi6-2873915>

British spy agencies lack the expertise needed to tackle the severe threat from China's intelligence services, the former deputy head of MI6 has warned.

Nigel Inkster suggests this was partly a result of No 10 pursuing a "golden era" of friendship with Beijing.

Chinese espionage now poses greater long-term risks to the UK than Russian spying, according to Mr Inkster, who worked at the Secret Intelligence Service for 31 years.

However, not enough British agents have the requisite knowledge of the country, or the level of Mandarin, to properly counter these dangers, he said in a wide-ranging interview with i.

China's "industrial-scale cyber espionage operations directed against advanced Western countries" are well established but he cautioned that Beijing is also deploying more spies on the ground, using ruthless methods to gather all the military and commercial information they can.

"We're seeing a significant increase in human intelligence collection operations, with the Chinese services essentially seeming to be operating under no political constraints – incentivised to take risks and to do whatever it takes to get the intelligence that is required," he said.

Mr Inkster is concerned that MI6 "clearly does have difficulties, in terms of language expertise and collective general historical and cultural awareness" of China. This is true of "all the UK intelligence community", including MI5 and GCHQ, he told i in an exclusive interview.

Nigel Inkster, now a geopolitical analyst with Enodo Economics, underlines that he is 'apolitical' but thinks policy decisions made 10 years ago are still affecting UK intelligence capabilities now (Photo: John Buck / IISS)Nigel Inkster is now a geopolitical analyst with Enodo Economics (Photo: John Buck/IISS)  
These security deficiencies are partially a legacy of the government prioritising warmer relations with Xi Jinping's regime to improve trade links in the early 2010s, he said.

This happened while David Cameron – now Foreign Secretary – was serving in No 10, with keen support from his chancellor George Osborne.

Since his appointment to the Foreign Office two months ago, now-Lord Cameron has come under fire for the UK's doveish approach to China while he was PM and his business links with Beijing in the following years.

Mr Inkster underlined that he is "apolitical" and not seeking to attack individuals, but believes problems dating back to that policy still need to be overcome today.

"In 2015, the British government was talking about a 'golden era' of UK-China relations... Given that situation, it's perhaps unsurprising that the security service isn't where it might be," he said.

This was “not a climate which justified a high level of focus on Chinese covert activities,” he explained. “It’s hard to envisage a government that is invested in a close relationship with China being willing to sanction or to fund such activities.”

There was also “a very intense focus on transnational terrorism” in the early 2010s, he pointed out. “All the training, all the capability building was necessarily focused on that, to the detriment – not entirely but relatively speaking – of other concerns which had to be put on the back burner.”

Mr Inkster has been a longstanding critic of British attempts to build an economic alliance with China despite the security risks.

In 2015, he voiced concerns over “a propensity on the part of some areas of the UK government to see China as little more than a giant hypermarket”, warning: “If the UK demonstrates any vulnerabilities, these will likely be taken advantage of.”

The serving head of MI6, Sir Richard Moore, has repeatedly stated that the agency now devotes more staff and funding “to China than any other mission”.

Mr Inkster acknowledges this but believes it is still playing catch-up. “I know that there is a big effort underway to remedy those deficiencies. A lot of resources are now being put into getting the UK intelligence community in a better state... but it does take a certain amount of time,” he said.

He welcomed the new National Security Act, coming into force last year, which he believes will aid the prosecution of Chinese spies, replacing “an Official Secrets Act that was derived from the First World War”.

#### Cameron’s ‘evolving views’ on China

It was three years into his first term as prime minister that Cameron called for a “growth partnership” between the two nations, declaring on a trade visit: “No country in the world is more open to Chinese investment than the UK.”

During Xi Jinping’s state visit in 2015, he famously took the President for a pint of beer in a Buckinghamshire pub – which ironically was later bought by Chinese investors.

After leaving No 10 in 2016, the former prime minister visited China several times. He went to Beijing in September 2017 to discuss the establishment of a UK-China investment fund with then-vice-premier Ma Kai, and met privately with Mr Xi in January 2018. He travelled to China twice more that year, holding talks with the then-premier Li Keqiang.

Parliament’s Intelligence and Security Committee said last year that his role as vice-chairman of the fund may have been “in some part engineered by the Chinese state to lend credibility to Chinese investment, as well as to the broader China brand”.

Cameron has defended his record in office, saying: “When I became prime minister, the greatest need was for Britain to grow again, trade again, with exports to help our businesses around the world.” As recently as last autumn, he told MPs he had no regrets about backing a Beijing-funded development.

The current Prime Minister, Rishi Sunak, declared in 2022 that the “so-called golden era” was over – and Cameron now acknowledges that British relations with Beijing have deteriorated, saying in November: “My views evolved because a lot of the facts changed.”

“China has become much more aggressive, much more assertive, over the Uyghurs, over Hong Kong, the ‘wolf warrior’ diplomacy,” he told the BBC.

Although he still emphasises the “need to engage” over climate change and other key matters, Cameron said in November: “Security and protection is such an important part of our policy. We also need to align more carefully with our allies to make sure we can counter any malign threats coming from China.”

“The security service isn’t where it might be”

#### China’s ruthless tactics

The history of notorious Russian operations in the UK, dating from the Soviet-era KGB through to the FSB and GRU agencies of today, mean the public still typically sees Moscow as the biggest threat to British security.

This is especially true after the 2006 murder of Alexander Litvinenko in London and the attempted assassination of Sergei Skripal at his Salisbury home in 2018, while the invasion of Ukraine has caused further alarm.

But Mr Inkster said the overall threat from China’s Ministry of State Security (MSS), which is likened by analysts to a combination of the FBI and the CIA, may be more serious.

“Russia is the weather, China is the climate,” he explained. “Whilst individual acts of Chinese espionage may not in and of themselves be that harmful, their cumulative effect – taken together with the intent that informs them – is strategically far more concerning than anything a country like Russia might do.”

While it appears that China has not been guilty of “the kind of assassinations that have been the hallmark of Russia’s intelligence services under Putin”, Mr Inkster said: “I don’t think that’s because they are inhibited by moral scruples. At the moment, they simply do not see it as in their interest.”

Beijing has been ruthless in targeting Chinese emigrants living in foreign states, said Mr Inkster. “We have seen a very broad effort by ‘China Inc’ to go after Chinese officials and others who have fled overseas, either to pressure them to return to China, or at the very least to stop speaking out against the regime.

“There we’ve seen a wide range of tactics, including putting pressure on families back in China, putting pressure on individuals in the countries to which they’ve gone. Cases, for example, of hiring private detectives to surveil and intimidate opponents of the regime, using Chinese diaspora communities for this purpose – all of this is going on.”

Shanghai-born businessman Desmond Shum, who now lives in the UK, is among those to have been intimidated like this. In 2021, he told i how Chinese authorities had secretly detained his billionaire ex-wife, Whitney Duan – “as if she’d been vaporised”. Security officials then made Ms Duan call Mr Shum to ask him not to publish details about the regime in his book Red Roulette.

The Government needs to be conscious of potential Chinese attempts to interfere in British politics and public life using these tactics, said Mr Inkster. It is a sensitive matter, though, so that they “do not end up demonising a Chinese diaspora population in this country that hasn’t done anything wrong”.

#### Concerns over Western vulnerabilities

British and American intelligence services both lack the specialist skills and insight needed to counter the spying threat from China, according to a former US intelligence agent once stationed in London.

MI5 is “woefully unprepared” to deal with the threat, said Professor Nick EftimiaDES, who worked for the CIA and the US Defense Intelligence Agency and is the author of Chinese Intelligence Operations.

"I've had these conversations with them, they don't have the expertise, they don't have the experience, they don't have the manpower," Mr Eftimadias told i. "Like the US intelligence and counterintelligence communities, they don't have the long-term experience to be able to contend with Chinese espionage as a problem."

He said the CIA and FBI suffer from the same problems in the US, despite efforts to catch up.

"How many people have been following the Chinese Communist Party for 30 years? I can name them on two hands and they're all in academic circles. We lack a lot of deep expertise on the subject areas. You'll find in the intelligence communities, a lot of people are running to deal with this, but it's going to take time."

Chinese spying expert Matt Brazil knows from personal experience that some FBI personnel tasked with preventing Beijing's operations lack the basic knowledge that should be essential for their jobs.

Mr Brazil, a former US Army intelligence officer who also worked as a diplomat at the US embassy in Beijing in the 90s, told i how in 2020 he was asked by FBI agents in California to meet and share some of his knowledge and insights on China. The co-author of Chinese Communist Espionage was surprised at their lack of Mandarin skills.

"We met at a Mexican restaurant," he recalled with a smile. "They were both on the China counterintelligence squad. One of them was a first-year Chinese student, the other did not speak Chinese and had no intention of doing so – and yet these were the people trying to catch Chinese spies in California."

"Hiring private detectives to surveil and intimidate opponents, using Chinese diaspora communities for this purpose – all of this is going on"

The former MI6 deputy has been wary of China's spying efforts for some time. He was frustrated when security warnings about using components made by Huawei – the Chinese tech giant – in the UK's 5G mobile network were brushed aside in 2020. This came before a government U-turn ordered all Huawei kit to be removed.

Mr Inkster said: "When it became apparent that BT was going to Huawei, I made the point that this was probably not a very wise move from a national security perspective. But the BT response was, 'Well, they're cheaper than everyone else.'"

Next week it will be one year since a US fighter jet shot down an alleged Chinese spy balloon off the American coast, thrusting concerns about Beijing's intelligence efforts to the centre of worldwide attention.

Numerous stories have since emerged of China's wide range of espionage tactics. A Conservative parliamentary researcher was arrested last year over suspicions he was spying for the Communist state. And MI5 director Ken McCallum revealed in October that more than 20,000 people in the UK had been approached by Chinese spies on internet platforms such as LinkedIn.

But China's agencies have also begun actively publicising alleged cases of Western spying efforts. This month the MSS claimed to have arrested a supposed MI6 spy called "Huang". In August it announced the prosecution of a Chinese man with the surname Zeng over suspicions he sold military secrets to the CIA.

Allegations about foreign spies are being used as domestic propaganda to secure the Communist Party's rule, said Mr Inkster. It also rallies the population in pursuit of Mr Xi's goal for China "to become the preeminent global power and to reshape global governance in ways that cement and legitimise China's position at the centre of the world".

"You have a general increase in levels of paranoia, a great all-of-nation effort to try and heighten awareness of the supposed threat," he explained. "When things go wrong, it can never be the Chinese Communist Party's fault, therefore it's got to be somebody else's."

"You have a general increase in levels of paranoia, a great all-of-nation effort to try and heighten awareness of the supposed threat"

Chen Yixin, who is now head of China's increasingly powerful MSS intelligence agency, welcomed Theresa May to Wuhan in 2018 while he was the local Communist Party boss and she was UK prime minister (Photo: Feature China / Future Publishing via Getty Images)Chen Yixin, now head of China's MSS intelligence agency, welcomes Theresa May to Wuhan in 2018 while he was the local Communist Party boss and she was prime minister (Photo: Feature China/Future Publishing)

#### UK's Taiwan quandary

Tensions have been rising over China's aggression towards Taiwan. The island's election of William Tai, a strident campaigner for continued independence, has not been welcomed in Beijing.

Mr Inkster is optimistic that China is seeking to avoid a military confrontation over Taiwan, a key technological trading partner with the West. But he says the UK may be forced to decide what action it would take if Chinese forces mounted an invasion.

"At the end of the day, there is a fundamental question that any Western government is going to have to ask itself – and the UK is no exception – which is: if something really serious does kick off in the Taiwan Straits, what is the UK going to do?

"As an ally of the US, there probably will be expectation that we would commit some resources to that theatre. So will we or won't we? Intelligence support is relatively easy and uncontroversial. But actually committing troops to the fight would be another matter.

"I suspect UK Government hasn't really come to a firm view, unsurprisingly in the circumstances, but probably should recognise that it might have to at some not-too-distant future point."

<https://inews.co.uk/news/uk-china-intelligence-mi6-2873915>

## Netherlands

### Counter-terror worker caught with 46 TB of data, over 900 state secrets at Schiphol

WEDNESDAY, 7 FEBRUARY 2024 - 14:42

<https://nltimes.nl/2024/02/07/counter-terror-worker-caught-46-tb-data-900-state-secrets-schiphol>

When an employee of the National Coordinator for Security and Counterterrorism (NCTV) was arrested last year, he was caught with 46 terabytes of data including 928 documents with state secrets, prosecutors alleged during the first public hearing in the case. The documents included 345 from the AIVD, the Dutch civilian intelligence agency, and 65 from the MIVD, the Dutch military intelligence service, the prosecutor said in the secured courthouse in Rotterdam.

He is suspected of leaking state secrets to Moroccan intelligence services. The total volume of data is "equal to around 11.5 billion A4" sheets of paper, the prosecutor explained. The investigation into all those documents will take much more time. He argued it is certain that hundreds of these documents contain state secrets. "The security of the Dutch state was at stake."

Ab el M., the 64-year-old suspect from Rotterdam, held various positions at the NCTV for several years, amongst them as an analyst. The Public Prosecution Service started an investigation in October of 2023 after an official report from the AIVD which stated that he had printed out copies of state secrets and other information. That had been happening from at least April of last year.

Shortly after the AIVD memo, both El M. and a colleague were taken into custody. El M. was arrested at Schiphol Airport when he was planning to board a flight to Morocco. The prosecutor said El M. had "a large amount of data carriers with him" at the time.

The Public Prosecutor claims that El M. printed the secret information at the office in The Hague, then allegedly scanned the files at home. He is accused of trying to fly to Morocco to transfer the information to his contacts in the intelligence service there. When he was given another position in May of last year and was not authorized to print documents anymore, he apparently asked a colleague to print items for him.

This woman is also a suspect in the investigation but is not currently in custody. El M. is still being held in pre-trial detention and will remain jailed until the next hearing in May. The case details will not be handled at that procedural hearing.

Given El M.'s position, the suspect's lawyer called it "incomprehensible" the court held the hearing in public. "My client is being framed, and the reasons are still unclear to us."

El M. has thus far exercised his right to remain silent. He does feel the need to respond in detail, said his lawyer Bart Nooitgedagt, "but he has a duty of confidentiality from which he should first be released." According to the lawyer, there is "a minefield that extends far beyond the court."

Reporting by ANP and NL Times

<https://nltimes.nl/2024/02/07/counter-terror-worker-caught-46-tb-data-900-state-secrets-schiphol>

## **Russia**

### **Putin's secret electronic weapon playing havoc with airliners' GPS**

A surge in disruption had been detected in an area stretching all the way from Finland, through the Baltic states and Poland

Joe Barnes

3 February 2024 • 2:00pm

<https://www.telegraph.co.uk/world-news/2024/02/03/secret-russian-electronic-warfare-weapon-sat-nav/>

A highly secret Russian electronic warfare system is interfering with the GPS guidance of airliners and ships on Nato's eastern flank.

A surge in disruption had been detected in an area stretching all the way from Finland, through the Baltic states and Poland, Estonia's military chief told The Telegraph.

"What we have seen is a malfunctioning of GPS for ships and air traffic," said General Martin Harem, commander of the Estonian Defence Forces.

"And we really do not know if they [Russia] want to achieve something or just practise and test their equipment."

He added: "But definitely, nobody should behave like this, especially when you're at war with a neighbouring country."

Estonia is the first member of the Nato military alliance to directly call out the Kremlin over the disruption.

Western intelligence suggests Russia has deployed a large, fixed jamming system named Tobol to its military enclave Kaliningrad, which is nestled between Lithuania and Poland.

There are believed to be fewer than 10 of the advanced electronic warfare systems in operation across the country, including the one stationed in the outpost.

Images on social media purportedly of the device show a large satellite dish mounted on the ground.

Multiple directions

Dr Thomas Withington, an expert in electronic warfare at the Royal United Services Institute think-tank, said the dish could be directed to disrupt GPS signals in multiple directions.

The effort to jam signals is likely to provide a kind of invisible shield over Kaliningrad to assuage Russia's concerns over Nato's arsenal of satellite-guided missiles, he added.

"This may surprise some people but I think, ostensibly, it's actually defensive," Dr Withington said.

"The Russian military is highly concerned by Global navigation satellite system weapons."

While the Russian Tobol won't stop missiles from exploding, it may cause weapons that depend on satellite signals for guidance to miss their targets, he said.

But rather than blocking munitions fired by Nato, it is causing havoc amongst civilian use of satellite navigation systems.

There have been reports of commercial airliners suddenly dropping off tracking sites, as well as warnings that ships could collide if they lose connection to the satellites.

Ukrainian President Volodymyr Zelenskyy, left, is welcomed by Estonian Prime Minister Kaja Kallas, right, before a bilateral meeting  
Volodymyr Zelenskyy is welcomed by Estonian prime minister Kaja Kallas in Tallinn CREDIT: Planetpix / Alamy Live News  
"It's affecting the safety of navigation, degrading the safety of navigation," Dr Withington said.

"The good news is that aircraft and ships have other means of navigation," he added.

"It obviously is a cause of concern if those systems are not available... so they're a very valid argument that what the Russians are doing is deeply irresponsible from a navigation point of view."

The Russian jamming is expected to have a larger socio-economic impact on the countries closest to Kaliningrad.

Could lead to 'meltdown in logistics'

Any long-term disruption to GPS signals could lead to a meltdown in logistics, with delivery drivers left stranded without navigation systems.

But it also could undermine trust in Nato and the West by those most affected by the jammers.

Gen Harem said: "Whatever they [Russia] do here, one aim is to degrade our stability, self-confidence, our trust to the West, unity and cohesion."

The Kremlin has plans to use hybrid attacks to incite social unrest in the Baltic states, according to a potential invasion scenario drawn up by the German military.

"They use different means in hybrid areas to see how we behave, how far we are to respond, and so on," Gen Harem said.

"They have nothing to lose. First they exercise, then they test us and then they attempt to cause some mistrust towards governments or towards Nato."

But while his colleagues at Nato warn the alliance could be at war with Russia in the next 20 years, Estonia's top general doesn't believe the GPS jamming is part of Moscow's "immediate preparations" for the conflict.

<https://www.telegraph.co.uk/world-news/2024/02/03/secret-russian-electronic-warfare-weapon-sat-nav/>

## **UNITED STATES of AMERICA**

### **Chinese Nationals Charged with Illegally Exporting U.S.-Origin Electronic Components to Iran and Iranian Military Affiliates**

Wednesday, January 31, 2024

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For Immediate Release

Office of Public Affairs

<https://www.justice.gov/opa/pr/chinese-nationals-charged-illegally-exporting-us-origin-electronic-components-iran-and>

Four Chinese nationals are charged in an indictment in the District of Columbia with various federal crimes related to a years-long conspiracy to unlawfully export and smuggle U.S.-origin electronic components from the United States to Iran.

According to court documents, Baoxia Liu, aka Emily Liu; Yiu Wa Yung, aka Stephen Yung; Yongxin Li, aka Emma Lee; and Yanlai Zhong, aka Sydney Chung, unlawfully exported and smuggled U.S. export controlled items through China and Hong Kong ultimately for the benefit of entities affiliated with the Islamic Revolutionary Guard Corps (IRGC) and Ministry of Defense and Armed Forces Logistics (MODAFL), which supervises Iran's development and production of missiles, weapons, and military aerial equipment to include Unmanned Aerial Vehicles (UAVs).

"For more than a decade, the defendants allegedly orchestrated a scheme to smuggle U.S. manufactured parts to the IRGC and the Iranian agency charged with developing ballistic missiles and UAVs," said Assistant Attorney General Matthew G. Olsen of the Justice Department's National Security Division. "Such efforts to unlawfully obtain U.S. technology directly threaten our national security, and we will use every tool at our disposal to sever the illicit supply chains that fuel the Iranian regime's malign activity."

"Aggressively combating illicit procurement networks that support Iranian military systems like radars and UAVs is essential to U.S. national security," said Assistant Secretary for Export Enforcement Matthew S. Axelrod of the Department of Commerce. "Today's indictment, tied to the work of the Disruptive Technology Strike Force, reaffirms that proliferators cannot hide behind front companies in third countries to funnel technology to our adversaries."

"Our indictment alleges a years-long, complex conspiracy to violate U.S. laws by procuring U.S. technology with military uses for entities in Iran who would do us harm – a serious offense that endangers our national security," said U.S. Attorney Matthew M. Graves for the District of Columbia. "Our office, along with our federal law enforcement partners, will continue to turn over every stone to find those who break our laws and put us at risk. We are committed to making sure that U.S. technology is kept out of the hands of those taking aim at the United States and its citizens through robust enforcement of U.S. sanctions."

"Our foreign adversaries use many tactics to gain access to critical U.S. technologies and innovation," said Executive Assistant Director Larissa L. Knapp of the FBI's National Security Branch. "In this instance, it is alleged that U.S.-origin equipment was smuggled by front companies to the benefit of end users in Iran. Any circumvention of U.S. export control law is simply unacceptable – the FBI will work diligently with its partners across the globe to hold all accountable who jeopardize our national security."

According to the indictment, beginning as early as May 2007 and continuing until at least July 2020, the defendants utilized an array of front companies in the People's Republic of China (PRC) to funnel dual-use U.S.-origin items, including electronics and components that could be utilized in the production of UAVs, ballistic missile systems, and other military end uses, to sanctioned Iranian entities with ties to the Islamic Revolutionary Guard Corps (IRGC) and Ministry of Defense and Armed Forces Logistics (MODAFL) such as Shiraz Electronics Industries (SEI), Rayan Roshd Afzar, and their affiliates.

Throughout the course of the conspiracy, the defendants concealed the fact that the goods were destined for Iran and Iranian entities and made material misrepresentations to U.S. companies regarding the end destination and end users. These deceptive practices caused the U.S. companies to export goods to the defendants' PRC-based front companies under false pretenses and under the guise that the ultimate destination of these products was China as opposed to Iran. As a result, a vast amount of dual-use U.S.-origin commodities with military capabilities were exported from the United States to Iran in violation of U.S. sanctions and export control laws and regulations.

The defendants are charged with conspiring to violate the International Emergency Economic Powers Act (IEEPA), violating IEEPA, smuggling goods from the United States, and one count of submitting false or misleading export information. If convicted, the defendants face a maximum penalty of 20 years in prison for violating the IEEPA; up to 10 years in prison for smuggling goods from the United States; and up to five years in prison for each count of conspiracy and submitting false or misleading export information. Arrest warrants have been issued for Liu, Yung, Li and Zhong who all remain fugitives.

The FBI's Detroit Field Office and Commerce Department's Office of Export Enforcement Chicago Field Office are investigating the case.

Assistant U.S. Attorney Jack F. Korba for the District of Columbia and Trial Attorneys Heather Schmidt and Yifei Zheng of the National Security Division's Counterintelligence and Export Control Section are prosecuting the case.

In June 2023, the Department of Justice joined with the Departments of Commerce, State, and Treasury to issue an advisory to share information about the threat posed by Iran's procurement, development, and proliferation of UAVs. Four months later, in October 2023, the department joined with the same interagency partners to issue an advisory describing the threat posed by Iran's ballistic missile procurement activities. The advisories gave an overview of the key components sought by Iran, the regime's use of deceptive practices to acquire certain types of technologies, and recommendations for implementing effective compliance controls to minimize sanctions and export control risk.

Today's action was coordinated through the Disruptive Technology Strike Force, an interagency law enforcement strike force co-led by the Departments of Justice and Commerce designed to target illicit actors, protect supply chains, and prevent critical technology from being acquired by authoritarian regimes and hostile nation-states. Under the leadership of the Assistant Attorney General for National Security and the Assistant Secretary of Commerce for Export Enforcement, the Strike Force leverages tools and authorities across the U.S. government to enhance the criminal and administrative enforcement of export control laws.

An indictment is merely an allegation. All defendants are presumed innocent until proven guilty beyond a reasonable doubt in a court of law.

<https://www.justice.gov/opa/pr/chinese-nationals-charged-illegally-exporting-us-origin-electronic-components-iran-and>

## **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**

Ary, (AB), reports this unidentified station that appears to transmit sporadically with messages on 14442kHz;

14442	1010z	02 Jan	Unidentified Morse station	AB	TUE
<p>55555 (x20) BDTOP XKOCE XKOCE UKEMO RTSMA UKEMO 22222 (x20) XKOCE UKEMO XKOCE XKOCE TUORS XKOCE 00000 (x20) BDTOP UKEMO XKOCE BDTOP RTSMA UKEMO 8290 22222 (x20) RTSMA TUORS RTSMA XKOCE BDTOP XKOCE 55555 (x20) TUROS RTS,A UKEMO XKOCE UKEMO TRSMA 55555 (x20) BDTOP RTSMA XKOCE RTSMA XKOCE UKEMO 00000 (x20) RTSMA BDTOP XKOCE XKOCE XKOCE RTSMA 11111 (x20) RTSMA XKOCE TUORS UKEMO TUORS BDTOP 55555 (x20) XKOCE UKEMO UKEMO RTSMA RTSMA BDTOP 55555 (x20) XKOCE UKEMO XKOCE RTSMA TUORS BDTOP 00000 (x20) XKOCE BDTOP RTSMA TUORS UKEMO RTSMA 00000 (x20) RTSMA XKOCE NDTOP UKEMO UKEMO TUORS 00000 (x20) TUORS TUORS XKOCE RTSMA UKEMO UKEMO 22222 (x20)</p>					
<p>[etc.]</p>					

### **UM05 – The French Mystery Morse Station**

This station, first reported in October 2023, commenced transmissions sending a single French word, a single figure number or a single letter that repeated every few seconds, then increased output to accommodate words & phrases – some sent in English. (See our last two newsletters for details).

This station has now evolved to a further, quite bizarre, level in that it now continuously sends bible verses, in French, taken from the New Testament book of Revelation, (Apocalypse in the French version).

As with all the earlier transmissions the Morse is quite basic, with no use of punctuation or accented letters that can make interpretation of some French words problematic.

Quite who is operating this station, that does appear to be for Morse practice, or why they chose to use biblical passages – particularly from The Revelation – still remains a mystery.

Several different frequencies were trailed during early transmissions with the station finally settling on 5345.8 kHz, where it has continued to operate since mid-December 2023.

5345.8	0601z	10 Jan	Extract from Bible Book Apocalypse I ont vaincu par le song de l agneau et par la parol d ont ils ont t moign car ils ont m pris leur vie jusque mourir 12 soyez donc dans la joie vous les cieux et leurs habitants malheur	AB	WED
5345.8	1445z	15 Jan	Sending from Apocalypse 2:8, 2:9 & 2:10 8 A lange de leglise de smyrene cris ainsi parle le premier et le dernier celui qui fut mort et qui a repris vie 9 je connais tes preuves et ta pauvret tu es riche pourtant et les diffamations (etc.).	BR	MON
5345.8	1705z	15 Jan	Now on Apocalypse 14:11	HFD	MON
5345.8	1728z	27 Jan	Extract from Apocalypse Ch6 V12 [Revelation Ch6 V12] 12 et ma vision se poursuivit lorsquil ouvrit le sixime sceau alors il se fit un violent tremblement de terre et le soleil devint noir deomme une toffe de crin et la lune devint tout entire comme du sang	BR	SUN
5345.8	2328z	12 Feb	Extract from Apocalypse 14:12 12 voil qui fonde la constance des saints ceux qui garden les commandements de dieu et la foi en jesus 13 puis etc.	BR	MON

On Tuesday, 20 February the output was noted to have reverted back to groups of single words repeated for five minutes, followed by a short pause before a further set of words commences – possibly randomly selected from a list;

5345.8 2043z 20-02-2024 2043 UM05 CW i.p. montagne voiture river fish terre snow (R), lune mer star earth fish ciel (R), etc.

5345.8	1440z	22 Feb	Montagne Table Star Chat Flower River	BR	FRI
	1445z		Chat Fire Ice Sky Feu		
	1456z		Forest Earth Ice Star Riviere River [etc.]		

### PoSW Report – 5345.8 kHz

Peter, PoSW was also monitoring this odd French station – Here are Peter's observations & logs;

This station was busy in December sending slow Morse groups of six words in a mixture of French and English; carried over into the New Year but changed later in the month of January:-

02-Jan-24, Tuesday:- “CAT TREE CLOUD CHAT ARBRE NUAGE”, not a strong signal.  
0824 UTC, stronger than earlier, “TABLE WIND FORET FLEUR SABLE FIRE”

Checked on most days in the first week of January and was still in this mode on 09-Jan-24, Tuesday at around 0800 UTC was sending,  
“MOUNTAIN TABLE SNOW CIEL SABLE SEA”.

Didn't check this one again for a few days since it appeared to be stuck in a rut but the content had changed a few days later:-

12-Jan-24, Friday:- Not sending groups of six words repeated but what appeared to be plain text in the French language. Was in this mode when monitored several times in the remainder of January and into early February, didn't pay any attention until later in the month when groups of six words were back:-

21-Feb-24, Wednesday:- 0710 UTC, sending “CHAISE HOUSE PLUIE CLOUD BIRD AIR”.  
Paused around 0712 UTC and started up again with, “CIEL CHIEN APPLE MAISON CAR CAR”.

22-Feb-24, Thursday:- 1922 UTC, “OISEAU POMME EARTH SEA CAT STAR”.  
Stopped after 1927z and came back with, “LUNE MER STAR EARTH FISH CIEL”.

23-Feb-24, Friday:- 0750 UTC, “GLACE SABLE VOITURE FORET SUN STAR”.

25-Feb-24, Sunday:- 0643 UTC, “TABLE STAR CHAT FLOWER RIVER MONTAGNE”.

26-Feb-24, Monday:- 0750 UTC, “FEU WATER CHAT FIRE ICE SKY”.  
Paused then came back with, “NEIGE POISSON OISEAU AIR CHAISE CLOUD

*[Thanks for the report PoSW]*

## Morse - Number Stations

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

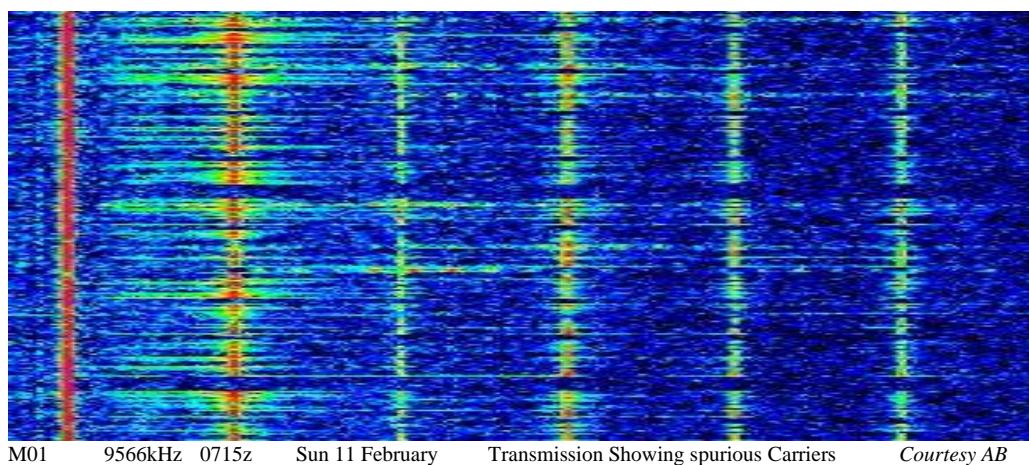
From the beginning of October 2022, all M01 transmissions sent have used a single carrier vs usual 'Two-Tone' transmission mode.

### January 2024:

4490	2000z	02 Jan	'197' 547 30 == 04357 36475 ... 73647 32165 == Weak, fast. Corrected error grp26 – otherwise good	BR	TUE
	2000z	16 Jan	'197' 231 30 == 83746 28437 ... 64827 28748 == Good, fast. Grp11 98765, grp28 12345. Error grp27	BR	TUE
	2000z	18 Jan	'197' 442 == 58769 13243 ... 373233 50908 == Strong, fast with QSB. Several errors noted	BR	THU
	2000z	25 Jan	'197' 677 30 == 96750 39670 ... 56241 85746 == Strong, fast. Grp3 12345, grp4 65432. Only 29 grps sent	BR	THU
5320	1800z	02 Jan	'197' 238 30 86768 74637 ... 26743 75875 == Erratic spacing. Fair via Finland SDR – No copy in UK	BR	TUE
	1805z	04 Jan	'197' 175 30 == 11238 14267 ... 32131 34121 == Good, fast. Grps used sequential starting figures 1,2,3	BR	THU
	1800z	09 Jan	'197' 879 30 == 13527 ... 01326 20316 == Weak, fast. Grps used sequential starting figures 1,2,3	BR	TUE
	1800z	23 Jan	'197' 431 30 == 86905 95874 ... 56748 78695 == Weak/Fair, fast. Error on grp1354637 54337	BR	TUE
5810	1500z	13 Jan	'197' 878 30 == 65847 93728 ... 27564 97099 == Fair/Good, fast. Grps & repeat sent with no pauses	BR	SAT
	1500z	27 Jan	'197' 312 30 == 75648 09187 ... 15624 01761 == Weak/Fair, fast. Errors in grp07 & grp09	BR	SAT

**February 2024:**

4490	2000z	01 Feb	'197' 397 30 == 32431 94053 ... 81325 84945 ==	Fair/Good, fast. Grps & repeat sent with no pauses	BR	THU	
	2000z	06 Feb	'197' 937 30 == 38421 87549 ... 84310 94365 ==	Good with QSB, fast. One error grp17 94833 99833	BR	TUE	
	2000z	13 Feb	'197' 490 30 == 75904 30981 ... 48756 33091 ==	Fair with QSB, fast. No errors noted	BR	TUE	
	2000z	20 Feb	'197' 291 30 == 20493 38492 ... 463 94032 940 ==	Good, fast. Jumbled & confused after first 9 groups	BR	TUE	
	2000z	22 Feb	'197' 244 30 == 12312 23423 ... 64707 13546 ==	Good, fast. Grps included 12345 & 56789. 29 grps sent	BR	THU	
	2000z	27 Feb	'197' 221 30 == 12345 12332 ... 98070 54321 ==	Fair/Good with QSB. Errors noted. Note grps01 & 30	BR	TUE	
	2000z	29 Feb	'197' 501 30 == 10921 20918 ... 55047 70937 ==	Fair/Good, fast. Excellent Morse. No noted errors	BR	THU	
5320	1800z	01 Feb	'197' 195 30 == 39573 35943 ... 84935 94756 ==	Weak, fast. Grps & repeat sent with no pauses.	BR	THU	
	1800z	06 Feb	'197' 786 30 == 38573 39385 ... 85947 94031 ==	Weak/Fair, fast. Excellent Morse. Only 29 groups sent	BR	TUE	
	1800z	08 Feb	'197' 466 30 == 57684 10294 ... 87906 45312 ==	Weak/Fair with QSB. Poor copy in places	BR	THU	
	1800z	13 Feb	'197' 241 30 == 450.7 11615 ... 67 ... 31091 ==	Weak/Fair Poor. Tx problem. Ceased & restarted 1810z	BR	TUE	
	1800z	22 Feb	'197' 757 30 == 14325 46274 ... 09876 10201 ==	Weak/Fair, fast. Grps included 12345 & 54321	BR	THU	
	1800z	29 Feb	'197' 713 30 == 55473 10981 ... 28918 55789 ==	Weak, fast. Poor copy in places. Excellent Morse	BR	THU	
5465	0700z	04 Feb	'197' 722 30 == 76859 34562 ... 23423 78907 ==	Weak, Fair, fast. Grps included 12345, 54321 & 56789	BR	SUN	
	0700z	11 Feb	'197' 137 30 == 12517 17892 ... 12412 27354 000		AB	SUN	
5810	1500z	03 Feb	'197' 133 30 == 12345 10203 ... 23426 89080 ==	Fair, fast. . Grps & repeat sent with no pauses	BR	SAT	
9566	0715z	11 Feb	'475' 165 50 == 57612 34576 ... 85984 9 4911391 ==	Extremely poor (See picture)	USB/CW AM without carrier	AB HFD	SUN
	0715z	25 Feb	'475' 199 50 == 34764.... 199 50 000				SUN



M01 9566kHz 0715z Sun 11 February Transmission Showing spurious Carriers Courtesy AB

<b>M01/1 5320kHz 1800z 23 January 2024</b>	<b>M01/1 5810kHz 1500z 03 February 2024</b>
197 (R4m) 431 431 30 30 ==  86905 95874 44738 12091 13241 57648 33901 20917 75647 09497 87698 56748 54637 87906 45637 22413 54676 87584 98745 12110 06785 76890 56749 34256 97860 40458 60698 40921 56748 78695 == 431 431 30 30 000  (Errors omitted)	197 (R4) 133 133 30 30 ==  12345 10203 20304 30405 50607 70809 90105 64724 95847 18594 27485 24352 64836 17485 54321 56746 17584 76857 92345 56789 98798 12312 23423 34534 45645 56756 67867 23426 89080 ==  (Note the patterns in group structure)

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

No reports

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

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

**Asiatic M12 Logs**

14673/13473/12173	0300/20/40z	02 Jan	641 1	(Via SDR Japan)	HFD	TUE
16253/15953/14453	0010/30/50z	01 Jan	294 1	(Via SDR Japan)	HFD	MON
	0010/30/50z	08 Jan	294 1 (9730 106) 55903 57848....	(Via SDR Japan)	BR	MON
	0010/30/50z	19 Jan	294 1 (7155 49) 47644 41058....	(Via SDR Japan)	BR	FRI
	0010/30/50z	29 Jan	294 1 (3354 99) 17685 34358....	(Via SDR Japan)	BR	MON
17437/15937/14537	0300/20/40z	01 Feb	495 1	(Via SDR Japan)	HFD	THU
	0300/20/40z	22 Feb	495 000	(Via SDR Japan)	BR	THU
17461/16161/15861	0010/30/50z	05 Feb	418 1	(Via SDR Japan)	HFD	MON
	0010/30/50z	16 Feb	418 1 (193 144) 83547 .6088....	(Via SDR Japan)	BR	FRI

## European M12 Logs

<b>January 2024:</b>		New scheds in bold type			
5778/6778/8178	2200/20/40z	05 Jan	771 000	BR	FRI
	2200/20/40z	06 Jan	771 000	HFD	SAT
	2200/20/40z	12 Jan	771 000	BR	FRI
	2200/20/40z	13 Jan	771 000	BR	SAT
	2200/20/40z	19 Jan	771 1 (1814 287) 12472 16917....	BR	FRI
	2200/20/40z	20 Jan	771 1 (1814 287) 12472 16917....	BR	SAT
	2200/20/40z	26 Jan	771 1 (1814 287) 12472 16917....	BR	FRI
6782/5882/5182	2000/20/40z	03 Jan	781 1 (838 . 15 .) 12272 ....	(Poor copy)	BR/HFD
	2000/20/40z	05 Jan	781 1 (8388 157) 12272 55458....	BR	FRI
	2000/20/40z	10 Jan	781 1 (8388 157) 12272 55458....	BR	WED
	2000/20/40z	12 Jan	781 1 (8388 157) 12272 55458....	BR	FRI
	2000/20/40z	17 Jan	781 000	BR	WED
	2000/20/40z	24 Jan	781 1 (6128 100) 37499 72972 ... 43985 90050 000 000	Gert	WED
	2000/20/40z	26 Jan	781 1 (6128 100) 37499 72972....	BR	FRI
	2000/20/40z	31 Jan	781 000	BR	WED
11079/10279/9179	2300/20/40z	01 Jan	136 000	BR	MON
	2300/20/40z	04 Jan	136 000	BR	THU
	2300/20/40z	08 Jan	136 1 (678 91) 22125 67209....	BR	MON
	2300/20/40z	11 Jan	136 1 (678 91) 22125 67209....	BR/HFD	THU
	2300/20/40z	15 Jan	136 1 (139 77) 37908 56405....	BR	MON
	2300/20/40z	18 Jan	136 1 (139 77) 37908 56405....	BR	THU
	2300/20/40z	25 Jan	136 1 (697 145) 82680 87965....	BR	THU
	2300/20/40z	29 Jan	136 000	BR	MON
<b>11161/10461/9261</b>	<b>2310/30/50z</b>	<b>03 Jan</b>	<b>142 1 (9431 198) 79378 02702....</b>	BR/HFD	WED
	<b>2310/30/50z</b>	<b>07 Jan</b>	<b>142 1 (9431 198) 79378 02702....</b>	BR	SUN
	2310/30/50z	10 Jan	142 1 (2219 119) 46206 3490 .	(Poor copy)	BR
	2310/30/50z	14 Jan	142 1 (2219 119) 46206 34901	BR	SUN
	2310/30/50z	17 Jan	142 1 (727 132) .0 .6 .3 .	(Poor copy)	BR
	2310/30/50z	21 Jan	142 1 (727 132) 30106 43848....	BR	SUN
	2310/30/50z	24 Jan	142 1 (662 89) 9 . 82. 23595....	(Poor copy)	BR
	2310/30/50z	28 Jan	142 1 (662 89) 92821 23595....	BR	SUN
	2310/30/50z	31 Jan	142 000	BR	WED
11435/10598/9327	1800/20/40z	20 Jan	938 1 (4784 70) 70179 77171....	BR	SAT
16357/17457/18357	0800/20/40z	03 Jan	343 1	HFD	WED
	0800/20/40z	10 Jan	343 1 (100 163) 20449 80495 ... 82102 81864 000 000	Gert	WED
17418/16318/14918	1400/20/40z	01 Jan	439 000	BR	MON
	1400/20/40z	04 Jan	439 000	HFD	THU
	1400/20/40z	08 Jan	439 1 (185 87) 30598 77850....	BR	MON
	1400/20/40z	11 Jan	439 1 (185 87) 30598 77850....	Gert	THU
	1400/20/40z	15 Jan	439 1 (504 74) 42670 45360....	BR	MON
	1400/20/40z	18 Jan	439 1 (504 74) 42670 45360....	BR	THU
	1400/20/40z	22 Jan	439 000	BR	MON
	1400/20/40z	25 Jan	439 000	BR	THU
	1400/20/40z	29 Jan	439 1 (564 93) 13949 13561....	BR	MON
<b>February 2024:</b>					
5832/6832/7732	2200/20/40z	02 Feb	887 1 (332 222) 29805 40831....	BR/HFD	FRI
	2200/20/40z	09 Feb	887 1 (332 222) 29805 40831....	BR	FRI
	2200/20/40z	10 Feb	887 1 (332 222) 29805 40831....	BR	SAT
	2200/20/40z	16 Feb	887 1 (9006 235) 75594 55801 ... 28924 77129 000 000	Gert	FRI
	2200/20/40z	17 Feb	887 1 (9006 235) 75594 55801 ... 28924 77129 000 000	Gert	SAT
	2200/20/40z	23 Feb	887 1 (9006 235) 75594 55801....	BR	FRI
	2200/20/40z	24 Feb	887 1 (9006 235) 75594 55801....	BR	SAT
7674/6874/5774	2000/20/40z	02 Feb	687 000	HFD	FRI
	2000/20/40z	07 Feb	687 1 (334 115) 24320 70105....	BR	WED
	2000/20/40z	09 Feb	687 1 (334 115) 24320 70105....	BR	FRI
	2000/20/40z	14 Feb	687 000	BR	WED
	2000/20/40z	21 Feb	687 1 (322 172) 51686 95947....	BR	WED
	2000/20/40z	23 Feb	687 1 (322 172) 51686 95947....	BR	FRI
9362/8062/7462	2300/20/40z	01 Feb	451 000	HFD	THU
	2300/20/40z	12 Feb	451 1 (444 97) 77682 33254....	BR	MON
	2300/20/40z	15 Feb	451 1 (444 97) 77682 33254....	BR	THU
	2300/20/40z	19 Feb	451 000	BR	MON
	2300/20/40z	29 Feb	451 1 (439 75) 29001 40122....	BR	THU
11435/10598/9327	1800/20/40z	03 Feb	938 1 (9371 73) 23768 60469....	BR	SAT
	1800/20/40z	10 Feb	938 1 (9865 78) 85880 73855....	BR	SAT

<b>12137/10937/10237</b>	<b>2310/30/50z</b>	<b>04 Feb</b>	<b>192 000</b>		BR/HFD	SUN
	<b>2310/30/50z</b>	<b>07 Feb</b>	<b>192 1 (515 115) .5..0 3927 .....</b>	Poor copy	BR	WED
	2310/30/50z	11 Feb	192 1 (515 113) 25120 39276....		BR	SUN
	2310/30/50z	14 Feb	192 1 (8339 235) 14726 90559....		BR	WED
	2310/30/50z	18 Feb	192 1 (8339 235) 14726 90559....		BR	SUN
	2310/30/40z	21 Feb	192 000		BR	WED
	2310/30/40z	23 Feb	192 000		BR	SUN
	2320/30/50z	28 Feb	192 1 (7707 79) 27400 07625....		BR	WED
<b>19373/17473/16173</b>	<b>1400/20/40z</b>	<b>01 Feb</b>	<b>341 1 (564 93) 13949 13561....</b>		BR/HFD	THU
	1400/20/40z	05 Feb	341 1 (8493 63) 49185 60721....		BR	MON
	1400/20/40z	08 Feb	341 1 (8493 63) 49185 60721....		BR	THU
	1400/20/40z	15 Feb	341 000		BR	THU
	1400/20/40z	19 Feb	341 1 (5642 114) 75821 74091....		BR	MON
	1400/20/40z	22 Feb	341 1 (5642 114) 75821 74091....		BR	THU
	1400/20/40z	25 Feb	341 1 (527 82) 46153 54655....		BR	MON
	1400/20/40z	29 Feb	341 1 (527 82) 46153 54655....		BR	THU

**M12 16357/17457/18357kHz 0800/0820/0840z 10 Jan 2024**

343 343 343 1 (R2m) 100 163 100 163

20449 80495 05505 33473 66602 81018 82485 33810 25014 96513  
 77759 13759 46164 32166 96100 37396 05661 20458 96773 05654  
 50422 73574 50475 51286 08646 65638 39413 01830 91424 31840  
 72265 58274 71821 46387 14924 01582 73039 56062 01008 43093  
 00273 71698 73744 81304 81895 48099 30414 31513 06984 88976  
 48830 58634 77357 99172 61765 41129 22949 81593 27862 32125  
 87997 38984 12101 32133 35445 46066 12997 61540 16632 45441  
 54260 80967 23591 35909 27951 49951 06503 23051 90557 69321  
 69939 87533 55202 49605 19050 12374 53324 89054 11561 74955  
 06097 77721 48910 64799 11935 17805 85605 58681 05298 99604  
 69950 96883 92380 73545 49523 68323 10306 13391 76992 13973  
 74688 44071 62803 61780 55492 53671 09370 07429 10486 37773  
 40023 99387 43852 87055 29882 21540 74272 01429 45111 73180  
 03254 28302 76196 21397 73227 45307 92098 70298 65274 45970  
 15487 59750 24787 52314 29426 18253 98359 08566 80625 01100  
 42508 91221 59461 75772 55984 17833 69758 56739 14264 87994  
 40553 82102 81864  
 000 000

Courtesy Gert

**M12 6782/5882/5182kHz 2000/2020/2040z 24 Jan 2024**

781 781 781 1 (R2m) 6128 100 6128 100

37999 72972 51876 59861 93663 34309 42828 26975 07947 83115  
 20771 19815 17767 01542 84969 00087 35915 03810 45796 33872  
 90105 45858 00942 94903 45342 98302 61056 33426 19859 81771  
 47612 56890 56018 78039 60965 16556 28501 55686 31000 47810  
 72448 19318 54318 95509 73635 82133 52732 55529 11376 66739  
 46770 32297 85368 51080 52485 38678 15486 46734 83646 26902  
 95889 16896 71925 90779 27657 18438 40726 68903 56927 46479  
 60948 87655 23744 99884 92855 24016 30470 50405 48448 24157  
 17947 37196 10922 97504 41874 60065 32388 43091 24776 89822  
 09903 30102 57632 16280 65116 22235 86868 89836 43985 90050  
 000 000

Courtesy Gert

**M12 5832/6832/7732kHz 2200/2220/2240z 17 Feb 2024**

887 887 887 1 (R2m) 9006 235 9006 235

75594 55801 40977 92883 28590 93704 43992 96356 74477 71862  
 45916 61774 02527 12080 75366 82371 62213 18432 69067 54020  
 55082 89370 24566 49882 49181 89624 58615 53911 59389 05696  
 86070 26486 49785 23030 80320 78492 70572 82140 40734 83802  
 05741 00127 02928 75260 09850 36936 24790 07644 84951 23410  
 30844 45841 81490 60699 43591 39515 48400 37379 09712 46165  
 68149 46381 17494 69338 41880 55661 29296 12090 83484 51949  
 63799 53825 65450 68704 01245 34502 73607 30339 62926 02480  
 89267 21069 59691 84654 73829 81673 38382 69327 36525 97402  
 40551 43185 55547 48003 33441 04244 56589 71075 60535 16188  
 56332 25206 27216 39678 87324 20400 99947 28721 07577 53183

(Continued)

(Continued)

61598 40743 61913 17026 38485 55433 39728 15974 18936 26278  
 95467 81979 74525 18627 84957 93735 18074 60849 88344 81120  
 07606 68859 38573 65091 48240 33168 81197 27213 20024 80911  
 44002 34769 30896 31641 50967 43093 99266 52740 31574 04930  
 90880 82460 59182 20616 12641 36540 06915 04465 20055 44541  
 21169 66745 02116 63005 61692 43237 00259 96468 41681 96197  
 47481 58602 06554 56943 80972 06062 77385 86890 76507 70021  
 68885 78314 21762 27866 40734 22883 76275 33776 39750 95798  
 77578 97697 01708 51513 26769 62075 32986 48965 72664 66480  
 00407 69124 02123 04466 15174 44120 31313 00364 42953 85604  
 26994 85096 70300 15293 01406 05986 17203 51981 51849 08670  
 88963 00468 81309 91845 82847 94935 45733 38641 46912 67813  
 07845 31519 78687 28924 77129

Courtesy Gert

**M14 IA MCW / ICW Short 0**

**January 2024:**

12211 0500z	18 Jan	952 307 68 = 17744 42744 ... 85959 73399 = 307 68	Fair/Good Via SDR Japan	BR	THU
10243 0520z	18 Jan	952 307 68 = 17744 42744 ... 85959 73399 = 307 68	Fair via SDR Japan	BR	THU

**17458 0930z 10 Jan 617 00000 HFD WED**

#### Test Transmissions

Ary, (AB), logged this M14 test transmission along with an S06 test carried out at 1740z on 10755kHz on the same day. Both the M14 & S06 exhibited the same sequence of an interrupted first attempt, followed by a full, successful transmission.

11073 1700z	31 Jan	352 981 60 = 51695 90354 ... 61056 63447 = 981 60	AB	WED
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## February 2024:

No reports

M14 12211kHz 0500z 18 January 2024				
952 (R4m) 307 307 68 68 ==				
17744 42744 63328 76092 73942 82287 89219 23694 88890 72870 77102 16755 16470 92373 33735 50863 18593 45162 29936 00106 40661 08121 74525 05532 47666 79919 04384 44195 63128 44435 45309 52189 78044 84265 23364 00135 22052 05293 31397 44537 13984 58201 80429 03467 34008 67919 90591 29987 84530 06907 01294 81780 32061 73217 05334 10399 47224 59300 36603 18580 85095 22447 66106 59072 73064 92842 85959 73399 ==				
307 307 68 68 00000				
<i>Courtesy BR</i>				

M14 11073kHz 1700z 31 January 2024				
352 (R) 981 981 60 60 ==				
51695 90354 85909 37970 09777 51634 26634 13142 42885 00995 80314 58494 13224 34679 29309 [off]				
352 (R) 13224 34679 29309 55756 62115 27741 66051 38711 83560 20565 19387 57634 70150 67196 89994 43134 86036 18933 62070 29744 46635 41603 83475 25399 09759 89969 31525 09133 07864 87710 06613 67942 76091 86393 20847 08736 55807 01896 73903 06332 78305 51704 33267 73423 58384 41527 61056 63447 ==				
981 981 60 60 00000				
<i>Courtesy AB</i>				

## M23 O ICW

Once again, we are indebted to Ary, (AB), & the UDXF group for alerting us to a new series of transmissions. It appears that the station was active for at least a week before we became aware, as a log received for the 08 Feb, via UDXF shows.

From early reports it appeared that transmissions in this series were being sent on a two-hourly schedule &, with the help of reports from other radio monitors, Ary has managed almost a full list of the schedules over the 24 hour period –as shown in the table below:

Time UTC		Freq kHz	Call	Duration	Dates Heard	Notes
	0158z	5198	SST XKO	1h 30m 45m	19 Feb 21 Feb	
	0358z	5198	2O2 RST	36m 1h 30m	19 Feb 21 Feb	
	0558z	5873	SOT BDT	1h 1h	19 Feb 21 Feb	
	0758z					
	0958z	17432	RST OSS	1h 30m 1hr	08 – 19 Feb 20 Feb	Still active into first week of March
	1158z	18412	OSS	1h	16 Feb	Still active into first week of March
	1358z	18412	ISS	1h 30m	15 – 20 Feb	NRH 21 Feb
	1558z	18412	1T2	45m	14 Feb	Still active into first week of March
	1758z	10380	ITS	1h 30m	13 – 19 Feb	NRH 20 Feb
	1958z	10380	OSS	1h	14 – 20 Feb	NRH 21 Feb
	2158z	10551	SOT SST	1h 1h 30m	15 - 19 Feb 20 Feb	Still active into first week of March
	2358z					

### **Errors & Omissions**

Dates, times & changes are correct as far as we are able to determine from the logs & information available, but may be incomplete or contain errors due to the intensive nature of the schedules.

### **No Activity on 5345 kHz**

It is interesting to note that 5345kHz, usually this station's primary frequency, was not used in this series of transmissions & that the hourly marker 'dash' was also not heard on this frequency. Markers were noted on several other of the frequencies used, namely 5198, 10380 & 18412kHz.

### **Frequency Use**

The frequencies used in this series have not been previously used by M23 to our knowledge, however, it is noted that these & all previous frequencies used by the station are all within the 'Fixed' use allocations bands agreed under the International Telecommunications Union.

Previous frequencies used include;  
4822, 4951, 4980, 5345, 6937, 8030, 8166, 10184, 10381, 11530 & 20456 kHz

Thanks & credit to Ary, UDXF & Colleagues for their work & for sharing the information with ENIGMA 2000 as well as those ENIGMA members who provided additional logs & reports on this station.

## **Morse Stations - Not Number Related**

### **M21 - Russian Air Defence**

Chpa reported this old friend of ENIGMA;

3185	0404z	03 Jan	Russian Air Defence = 990705??8?????	= 990706??8?????	= 990707??8?????	[etc.]	chpa	WED
	0517z	05 Jan	Russian Air Defence = 990817??8?????				Good	chpa
	0642z	10 Jan	Russian Air Defence = 990944??8?????				Good	chpa
	0500z	26 Jan	Russian Air Defence				Moderate	FRI

Also found active in the 5MHz band by BR;

5397	1519z	03 Feb	Russian Air Defence	= 991820??8?????	= 991821??8?????	= 991822??8?????	[etc.]	Good	BR	SAT
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Each burst is sent one minute apart. Always starts with 99 followed by the time, (Moscow time). Note the time change between each sending. Uses short zero. The figure 8 indicates the identifier. When in operation the ??? are replaced with the tracking coordinates. Thanks to AB for the additional information.

### M51 XIX

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

No reports – M51b format in use

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

3881//6825	1230 - 1320z	29 Jan	Lundi-Leçon	11-2/1 Codé	11-2/2 Clair,	11-2/3 Codé,	11-2/4 Clair (420 grps/hr)	BR	MON
	1230 - 1302z	13 Feb	Mardi-Leçon	02-2/1 Codé	02-2/2 Clair,	02-2/3 Codé,	02-2/4 Clair (600 grps/hr)	BR	TUE
	1230 - 1309z	21 Feb	Mercredi-Leçon	13-2/1 Codé	13-2/2 Clair,	13-2/3 Codé,	13-2/4 Clair (720 grps/hr)	BR	WED
	1230 - 1306z	09 Feb	Jeudi- Leçon	25-2/1 Codé,	25-2/2 Clair,	25-2/3 Codé,	25-2/4 Clair (840 grps/hr)	BR	THU

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

No reports

### M89 O

This is a summary of activity from the M89 stations.

#### **M89 Freq & Call signs heard in Jan / Feb 2024**

<u>Freq in KHz</u>	<u>Call Slip</u>
3565//NRH	V BSA5 (x3) DE TP4C (x2)
4860// NRH	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?
4860// 6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K

### M95 O XSV, XSV70, XSV85

#### **M95 Morse Logs**

3642//NRH	Call Sign 3A7D	(Active daily - only first marker log has been included)			
3642//7602	Call Sign 3A7D	(Active daily - only first marker log has been included)			
3968//NRH	Call Sign SAQC	(Previously 3A7D) Suspect change in frequency and Round Slip for DKG6 DE 3A7D			
	2107z	10 Jan V YHXd (x3) DE SAQC (x2)	(SDR Japan)	BR	WED
	2019z	22 Jan V YHXd (x3) DE SAQC (x2)	(SDR Japan)	BR	MON
3968//6936	Call Sign SAQC	(Previously 3A7D) Suspect change in frequency and Round Slip for DKG6 DE 3A7D			
	2205z	12 Jan V YHXd (x3) DE SAQC (x2)	(SDR Japan)	BR	FRI
5479//10722	Call Sign SAQC	(Active daily - only first marker log has been included)			
	1059z	03 Jan V YHXd (x3) DE SAQC (x2) (IP - Cont'd)	(SDR Japan)	BR	SAT
	1130z	07 Feb V YHXd (x3) DE SAQC (x2) (IP - Cont'd)	(SDR Japan)	BR	WED
6936//NRH	Call Sign SAQC	(Previously 3A7D) Suspect change in frequency and Round Slip for DKG6 DE 3A7D			
2028z	12 Jan V YHXd (x3) DE SAQC (x2)	(SDR Japan)	BR	FRI	
	2138z	16 Feb V YHXd (x3) DE SAQC (x2)	(SDR Irkutsk)	BR	FRI
8073	Call sign XSV85	Usual format is Initial call-up in voice LSB, then to digital 4+4 mode LSB, finally, switching to CW			
	1130 - 1153z	03 Jan NR 0109 CK 240 35 02231 6241 BT	(Remote tuner S.Korea)	BR	SAT

**Spl Msg:** VVV JPL VY Best RGDS DE E2K K

## Marker Beacons (MX MXI)

3657	1416z	04 Jan	MX CW Beacon "V"	Khiva		chpa	THU
4557.9	2201z	04 Feb	MXI CW Beacon "S"	Severomorsk	Weak	BR	SUN
5153.7	2100z	02 Jan	MXI CW Beacon "D"	Sevastopol	Good	chpa	TUE
	2116z	02 Feb	MXI CW Beacon "D"	Sevastopol		HFD	FRI
	2202z	04 Feb	MXI CW Beacon "D"	Sevastopol		BR	SUN
5153.9	0636z	01 Jan	MXI CW Beacon "S"	Severomorsk	Good	chpa	MON
	0538z	14 Jan	MXI CW Beacon "S"	Severomorsk	Good	chpa	SUN
	2115z	02 Feb	MXI CW Beacon "S"	Severomorsk		HFD	FRI
	2203z	04 Feb	MXI CW Beacon "S"	Severomorsk		BR	SUN
5156.7	0630z	01 Jan	MX CW Beacon "L"	St Petersburg	Excellent	chpa	MON
	0659z	09 Jan	MX CW Beacon "L"	St Petersburg	Good	chpa	TUE
	1445z	15 Jan	MX CW Beacon "L"	St Petersburg	Weak	BR	MON
	2114z	02 Feb	MX CW Beacon "L"	St Petersburg		HFD	FRI
	2205z	04 Feb	MX CW Beacon "L"	St Petersburg		BR	SUN
	1713z	16 Feb	MX CW Beacon "L"	St Petersburg	Good	chpa	FRI
7508.7	1036z	08 Jan	MXI CW Beacon "D"	Sevastopol		HFD	MON
	2208z	04 Feb	MXI CW Beacon "D"	Sevastopol		BR	SUN
7508.9	0507z	02 Jan	MXI CW Beacon "S"	Severomorsk	Good	chpa	TUE
	1037z	08 Jan	MXI CW Beacon "S"	Severomorsk		HFD	MON
	1435z	15 Jan	MXI CW Beacon "S"	Severomorsk		BR	MON
	0907z	06 Feb	MXI CW Beacon "S"	Severomorsk		BR	TUE
7509	0637z	01 Jan	MXI CW Beacon "C"	Moscow	Good	chpa	MON
	1038z	08 Jan	MXI CW Beacon "C"	Moscow		HFD	
	1435z	15 Jan	MXI CW Beacon "C"	Moscow		BR	MON
	2210z	04 Feb	MXI CW Beacon "C"	Moscow	Weak	BR	SUN
	0907z	06 Feb	MXI CW Beacon "C"	Moscow	Fair	BR	TUE
8494.7	1433z	15 Jan	MXI CW Beacon "D"	Sevastopol	Under Digi QRM	BR	MON
	2211z	04 Feb	MXI CW Beacon "D"	Sevastopol		BR	SUN
8494.9	1432z	15 Jan	MXI CW Beacon "S"	Severomorsk	Under Digi QRM	BR	MON
8497.8	1430z	15 Jan	MX CW Beacon "L"	St Petersburg		BR	MON
	1030z	02 Feb	MX CW Beacon "L"	St Petersburg	Excellent	chpa	FRI
	2211z	04 Feb	MX CW Beacon "L"	St Petersburg		BR	SUN
	0905z	06 Feb	MX CW Beacon "L"	St Petersburg	Strong	BR	TUE
10871.7	1220z	26 Feb	MXI CW Beacon "D"	Severomorsk	Weak	BR	MON
10871.9	1424z	04 Jan	MXI CW Beacon "S"	Severomorsk	Good	chpa	THU
	1428z	15 Jan	MXI CW Beacon "S"	Severomorsk		BR	MON
	1033z	02 Feb	MXI CW Beacon "S"	Severomorsk	Good	chpa	FRI
	0903z	06 Feb	MXI CW Beacon "S"	Severomorsk		BR	TUE
10872.1	1429z	15 Jan	MXI CW Beacon "A"	Astrakhan	Weak	BR	MON
13527.7	1425z	04 Jan	MXI CW Beacon "D"	Sevastopol	Moderate	chpa	THU
	1426z	15 Jan	MXI CW Beacon "D"	Sevastopol		BR	MON
	1035z	02 Feb	MXI CW Beacon "D"	Sevastopol	Good	chpa	FRI
	0901z	06 Feb	MXI CW Beacon "D"	Sevastopol		BR	TUE
13527.9	1426z	15 Jan	MXI CW Beacon "S"	Severomorsk		BR	MON
	1037z	02 Feb	MXI CW Beacon "S"	Severomorsk	Good	chpa	FRI
	0900z	06 Feb	MXI CW Beacon "S"	Severomorsk		BR	TUE
16331.7	1418z	15 Jan	MXI CW Beacon "D"	Sevastopol		BR	MON
	1039z	02 Feb	MXI CW Beacon "D"	Sevastopol	Moderate	chpa	FRI
	0857z	06 Feb	MXI CW Beacon "D"	Sevastopol		BR	TUE
16331.9	1418z	15 Jan	MXI CW Beacon "S"	Severomorsk		BR	MON
	1038z	02 Feb	MXI CW Beacon "S"	Severomorsk	Good	chpa	FRI
	0857z	06 Feb	MXI CW Beacon "S"	Severomorsk		BR	TUE
16332.0	0858z	06 Feb	MXI CW Beacon "C"	Moscow	Fair	BR	TUE
20047.7	1432z	04 Jan	MXI CW Beacon "D"	Sevastopol	Excellent	chpa	THU
	1423z	15 Jan	MXI CW Beacon "D"	Sevastopol		BR	MON
	1041z	02 Feb	MXI CW Beacon "D"	Sevastopol	Excellent	chpa	FRI
	0855z	06 Feb	MXI CW Beacon "D"	Sevastopol		BR	TUE
20047.9	1423z	15 Jan	MXI CW Beacon "S"	Severomorsk		BR	MON
	1042z	02 Feb	MXI CW Beacon "S"	Severomorsk	Excellent	chpa	FRI

## Oddities

### More Russian Markers?

The appearance or reorganisation of the Russian channel markers still appears to be in flux, with some markers appearing for a short time only to disappear within a short time. Changes and/or temporary assignments could be related to the current Russ/Ukr radio war.

These markers logged by chpa in late January. Chpa writes;

And then there is at least tree Unidentified markers with concurrent behaviour on 5854 kHz, 5852 kHz, 6725 kHz;

5824	0505z	22 Jan	Rhythmic sound reminiscent of a buzzer concurrent behaviour on 5854, 5852, 6725 kHz	Good	chpa	MON
5852	0507z	26 Jan	Rhythmic sound reminiscent of a buzzer concurrent behaviour on 5854, 5852, 6725 kHz	Moderate	chpa	FRI
5824	0507z	26 Jan	Rhythmic sound reminiscent of a buzzer concurrent behaviour on 5854, 5852, 6725 kHz	Moderate	chpa	FRI
5852	0505z	22 Jan	Rhythmic sound reminiscent of a buzzer concurrent behaviour on 5854, 5852, 6725 kHz	Good	chpa	MON
6725	0507z	26 Jan	Rhythmic sound reminiscent of a buzzer concurrent behaviour on 5854, 5852, 6725 kHz	Moderate	chpa	FRI
6725	0505z	22 Jan	Rhythmic sound reminiscent of a buzzer concurrent behaviour on 5854, 5852, 6725 kHz	Good	chpa	MON

### 'The Goose'

3243	0622z	01 Jan	'Goose' Marker – Night Freq	USB	Moderate	chpa	MON
	0538z	12 Jan	'Goose' Marker – Night Freq	USB	Good	chpa	FRI
	0501z	26 Jan	'Goose' Marker – Night Freq	USB	Weak	chpa	FRI
	0542z	30 Jan	'Goose' Marker – Night Freq	USB	Excellent	chpa	TUE
	1710z	16 Feb	'Goose' Marker – Night Freq	USB	Good	chpa	FRI

### 'The Air Horn'

4930	1414z	04 Jan	Marker signal (Air Horn)	USB	Weak	chpa	THU
	0529z	08 Jan	Marker signal (Air Horn)	USB	Weak	chpa	MON
	0544z	12 Jan	Marker signal (Air Horn)	USB	Weak	chpa	FRI

### 'The Alarm'

4770	0527z	08 Jan	Marker Signal (The Alarm)	USB	Good	chpa	MON
	0541z	17 Jan	Marker Signal (The Alarm)	USB	Good	chpa	WED
	0504z	26 Jan	Marker Signal (The Alarm)	USB	Good	chpa	FRI

### S28      The Buzzer'

4625	0628z	01 Jan	S28	'The Buzzer' Marker	USB	Good	chpa	MON
	1413z	04 Jan	S28	'The Buzzer' Marker	USB	Moderate	chpa	THU
	0541z	14 Jan	S28	'The Buzzer' Marker	USB	Excellent	chpa	SUN
	0503z	26 Jan	S28	'The Buzzer' Marker	USB	Good	chpa	FRI
	1711z	16 Feb	S28	'The Buzzer' Marker	USB	Good	chpa	FRI
	1454z	25 Feb	S28	'The Buzzer' Marker	with music overlay	USB	Good	SUN

### S30      The Pip'

3756	0449z	02 Jan	S30	'Pip' marker (Night freq)	USB	Moderate	chpa	TUE
	1708z	16 Feb	S30	'Pip' marker (Night freq)	USB	Excellent	chpa	FRI

### 4182      T Marker'

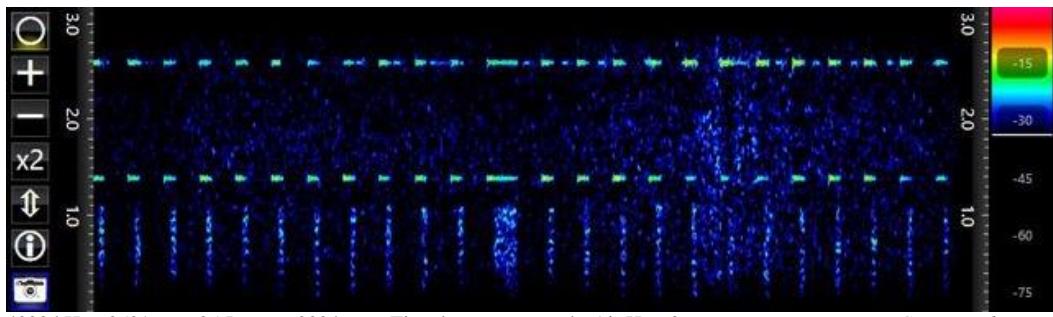
0626z	01 Jan	Normal sound from the T Marker	USB	Good	chpa	MON
1412z	04 Jan	Normal sound from the T Marker	USB	Good	chpa	THU
0551z	17 Jan	Normal sound from the T Marker	USB	Good	chpa	WED
0543z	30 Jan	Normal sound from the T Marker	USB	Excellent	chpa	TUE
1711z	16 Feb	Normal sound from the T Marker	USB	Excellent	chpa	FRI

### 4183.1//4184.1      'T Marker'

2221z	04 Feb	T Marker	BR	SUN
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### 4020      Unidentified Time Signal

0452z	02 Jan	Unid time beat signal	USB	Moderate	chpa	TUE
0509z	03 Jan	Not really the sound I recognise as the Air Horn	USB	Moderate	chpa	WED
0521z	08 Jan	Time beat type sound	USB	Good	chpa	MON
0540z	12 Jan	Time beat type sound	USB	Good	chpa	FRI



4020 kHz 0521z 05 January 2024

Time beat type sound - Air Horn?

Courtesy chpa

#### 4525 Marker Beacon

0445z

14 Jan

Alternating muffled sound almost of Squeaky Wheel type

USB

Good

chpa

SUN

All logs from chpa Monitored from Stockholm. All logs from BR monitored from UK. All logs from HFD monitored from Germany.

Contributors: AB, BR, Gert, chpa, HFD, PoSW, RNGB

*Thank you all for your logs.*

## Voice, Polytone, Tones, Hybrids and FSK

### E06

#### Jan/Feb log:

From RNGB

Monday (repeats Tuesday)	0210z	9349kHz	0310z	13413Hz	(frequencies may vary slightly)
15/01 '537' 409 31 89453.....etc	(via KiwiSDR J)		Thanks to HfD		
Thursday (repeats Friday)	0300z	14903kHz	0400z	12218kHz	(frequencies may vary slightly)
11/01 '361' 875 49 57777.....etc		Thanks to HfD			
First /Third Thursday (repeats Friday)	0600z	13945kHz	0700z	16350kHz	
04/01 '139' 847 52 70442 61496 97998 52136 33208 76852 43255 25001 51437 42491 68805 64031 25545 20613 61304 55799 29879 65358 78446 98715 81173 58816 97738 90643 95381 88921 74747 63878 81314 11434 21753 22176 44550 63194 42750 59524 00018 18829 85746 65334 16721 08099 98261 45748 43027 36091 97010 15750 85952 73417 87662 41757 847 52 00000					
18/01 '139' 274 60 79403 73474 36559 74256 40349 44983 94699 04440 26160 60908 95674 51131 43974 48216 05739 80696 46139 21269 34766 07823 07632 37632 59029 31130 82856 50846 28832 90098 84034 71120 15694 19752 48362 69861 78779 01526 86126 88996 55244 33773 26958 41019 04201 70332 06426 10686 58982 00598 60149 94320 67394 69531 17609 37650 24645 61061 12863 58110 28637 93282 274 60 00000	0600z	kHz	0700z	20085kHz	
01/02 '702' 614 53 59756 31651 34380 12569 98710 83500 69524 08291 61698 33281 72251 88984 90207 49754 67881 51723 18155 17309 27461 72226 01559 78123 47301 34168 44412 55274 33294 94530 44192 73999 75960 02561 05419 23287 27145 27043 94731 24985 14326 71542 35903 02618 53442 82344 68231 67099 46211 78734 16747 61527 69710 76911 53791 614 53 00000					
15/02 '702' 468 51 80216 98861 74318 67281 42257 41271 49645 70568 58048 72897 74927 51760 33139 70088 49934 73928 88915 20024 86820 54063 66454 83728 43903 24742 08596 50188 15012 74626 31181 36272 47844 33976 19379 12140 89761 97377 10056 56827 84457 00857 46116 73698 67951 95584 13751 20435 37333 85338 98532 33282 90695 468 51 000000	1600z	7377kHz	1630z	5410kHz	
Saturday					
06/01 '480' 516 43 80967 45241 28079 31597 38505 05049 41262 79683 27101 27079 98196 18750 15395 38349 64189 35615 17351 76929 93593 17191 93616 78234 90136 68375 92451 29019 18340 69150 28247 56485 01929 80690 65454 35182 68043 03286 67065 63212 38127 41239 47253 45282 95052 516 43 00000					
13/01 '480' 261 45 24729 37084 94265 50395 41730 26988 49467 76496 43728 59832 19021 27942 60715 06737 79307 42683 21958 83298 19129 29635 43459 13137 41271 50168 71489 32705 38026 03987 73402 94348 72428 74734 96502 35038 93919 32857 42675 54973 95107 27105 59290 83945 80165 68038 93149 261 45 00000					
20/01 '480' 169 42 54106 51624 28929 15780 50145 10126 52646 45973 15035 79632 52609 60137 72517 80816 76219 35907 47295 92783 02056 67203 75729 84140 32010 24876 03971 34249 89468 58740 95312 79056 67570 96590 92838 21654 36127 67902 25795 04586 59841 83218 02128 59738 169 42 00000					

27/01 '480' 679 41 57108 16240 10258 95646 89728 69795 81291 70312 46272 93209 13273 94104 82462 13241 41502 35838 97012 09856 60371 64575  
47208 15980 02780 03489 34791 65359 85483 68232 46257 50974 38467 75180 37290 79190 49821 51532 43858 59267 62403 87380  
79579 679 41 00000

10/02      '480' 267 44 42412 39272 26313 48106 03560 23804 20817 19813 50489 42184 01692 95310 94623 37528 92794 31720 64105 30267 25126 59156  
              01392 85792 09037 89210 23542 14562 76235 98107 32852 02863 92615 01817 63279 76180 24906 82151 56102 37168 67040 69615  
              09132 80906 27965 52131 267 44 00000

17/02 '480' 362 40 49850 - SENT OUT AS S06

<b>Sunday</b>	<b>0730z</b>	<b>9946kHz</b>	<b>0800z</b>	<b>8095khz</b>
07/01	'480' 516 43 80967.....etc			
14/01	'480' 261 45 24729.....etc			
21/01	'480' 169 42 54106.....etc			
28/01	'480' 679 41 57108.....etc			
11/02	'480' 267 44 42412.....etc			

**Other test messaging:** **0940z**    **10755kHz**

31/01    '975' 238 60 90680 79944 51713 04033 89194 38712 59248 23785 66210 54402 87552 98458 24769 70333 68715 41014 67254 61278 65936 89104  
             65203 76307 56476 63586 70632 89150 52212 15025 67298 48257 18720 62872 85343 43766 78829 57006 27753 33544 11600 16328  
             82065 95502 82632 24086 15782 98363 66669 84641 78893 08078 48424 71330 61984 72071 12557 20136 83333 48512 58766 off  
       '975' (R) (restarts at group 44)...15782 98363 66669 84641 78893 08078 48424 71330 61984 72071 12557 20136 83333 48512 58766 48852 238  
             60 00000

### **Complete message:**

'975' 238 60 90680 79944 51713 04033 89194 38712 59248 23785 66210 54402 87552 98458 24769 70333 68715 41014 67254 61278 65936 89104  
65203 76307 56476 63586 70632 89150 52212 15025 67298 48257 18720 62872 85343 43766 78829 57006 27753 33544 11600 16328  
82065 95502 82632 24086 15782 98363 66669 84641 78893 08078 48424 71330 61984 72071 12557 20136 83333 48512 58766 48852  
238 60 00000 (Many thanks to Ary)

**1210z      11073khz**

31/01 '352' 784 60 83156 97144 81550 21052 56623 03343 98944 00483 18331 45873 37715 05696 05003 01304 off  
'352' 05696 05003 01304 20427 23121 91827 35777 03842 41819 25355 63280 39023 97739 63537 39560 09656 09094 71323 33867 59533  
57519 45264 45726 45139 94745 65555 58906 74263 79422 98962 49792 16592 73822 01062 92330 97205 55087 91231 26751 08932  
50718 98840 84242 04469 92983 04060 84777 51250 51949 784 60 off  
'352' 04469 92983 04060 84777 51250 51949 784 60 00000

### **Complete message:**

'352' 784 60 83156 97144 81550 21052 56623 03343 98944 00483 18331 45873 37715 05696 05003 01304 20427 23121 91827 35777 03842 41819  
25355 63280 39023 97739 63537 39560 09656 09094 71323 33867 59533 57519 45264 45726 45139 94745 65555 58906 74263 79422  
98962 49792 16592 73822 01062 92330 97205 55087 91231 26751 08932 50718 98840 84242 04469 92983 04060 84777 54250 51949  
784 60 00000

### From PoSW:

First + Third Thursdays in the Month 0600 + 0700 UTC Schedule:-

Not much success with the 0600 UTC sending in January and February, the second transmission better:-

4-Jan-24:- Nothing readable at 0600 UTC on predicted frequency 13960 kHz from En134 of January last year, also tuning several kHz up and down. 0700 UTC, 16350 kHz calling "139", DK/GC "847 847 52 52", weak at first, became much stronger around 0708. Ended around 0713z.

5-Jan-24, Friday:- 0700 UTC, 16350 kHz, the “next day repeat”, again weak at first then became stronger.

18-Jan-24:- 0700 UTC, 16350 kHz, "139", DK/GC "274 274 60 60", signal strength up and down.

19-Jan-24, Friday:- 0700 UTC, 16350 kHz, slightly stronger than 24 hours earlier.

1-Feb-24:- 0700 UTC, 20085 kHz, call "702", DK/GC "614 614 53 53". Nothing heard at 0600z on predicted frequency 17480.

2-Feb-24, Friday:- 0700 UTC, 20085 kHz, strong signal.

15-Feb-24:- 0600 UTC, 17480 kHz, first sending audible for a change although not very strong, "702", DK/GC "468 468 51 51". 0700 UTC, 20085 kHz, weak at first then became stronger.

16-Feb-24, Friday:- nothing heard at 0600z on 17480. 0700 UTC, 20085 kHz, signal strength up and down.

Saturday 1630 UTC Schedule:-

10-Feb-24, 5410 kHz:- On the previous Saturday, the 3<sup>rd</sup>, there had been a transmission from the S06 Russian Man at this time and on this frequency; today his English-speaking colleague had been given the job:- Calling "480", same as last Saturday's S06, DK/GC "267 267 44 44", not very strong but strong enough. Ended around 1642:30s UTC.

24-Feb-24, 5410 kHz:- Call "480", DK/GC "356 356 42 42", ended after 1642 UTC.

# E07

Excellent E07 analysis from PoSW:

It looks as if the Saturday schedule, 1400 UTC start and the related Sunday 0700 UTC start have gone - at least nothing heard on those frequencies which were used in January and February of past years. Even if signals were very weak and under all the local RF noise interference it should have been possible to hear something at some point in the last two months if they were there. The last time these schedules sent anything other than a couple of minutes of a trio of zeroes appears to be in December of 2022.

That being the case it would appear that in 2024 there are only two E07 schedules left, unless someone knows otherwise:-

## Saturday + Thursday Schedule, 1410 UTC Start:-

6-Jan-24, Saturday:- Predicted frequencies for this month are 11593 + 10293 + 9293 kHz, nothing readable from the first two transmissions, local RF noise interference extremely overpowering in this part of the short-wave spectrum. just a brief few seconds of copy from the third:- 1450 UTC, 9293 kHz, could just hear "916 916 916 1", everything else unreadable.

Nothing readable from this one until the very end of the month:-

27-Jan-24, Saturday:- 1410 UTC, 11593 kHz, "916 916 916 000", over-riding local interference.  
1430 UTC, 10393 kHz, very weak.

Things were a bit better in February:-

3-Feb-24, Saturday:- 1410 UTC, 13368 kHz, "745 745 745 1", DK/GC "2097 87" x 2, good signal, local interference not so much of an issue above 12000 or so.  
1430 UTC, 12168 kHz, strong signal. Nothing heard at 1450 UTC on 11168 which is in local QRM territory.

8-Feb-24, Thursday:- 1410 UTC, 13368 kHz, "745 745 745 000", good signal.  
1430 UTC, 12168 kHz, slightly weaker.

15-Feb-24, Thursday:- 1430 UTC, 12168 kHz, arrived home just in time to catch the second sending, "745 745 745 1", message, DK/GC "466 122" x 2, strong.

Nothing heard at 1450 UTC.

17-Feb-24, Saturday:- 1410 UTC, 13368 kHz, "745" and "466 112" again, strong signal.  
1430 UTC, 12168 kHz, also strong.

Nothing heard from the third sending, no doubt was a weak signal under the S9 interference.

22-Feb-24, Thursday:- 1410 UTC, 13368 kHz, "745 745 745 000", strong signal.  
1430 UTC, 12168 kHz, slightly weaker.

## Tuesday + Friday Schedule, 1500 UTC Start:-

2-Jan-24, Tuesday:- 1500 UTC, 13375 kHz, "313 313 313 000", strong signal.  
1520 UTC, 12175 kHz, also strong.

5-Jan-24, Friday:- 1500 UTC, 13375 kHz, "313 313 313 000", strong.  
1520 UTC, 12175 kHz, also strong but went off air after a few seconds. Stayed with it for a couple of minutes, did not hear it return.

9-Jan-24, Tuesday:- 1500 UTC, 13375 kHz, "313 313 313 1", message, DK/GC "9127 112" x 2, strong, ended 1511:50s UTC.  
1520 UTC, 12175 kHz, went off briefly during the call/preamble routine, weaker signal than the first sending.  
1540 UTC, 10375 kHz, nothing heard at first on the predicted frequency for the third sending, became just audible around 1543z, a bit clearer by 1546.

16-Jan-24, Tuesday:- 1500 UTC, 13375 kHz and 1520 UTC, 12175 kHz, "313 313 313 000".

19-Jan-24, Friday:- 1500 UTC, 13375 kHz, "313 313 313 000", very strong signal.  
1520 UTC, 12175 kHz, slightly weaker.

23-Jan-24, Tuesday:- 1500 UTC, 13375 kHz, "313 313 313 1", message, DK/GC "554 132" x 2, strong signal but another example of transmission failure, went off air approx 1513z, came back with the "313...1" routine then into 5F groups, ended around 1514:30s.  
1520 UTC, 12175 kHz, weaker signal than the first sending.  
Nothing readable from the third sending on 10375.

26-Jan-24, Friday:- 1500 UTC, 13375 kHz, "313" and "554 132" again, strong.  
1520 UTC, 12175 kHz, slightly weaker.  
Again, nothing heard at 1540z on 10375.

30-Jan-24, Tuesday:- 1500 UTC, 13375 kHz, "313 313 313 000", strong.  
1520 UTC, 12175 kHz, slightly weaker.

2-Feb-24, Friday:- 1500 UTC, 15858 kHz, "841 841 841 000", strong signal.  
1520 UTC, 14458 kHz, also strong.

6-Feb-24, Tuesday:- 1500 UTC, 15858 kHz, "841 841 841 1", message, DK/GC "7747 98" x 2, strong signal.  
1520 UTC, 14458 kHz, strong and at times very strong.  
1540 UTC, 12158 kHz, weakest of the three transmissions.

9-Feb-24, Friday:- 1500 UTC, 15858 kHz, "841" and "7747 98" again, strong.  
1520 UTC, 14458 kHz, strong.  
1540 UTC, 12158 kHz, weaker.

13-Feb-24, Tuesday:- 1500 UTC, 15858 kHz, "841 841 841 000".

1520 UTC, 14458 kHz, strong signal but with interference, wide-band pulse/buzz extending from about 14430 to 14463 kHz, such noise always somewhere on the short-wave spectrum these days, generally thought to be someone's over-the-horizon radar, I think.

16-Feb-24, Friday:- 1500 UTC, 15858 kHz, strong signal and 1520 UTC, 14458 kHz, also strong, no interference today, "841 841 841 000".

20-Feb-24, Tuesday:- 1500 UTC, 15858 kHz, "841 841 841 1", DK/GC "106 150", a longer message than most, ended just before 1515 UTC so a total transmission time of just under a quarter of an hour.  
1520 UTC, 14458 kHz, strong signal.  
1540 UTC, 12158 kHz, signal strength up and down.

23-Feb-24, Friday:- 1500 UTC, 15858 kHz, "841" and "106 150" again, good signal.  
1520 UTC, 14458 kHz and 1540 UTC, 12158 kHz, both good signals.

27-Feb-24, Tuesday:- 1500 UTC, 15858 kHz, "841 841 841 000", strong signal.  
1520 UTC, 14458 kHz, also strong.

Onto others' logs:

## Sunday

### January 2024

<b>0700z</b>	<b>9326kHz</b>	<b>0720z</b>	<b>10426kHz</b>	<b>0740z</b>	<b>11526kHz</b>
07/01		NRH			
14/01		NRH			
SUNDAY 21 <sup>st</sup> January 2024			NOT MONITORED		
28/01		NRH		BC Stns evident 0700/0720z	

### February 2024

<b>0700z</b>	<b>9326kHz</b>	<b>0720z</b>	<b>10426kHz</b>	<b>0740z</b>	<b>11526kHz</b>
04/02		NRH, with local QRM3 across all three freqs			
11/02		NRH			
18/02		NRH			

## Tuesday/Friday

### January 2024

<b>1500z</b>	<b>13375kHz</b>	<b>1520z</b>	<b>12175kHz</b>	<b>1540z</b>	<b>10375kHz</b>
02/01	313 000			Fair	
05/01	313 000			Fair, 1520z 9s only then LOS	
09/01	313 1 9127 112 21181 ... 84870 000 000			1520z Strong, rest Fair	[PLdn: Weak]
12/01	313 1 9127 112 21181 ... 84870 000 000			1500z Strong, 1520z Weak, 1540z Fair	
16/01	313 000			Fair	
19/01	313 000			Fair	
23/01	313 1 554 132 09469 ... 80011 95 000 000			1500z (TX Stopped at GRP122 restart at 313 x 3 at GRP112 to End 1516z) 1540z Weak, rest strong	[PLdn: 1540z Weak, rest Fair]
26/01	313 1 554 132 09469 ... 84302 000 000			Fair	

### February 2024

<b>1500z</b>	<b>15858kHz</b>	<b>1520z</b>	<b>14458kHz</b>	<b>1540z</b>	<b>12158kHz</b>
02/02	841 000			Strong 1500z QRM2.	
07/02	841 1 7747 98 28976 ... 69416 000 000			Fair	
09/02	841 1 7747 98 28976 ... 69416 000 000			1520z Strong, rest Weak	
13/02	841 000			1520z Fair, 1500z Weak	
16/02	841 000			1500z Weak, 1520z Strong	

20/02	841 1 106 150 24930 ... 13149 000 000	1500z Weak, 1520z Strong, 1540z Fair
23/02	841 1 106 150 24930 ... 13149 000 000	Fair
27/02	841 000	Weak

#### Thursday/Saturday

##### January 2024

<b>1410z</b>	<b>11593kHz</b>	<b>1430z</b>	<b>10293kHz</b>	<b>1450z</b>	<b>9323kHz</b>	
04/01	916 1 676 99 27380 ... 51170 000 000					Weak ~10m duration
06/01	916 1 676 99 27380 ... 51170 000 000					Weak Restarted at grp56: 916 x 3 continued to 51170 000 000 Ending 1503z
11/01	916 000					Weak
13/01	916 000					1410z Fair, 1430z Weak
18/01	916 1 721 56 87641 ... 99462 000 000					Weak
20/01	916 1 721 56 87641 ... 99462 000 000					Weak
27/01	916 000					Fair

##### February 2024

<b>1410z</b>	<b>13368kHz</b>	<b>1430z</b>	<b>12168kHz</b>	<b>1450z</b>	<b>11168kHz</b>	
01/02	745 1 2097 87 27416 ... 11075 000 000					Weak
08/02	745 000					Weak
10/02	745 000					1410z Weak, 1430z Fair
15/02	745 1 466 112 64389 to 24572 000 000					Fair, 1410z Weak
17/02	745 1 466 112 64389 to 24572 000 000					Weak
22/02	745 000					Fair
29/02	745 1 839 81 99915 ... 61547 000 000					Weak

#### Saturday

##### January 2024

<b>1400z</b>	<b>10323kHz</b>	<b>1420z</b>	<b>9123kHz</b>	<b>1440z</b>	<b>8023kHz</b>
06/01	NRH				

##### February 2024

<b>1400z</b>	<b>11464kHz</b>	<b>1420z</b>	<b>10764kHz</b>	<b>1440z</b>	<b>9264kHz</b>
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Believed Closed

## E11&E11a log Jan/Feb

4505kHz	1910z	06/01 [393/00] Out 1913z S7	Malc	SAT
	1910z	13/01 [395/00] Out 1913z S9	Malc	SAT
	1910z	17/01 [393/00] Out 1913z S5	Malc	WED
	1910z	20/01 [391/00] Out 1913z S9	Malc	SAT
	1910z	24/01 [395/32 99985.....36215] Out 1920z S5	Malc	WED
	1910z	31/01 [393/00] Out 1913z S7	Malc	WED
	1610z	10/02 [394/38 51743.....24829] Out 1621z S6 M8 SAT (New Time)	Malc	SAT
	1610z	14/02 [395/00] Out 1613z S7	Malc, HfD	WED
	1610z	17/02 [393/00] Out 1613z S4	Malc	SAT
	1610z	21/02 [399/00] Out 1613z S6	Malc	WED

4909kHz	1300z	01/01 [311/00] Out 1303z S3	(Dutch SDR)	Malc	MON
	1300z	04/01 [313/00] Out 1303z S3	(Dutch SDR)	Malc	THU
	1530z	06/01 [365/00] Out 1533z S9		Malc	SAT
	1530z	07/01 [368/00] Out 1533z S4		Malc	SUN
	1530z	13/01 [367/00]		Gary H	SAT
	1530z	14/01 [363/00] Out 1533z S8		Malc	SUN
	1300z	15/01 [316/36 54441.....52929] Out 1310z S2	(Dutch SDR)	Malc	MON
	1530z	20/01 [366/00] Out 1533z S4		Malc	SAT
	1300z	22/01 [314/00] Out 1303z S4	(Finnish SDR)	Malc	MON
	1530z	27/01 [365/39 96882.....51568] Out 1541z		Malc	SAT
	1530z	28/01 [365/39 96882.....51568] Out 1541z S3		Malc	SUN
	1300z	01/02 [314/00] Out 1303z S5	(Finnish SDR)	Malc	THU
	1300z	08/02 [313/00] Out 1303z S5	(Finnish SDR)	Malc	THU
	1645z	10/02 [369/00] Out 1648z S7	(New time)	Malc	SAT
	1645z	11/02 [363/00] Out 1648z S5		Malc	SUN
	1300z	12/02 [315/00] Out 1303z S3	(Dutch SDR)	Malc	MON
	1300z	15/02 [312/00] Out 1303z S2	(Dutch SDR)	Malc	THU
	1645z	17/02 [363/33 68826 90467 31333 95441 11456 82930 26837 85841.....71694] Out 1655z S6		Gary H, Malc	SAT
	1300z	22/02 [313/36 09495.....05159] Out 1311z S4	(Dutch SDR)	Malc	THU
	1645z	24/02 [365/00] Out 1648z		Brixmis, Gary H	SAT
	1300z	26/02 [311/00] Out 1303z S9	(Finnish SDR)	Malc	MON
	1300z	29/02 [314/00] Out 1303z S4	(Dutch SDR)	Malc	THU
5082kHz	2000z	04/01 [525/00] Out 2003z S3		Malc	THU
	2000z	07/01 [520/00] Out 2003z S7		Malc	SUN
	1715z	10/01 [975/00] Out 1719z S7		Malc	WED
	1715z	12/01 [977/00] Out 1718z S3		Malc	FRI
	2000z	14/01 [525/35 27013.....66624] Out 2010z S6		Malc	SUN
	1715z	17/01 [974/34 89280.....68128] Out 1725z S7		Malc	WED
	2000z	18/01 [521/00] Out 2003z S4		Malc, Brixmis	THU
	1715z	24/01 [974/00] Out 1718z S5		Malc	WED
	1530z	26/01 [978/00] Out 1533z S7		Malc	FRI
	2000z	28/01 [525/00] Out 2003z S6		Malc	SUN
	1715z	31/01 [978/00] Out 1718z S5		Malc	WED
	1715z	07/02 [974/00] Out 1718z S9		Malc	WED
	2000z	08/02 [524/00] Out 2003z S5		Malc, Brixmis	THU
	1715z	09/02 [976/00] Out 1718z S9		Malc	FRI
	2000z	11/02 [525/00] Out 2003z S5		Malc	SUN
	1715z	14/02 [972/00] Out 1718z S7		Malc	WED
	2000z	15/02 [520/40 79020 ..... 45083] Out 2011z S4		Malc	THU
	1715z	16/02 [970/00] Out 1718z S6		Malc	FRI
	1715z	21/02 [977/37 36742.....54742] Out 1726z S6		Malc	WED
	2000z	25/02 [528/00] Out 2003z S5		Malc	SUN
	2000z	29/02 [525/00] Out 2003z S4		Malc	THU
5371kHz	0700z	07/01 [498/39 95690.....02528] Out 0711z S3		Malc	SUN
	0700z	27/01 [490/00] Good		RNGB	SAT
	0700z	17/02 [496/00]		HfD	SAT
	0700z	25/02 [495/00] Out 0703z S2		Malc	SUN
5409kHz	1530z	11/01 [264/37 99000.....73770] Out 1540z S9		Malc	THU
	1530z	18/01 [268/00] Out 1533z S4		Malc	THU
	1530z	01/02 [266/00] Out 1533z S3		Malc, Gary H	THU
	1530z	08/02 [269/00] Out 1533z S5		Malc	THU
	1530z	22/02 [266/00] Out 1533z S7		Malc	THU
	1530z	29/02 [262/40 74312.....83262] Out 1541z S2		Malc	THU
5432kHz	1605z	02/01 [231/00] Out 1608z S8		Malc	TUE
	1605z	07/01 [236/00] Out 1608z S9		Malc	SUN
	1605z	09/01 [235/00] Out 1608z S9		Malc, Gary H	TUE
	1605z	14/01 [230/00] Out 1608z S9		Malc	SUN
	1605z	16/01 [237/00] Out 1608z S5		Malc, Brixmis, Gary H	TUE
	1605z	23/01 [230/32 36288 70039 12073 95501 56126 17149 84835 26621 20973.....20698 37674]		Gary H	TUE
	1605z	30/01 [233/00] Out 1608z S5		Malc	TUE
	1605z	06/02 [230/00] Good		RNGB, Malc	TUE
	1605z	11/02 [237/00] Out 1608z S6		Malc, Gary H	SUN
	1605z	13/02 [230/37 38505.....93807] Out 1616z S9		Malc	TUE
	1605z	20/02 [237/00] Out 1608z S9		Malc, Gary H	TUE
	1605z	25/02 [368/00] Out 1608z S5		Malc	SUN
	1605z	27/02 [230/00] Out 1608z S5		Malc	TUE
5779kHz	1730z	04/01 [413/00] Out 1733z S4		Malc	THU

1730z	11/01 [410/39 59499.....17954] Out 1741z S7	Malc	THU
1730z	01/02 [410/00] Out 1733z S5	Malc	THU
1730z	08/02 [412/00] Out 1733z S4	Malc	THU
1730z	15/02 [412/39 44404 44642 87405 26824 34540 80434 16380.....37699 05320]	Gary H	THU
1730z	22/02 [418/00] Out 1733z S6	Malc, Gary H	THU
1730z	29/02 [410/00] Out 1733z S3	Malc	THU
6804kHz	0700z 02/01 [579/00] Out 0703z S4	Malc	TUE
	0700z 09/01 [577/40 05853.....86424] Out 0711z S5	Malc	TUE
	0700z 16/01 [571/00] Out 0703z S4	Malc	TUE
	0700z 19/01 [573/00] Out 0703z S5	Malc	FRI
	0700z 23/01 [576/00] Out 0703z S3	Malc	TUE
	0700z 26/01 [575/00] Out 0704z S4	Malc	FRI
	0700z 30/01 [576/00] Out 0703z S4	Malc	TUE
	0700z 06/02 [573/00] Out 0703z S6	Malc	TUE
	0700z 13/02 [573/00] Out 0703z S7	Malc	TUE
	0700z 16/02 [577/00] Good	RNGB, Malc	FRI
	0700z 20/02 [576/37 26422 59935 40182 37762 77546 78516.....50561 12694] Out 0711z S4	RNGB, Malc	TUE
6849kHz	1900z 01/01 [646/00] Out 1903z S3 (Dutch SDR)	Malc	MON
	1900z 04/01 [648/00] Out 1903z S6	Malc	THU
	1815z 07/01 [922/00] Out 1818z S4	Malc	SUN
	1900z 08/01 [647/40 70814.....16198] Out 1912z S4 (Finnish SDR)	Malc	MON
	1900z 15/01 [649/00] Out 1903z S7	Malc	MON
	1900z 18/01 [646/00] Out 1903z S7	Malc	THU
	1815z 19/01 [922/00] Out 1818z S5	Malc	FRI
	1900z 22/01 [644/00] Out 1903z S5	Malc	MON
	1815z 28/01 [927/00] Out 1818z S7	Malc	SUN
	1815z 04/02 [929/36 87684 38790 70470 01955 32340 19266 15009 22182.....27462 29897] Strong	dMHz, Brixmis	SUN
	1900z 05/02 [648/37 17192 61939 90132 76677 77261 42415 31934 35734..... 94469 35699] Out 1910z	Brixmis	MON
	1815z 11/02 [925/00] Out 1815z S6	Malc	SUN
	1900z 12/02 [643/00] Out 1903z S8	Malc, Brixmis	MON
	1900z 15/02 [643/00] Out 1903z S9	Malc	THU
	1815z 16/02 [926/00] Out 1818z S6	Malc	FRI
	1815z 18/02 [921/00] Out 1818z S7	Malc	SUN
	1900z 19/02 [640/00] Out 1903z S3	Malc	MON
	1815z 23/02 [921/00] Out 1818z S5	Malc	FRI
	1900z 26/02 [649/00] Out 1903z S7	Malc	MON
	1900z 29/02 [641/00] Out 1903z S4	Malc	THU
6986kHz	0820z 04/01 [434/00] Strong	RNGB, Malc	THU
	0820z 05/01 [439/00] Good	RNGB	FRI
	0820z 11/01 [439/00] Out 0823z S2	Malc	THU
	0820z 12/01 [436/00] Out 0823z S2	Malc	FRI
	0820z 18/01 [435/00] Out 0823z S3	Malc	THU
	0820z 19/01 [438/00] Out 0823z S3	Malc	FRI
	0820z 26/01 [436/33 20974 84100 09615 05893 03545 11738 85129 87062.....59126 82890]	RNGB	THU
	0820z 01/02 [431/00] Out 0823z S4	Malc	THU
	0820z 08/02 [435/00] Out 0823z S2	Malc	THU
	0820z 09/02 [432/00] Out 0823z S3	Malc	FRI
	0820z 15/02 [435/00] Out 0823z S2	Malc	THU
	0820z 22/02 [432/32 39467 41275 28532 34536 94978 35949 69983.....40266 59286]	RNGB	THU
	0820z 29/02 [431/00] Out 0823z S3	Malc	THU
7469kHz	0930z 04/01 [276/39 93424 32279 47501 70796 11010 56762 66086.....15905 9918 87004] Good	RNGB, Malc	THU
	0930z 10/01 [273/00] Out 0933z S2	Malc	WED
	0930z 11/01 [270/00] Out 0933z S2	Malc	THU
	0930z 17/01 [279/00] Out 0933z S2	Malc	WED
	0930z 18/01 [270/00] Out 0933z S2	Malc	THU
	0930z 24/01 [275/00] Out 0933z S2	Malc	WED
	0930z 31/01 [277/00] Out 0933z S2	Malc	WED
	0930z 01/02 [275/00] Out 0933z S2	Malc	THU
	0930z 07/02 [279/00] Out 0933z S2	Malc	WED
	0930z 08/02 [270/00] Out 0933z S2	Malc	THU
	0930z 14/02 [277/00] Out 0933z S2	Malc	WED
	0930z 21/02 [275/35 48762.....26002] Out 0941z S3	Malc	WED
	0930z 29/02 [271/00] Out 0933z S2	Malc	THU
9079kHz	1000z 09/01 [300/00] Out 1003z S5	Malc	TUE
	1000z 12/01 [307/00] Out 1003z S5	Malc	FRI
	1000z 16/01 [300/00] Out 1003z S3	Malc	TUE
	1000z 19/01 [300/00] Out 1003z S4	Malc	FRI

1000z	23/01 [306/23 42592 49140 48195 23797 90345 78861 77471 72885.....02883 72576] Good	RNGB	TUE
1000z	30/01 [305/00] Out 1003z S3	Malc	TUE
1000z	06/02 [300/00] Out 1003z S3	Malc	TUE
1000z	09/02 [300/00] Out 1003z S4	Malc	FRI
1000z	13/02 [304/00] Out 1003z S5	Malc, Brixmis	TUE
1000z	16/02 [309/00] Out 1003z S4	Malc	FRI
1000z	20/02 [308/25 10233.....53963] Out 1008z S3	Malc	TUE
1000z	27/02 [308/00] Out 1003z S3	Malc	TUE
9130kHz	0715z 02/01 [637/32 96164 55497 79449 00094 86165 11426 66156.....06365 75598]	RNGB, Malc	TUE
	0715z 09/01 [639/00] Out 0718z S5	Malc	TUE
	0715z 16/01 [636/00] Out 0718z S5	Malc	TUE
	0715z 19/01 [139/00] Out 0718z S5	Malc	FRI
	0715z 23/01 [635/00] Out 0718z S4	Malc	TUE
	0715z 26/01 [631/00] Out 0718z S5	Malc	FRI
	0715z 30/01 [637/00] Out 0718z S6	Malc	TUE
10213kHz	0745z 01/01 [268/00] Out 0748z S3	Malc	MON
	0745z 08/01 [264/37 99000.....73370] Out 0755z S3	Malc	MON
	0745z 15/01 [262/00] Out 0848z S7	Malc	MON
	0745z 22/01 [269/00] Out 0748z S4	Malc	MON
	0745z 29/01 [262/00] Out 0748z S9	Malc	MON
	0745z 12/02 [261/00] Good	RNGB	MON
	0745z 12/02 [261/00] Out 0748z S9	Malc	MON
	0745z 19/02 [261/00] Good	RNGB, Malc	MON
	0745z 26/02 [262/40 74312.....83262] Out 0756z S8	Malc	MON
10487kHz	1910z 07/01 [617/00] Out 1913z S2 (Dutch SDR)	Malc	SUN
	1910z 14/01 [616/37 09225.....82878] Out 1921z S2 (Dutch SDR)	Malc	SUN
	1910z 19/01 [616/00] Out 1913z S2	Malc	FRI
	1910z 28/01 [611/00] Out 1913z S7	Malc	SUN
	1910z 16/02 [610/00] Out 1913z S7	Malc	FRI
	1910z 18/02 [612/00] Out 1913z S9	Malc	SUN
	1910z 23/02 [613/32 95964..... 36945] Out 1920z S3	Malc	FRI
11092kHz	0900z 01/01 [536/00] Out 0903z S6	Malc	MON
	0900z 08/01 [530/00] Out 0903z S4	Malc	MON
	0900z 10/01 [536/00] Out 0903z S6	Malc	WED
	0900z 15/01 [538/00] Out 0903z S6	Malc	MON
	0900z 17/01 [536/00] Strong	RNGB, Malc	WED
	0900z 22/01 [536/00] Out 0903z S4	Malc	MON
	0900z 24/01 [538/00] Out 0903z S4	Malc	WED
	0900z 31/01 [537/39 70338.....48712] Out 0911z S4	Malc	WED
11100kHz	1045z 01/10 [692/00] Out 1048z S7	Malc	MON
	1045z 08/01 [697/39 88307.....86931] Out 1048z S5	Malc	MON
	1045z 17/01 [690/00] Out 1048z S5	Malc	WED
	1045z 22/01 [698/00] Out 1048z S3	Malc	MON
	1045z 24/01 [697/00] Out 1048z S5	Malc	WED
	1045z 31/01 [698/00] Out 1048z S7+QRM	Malc	WED
	1045z 07/02 [691/00] Out 1048z S5	Malc	WED
	1045z 12/02 [692/40 50975.....71738] Out 1056z S4	Malc	MON
	1045z 19/02 [693/00] Out 1045z S5	Malc	MON
	1045z 21/02 [693/00] Out 1048z S5	Malc	WED
	1045z 26/02 [693/00] Out 1048z S6	Malc	MON
	1045z 28/02 [691/00] Out 1048z S5	Malc	WED
11104kHz	0715z 10/01 [754/40 82816 54740 66495 73350 93970 47079 58698.....93036 59636] Fair	RNGB	WED
	0715z 15/01 [754/00] Out 0718z S5	Malc	MON
	0715z 22/01 [752/00] Out 0718z S4	Malc	MON
	0715z 24/01 [753/00] Out 0718z S7	Malc	WED
	0715z 29/01 [753/00] Out 0718z S5	Malc	MON
	0715z 31/01 [751/00] Out 0703z S5	Malc	WED
	0715z 07/02 [750/00] Heavy QRM	RNGB, Malc	WED
	0715z 12/02 [751/31 62710.....38327] Out 0725z S7	Malc	MON
	0715z 19/02 [751/00] Out 0718z S6	Malc	MON
	0715z 21/02 [753/00] Out 0718z S5	Malc	WED
0717z	26/02 [751/00] Out 0720z S9 (Late Start)	Malc	MON
0715z	28/02 [754/00] Out 0718z S5	Malc	WED

11559kHz	1205z	02/01 [461/00] Out 1208z S4+QRM		Malc	TUE
	1205z	09/01 [469/00] Out 1208z S6		Malc	TUE
	1205z	10/01 [465/00] Out 1208z S5		Malc	WED
	1205z	16/01 [465/35 21039.....85437] Out 1215z 5+QRM		Malc	TUE
	1205z	23/01 [461/00] Out 1208z S5		Malc	TUE
	1205z	24/01 [466/00] Out 1208z S4		Malc	WED
	1205z	30/01 [460/00] Out 1208z S3		Malc	TUE
	1205z	31/01 [469/00] Out 1208z S5		Malc	WED
	1205z	06/02 [461/00] Out 1208z S5		Malc	TUE
	1205z	07/02 [460/00] Out 1208z S5		Malc	WED
	1205z	13/02 [464/00] Out 1208z S5		Malc	TUE
	1205z	14/02 [469/00] Out 1208z S5		Malc	WED
	1205z	20/02 [460/00] Out 1208z S9		Malc	TUE
	1205z	21/02 [460/00] Out 1208z S6		Malc	WED
	1205z	27/02 [461/38 22901.....74909] Out 1216z S6		Malc	TUE
12067kHz	0845z	01/01 [714/00] Good	RNGB, Malc	MON	
	0845z	08/01 [715/00] Good	RNGB, Malc	MON	
	0845z	10/01 [714/00] Out 0848z S6	Malc	WED	
	0845z	15/01 [714/00] Out 0848z S6	Malc	MON	
	0845z	17/01 [714/00] Out 0848z S5	Malc	WED	
	0845z	22/01 [719/00] Out 0848z S3	Malc	MON	
	0845z	24/01 [714/00] Out 0848z S3	Malc	WED	
	0845z	29/01 [713/34 79757.....86965] Out 0855z S4	Malc	MON	
	0845z	07/02 [718/00] Out 0848z S7	Malc	WED	
	0845z	12/02 [719/00] Good	RNGB	MON	
	0845z	12/02 [719/00] Out 0848z S6	Malc	MON	
	0845z	14/02 [711/00] Out 0848z S9	Malc	WED	
	0845z	19/02 [715/00] Out 0848z S5	Malc	MON	
	0845z	21/02 [713/00] Out 0748z S6	Malc	WED	
	0845z	28/02 [713/30 91936.....52935] Out 0855z S5	Malc	WED	
12924kHz	1745z	08/01 [247/30 31363.....27984] Out 1754z S3 (Polish SDR)		Malc	MON
	1745z	15/01 [248/00] Out 1748z S2 (Polish SDR)		Malc	MON
	1745z	22/01 [245/00] Out 1748z S2		Malc	MON
	1745z	28/01 [247/00] Out 1748z S2		Malc	SUN
	1745z	04/02 [247/00] Fair	dMHz, Brixmis	SUN	
	1745z	11/02 [247/34 99665.....74801] Out 1748z S6	Malc	SUN	
	1745z	12/02 [244/00] Out 1748z S8	Malc	MON	
	1745z	18/02 [240/00] Out 1748z S3	Malc, Gary H	SUN	
	1745z	19/02 [246/00] Out 1748z S8	Malc	MON	
	1745z	25/02 [246/00] Out 1748z S9+20	Malc	SUN	
	1745z	26/02 [247/00] Out 1748z S5	Malc	MON	
13363kHz	1430z	02/01 [912/00] Out 1433z S4		Malc	TUE
	1430z	06/01 [917/00] Out 1433z S5		Malc	SAT
	1430z	09/01 [912/37 57075.....01031] Out 1440z S6		Malc	TUE
	1430z	16/01 [915/00] Out 1433z S7		Malc	TUE
	1433z	20/01 [918/00] Out 1436z S5 M8 SAT (Started 3mins Late)		Malc	SAT
	1430z	23/01 [918/00] Out 1433z S7		Malc	TUE
	1430z	27/01 [915/00] Out 1433z S5		Malc	SAT
	1430z	30/01 [918/00] Out 1433z S6		Malc	TUE
	1430z	06/02 [918/34 31761.....41803] Out 1440z S7		Malc	TUE
	1430z	13/02 [915/00] Out 1433z S9		Malc	TUE
	1430z	17/02 [914/00] Out 1433z S5		Malc	SAT
	1430z	20/02 [912/00] Out 1433z S5		Malc	TUE
	1430z	27/02 [918/00] Out 1433z S7		Malc	TUE
13908kHz	0745z	02/01 [223/00] Out 0748z S9		Malc	TUE
	0745z	04/01 [227/00] Out 0748z S4		Malc	THU
	0745z	09/01 [229/36 80065 35388 98341 11980 05701 34752 54090 43020.....95530 49093] Strong	RNGB	TUE	
	0745z	16/01 [227/00] Out 0748z S3		Malc	TUE
	0745z	18/01 [224/00] Good	RNGB, Malc	THU	
	0745z	23/01 [227/00] Out 0748z S9		Malc	TUE
	0745z	25/01 [223/00] Good	RNGB	THU	
	0745z	30/01 [223/00] Out 0748z S5		Malc	TUE
	0745z	01/02 [227/00] Out 0748z S9		Malc	THU
	0745z	06/02 [229/00] Good	RNGB	TUE	
	0745z	08/02 [221/00] Out 0748z S7		Malc	THU
	0745z	13/02 [225/39 27053.....75368] Out 0756z S5		Malc	TUE
	0745z	20/02 [223/00] Good	RNGB, Malc	TUE	
	0745z	27/02 [228/00] Out 0748z S6		Malc	TUE

0745z	29/02 [227/00] Out 0748z S7	Malc	THU
14611kHz 0820z	02/01 [138/00] Good	RNGB, Malc	TUE
0820z	03/01 [134/00] Good	RNGB	WED
0820z	09/01 [132/00] Strong	RNGB, Malc	TUE
0820z	10/01 [136/00] Strong	RNGB, Malc	WED
0820z	16/01 [13/00] Out 0823z S5	Malc	TUE
0820z	17/01 [131/00] Out 0723z S6	Malc	WED
0820z	23/01 [133/00] Good	RNGB, Malc	TUE
0820z	24/01 [136/00] Out 0823z S5	Malc	WED
0820z	30/01 [133/36 77529.....87900] Out 0830z S5	Malc	TUE
0820z	06/02 [132/00] Out 0823z S6	Malc	TUE
0820z	07/02 [136/00] Good	RNGB, Brixmis	WED
0820z	13/02 [133/00] Out 0823z S7	Malc	TUE
0820z	14/02 [135/00] Good	RNGB	WED
0820z	20/02 [132/32 88507 08719 98754 63038 93019 08540 02543 41892.....40610 32531] Fair	RNGB, Malc	TUE
0820z	27/02 [133/00] Out 0823z S6	Malc	TUE
0820z	28/02 [131/00] Out 0823z S6	Malc	WED
14975kHz 0715z	09/02 [635/00] Out 0718z S9	Malc	FRI
0715z	13/02 [636/39 60575.....15534] Out 0726z S5	Malc	TUE
0715z	16/02 [636/39 60575 07646 72556 16149 33743 06365 65592 65341.....74115 15534] Good	RNGB	FRI
0715z	20/02 [631/00] Good	RNGB, Malc	TUE
0715z	23/02 [633/00] Out 0718z S7	Malc	FRI
0715z	27/02 [631/00] Out 0718z S4	Malc	TUE
15915kHz 0900z	07/02 [535/00] Out 0903z S9	Malc, Brixmis	WED
0900z	12/02 [532/00] Out 0903z S9	Malc, HfD	MON
0900z	14/02 [532/00] Out 0903z S8	Malc	WED
0900z	19/02 [535/00] Good	RNGB, Malc	MON
0900z	21/02 [537/00] Out 0903z S7	Malc	WED
0900z	26/02 [536/39 09580.....61493] Out 0911z S7	Malc	MON
17378kHz 0845z	02/01 [154/00] Out 0848z S2	Malc	TUE
0845z	04/01 [151/00] Fair	RNGB, Malc	THU
0745z	05/01 [344/00] Weak	RNGB	FRI
0845z	09/01 [154/00] Out 0848z S6	Malc	TUE
0745z	10/01 [344/00] Fair	RNGB, Malc	WED
0845z	11/01 [151/00] Out 0848z S7	Malc	THU
0745z	12/01 [348/00] Out 0748z S2	Malc	FRI
0845z	16/01 [151/36 54517 51611 14837 14170 67584 76811 50038 73489.....82210 66617]	RNGB	TUE
0745z	17/01 [343/32 34757.....59886] Out 1755z S4	Malc	WED
0845z	18/01 [151/36 54517.....66617] Out 0855z S4	Malc	THU
0845z	23/01 [154/00] Out 0848z S6	Malc	TUE
0745z	24/01 [348/00] Out 0748z S5	Malc	WED
0745z	26/01 [349/00] Out 0748z S6	Malc	FRI
0845z	30/01 [159/00] Good	RNGB	TUE
0845z	30/01 [159/00] Out 0848z S9	Malc	TUE
0745z	31/01 [340/00] Out 0748z S4	Malc	WED
0845z	01/02 [156/00] Out 0848z S9	Malc	THU
0845z	06/02 [159/00] Good	RNGB, Malc, Brixmis	TUE
0745z	07/02 [343/36 35526 30080 51941 38544 58846 40160 10964 63629.....86752 30874] Weak	RNGB	WED
0845z	08/02 [152/00] Out 0848z S8	Malc	THU
0845z	13/02 [155/22 61256.....32006] Out 0853z S6	Malc	TUE
0845z	14/02 [348/00] Fair	RNGB, Malc	WED
0745z	16/02 [347/00] Out 0748z S5	Malc	FRI
0845z	20/02 [157/00] Good	RNGB, Malc	TUE
0745z	21/02 [343/00] Fair	RNGB, Malc	WED
0845z	22/02 [157/00] Out 0848z S5	Malc	THU
0745z	23/02 [346/00] Out 0748z S4	Malc	FRI
0845z	27/02 [150/00] Out 0848z S7	Malc	TUE
0745z	28/02 [344/00] Out 0748z S6	Malc	WED
0845z	29/02 [155/00] Out 0848z S7	Malc	THU
23004kHz 0600z	19/02 [940/00]	HfD	MON
23353kHz 0830z	01/11 [185/28 07989 60203 16605 49376 65234 76448 10785.....74542 58358] polish SDR	RNGB, Malc	MON
0830z	08/01 [188/00] Out 0833z S3 (Dutch SDR)	Malc	MON
0830z	12/01 [183/00] Out 0833z S2	Malc	FRI
0830z	15/01 [184/00] Out 0833z S2	Malc	MON
0830z	19/01 [183/00] Out 0833z S3	Malc	FRI
0830z	22/01 [185/00] Out 0833z S3	Malc	MON

0830z	26/01 [185/00] Out 0833z S2	Malc	FRI
0830z	29/01 [185/00] Weak	RNGB, Malc	MON
0830z	02/02 [183/00] Weak with echo	RNGB	FRI
0830z	05/02 [183/37 96099 11839 86183 81831 03501 52166 75414.....29236 29226] Polish SDR	RNGB	MON
0830z	12/02 [181/00] Weak	RNGB, Malc	MON
0830z	16/02 [188/00] Out 0833z S2	Malc	FRI
0830z	19/02 [188/00] Fair	RNGB, Malc	MON
0830z	23/02 [189/00] Out 0833z S6	Malc	FRI
0830z	26/02 [185/00] Out 0833z S3 (Finnish SDR)	Malc	MON

#### Possible pirate station?

4525kHz 1740z 10/02 [continuous number TX by E11 sounding voice, ended 1800z, followed by continuous siren noise.

Not known when it commenced, the frequency is known as a Russian Pirate station. Or is it?] S3 M8 SAT

Logs with analysis from PoSW, with duplications:

Some of the stronger transmissions from this very busy number station in the first months of this year although, as always, the vast majority of traffic is of the three minutes or so “no message” variety.

4505 kHz, 1910 UTC

6-Jan-24, Sat:- “393/00”  
 17-Jan-24, Wed:- “393/00”  
 24-Jan-24, Wed:- “395/32”, message, “Out” at 1919:40s UTC.  
 27-Jan-24, Sat:- “395/32” again.  
 31-Jan-24, Wed:- “393/00”  
 3-Feb-24, Sat:- “399/00”

4909 kHz

7-Jan-24, Sun:- “368/00”  
 13-Jan-24, Sat:- “367/00”

5082 kHz, 2000 UTC

7-Jan-24, Sun:- “520/00”  
 14-Jan-24, Sun:- “525/35”, message.  
 21-Jan-24, Sun:- “525/00”  
 11-Feb-24, Sun:- “525/00”  
 22-Feb-24, Thu:- “522/00”  
 25-Feb-24, Sun:- “528/00”

5409 kHz, 1530 UTC

8-Feb-24, Thu:- “269/00”  
 22-Feb-24, Thu:- “266/00”

5432 kHz, 1605UTC

2-Jan-24, Tue:- “231/00”  
 7-Jan-24, Sun:- “236/00”  
 14-Jan-24, Sun:- “230/00”  
 30-Jan-24, Tue:- “233/00”  
 11-Feb-24, Sun:- “237/00”  
 13-Feb-24, Tue:- “230/37”, message, “Out” at 1615:40s UTC.  
 18-Feb-24, Sun:- “230/37” again.  
 20-Feb-24, Tue:- “237/00”  
 25-Feb-24, Sun:- “232/00”  
 27-Feb-24, Tue:- “230/00”

5779 kHz, 1730 UTC

1-Feb-24, Thu:- “410/00”  
 8-Feb-24, Thu:- “412/00”  
 15-Feb-24, Thu:- “412/38”, message, “Out” just before 1741 UTC.  
 22-Feb-24, Thu:- “418/00”

6849 kHz, 1900 UTC

4-Jan-24, Thu:- “648/00”  
 5-Jan-24, Mon:- “648/37”, message, “Out” at 1910:40s UTC approx.  
 19-Feb-24, Mon:- “640/00”

6849 kHz, 1815 UTC

5-Jan-24, Fri:- “927/00”  
 7-Jan-24, Sun:- “922/00”  
 19-Jan-24, Fri:- “922/00”  
 21-Jan-24, Sun:- “924/00”  
 4-Feb-24, Sun:- “929/36”, message.  
 9-Feb-24, Fri:- “921/00”  
 16-Feb-24, Fri:- “926/00”  
 18-Feb-24, Sun:- “921/00”  
 23-Feb-24, Fri:- “921/00”

12067 kHz, 0845 UTC

8-Jan-24, Mon:- “715/00”  
 10-Jan-24, Wed:- “714/00”  
 29-Jan-24, Mon:- “713/34”, message, “Out” after 0855 UTC.

31-Jan-24, Wed:- "713/34" again.

5-Feb-24, Mon:- "719/00"

7-Feb-24, Wed:- "718/00"

12-Feb-24, Mon:- "719/00"

14-Feb-24, Wed:- "711/00"

19-Feb-24, Mon:- "715/00"

21-Feb-24, Wed:- "713/00"

27-Feb-24, Mon:- "713/30", message, "Out" at 0854:20s UTC.

13363 kHz, 1430 UTC

6-Jan-24, Sat:- "917/00"

13-Jan-24, Sat:- "912/37", message, "Out" at 1440:37s UTC.

20-Jan-24, Sat:- Some technical problems today, most unlike E11; nothing heard at 1430z, went to look at my schedule of number stations to check I had the correct day and time, saw the S-meter on the RX briefly swing up a couple of times, transmission started at approx 1433:15s, "918/00".

23-Jan-24, Tue, "918/00"

27-Jan-24, Sat:- "915/00"

30-Jan-24, Tue:- "918/00"

3-Feb-24, Sat:- "919/00"

6-Feb-24, Tue:- "918/34", message, "Out" at 1440:09s UTC

13-Feb-24, Tue:- "915/00"

17-Feb-24, Sat:- "914/00"

27-Feb-24, Tue:- "918/00"

13908 kHz, 0745 UTC

2-Jan-24, Tue:- "223/00"

9-Jan-24, Tue:- "229/36", message, "Out" at 0755:35s UTC.

16-Jan-24, Tue:- "227/00"

23-Jan-24, Tue:- "227/00"

30-Jan-24, Tue:- "223/00"

6-Feb-24, Tue:- "229/00"

8-Feb-24, Thu:- "221/00"

13-Feb-24, Tue:- "225/39", message.

20-Feb-24, Tue:- "223/00"

22-Feb-24, Thu:- "223/00"

27-Feb-24, Tue:- "228/00"

14611 kHz, 0820 UTC

2-Jan-24, Tue:- "138/00"

3-Jan-24, Wed:- "134/00"

9-Jan-24, Tue:- "132/00"

10-Jan-24, Wed:- "136/00"

16-Jan-24, Tue:- "138/00"

17-Jan-24, Wed:- "131/00".

23-Jan-24, Tue:- "133/00"

24-Jan-24, Wed:- "136/00"

30-Jan-24, Tue:- "133/36", message - for a change, "Out" at 0830:26s UTC.

31-Jan-24, Wed:- "133/36" again.

6-Feb-24, Tue:- "132/00"

7-Feb-24, Wed:- "136/00"

13-Feb-24, Tue:- "133/00"

14-Feb-24, Wed:- "135/00"

20-Feb-24, Tue:- "132/32", message, "Out" at 0829:38s UTC.

21-Feb-24, Wed:- "132/32" again.

27-Feb-24, Tue:- "133/00"

17378 kHz, 0745 UTC

17-Jan-24, Wed:- "343/32", message

19-Jan-24, Fri:- "343/32" again.

24-Jan-24, Wed:- "348/00"

26-Jan-24, Fri:- "349/00"

31-Jan-24, Wed:- "340/00"

2-Feb-24, Fri:- "349/00"

7-Feb-24, Wed:- "343/36", message

9-Feb-24, Fri:- "346/36" again, "Out" at 0755:30s UTC.

14-Feb-24, Wed:- "348/00"

16-Feb-24, Fri:- "347/00"

21-Feb-24, Wed:- "343/00"

23-Feb-24, Fri:- "346/00"

## S06

From RNGB

### Friday 1st & 3rd

05/01      '842' 00000

19/01      '842' 00000

**2000z    7923kHz**

**2100z    5943kHz**

**1900z    7923kHz**

**2000z    5943kHz**

16/02      '842' 00000

	<b>Wednesday</b>	<b>0930z</b>	<b>9463kHz</b>	<b>1030z</b>	<b>9073kHz</b>
10/01	'480' 739 45 14197 76916 18398 87613 68410 68951 94323 31257 37547 13432 21729 46309 58042 52701 42682 10767 81783 27812 25218 09196 24619 83805 48697 83910 96081 74217 86421 07185 17215 05082 06912 85079 23191 41701 83946 94535 86574 57372 24369 19482 56436 26401 40539 73926 02814 739 45 00000				
17/01	'480' 357 42 49802 96414 08142 37157 04527 27957 63586 19609 31967 51320 27456 52345 01960 49647 76704 15780 36725 71465 43150 94506 01831 59109 84154 45039 40469 38681 13970 90862 90981 28542 23767 64246 86908 07030 62081 49548 05935 75803 75631 20507 31069 92760 357 42 00000				
24/01	'480' 235 47 68082 23598 39650 08050 36928 70521 63538 94135 78708 67419 09576 43293 40130 90964 30451 39851 98565 79715 72058 79106 35832 25480 16983 74828 8297179142 25101 01321 40415 95084 72617 13492 23403 86913 08185 57187 97138 07860 06490 36816 37049 19810 59590 46068 04090 61580 39584 235 46 00000				
31/01	'480' 315 42 62421 67505 93545 21348 53807 83485 95245 25623 58912 31401 17285 57847 34036 05130 19296 48296 32496 16318 08647 56919 59073 37104 05089 72686 78162 27657 41254 80253 37686 93762 64157 47870 13975 43162 25413 85376 49242 35412 41605 72102 58635 74583 315 42 00000				
		<b>0930z</b>	<b>12188kHz</b>	<b>1030z</b>	<b>9073kHz</b>
14/02	'480' 159 43 20575 14176 43970 01308 78019 08497 80725 48603 24702 79646 06515 26148 98429 93834 82842 98727 82471 84714 40431 98156 78075 20847 58072 80185 58745 65353 56285 30689 57852 58921 95146 78749 74504 76463 49249 50415 84207 24742 71523 26371 61031 30412 42068 159 43 00000				(Thanks to Ary)
21/02	'480' 719 46 41538 48737 62835 17238 81741 65785 23130 21650 59021 52484 05981 16307 24264 24695 03051 65682 07427 56260 07934 72560 20636 17162 58027 76925 86068 39158 90930 03498 41960 57654 94057 95956 80849 87304 79574 16016 74293 74064 54681 07145 65138 37310 37136 68090 98928 86259 719 46 00000				
28/02	'480' 129 44 25910 31790 09852 19039 05805 07829 97590 54531 74640 45965 21943 25863 26989 71984 53196 13243 76098 86914 65812 94907 75329 41069 67618 29804 96280 52102 18986 51279 60373 05232 75837 43214 03496 30108 98040 39869 73975 70856 14702 02796 47129 47453 15604 80365 129 44 00000				
	<b>Saturday</b>	<b>1600z</b>	<b>8116khz</b>	<b>1630z</b>	<b>5410kHz</b>
03/02	'480' 976 44 97450.....etc				(Thanks HfD)
17/02	'480' 362 40 49850 19543 62606 27512 49169 04695 85845 70747 23735 19765 23862 67461 71325 49863 89878 27316 65901 18795 73875 41767 86846 93712 27084 38506 93926 32172 90465 49037 20258 03653 78691 62578 54952 96531 48568 98546 41216 62317 50939 56431 362 40 00000				
	<b>Sunday</b>	<b>0730z</b>	<b>10423kHz</b>	<b>0800z</b>	<b>8167kHz</b>
04/02	'480' 976 44 97450.....etc				(Repeat of Saturday)
18/02	'480' 362 40 49850.....etc				(Repeat of Saturday)
25/02	'480' 356 42 61614 70168 42954 25752 75824 27254 48143 82106 25029 08026 18205 64052 62687 30728 62780 51834 38215 35295 32761 24975 19789 34207 04257 51784 81756 38746 15824 42385 06184 30954 62704 81090 96899 81470 35906 78303 54506 47141 46191 34605 36462 39530 356 42 00000] 0742z				Thanks Malc

	<b>Thursday</b>	<b>1220z</b>	<b>11073khz</b>
01/02	'352' 987 60 01847 78856 91852 83501 34798 80005 91957 17855 85756 81041 79825 27958 76723 71246 73229 34495 45184 83329 37149 44568 12651 29917 34985 51515 02536 86626 12680 99288 80762 88917 51695 91063 17581 34884 51764 46778 94001 11210 29376 39284 01311 84437 42916 63797 07067 24775 80400 20341 86063 54593 70753 13856 39652 38829 04549 01687 51890 59463 75170 43109 987 60 00000 (Thanks Ary)		
	<b>S06g</b>	<b>0830z</b>	<b>11060kHz</b>
13/02	'352' 352 352 94618 (R4m) 896 40 18307 39943 92651 21413 29324 04478 58553 47067 38228 51660 05334 23097 67996 43425 52890 75146 52588 53250 62045 49481 09151 70960 77308 20578 44711 79894 31460 07792 08260 61122 85393 68291 24199 04401 01640 58460 68065 30556 75027 80929 896 40 00000		(Thanks to Andrew and Ary)

S06 analysis from PoSW:

#### First + Third Fridays in the Month Schedule:-

One of the few – if not the only regular S06 schedules left, at least appearing at a reasonable time in the UK has survived into 2024. Has the habit of shifting by one hour on a regular basis. Used frequencies in the 7 and 5 MHz bands in the first two months - and also the last two - in 2023 so it was reasonable to assume the same parts of the short-wave spectrum would be used in this year:-

19-Jan-24:- 2002 UTC approx, 7923 kHz, presumably the first sending in progress, weak signal, "842 842 842 00000". 2100 UTC, 5943 kHz, second sending, weak signal.

2-Feb-24:- as was more or less expected, moved back by one hour in this month:- 1900 UTC, 7923 kHz, "842 842 842 00000". Missed the second sending having lost track of the time!

11-Feb-24:- 1900 UTC, 7923 kHz, "842 842 842 00000". Pre-transmission tone and single spoken "842" heard at approx 1848 UTC. 2000 UTC, 5943 kHz, second sending.

A Saturday S06:-

3-Feb-24:- 1632 UTC approx, 5410 kHz, S06 in preamble/ call mode, "480", message, DK/GC "976 976 44 44", reasonable signal with some deep fading, ended after 1642 UTC.

Listened for this one on the following Saturday, the 10<sup>th</sup> but S06 had been replaced by the E06 English Man.

## S11a log Jan/Feb

From RNGB

5371kHz	0830z	06/01 [376/34 76328.....65942] Konyetz 0841z S2	Malc	SAT
	0830z	13/01 [377/00] Konyetz 0833z S3	Malc	SAT
	0830z	14/01 [373/00] Konyetz 0833z S4	Malc	SUN
	0830z	20/01 [371/00] Konyetz 0833z S3	Malc	SAT
	0830z	27/01 [378/00] Konyetz 0833z S3	Malc	SAT
	0830z	28/01 [379/00] Konyetz 0833z S5	Malc	SUN
	0830z	03/02 [379/00] Good	RNGB	SAT
	0830z	10/02 [372/00] Konyetz 0833z S2	Malc	SAT
	0830z	11/02 [370/00] Konyetz 0833z S3	Malc	SUN
	0830z	17/02 [373/00] Konyetz 0833z S4	Malc	SAT
	0830z	18/02 [373/00] Konyetz 0833z S3	Malc	SUN
	0830z	24/02 [378/40]		
6252kHz	0915z	01/01 [484/00] Konyetz 0918z S5	Malc	MON
	0915z	08/01 [485/00] Konyetz 0918z S2	Malc	MON
	0915z	12/01 [485/00] Good	RNGB, Malc	FRI
	0915z	15/01 [484/33 59896.....80099] Konyetz 0926z S2	Malc	MON
	0915z	22/01 [481/00] Konyetz 0918z S4	Malc	MON
	0915z	26/01 [480/00] Konyetz 0918z S2	Malc	FRI
	0915z	09/02 [483/00] Konyetz 0918z S2	Malc	FRI
	0915z	12/02 [484/00] Konyetz 0918z S2+QRM	Malc	MON
	0915z	16/02 [480/00] Konyetz 0918z S2	Malc	FRI
	0915z	19/02 [486/31 59707 54119 57426 54472 44493 71173 28423 50486.....79999 84971] Good	RNGB, Malc	MON
	0915z	26/02 [484/00] Good	RNGB	MON
	0915z	26/02 [484/00] Konyetz 0918z S2	Malc	MON
9050kHz	0700z	04/01 [470/35 94249.....21541] Konyetz 0711z S5	Malc	THU
	0700z	08/01 [470/00] Konyetz 0703z S5	Malc	MON
	0700z	11/01 [478/00] Konyetz 0703z S6	Malc	THU
	0700z	15/01 [470/00] Konyetz 0703z S8	Malc	MON
	0700z	18/01 [472/00] Konyetz 0703z S4	Malc	THU
	0700z	01/02 [472/00] Strong	RNGB, Malc	THU
	0700z	08/02 [478/00] Konyetz 0703z S9	Malc	THU
	0700z	12/02 [471/00] Konyetz 0703z S7	Malc	MON
	0700z	19/02 [470/32 86407.....82136] Konyetz 0711z S4	Malc	MON
	0700z	26/02 [472/00] Konyetz 0703z S5	Malc	MON
	0700z	29/02 [470/00] Konyetz 0703z S7	Malc	THU
10448kHz	1400z	02/01 [425/00] Konyetz 1403z S3	Malc	TUE
	1400z	09/01 [425/36 30421.....90729] Konyetz 1411z S5	Malc	TUE
	1400z	16/01 [421/00] Konyetz 1403z S6	Malc	TUE
	1400z	19/01 [422/00] Konyetz 1403z S5	Malc	FRI
	1400z	23/01 [427/00] Konyetz 1403z S5	Malc	TUE
	1400z	26/01 [422/00] Konyetz 1403z S4	Malc	FRI
	1400z	30/01 [426/00] Konyetz 1403z S3	Malc	TUE
	1400z	06/02 [421/36 04068 71234 85955 93790 71045 01710 92950.....79300 65347] Konyetz 1412z S5	Ary, Malc	TUE
	1400z	13/02 [420/00] Konyetz 1403z S5	Malc	TUE
	1400z	16/02 [425/00] Konyetz 1403z S6	Malc	FRI
	1400z	20/02 [460/00] Konyetz 1403z S9	Malc	TUE
	1400z	23/02 [424/00] Konyetz 1403z S5	Malc	FRI
	1400z	27/02 [420/00] Konyetz 1403z S6	Malc	TUE
11486kHz	1850z	06/01 [287/35 37493.....35408] Konyetz 1902z S4 (Italian SDR)	Malc	SAT
	1850z	13/01 [285/00] Konyetz 1853z S3 (Dutch SDR)	Malc	SAT
	1850z	17/01 [284/00] Konyetz 1853z S2	Malc	WED
	1850z	20/01 [287/00] Konyetz 1853z S3	Malc	SAT
	1850z	24/01 [281/00] Konyetz 1853z S2 (Dutch SDR)	Malc	WED
	1850z	31/01 [287/00] Konyetz 1853z S2	Malc	WED
	1850z	07/02 [281/00] Konyetz 1853z S9	Malc	WED
	1850z	10/02 [280/00] Konyetz 1853z S9	Malc	SAT
	1850z	14/02 [284/39 80473.....13359] Konyetz 1901z S7	Malc	WED
	1850z	21/02 [285/00] Konyetz 1853z S9	Malc	WED
	1850z	28/02 [288/00] Konyetz 1853z S9	Malc	WED

23486kHz 0725z	03/01 [381/00] Fair (Polish SDR)	RNGB	WED
0725z	05/01 [387/00] Weak (Polish SDR)	RNGB	FRI
0725z	10/01 [384/36] 78462 80131 89980 64133 88680 24223 37128 09051.....13862 04007]	RNGB, Malc	WED
0725z	17/01 [385/00] Konyetz 0728z S3	(Dutch SDR)	Malc
0725z	19/01 [382/00] Konyetz 0728z S3	(Dutch SDR)	Malc
0725z	24/01 [384/00] Konyetz 0728z S4	(Finnish SDR)	Malc
0725z	26/01 [385/00] Konyetz 0728z S3	(Finnish SDR)	Malc
0725z	07/02 [382/00] Konyetz 0728z S3	(Finnish SDR)	Malc
0725z	09/02 [382/00] Konyetz 0728z S2	(Dutch SDR)	Malc
0725z	14/02 [380/33] 94041 00577 42230 48563 39507 14214 07190 63161.....78459 08580] Weak	RNGB	WED
0725z	21/02 [384/00] Konyetz 0738z S4	(Finnish SDR)	Malc
0725z	23/02 [383/00] Weak		RNGB
0725z	23/02 [383/00] Konyetz 0728z S3	(Finnish SDR)	Malc
0725z	28/02 [384/00] Konyetz 0728z S3	(Finnish SDR)	Malc

## V02 a

Nil Reports

## V06

Nil Reports

## V07 [Txn DanAR]

Sunday

January 2024

0200z	17436kHz	0220z	14636kHz	0240z	13436kHz		
17436kHz0200z	07/01	464 1 7598 119 52476 ... 83135 000 000	QSA3	DanAR	SUN		

464 464 464 1  
 7598 119  
 52476 92094 20494 19507 87717  
 03880 28848 11253 99190 36243  
 88312 20225 28493 35667 04799  
 79737 31228 16873 46797 00103  
 89944 08307 98713 58310 26866  
 13871 40973 77921 64642 73485  
 91286 27345 42760 89058 63774  
 02747 87187 82380 05715 38025  
 14799 45660 56573 50515 29867  
 32929 30192 84235 46677 11701  
 34644 84796 98610 36216 02535  
 86188 78263 79262 70513 33844  
 77362 37832 86066 37382 75663  
 47675 12031 30428 12707 39933  
 98040 70553 60161 87410 15737  
 61577 01169 42740 09649 12556  
 88220 27160 85130 20058 46458  
 17650 07158 56609 98142 54757  
 68793 88616 76488 77213 53425  
 49485 09123 06180 09777 86173  
 88286 91965 63244 14975 33788  
 14446 95693 55327 80865 43755  
 46881 11802 18047 87887 50573  
 66617 75419 04509 83135  
 000 000      *Courtesy DanAr*

17436kHz0200z	14/06	464 1 7608 124 27655 ... 77478 000 000	DanAR	SUN
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464 464 464 1  
 7608 124  
 27655 43841 36968 47319 39927  
 21663 21977 16104 13979 54198  
 68364 33957 67497 64881 87862  
 76650 67836 42363 15257 24985  
 84062 53042 07727 56318 92714  
 16180 76503 71573 91903 00100  
 76799 76871 44371 28584 70503  
 54202 75308 12301 10996 44417  
 71785 36852 90016 50680 13473  
 18931 45526 55787 66925 72508  
 20111 82418 40683 64961 87746  
 46762 14590 90912 91716 98191  
 71059 77717 44108 14580 27292  
 50266 87866 87232 29513 22236  
 96654 08469 16625 06326 29416  
 38010 13688 33934 76362 01715  
 19339 73267 77259 79836 31288  
 91162 19990 64258 48465 40136  
 74515 99325 51114 02104 77553  
 78503 89887 46958 64968 35415  
 24739 41446 57082 95821 91426  
 35240 52337 52138 54883 13157  
 54549 52653 10211 94513 08220  
 10460 60904 63116 57677 92533  
 94397 83116 20852 77478  
 000 000      *Courtesy DanAr*

17436kHz0200z	21/01	464 1 5658 126 79313 ... 32234 000 000	DanAR	SUN		
464 464 464 1 5658 126 79313 33925 03502 39553 68338 47459 82417 72941 61944 50286 46358 58775 05156 88032 90836 70604 28691 68999 77062 55349 45921 96888 39850 02307 84134 53888 21338 63355 36257 28413 03790 19274 63153 38086 91789 16380 11161 37495 16074 52212 19443 49707 32140 28125 07223 73546 45924 31545 32053 52094 82949 67649 07305 82056 05380 63228 70171 26903 46407 91921 47977 79600 53086 18317 22494 00474 71104 80959 31618 47145 11793 42871 11116 14267 47585 12707 56706 08329 09476 84578 73440 84517 49426 12201 49792 93521 00890 42748 09837 48784 67995 82158 60118 30518 81373 42276 43590 52675 39269 76551 72072 27198 64524 32523 85039 05747 11851 96088 26361 84365 17931 90209 11342 83489 18067 27256 98048 44776 48593 06352 37238 29210 36497 79478 29081 32234 000 000 <i>Courtesy DanAr</i>						
17436kHz0200z	28/01	464 1 314 78 67600 ... 67549 000 000	Weak	DanAR	SUN	
464 464 464 1 314 78 67600 42275 82094 49173 41566 98256 32260 15820 76021 04490 88793 89319 20167 73967 57594 10597 73375 30952 62301 42733 33775 93892 83232 85202 56429 15236 83533 16195 95171 11524 67281 68274 71503 41764 15097 83541 95752 05050 80756 23457 02126 98608 82100 56166 38416 38771 50961 66245 87790 87508 91167 08208 65165 04821 10530 24407 72704 68944 31037 50146 19090 17537 41499 75129 59697 93119 87197 51586 63337 51525 75619 21932 39399 64782 06995 28103 26740 67549 000 000 <i>Courtesy DanAr</i>						
<b>February 2024</b>						
0200z	18217kHz	0220z	16317kHz	0240z	15817kHz	NEW FREQS & TIMES
04/02	238 1 181 93 43700 ... 52424 000 000					Weak [0200z only]
238 238 238 1 181 93 43700 64518 35962 10089 45559 97610 49079 73642 86891 59192 96631 29470 27559 16437 06825 31381 49123 37874 82591 02294 30077 60490 45964 86722 53268 41895 22694 65026 22032 45291 38695 09955 44639 30028 70588 53799 15707 79067 87000 81222 84648 16051 88655 91475 62049 74344 32248 19512 89929 23225 41260 46336 07242 52807 49732 09435 22184 58151 61840 72221 37265 37969 73666 81253 88528 48982 27444 36641 83302 40175 05308 56290 53630 29440 17267 77148 07691 66725 34623 42697 84645 95453 56211 77531 35135 54281 60379 74431 68426 39747 43270 52424 000 000 <i>Courtesy DanAr</i>						
11/02	238 1 200 106 77866 ... 45397 000 000					Weak [0200z only]
238 238 238 1 200 106 77866 40921 75341 61436 97725 84009 60760 48254 52896 25831 98335 39502 61947 29552 18541 03750 73024 70619 88659 62621 30652 46987 00637 89313 65925 02352 42012 21661 47374 35236 77786 61090 70395 31022 93169 54837 17313 72663 16625 65781 95483 20465 98586 41185 29792 32880 04815 78346 94343 80819 35222 67052 19615 28891 47512 60085 54314 67117 51699 17163 27049 15723 72105 47035 79901 78056 45240 65761 54410 39061 24839 49895 14565 39202 33873 00256 93248 93080 28524 74769 77231 98984 17343 53438 35046						

94933 46356 01273 58352 19947  
24929 35342 68332 09715 46747  
91265 22587 64417 20611 45137  
19882 60791 28979 34975 28892  
45397 000 000 *Courtesy DanAR*

18/02 238 1 383 34 69733 ... 38541 000 000 Weak [0200z only]

238 238 238 1  
383 34  
69733 90644 85083 97337 93494  
23381 06731 39025 04201 77065  
68706 36009 20814 29231 09630  
07394 64357 77590 54536 36187  
53759 46139 97907 80603 14707  
80230 78527 54017 59293 14863  
04206 25169 38541 000 000  
*Courtesy DanAR*

25/02 238 1 130 126 61114 ... 05387 000 000 Weak [0200z only]

238 238 238 1  
130 126  
61114 34595 50303 19733 11991  
87764 67510 83391 72369 34337  
14634 52502 70951 68164 33664  
96019 96357 33378 72052 64251  
97700 73816 86027 54007 51018  
50446 99286 56381 83410 51392  
82836 76801 48627 82410 37380  
03272 90796 60101 06965 28681  
81528 82623 35314 34045 99371  
16815 08096 70946 21457 64943  
24487 85171 53255 12919 95128  
91601 40198 40134 19322 21255  
79116 57545 62616 97278 69666  
40605 88616 42420 66716 36943  
58862 29956 16776 34454 65856  
58713 50467 62487 45789 72974  
79721 86253 54261 99527 06764  
27161 57278 31268 61554 79486  
02225 02459 01844 92280 42929  
06697 92298 30084 84033 59091  
87151 71600 73236 29258 21580  
08157 39976 63518 83811 48717  
35414 18525 16407 32266 92668  
48115 53897 02201 96386 01348  
64960 07328 38801 82161 37741  
05387 000 000 *Courtesy DanAR*

## V13 New Star Radio

From Ary:

20095 02-02-2024 1030 UTC  
20095 02-02-2024 1130 UTC  
20095 02-02-2024 1200 UTC. Carrier only.  
20095 02-02-2024 1230 UTC. Carrier only.  
13974 02-02-2024 1230 UTC  
11430 02-02-2024 1300 UTC  
20095 02-02-2024 1300 UTC. Carrier only.  
11430 02-02-2024 1330 UTC  
11430 03-02-2024 1300 UTC  
11430 05-02-2024 1300 UTC  
14944 05-02-2024 1300 UTC  
11430 06-02-2024 1300 UTC  
14944 06-02-2024 1300 UTC  
11430 07-02-2024 1300 UTC  
14944 07-02-2024 1300 UTC  
15388 08-02-2024 1210 UTC i.p.  
14944 08-02-2024 1210 UTC. Carrier only  
14944 08-02-2024 1230 UTC  
15388 08-02-2024 1230 UTC  
11430 08-02-2024 1300 UTC  
14944 08-02-2024 1300 UTC  
15388 08-02-2024 1300 UTC  
11430 08-02-2024 1330 UTC  
14944 08-02-2024 1330 UTC  
15388 08-02-2024 1330 UTC

19052 09-02-2024 1000z  
20095 09-02-2024 1001z  
20025 09-02-2024 1002z

19052 09-02-2024 1030z  
20025 09-02-2024 1030z  
20095 09-02-2024 1031z

20095 09-02-2024 1059z  
19052 09-02-2024 1059z  
20025 09-02-2024 1101z

19052 09-02-2024 1130z  
20025 09-02-2024 1130z  
20095 09-02-2024 1130z  
  
13974 09-02-2024 1200z  
15388 09-02-2024 1200z  
19052 09-02-2024 1159z  
20025 09-02-2024 1200z Carrier only

13974 09-02-2024 1230z  
15388 09-02-2024 1230z  
19052 09-02-2024 1230z

11430 09-02-2024 1300z  
14944 09-02-2024 1300z  
15388 09-02-2024 1300z

11430 09-02-2024 1329z  
14944 09-02-2024 1329z  
15388 09-02-2024 1329z

19052 14-02-2024 0959 V13  
20025 14-02-2024 0959 V13  
20095 14-02-2024 1001 V13

19052 14-02-2024 1028 V13  
20025 14-02-2024 1029 V13  
20095 14-02-2024 1031 V13

19052 14-02-2024 1059 V13  
20025 14-02-2024 1101 V13  
20095 14-02-2024 1059 V13

19052 14-02-2024 1129 V13  
20025 14-02-2024 1131 V13  
20095 14-02-2024 1129 V13

13974 14-02-2024 1200 V13  
15388 14-02-2024 1200 V13  
14944 14-02-2024 1200 V13

19052 14-02-2024 1230 V13  
13974 14-02-2024 1230 V13  
15388 14-02-2024 1229 V13  
14944 14-02-2024 1230 V13. Carrier only

19052 14-02-2024 1300 V13  
15388 14-02-2024 1300 V13  
14944 14-02-2024 1300 V13

11430 14-02-2024 1330 V13  
14944 14-02-2024 1330 V13  
15388 14-02-2024 1330 V13  
19052 14-02-2024 1330 V13

19052 21-02-2024 1000 V13  
20025 21-02-2024 1000 V13  
20095 21-02-2024 1001 V13

1030 UTC not monitored

20025 21-02-2024 1100 V13  
20095 21-02-2024 1100 V13

15388 21-02-2024 1130 V13. Carrier only  
19052 21-02-2024 1130 V13. Carrier only  
20025 21-02-2024 1131 V13  
20095 21-02-2024 1129 V13

13974 21-02-2024 1200 V13  
14944 21-02-2024 1159 V13  
15388 21-02-2024 1159 V13  
20095 21-02-2024 1200 V13. Carrier only

13974 21-02-2024 1230 V13  
14944 21-02-2024 1230 V13  
15388 21-02-2024 1229 V13  
20095 21-02-2024 1200 V13. Carrier only

14944 21-02-2024 1300 V13  
15388 21-02-2024 1300 V13  
20095 21-02-2024 1300 V13. Carrier only

11430 21-02-2024 1330 V13  
14944 21-02-2024 1329 V13  
15388 21-02-2024 1329 V13  
20095 21-02-2024 1330 V13. Carrier only

19052 kHz, 26-02, 1000 UTC  
20025 kHz, 26-02, 1000 UTC  
20095 kHz, 26-02, 1000 UTC

19052 kHz, 26-02, 1030 UTC  
20025 kHz, 26-02, 1030 UTC  
20095 kHz, 26-02, 1031 UTC

19052 kHz, 26-02, 1059 UTC  
20025 kHz, 26-02, 1101 UTC  
20095 kHz, 26-02, 1059 UTC

19052 kHz, 26-02, 1130 UTC  
20025 kHz, 26-02, 1130 UTC  
20095 kHz, 26-02, 1130 UTC

13974 kHz, 26-02, 1200 UTC  
14944 kHz, 26-02, 1200 UTC  
15388 kHz, 26-02, 1200 UTC  
20095 kHz, 26-02, 1200 UTC. Carrier only

13974 kHz, 26-02, 1230 UTC  
14944 kHz, 26-02, 1230 UTC  
15388 kHz, 26-02, 1229 UTC  
20095 kHz, 26-02, 1230 UTC. Carrier only

11430 kHz, 26-02, 1300 UTC  
14944 kHz, 26-02, 1300 UTC  
15388 kHz, 26-02, 1300 UTC  
20095 kHz, 26-02, 1300 UTC. Carrier only

11430 kHz, 26-02, 1330 UTC  
14944 kHz, 26-02, 1330 UTC  
15388 kHz, 26-02, 1330 UTC  
20095 kHz, 26-02, 1330 UTC. Carrier only

## **V15 North Korean Intelligence via Radio Pyongyang**

**657, 3250, 3320, 6400kHz**

## **V24 South Korean intelligence**

Nil Reports

## **V26**

Nil Reports

## **Polytones**

## **XPA1 Wed/Fri**

**Wednesday/Friday [Very difficult freqs to receive in Southern England]**

**January2024**

1310z	14852kHz	1330z	13952kHz	1350z	11552kHz
03/01		895 000 04561 00001 00000 ... 34262			1330z Strong, rest Weak
05/01		895 000 07514 00001 00000 ... 35660			1350z Weak, rest Fair, 1330z QRM2
10/01		895 000 09110 00001 00000 ... 31662			1350z Unworkable, rest Weak

12/01	895 000 04023 00001 00000 ... 32656	Weak, 1330z QRM2			
17/01	895 1 00314 00188 54230 ... 47363	Weak			
895 895 895 1 895 895 895 1 895 895 895 1 89					
00314 00188 54230 02179 17944 83350 30414 96550 61176 26637 27277 23073 34855 57352 48803 47187 12321 20958 11313 57927 52866 34671 73594 08240 13303 11689 65992 32216 79551 86577 36609 30210 28490 53262 23652 09189 96836 29550 60709 55013 44871 39657 21787 83198 73405 05328 10643 42692 21628 42352 79290 51520 18177 85547 43846 99899 42756 06054 68631 42833 79229 54855 68331 25872					
37059 59449 72688 66556 97789 79434 42767 52905 02437 92734 31325 51299 71312 50926 98225 89636 53260 82853 02883 78114 92700 76033 27466 68716 86204 27521 77594 33038 78478 07443 96110 42972 91366 00825 81604 17540 67060 27311 10498 31718 42816 96205 22018 47613 78728 67801 14421 91027 52492 28672 06941 68634 78506 71487 23434 71209 85455 62937 82662 44300 29658 32972 92057 69949					
28046 01595 46873 68318 37985 97688 00176 93566 78100 91436 56841 23337 31800 59116 76197 61781 71984 66738 02953 75601 70189 10160 15455 40835 05211 84588 59882 27435 01762 74606 92021 27969 74822 14607 36979 93779 73134 07533 41838 41359 46154 80782 90760 19116 15735 10852 30740 85844 18940 28733 89582 52995 72596 22581 57967 10993 93369 77978 58603 76887 95746 91052 47363					
<i>Courtesy PLdn</i>					
24/01	895 1 00314 00188 54230 ... 47363	1350z Weak, rest Fair			
26/01	895 1 00314 00188 54230 ... 47363	1350z Weak, rest Fair			
<b>February 2024</b>					
<b>1310z</b>	<b>14374kHz</b>	<b>1330z</b>	<b>13374kHz</b>	<b>1350z</b>	<b>11474kHz</b>
02/02	334 1 04257 00215 08528 ... 31462				Weak
334 334 334 1 334 334 334 1 334 334 334 1					
04257 00215 08528 61527 33580 73603 60256 80539 83886 94735 66598 48927 48426 67729 63596 94020 48252 61754 73189 13445 53324 37756 95682 92496 78326 75052 65702 82664 47366 57182 93746 08429 30923 41082 45665 79179 87633 45093 73476 68032 44445 54753 45902 57552 24062 11479 89089 69040 02044 36837 09104 55839 41117 21274 54189 18591 88837 42452 55866 39624 18787 65825 76395 61952					
57105 54037 15144 24135 62979 42097 62536 98289 17944 71987 90278 71854 85389 01378 87215 86367 67098 91939 34949 97358 25381 76404 89565 75964 79491 42785 66155 47761 24047 34765 11982 67689 35550 45154 99579 33285 05178 16244 28644 13043 24416 37182 92081 20656 10451 67638 50381 43065 17422 52902 35937 82082 02678 65425 38780 18976 68953 94658 27174 42012 73036 21614 04375 18388					
99166 41738 71639 73980 91145 57912 82531 57437 97547 83100 96739 64973 69014 78647 81914 86550 60927 19787 88985 42219 66596 24622 87085 50492 36886 90418 73825 11519 55980 74534 89690 19670 13832 82411 13511 44093 59175 97873 73592 96864 36399 98102 48971 46729 52788 40548 93825 94648 51162 04403 64173 07362 24014 32686 42363 75509 77793 69871 10391 76143 20634 14585 00371 52191					
91745 97368 45222 53487 21579 71886 37317 60894 56542 36499 69562 38887 70144 05871 99334 08805 91146 25584 74418 41521 32744 82723 98809 23592 69647 31462					<i>Courtesy PLdn</i>
07/02	334 1 04257 00215 08528 ... 31462				Weak
09/02	334 1 04257 00215 08528 ... 31462				1330z Weak QSB3/4, rest unworkable
14/02	334 1 01092 00197 25498 ... 51450				1350z Weak, rest Fair QSB2
334 334 334 1 334 334 334 1 334 334 334 1					
01092 00197 25498 89578 26683 96330 42059 37066 50029 19430 59892 71370 25031 81321 18356 17818 06243 79323 33176 78613 36662 02179 54319 89575 74336 97842 99275 43417 03948 19068 67279 65825 62975 56403 29822 87781 04918 44602 09090 24370 70095 80487 85402 74398 17930 57856 35759 70869 12167 88619 58617 68133 52081 66946 84761 54805 35397 59246 11244 16086 69151 19655 23454 39038					
80161 10110 71157 78512 18744 54681 36578 45332 61114 89083 64099 98643 85639 38645 43037 66645 69196 47890 64303 41342 42995 46361 45225 11192 94337 75693 51311 79917 04972 92928 85832 02945 99662 26114 21686 19223 85149 14774 63132 27827 73730 22404 86515 32506 87152 48383 77519 00188 45578 32562 51639 20995 28747 62594 44995 52429 96774 87049 14920 46901 74850 79176 91300 23539					
25845 99340 43448 10702 44576 49342 32408 10973 26914 59298 50243 02889 13296 93063 73100 72942 60702 16485 10535 07213 40562 09993 81483 56721 47971 99501 74094 36756 17211 57029 71309 97770 54704 81467 00418 97819 28789 65431 08426 13301 76465 62631 54128 27945 92759 49812 32934 21357 94379 41238 75032 80181 17122 02461 01227 24889 95646 21138 89708 08673 78432 53888 62066 58265					
60076 59488 56182 03058 88541 85173 60181 51450					<i>Courtesy PLdn</i>

16/02	334 1 01092 00197 25498 ... 51450	Fair, 1310z QSB2
21/02	334 1 01092 00197 25498 ... 51450	1310z Strong, rest Weak
23/02	334 1 01092 00197 25498 ... 54150	1350z Weak, rest Fair
28/02	334 1 00484 00114 02714 ... 30145	1310z Strong, 1330z Fair, 1350z Weak

334 334 334 1 334 334 334 1 334 334 334 1

00484 00114 02714 51949 11208 02570 56220 60635 22348 71524  
 24239 64088 60319 53377 57244 30299 97329 06298 10146 15293  
 40619 37232 38105 05154 70747 89587 75446 12461 48175 01517  
 24046 90214 65797 77871 50344 39440 01673 61237 64273 15792  
 11329 43610 83886 02221 50033 04778 65542 50475 39431 28939  
 62505 64945 09814 18915 92629 05405 04449 73347 32075 09552  
 04820 49617 74659 73682

17497 72490 18994 15848 29363 77199 34210 75658 27110 04548  
 53906 72546 09838 07165 28484 22733 37072 57434 13138 15467  
 64567 17576 10945 80360 39357 26587 72819 63455 99705 72373  
 92510 37907 79030 99769 19363 01160 02548 25249 03297 19519  
 89180 06572 71547 78790 50261 60555 65830 18404 50730 77083  
 74905 83786 30145

*Courtesy PLdn*

## **XPA2 p**

**Monday/Wednesday**

**January 2024**

<b>0800z</b>	<b>11493kHz</b>	<b>0820z</b>	<b>13393kHz</b>	<b>0840z</b>	<b>13993kHz</b>
01/01	01739 00001 00000 ... 41254				0800z Weak, rest Fair
03/01	02664 00001 00000 ... 36260				0840z Fair, rest Weak
08/01	08279 00001 00000 ... 36667				Weak, 0640z QSB3
10/01	01347 00001 00000 ... 36255				0840z Fair, rest Weak
15/01	00449 00257 11156 ... 11430				0800z Weak, rest Fair
17/01	00449 00257 11156 ... 11430				0800z Weak, rest Fair

00449 00257 11156 92837 77926 82335 53790 60592 15018 44691  
 83470 02704 37556 70837 09898 36419 57474 19147 79723 15200  
 43692 12467 94073 39358 13321 99939 12966 62689 80897 28125  
 60801 38099 13182 79544 24984 80807 90378 04748 80080 59243  
 45369 03745 87777 97200 62719 32489 73735 86599 01162 97248  
 84736 37637 91664 14416 66802 21514 57830 03101 48120 19804  
 86548 91014 30672 46725 60640 73186 25908 55689 60213 12632  
 02534 64922 71629 07530 85665 53572 01323 55101 59202 84304  
 31071 10302 88385 91398 30464 02827 51035 62422 55719 98998  
 74755 77291 32675 16674 30435 60596 54192 64302 13154 82827  
 44348 54316 44944 02066 49547 74259 49104 58087 57658 08436  
 07740 52792 15511 02226 81922 32718 25703 77679 31947 48629  
 18238 74746 63938 27321 45021 51351 23716 82485 56007 47758  
 06543 03542 26194 62133 71413 32714 92948 17728 55890 81431  
 66033 40426 01955 71070 76176 66602 89497 55325 42981 75630  
 14656 73215 53918 63222 58739 22556 06710 98669 58586 51174  
 37422 71101 60916 00517 00005 58631 06216 20729 17462 48071  
 22743 31887 73082 35613 71560 32224 73051 47243 71557 58133  
 89520 43738 37181 72944 30358 42394 04211 47317 54671 97110  
 14990 44347 24476 53516 18765 49488 57381 25150 82952 19484  
 75947 29847 45163 16432 64982 43678 42020 19236 96299 97200  
 68733 65132 13931 88319 13861 32354 62814 18950 89906 71224  
 42573 10707 85171 12159 20029 56163 89937 81513 37890 15550  
 70944 87388 52809 46583 27389 40652 75695 94212 41535 21714  
 48080 99699 92903 13255 02299 89965 29641 99351 49448 98508  
 39756 86118 70179 04274 69896 71896 97104 00803 19295 11430  
*Courtesy PLdn*

22/01	00449 00257 11156 ... 11430	0800z Weak, rest Strong
24/01	00449 00257 11156 ... 11430	0800z Weak, rest Strong
29/01	09450 00199 51139 ... 62525	0800z Weak, rest Fair

**February 2024**

<b>0800z</b>	<b>13387kHz</b>	<b>0820z 13887kHz</b>	<b>0840z 14787kHz</b>
05/02	09450 00199 51139 ... 62525		Weak, Local QRM3
07/02	09450 00199 51139 ... 62525		Fair

12/02

00472 00297 16140 ... 57344

Strong

00472 00297 16140 42480 12505 32770 84788 08250 86999 11210  
 48802 96102 93648 32827 63122 53308 95406 24020 21382 01332  
 44556 74919 58301 66427 84886 16723 20044 16097 77933 08052  
 07477 83329 08180 85952 06391 82957 54848 46637 32240 11182  
 70369 51043 94325 68764 23684 63698 93193 72292 35090 57711  
 19737 58216 82702 51709 95977 64239 16858 23395 59240 87201  
 04794 64010 00102 58180 48510 40350 59026 23840 79823 25153  
 08687 46772 12683 90129 44915 63729 35758 07152 50972 41629  
 61793 45520 02848 55957 53048 43177 48303 44180 23243 24963  
 14284 90725 41412 85094 90627 27563 98379 08060 77895 67618  
 01118 37048 30629 98298 50573 83368 19684 71725 64292 80466  
 94616 22573 25128 84447 35583 43222 88346 80706 37922 82002  
 61296 46677 11391 82894 91221 98649 00542 53837 89409 98685  
 09179 50493 62797 80749 40221 78982 74993 10343 17907 99066  
 97323 37784 47453 93021 48788 46149 05782 53253 50312 84227  
 24861 15851 39016 34715 66253 80004 72117 64091 70522 35622  
 49673 58260 59840 47130 63155 26673 61008 75522 24926 04418  
 51795 63543 01063 14499 32142 67376 13850 86162 35279 70828  
 64553 81302 89562 02197 87880 71887 01244 04769 12795 10350  
 23537 57628 14051 25654 78717 24486 26949 95508 88479 95293  
 10408 11318 47434 76717 93536 03874 20794 55790 51300 95271  
 88646 87855 45512 91353 16000 71448 94633 55464 26295 80286  
 59757 22238 20819 45335 34053 98694 21651 30727 15294 22318  
 32011 58119 12415 07134 95482 18937 17340 04443 05516 27819  
 97969 82903 92773 37379 82886 57380 67676 04819 98423 98621  
 93252 43955 52442 96078 01733 48127 06152 71341 99804 04531  
 13849 47886 94975 46857 29926 61236 66825 61484 96665 06800  
 28305 89423 30787 42247 89949 64347 05571 74385 51084 39820  
 88923 51342 65775 56127 44791 90658 93850 98487 46268 36188  
 15554 86102 76766 39670 99879 19340 17307 80733 18456 57344

*Courtesy PLdn*

14/02

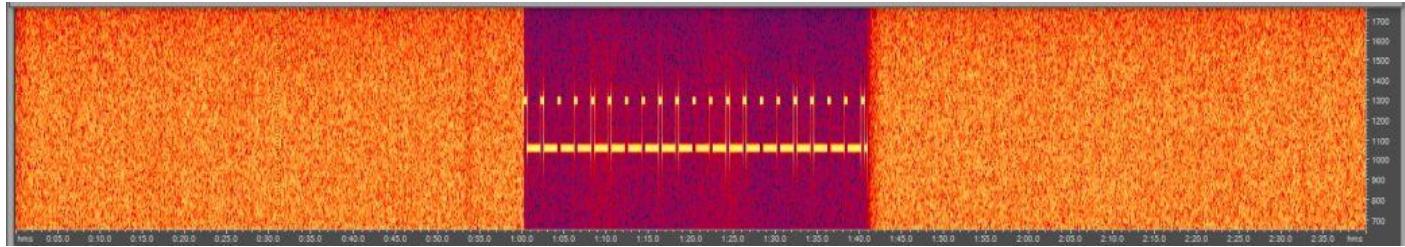
00472 00297 16140 ... 57344

0800z Weak QRM2, rest Strong

19/02

00472 00297 16140 ... 57344

0800/0820z Strong, 0840z Weak, 0820z 41s only LOS [See below]



1388kHz 0820z

19/02 41s only LOS

21/02

00472 00297 16140 ... 57344

0820z Strong, rest Weak

26/02

00274 00129 78945 ... 40532

0800z Weak, rest Strong

00274 00129 78945 22688 17968 15100 49827 26069 10235 98094  
 96874 80010 22735 48746 41830 92624 64623 03957 91710 41997  
 92379 97402 91705 29408 80066 96951 55870 47468 70641 47367  
 00103 98617 55538 27148 84871 23112 37673 82267 75478 33864  
 05266 66477 83360 00814 98478 63921 49118 21427 67419 68816  
 93683 98341 13553 51068 66466 13625 91765 91544 86461 07133  
 18705 26451 41295 73613 85891 97058 88714 55480 27396 61182  
 06698 53569 65032 42287 07974 78766 20811 40276 93753 24151  
 14302 24857 82655 08162 02696 47744 56772 31984 27183 84170  
 35677 98181 32559 03845 20423 49063 71567 30162 20966 38220  
 23805 83214 67295 99420 79480 49808 87566 26306 98768 47416  
 51690 30664 21232 30414 52030 47544 18478 51404 33409 73557  
 07523 06593 34988 82687 04068 97865 08904 04966 58759 78798  
 52798 40532

*Courtesy PLdn*

## Other uncatalogued XPA2 schedules

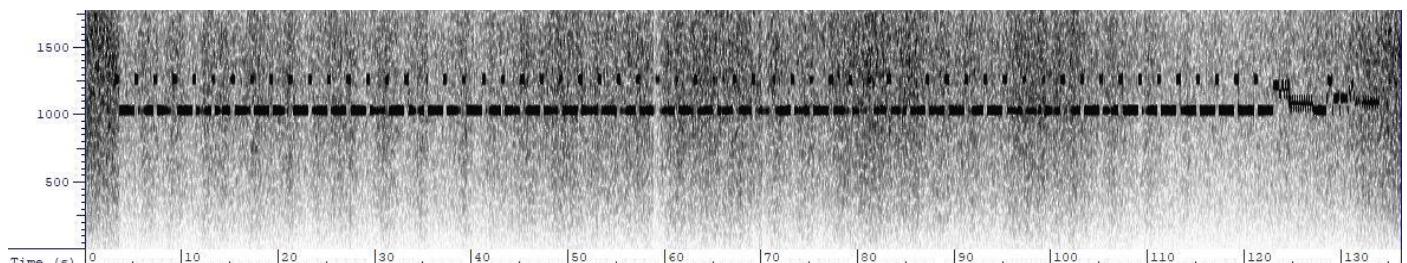
### XPA2

Tue/Fri [E2k Reception Trial; originally fm a suggestion fm Ary. December 2023 : All NRH]

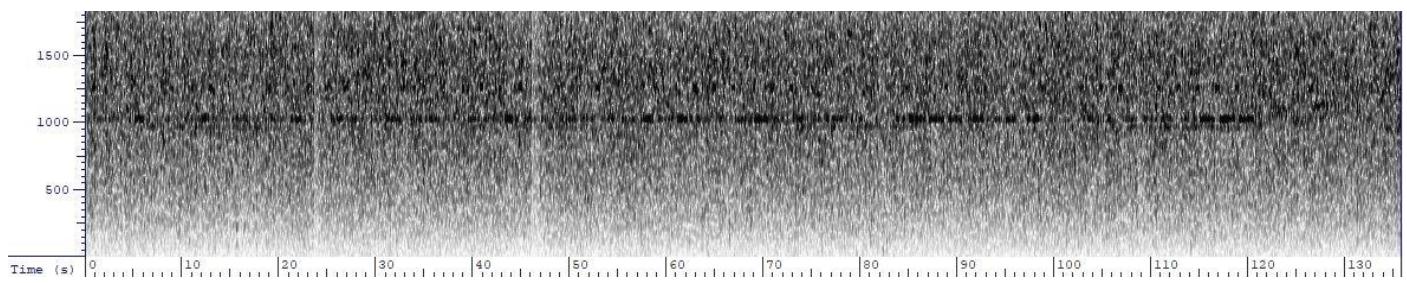
1100z 10231kHz 1120z 9331kHz 1140z 8131kHz

02/01 09889 00001 00000 ... 41671

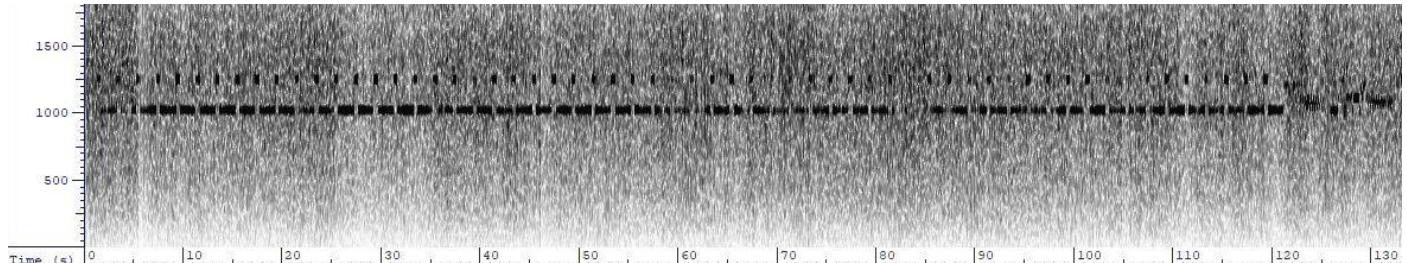
1100z Weak, readable; rest Unworkable See below:



1100z 10231kHz 09889 00001 00000 ... 41671



1120z 9331kHz Unworkable



1140z 8131kHz Unworkable

05/01 09889 00001 00000 ... 41671 1100z Weak, readable, 1120z NRH, 1140z QRM5

09/01 1100z Unworkable, rest NRH

12/01 1100z Unworkable, rest NRH

16/01 1100z Unworkable, rest NRH

19/01 NOT MONITORED

23/01 NRH

26/01 NRH

1100z 12147kHz 1120z 10347kHz 1140z 9247kHz

02/02 1140z NRH, rest Unworkable

06/02 00465 00054 nn433 ... 71203 Weak, 1140z NRH

09/02 00465 00054 77433 ... 71203 Weak, QSB3/4

13/02 NRH

16/02	09269 00112 21844 ... 30734	Weak, 1140z NRH
20/02	09269 00112 21844 ... 30734	Weak, 1140z NRH
23/02	09269 00112 21844 ... 30734	Weak, 1140z NRH
27/02	01534 00001 00000 ... 35654	1100z Weak, rest unworkable

## Other Polytones

### 1B XPA2 [H-FD]

Mon 01.01.2024 0910Z 14977 msg  
 Mon 01.01.2024 0930Z 13971 msg  
 Mon 01.01.2024 0950Z 13371 msg

Mon 01.01.2024 1600Z 9317 msg  
 Mon 01.01.2024 1620Z 8117 msg  
 Mon 01.01.2024 1640Z 7517 msg

Tue 02.01.2024 0600Z 9382 msg  
 Tue 02.01.2024 0620Z 10582 msg  
 Tue 02.01.2024 0640Z 11582 msg

Tue 02.01.2024 1600Z 10465 msg  
 Tue 02.01.2024 1620Z 9165 msg  
 Tue 02.01.2024 1640Z 8065 msg

Wed 03.01.2024 1200Z 13878 msg  
 Wed 03.01.2024 1220Z 14978 msg  
 Wed 03.01.2024 1240Z 16278 msg

Thu 04.01.2024 0910Z 14794 msg  
 Thu 04.01.2024 0930Z 13994 msg  
 Thu 04.01.2024 0950Z 12194 msg

Thu 04.01.2024 1100Z 13384 msg  
 Thu 04.01.2024 1120Z 12184 msg  
 Thu 04.01.2024 1140Z 10984 msg

Fri 05.01.2024 0900Z 16327 msg  
 Fri 05.01.2024 0920Z 18227 msg  
 Fri 05.01.2024 0940Z 19627 msg

### 1B XPA2

Thu 01.02.2024 0600Z 11126 msg  
 Thu 01.02.2024 0620Z 12226 msg  
 Thu 01.02.2024 0640Z 13926 msg  
 Thu 01.02.2024 1100Z 13967 msg

Thu 01.02.2024 1120Z 13367 msg  
 Thu 01.02.2024 1140Z 11567 msg

Thu 01.02.2024 1600Z 12173 msg  
 Thu 01.02.2024 1620Z 10373 msg  
 Thu 01.02.2024 1640Z 9373 msg

Sat 03.02.2024 0910Z 16146 msg  
 Sat 03.02.2024 0930Z 15846 msg  
 Sat 03.02.2024 0950Z 14446 msg

Sat 03.02.2024 1600Z 11461 msg  
 Sat 03.02.2024 1620Z 10261 msg  
 Sat 03.02.2024 1640Z 9161 msg

Sun 04.02.2024 0900Z 15835 msg  
 Sun 04.02.2024 0920Z 17435 msg  
 Sun 04.02.2024 0940Z 19535 msg

Tue 06.02.2024 1100Z 12147 msg  
 Tue 06.02.2024 1120Z 10347 msg  
 Tue 06.02.2024 1140Z 9247 msg

Wed 07.02.2024 0910Z 16102 msg  
 Wed 07.02.2024 0930Z 14951 msg  
 Wed 07.02.2024 0950Z 13991 msg

Wed 07.02.2024 1200Z 14956 msg  
 Wed 07.02.2024 1220Z 16356 msg  
 Wed 07.02.2024 1240Z 17456 msg  
 H-FD.....Thanks

# XPB1

## Mon/Sat

### January 2024

14769kHz 1100z	01/01	Fair	4m28s	PLdn	MON
14369kHz 1110z	01/01	Fair	4m28s	PLdn	MON
13969kHz 1120z	01/01	Fair	4m28s	PLdn	MON
13369kHz 1130z	01/01	Fair	4m28s	PLdn	MON
12169kHz 1140z	01/01	Fair	4m28s	PLdn	MON
11169kHz 1150z	01/01	Weak	4m28s	PLdn	MON
14769kHz 1100z	06/01	Fair	4m28s	PLdn	SAT
14369kHz 1110z	06/01	Fair	4m28s	PLdn	SAT
13969kHz 1120z	06/01	Fair	4m28s	PLdn	SAT
13369kHz 1130z	06/01	Fair	4m28s	PLdn	SAT
12169 kHz 1140z	06/01	Fair	4m28s	PLdn	SAT
11169kHz 1150z	06/01	Weak	4m28s	PLdn	SAT
14769kHz 1100z	08/01	V.strong	1m40s	PLdn	MON
14369kHz 1110z	08/01	Strong	1m40s	PLdn	MON
13969kHz 1120z	08/01	Strong	1m40s	PLdn	MON
13369kHz 1130z	08/01	V.strong	1m40s	PLdn	MON
12169 kHz 1140z	08/01	Strong	1m40s	PLdn	MON
11169kHz 1150z	08/01	Strong	1m40s	PLdn	MON
14769kHz 1100z	13/01	Fair	1m40s	PLdn	SAT
14369kHz 1110z	13/01	Weak	1m40s	PLdn	SAT
13969kHz 1120z	13/01	Fair	1m40s	PLdn	SAT
13369kHz 1130z	13/01	Fair	1m40s	PLdn	SAT
12169 kHz 1140z	13/01	Strong	1m40s	PLdn	SAT
11169kHz 1150z	13/01	Weak	1m40s	PLdn	SAT
14769kHz 1100z	15/01	Fair	1m40s	PLdn	MON
14369kHz 1110z	15/01	Fair	1m40s	PLdn	MON
13969kHz 1120z	15/01	Fair	1m40s	PLdn	MON
13369kHz 1130z	15/01	Fair	1m40s	PLdn	MON
12169 kHz 1140z	15/01	Fair	1m40s	PLdn	MON
11169kHz 1150z	15/01	Weak	1m40s	PLdn	MON

SATURDAY 20<sup>th</sup> January 2024

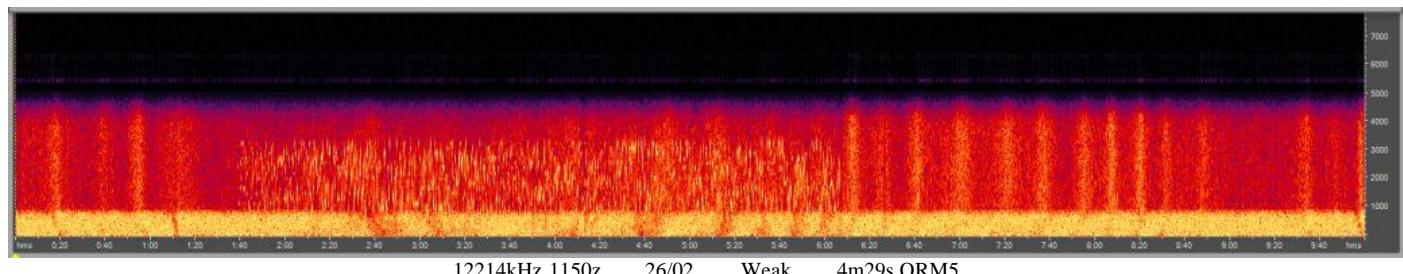
NOT MONITORED

14769kHz 1100z	22/01	Weak	4m28s	PLdn	MON
14369kHz 1110z	22/01	Weak	4m28s	PLdn	MON
13969kHz 1120z	22/01	Weak	4m28s	PLdn	MON
13369kHz 1130z	22/01	Weak	4m28s	PLdn	MON
12169kHz 1140z	22/01	Weak	4m28s	PLdn	MON
11169kHz 1150z	22/01	Weak	4m28s	PLdn	MON
14769kHz 1100z	27/01	Fair	4m28s	PLdn	SAT
14369kHz 1110z	27/01	Fair	4m28s	PLdn	SAT
13969kHz 1120z	27/01	Fair	4m28s	PLdn	SAT
13369kHz 1130z	27/01	Fair	4m28s	PLdn	SAT
12169kHz 1140z	27/01	Fair	4m28s	PLdn	SAT
11169kHz 1150z	27/01	Weak	4m28s	PLdn	SAT
14769kHz 1100z	29/01	Fair	1m40s	PLdn	MON
14369kHz 1110z	29/01	Fair	1m40s	PLdn	MON
13969kHz 1120z	29/01	Fair	1m40s	PLdn	MON
13369kHz 1130z	29/01	MISSED		PLdn	MON
12169kHz 1140z	29/01	MISSED		PLdn	MON
11169kHz 1150z	29/01	Weak	1m40s	PLdn	MON

February 2024

15814kHz 1100z	03/02	Weak	1m40s	PLdn	SAT
14814kHz 1110z	03/02	Weak	1m40s	PLdn	SAT
14414kHz 1120z	03/02	Weak	1m40s	PLdn	SAT
13914kHz 1130z	03/02	Weak	1m40s	PLdn	SAT
13414kHz 1140z	03/02	Weak	1m40s	PLdn	SAT
12214kHz 1150z	03/02	Weak	1m40s	PLdn	SAT
15814kHz 1100z	05/02	Weak	1m40s	PLdn	MON
14814kHz 1110z	05/02	Weak	1m40s	PLdn	MON
14414kHz 1120z	05/02	Weak	1m40s	PLdn	MON
13914kHz 1130z	05/02	Weak	1m40s	PLdn	MON
13414kHz 1140z	05/02	Weak	1m40s	PLdn	MON
12214kHz 1150z	05/02	Weak	1m40s	QRM3	MON

15814kHz 1100z	10/02	Fair	1m40s	PLdn	SAT
14814kHz 1110z	10/02	Weak	1m40s	PLdn	SAT
14414kHz 1120z	10/02	Weak	1m40s	PLdn	SAT
13914kHz 1130z	10/02	Weak	1m40s	PLdn	SAT
13414kHz 1140z	10/02	Weak	1m40s QRM3/4	PLdn	SAT
12214kHz 1150z	10/02	Weak	1m40s	PLdn	SAT
15814kHz 1100z	12/02	Weak	2m15s	PLdn	MON
14814kHz 1110z	12/02	Weak	2m15s	PLdn	MON
14414kHz 1120z	12/02	Weak	2m15s	PLdn	MON
13914kHz 1130z	12/02	Weak	2m15s	PLdn	MON
13414kHz 1140z	12/02	Weak	2m15s	PLdn	MON
12214kHz 1150z	12/02	Fair	2m15s	PLdn	MON
15814kHz 1100z	17/02	Fair	2m15s	PLdn	SAT
14814kHz 1110z	17/02	Weak	2m15s	PLdn	SAT
14414kHz 1120z	17/02	Fair	2m15s	PLdn	SAT
13914kHz 1130z	17/02	Fair	2m15s	PLdn	SAT
13414kHz 1140z	17/02	Fair	2m15s	PLdn	SAT
12214kHz 1150z	17/02	Fair	2m15s QSB3	PLdn	SAT
15814kHz 1100z	19/02	Fair	1m40s	PLdn	MON
14814kHz 1110z	19/02	Fair	1m40s	PLdn	MON
14414kHz 1120z	19/02	Weak	1m40s	PLdn	MON
13914kHz 1130z	19/02	Fair	1m40s	PLdn	MON
13414kHz 1140z	19/02	Fair	1m40s	PLdn	MON
12214kHz 1150z	19/02	Weak	1m40s	PLdn	MON
15814kHz 1100z	24/02	Weak	1m40s	PLdn	SAT
14814kHz 1110z	24/02	Weak	1m40s	PLdn	SAT
14414kHz 1120z	24/02	Weak	1m40s	PLdn	SAT
13914kHz 1130z	24/02	Weak	1m40s	PLdn	SAT
13414kHz 1140z	24/02	Weak	1m40s	PLdn	SAT
12214kHz 1150z	24/02	Weak	1m40s	PLdn	SAT



15814kHz 1100z	26/02	Fair	4m29s	PLdn	MON
14814kHz 1110z	26/02	Weak	4m29s	PLdn	MON
14414kHz 1120z	26/02	Weak	4m29s QRM3	PLdn	MON
13914kHz 1130z	26/02	Weak	4m29s	PLdn	MON
13414kHz 1140z	26/02	Weak	4m29s QRM4	PLdn	MON
12214kHz 1150z	26/02	Weak	4m29s QRM5	PLdn	MON [See above]

## Wed/Sat

### January 2024

15925kHz 1200z	03/01	Fair	3m35s	PLdn	WED
14825kHz 1210z	03/01	Strong	3m35s	PLdn	WED
13425kHz 1220z	03/01	Strong	3m35s	PLdn	WED
12125kHz 1230z	03/01	Strong	3m35s	PLdn	WED
10425kHz 1240z	03/01	Weak	3m35s	PLdn	WED
9325kHz 1250z	03/01	Weak	3m35s	PLdn	WED
15925kHz 1200z	06/01	Fair	3m35s	PLdn	SAT
14825kHz 1210z	06/01	Fair	3m35s	PLdn	SAT
13425kHz 1220z	06/01	Fair	3m35s	PLdn	SAT
12125kHz 1230z	06/01	Fair	3m35s	PLdn	SAT
10425kHz 1240z	06/01	Weak	3m35s	PLdn	SAT
9325kHz 1250z	06/01	Weak	3m35s	PLdn	SAT
15925kHz 1200z	10/01	Fair	4m28s	PLdn	WED
14825kHz 1210z	10/01	Weak	4m28s	PLdn	WED
13425kHz 1220z	10/01	Weak	4m28s	PLdn	WED
12125kHz 1230z	10/01	Fair	4m28s	PLdn	WED
10425kHz 1240z	10/01	Weak	4m28s	PLdn	WED
9325kHz 1250z	10/01	NRH		PLdn	WED

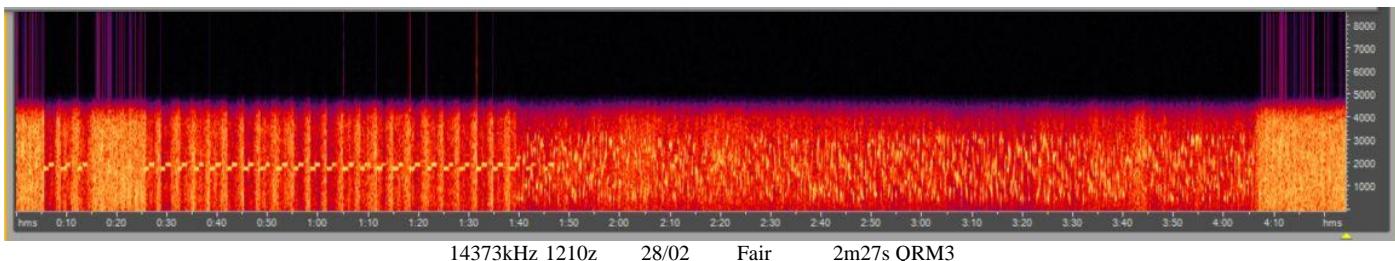
15925kHz 1200z	13/01	Strong	4m28s	PLdn	SAT
14825kHz 1210z	13/01	Fair	4m28s	PLdn	SAT
13425kHz 1220z	13/01	Fair	4m28s	PLdn	SAT
12125kHz 1230z	13/01	Fair	4m28s	PLdn	SAT
10425kHz 1240z	13/01	Fair	4m28s	PLdn	SAT
9325kHz 1250z	13/01	Weak	4m28s	PLdn	SAT
15925kHz 1200z	17/01	Fair	3m35s	PLdn	WED
14825kHz 1210z	17/01	Fair	3m35s	PLdn	WED
13425kHz 1220z	17/01	Fair	3m35s	PLdn	WED
12125kHz 1230z	17/01	Fair	3m35s	PLdn	WED
10425kHz 1240z	17/01	Weak	3m35s	PLdn	WED
9325kHz 1250z	17/01	Weak	3m35s	PLdn	WED

SATURDAY 20<sup>th</sup> January 2024      NOT MONITORED      SAT

15925kHz 1200z	24/01	Weak	4m28s	PLdn	WED
14825kHz 1210z	24/01	Weak	4m28s	PLdn	WED
13425kHz 1220z	24/01	Fair	4m28s	PLdn	WED
12125kHz 1230z	24/01	Fair	4m28s	PLdn	WED
10425kHz 1240z	24/01	Weak	4m28s	PLdn	WED
9325kHz 1250z	24/01	Weak	4m28s	PLdn	WED
15925kHz 1200z	27/01	Fair	4m28s	PLdn	SAT
14825kHz 1210z	27/01	Weak	4m28s	PLdn	SAT
13425kHz 1220z	27/01	Weak	4m28s	PLdn	SAT
12125kHz 1230z	27/01	Weak	4m28s	PLdn	SAT
10425kHz 1240z	27/01	Weak	4m28s	PLdn	SAT
9325kHz 1250z	27/01	V.weak	4m28s	PLdn	SAT

## February 2024

14873kHz 1200z	03/02	Fair	3m25s	PLdn	SAT
14373kHz 1210z	03/02	Fair	3m25s	PLdn	SAT
13873kHz 1220z	03/02	Fair	3m25s	PLdn	SAT
13373kHz 1230z	03/02	Fair	3m25s	PLdn	SAT
12173kHz 1240z	03/02	Fair	3m25s	PLdn	SAT
11173kHz 1250z	03/02	MISSED		PLdn	SAT
14873kHz 1200z	07/02	Fair	3m24s	PLdn	WED
14373kHz 1210z	07/02	Fair	3m24s	PLdn	WED
13873kHz 1220z	07/02	Fair	3m24s	PLdn	WED
13373kHz 1230z	07/02	Strong	3m24s	PLdn	WED
12173kHz 1240z	07/02	Fair	3m24s	PLdn	WED
11173kHz 1250z	07/02	Fair	3m24s	PLdn	WED
14873kHz 1200z	10/02	Weak	4m28s	PLdn	SAT
14373kHz 1210z	10/02	Fair	4m28s	PLdn	SAT
13873kHz 1220z	10/02	Fair	4m28s	PLdn	SAT
13373kHz 1230z	10/02	Weak	4m28s	PLdn	SAT
12173kHz 1240z	10/02	Fair	4m28s	PLdn	SAT
11173kHz 1250z	10/02	Weak	4m28s	PLdn	SAT
14873kHz 1200z	14/02	Fair	4m28 QRM3	PLdn	WED
14373kHz 1210z	14/02	Fair	4m28	PLdn	WED
13873kHz 1220z	14/02	Fair	4m28	PLdn	WED
13373kHz 1230z	14/02	Fair	4m28	PLdn	WED
12173kHz 1240z	14/02	Fair	4m28	PLdn	WED
11173kHz 1250z	14/02	Weak	4m28	PLdn	WED
14873kHz 1200z	17/02	Fair	4m28s	PLdn	SAT
14373kHz 1210z	17/02	Fair	4m28s	PLdn	SAT
13873kHz 1220z	17/02	Fair	4m28s	PLdn	SAT
13373kHz 1230z	17/02	Fair	4m28s	PLdn	SAT
12173kHz 1240z	17/02	Fair	4m28s	PLdn	SAT
11173kHz 1250z	17/02	Fair	4m28s	PLdn	SAT
14873kHz 1200z	21/02	Weak	4m28	PLdn	WED
14373kHz 1210z	21/02	Weak	4m28	PLdn	WED
13873kHz 1220z	21/02	Fair	4m28	PLdn	WED
13373kHz 1230z	21/02	Fair	4m28	PLdn	WED
12173kHz 1240z	21/02	Fair	4m28	PLdn	WED
11173kHz 1250z	21/02	Weak	4m28	PLdn	WED
14873kHz 1200z	24/02	Fair	4m28s	PLdn	SAT
14373kHz 1210z	24/02	Fair	4m28s	PLdn	SAT
13873kHz 1220z	24/02	Fair	4m28s	PLdn	SAT
13373kHz 1230z	24/02	Fair	4m28s	PLdn	SAT
12173kHz 1240z	24/02	Fair	4m28s	PLdn	SAT
11173kHz 1250z	24/02	Weak	4m28s	PLdn	SAT



14873kHz 1200z	28/02	Fair	2m27s	PLdn	WED	
14373kHz 1210z	28/02	Fair	2m27s QRM3	PLdn	WED	See above
13873kHz 1220z	28/02	Weak	2m27s	PLdn	WED	
13373kHz 1230z	28/02	Weak	2m27s	PLdn	WED	
12173kHz 1240z	28/02	Weak	2m27s	PLdn	WED	
11173kHz 1250z	28/02	Weak	2m27s	PLdn	WED	

## Other XPB1 [H-FD]

1B XPB1

Tue 02.01.2024 0600Z 12187 MFSK-16 4:30

Tue 02.01.2024 0610Z 13387 MFSK-16

Tue 02.01.2024 0620Z 13887 MFSK-16

Tue 02.01.2024 0630Z 14487 MFSK-16

Tue 02.01.2024 0640Z 14987 MFSK-16

Tue 02.01.2024 0650Z 15887 MFSK-16

Tue 02.01.2024 1300Z 20069 MFSK-16 4:30

Tue 02.01.2024 1310Z 19369 MFSK-16

Tue 02.01.2024 1320Z 18269 MFSK-16

Tue 02.01.2024 1330Z 17469 MFSK-16

Tue 02.01.2024 1340Z 16269 MFSK-16

Tue 02.01.2024 1350Z 15969 MFSK-16

Tue 06.02.2024 0600Z 13443 MFSK-16 1:41

Tue 06.02.2024 0610Z 13943 MFSK-16

Tue 06.02.2024 0620Z 14443 MFSK-16

Tue 06.02.2024 0630Z 14943 MFSK-16

Tue 06.02.2024 0640Z 15843 MFSK-16

Tue 06.02.2024 0650Z 16343 MFSK-16

Fri 09.02.2024 1300Z 20035 MFSK-16 2:16

Fri 09.02.2024 1310Z 19235 MFSK-16

Fri 09.02.2024 1320Z 18335 MFSK-16

Fri 09.02.2024 1330Z 17435 MFSK-16

Fri 09.02.2024 1340Z 16235 MFSK-16

Fri 09.02.2024 1350Z 15835 MFSK-16

## X06 Mazielka (1c) logs section

Date	Day UTC	Freq	Scale	Monitor	Comments
20240109	Tue 1008-1011	16317	612534	Andrew/SE	TX to Ashgabat, G89
20240109	Tue 1023-1026	20813	216354	Andrew	TX to Chennai, G388
20240110	Wed 0818-0820	11483	412356	Andrew	TX to Budapest, G97
20240110	Wed 0928-0930	11153	465132	Ary/NL,Dave/AU	TX to Sofia, G100
20240111	Tue 0812-0819	16153	153624	Dave	TX to Damascus, G249
20240111	Thu 0857	12184	1---6--	Schorsch	X06b before XPA2
20240113	Sat 1103	14825	1---6--	Schorsch	Very short X06b(1)
20240115	Mon 0907-0910	14392	532614	RX39	TX to Paris, G147
20240115	Mon 1053	10560	16-1-6	Schorsch	X06b
20240116	Tue 0742-0841	12350	1---6--	Anon07661, Andrew, Ary	X06b
20240116	Tue 0753-0840	14769	16-1-6	Ary, Andrew	X06b (carrier up till 0844)
20240116	Tue 0757-0841	15740	1---6--	Ary, Andrew	X06b
20240116	Tue 0805-0821	11370	6-----	Ary	X06d
20240116	Tue 0817-0821	13640	1-----	Ary	X06d
20240116	Tue 0821-0840	11370	111333	Ary, Andrew	X06b, doubled with "111555" (2)
20240116	Tue 0821-0840	13640	111333	Ary, Andrew	X06b, doubled with "111555" (3)
20240116	Tue 0825-0838	14810	111222	Ary, Andrew	X06b
20240116	Tue 0928-0943	14358	154263	Ary, Dave	Alert2 (TX to Rome, G148) 1
20240116	Tue 0943-1000	12149	154263	Ary, Dave	2.2
20240116	Tue 1010	8131	1---6--	Schorsch	X06b

20240118	Thu	0758-0802	17534	351264	Dave	TX to Abu Dhabi, G435
20240119	Fri	1025-1028	14824	625413	Dave	TX to Tel Aviv, G193
20240119	Fri	1035	14978	1--6--	Andrew	X06b before XPA2
20240120	Sat	1104	9325	1--6--	Schorsch	X06b
20240121	Sun	0651-0652	12130	452163	RadiotehnikaT	TX to Kabul, G403
20240122	Mon	0834-0838	17475	156234	Dave	TX to Kampala, G203
20240122	Mon	0944-0947	16117	463125	Dave	TX to Rabat, G222
20240123	Tue	0827-0830	17523	542136	Dave	TX to Beijing, G88
20240123	Tue	0958-1001	17520	612534	Dave,	
					Anonymouse	TX to Ashgabat, G234
20240123	Tue	1035-1037	20813	216354	Dave, Andrew	TX to Chennai, G228
20240124	Wed	0859-0900	13985	134265	Dave	TX to Tunis, G90
20240125	Thu	0817-0822	16153	153624	Dave	TX to Damascus, G249
20240126	Fri	1016	17463	256134	Ary	Alert 2 (TX to Abidjan, G270( 1
20240126	Fri	1023	19611	256134	Ary	2.2
20240128	Sun	1113-1120	15710	261453	Dave	TX to Cairo, G285
20240201	Thu	0736-0754	16132	352416	Ary, Andrew	Alert2 (Dar es Salaam, G43) 1
20240201	Thu	0753-0800	18575	352416	Ary, Andrew	2.2
20240201	Thu	0911-0913	14547	645321	Ary, Andrew	Alert2 (Ho Chi Minh City, G410)1
20240201	Thu	0915-0918	14547	645321	Andrew, Ary	2.2
20240201	Thu	1201-1209	12100	123456	Ary, Anon61155	X06c
20240201	Thu	1326-1334	20627	436512	Andrew	TX to Harare, G44
20240202	Fri	1014-1018	14824	625413	Dave	TX to Tel Aviv, G56
20240202	Fri	1206	15835	1--6--	Schorsch	X06b
20240202	Fri	1208	16235	1--6--	Schorsch	X06b
20240204	Sun	0701	12130	452163	RadiotehnikaT	TX to Kabul, G66(4)
20240205	Mon	0829-0830	12152	432516	Andrew	TX to Bern, G6
20240205	Mon	0923-0933	18750	641523	Dave	Alert3 (TX to Lusaka, G5) 1
20240205	Mon	0934-0941	20675	641523	Andrew	3.2
20240205	Mon	0941-0946	23355	641523	Anon34932	3.3
20240206	Tue	0936-0938	13401	154263	Dave	TX to Rome, G7
20240207	Wed	0916-0919	14631	362154	Ary, Andrew	TX to Athens, G32(5)
20240207	Wed	1113-1117	16115	215346	Ary, Anon53713	TX to Mumbai, G25
20230207	Wed	1240-1243	19878	231654	Dave	TX to Abuja, G422
20240208	Thu	0813-0814	16153	153624	Andrew	TX to Damascus, G249(6)
20240209	Fri	0753-0754	14695	341265	Andrew	G442
20240211	Sun	1126-1128	16060	261453	Dave	TX to Cairo, G138
20240211	Sun	1320	10841	134265	tiNG	TX to Tunis, R
20240212	Mon	0826-0830	20690	156234	Dave	TX to Kampala, G68
20240212	Mon	0928-0934	16117	463125	Dave	Alert2 (TX to Rabat, G77) 1
20240212	Mon	0934-0935	19235	463125	Andrew	2.2
20240213	Tue	1024-1026	20813	216354	Dave	TX to Chennai, G340
20240213	Tue	1215	20035	1----	RadiotehnikaT	X06d
20240214	Wed	0827-0830	13369	412356	Ary, Dave	TX to Budapest, G97
20240214	Wed	0918-0921	10172	465132	Ary, Dave	TX to Sofia, G100
20240215	Thu	0923	20837	645321	Dave	TX to Ho Chi Minh City, G417
20240216	Fri	0832-0838	13954	213546	Andrew	TX to Islamabad, G390
20240216	Fri	1023-1030	13547	625413	Andrew	Alert2 (TX to Tel Aviv, G193) 1
20240216	Fri	1031-1034	14824	625413	Andrew	2.2
20240219	Mon	0743-0745	12122	165324	Dave	TX to Vienna, G145
20240219	Mon	0907-0911	12152	432516	Dave	TX to Bern, G341
20240219	Mon	0913-0916	11438	532614	Dave	TX to Paris, G147
20240219	Mon	0946-0954	23355	641523	Dave	TX to Lusaka, G337
20240220	Tue	0940-0948	15687	154263	Dave	TX to Rome, G148
20240221	Wed	1117	16115	215346	Anon47870	TX to Mumbai, G167
20240221	Wed	1232-1237	19878	231654	Dave	TX to Abuja, G423
20240222	Thu	0750-0756	13854	521634	Dave	TX to Bucharest, G261
20240222	Thu	0810-0815	16153	153624	Dave	TX to Damascus, G249
20240225	Sun	1128-1137	16060	261453	Dave	TX to Cairo, G285
20240226	Mon	0818-0821	17475	156234	Dave	TX to Kampala, G203
20240226	Mon	0931-0937	19235	463125	Andrew	TX to Rabat, G222
20240227	Tue	0759-0805	17523	542136	Ary, Dave	TX to Beijing, G88
20240227	Tue	0759-0802	13420	534216	Ary, Dave	TX to Bagdad, G232(7)
20240227	Tue	1006-1008	20813	216354	Dave	TX to Chennai, G228
20240228	Wed	0859-0901	16116	134265	Dave	TX to Tunis, G90

1) Only seen, not heard (scale not confirmed)

2) Changed from X06d

3) Changed from X06d (with buzzer in background)

4) Restarted with some pattern, 2 rounds, off again

5) No carrier at first

6) Carrier up until 0815

7) 0753 UTC: Serdo v2

Many thanks as usual to all contributors. Till the next issue I say: Good-bye, and please stay healthy!

Jochen Schäfer, Numbers-, X06 Database and Teamkopf

## Hybrids : HM01

Logs from PoSW with some analysis:

Nothing heard from this Cuban YL and her weird sounding data noises throughout the winter months, checking on most Tuesday, Thursday and Saturdays at a bit before 0600 UTC on 14375 kHz, likewise 0700 UTC on 13435 and checking around half an hour later in both cases but nothing heard after mid-October of last year until late February of this:-

17-Feb-24, Saturday:- 0802 UTC, 13435 kHz, weak signal, just able to identify HM01 voice, must be running late, would normally expect a transmission on this frequency to end a few minutes before 0800z. Largely unreadable, audio low as well as weak signal, "4531?" and "00026" (?) heard. Was still going when checked at 0812 UTC.

20-Feb-24, Tuesday:- 0742 UTC, 13435 kHz, very weak, unreadable nothing was heard when checked at 0700 and 0715 UTC, had gone when checked again just before 0800.

22-Feb-24, Thursday:- 0731 UTC, 13435 kHz, in call-up mode after the break, weak, difficult copy, sounded like "64482 37449 88734..." (?) were in there somewhere.

Appeared to be in call-up mode again on this frequency when checked just before 0800z.

24-Feb-24, Saturday:- 0727 UTC, 13435 kHz, weak, low audio, in call-up mode, "64485 58476 52147 88737 05867 68012", again "query". Listened again at 0759 UTC, slightly stronger than earlier, data sounds and two 5Fs heard, "52147 88737". Stopped at 0801, carrier stayed on but had gone when checked about five minutes later.

27-Feb-24, Tuesday:- Very weak signal this morning on 13435, listened just after 0700, UTC and at 0730 and 0750, only just detectable, unreadable.

## Gizza Job



Tnx E, left out last issue.

**Attention former  
Police Officers seeking an  
outstanding opportunity!**

PREMIER PARTNERSHIP are currently recruiting Facilitators for a prestigious London-based project, with excellent day rates.

**Position:** Facilitator for London-based Project

**Location:** London, United Kingdom

**Duration:** 18 weeks (starting from 10th July)

*Requirements:*

- Recent employment as a police officer within the last 18 months is mandatory.
  - Current or recent Vetting

If you have the necessary experience and qualifications, we want to hear from you! Join our dynamic team and make a significant impact in this exciting project.

Don't miss out on this incredible opportunity!

To apply, please send your updated CV and a cover letter to

**[suppliers@premier-partnership.co.uk](mailto:suppliers@premier-partnership.co.uk)**

ONLY SHORTLISTED CANDIDATES WILL BE CONTACTED.



Note: This position is open to former police officers who meet the specified requirements.

(Please note that this advertisement is from the recruiting organisation, not the client.)

Probably won't be thrown under the bus in this role  
[isn't Diversity a wonderful thing]!

# **Chart Section Index**

**Predictions**

**M01 Schedule**

**Family III**

**Polytones, XPA1, XPA2**

**En141  
January 2024**

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Mar kHz, ID, ...	Apr kHz, ID, ...
x	x	x	x	x			0000		F01	01A	17471	17471
x	x	x	x	x	x	x	0000		V13	0	15250,15890	
x				x			0010/0030/0050		M12	01B	16284/15984/14784 297	14837/13937/12137 891
x				x			0025/0035		F01	01A	16023/13555	15820/13405
x	x	x	x	x	x	x	0100		V13	0	13974,15890,18040	
x				x			0125/0135		F01	01A	16023/13555	15820/13405
x	x	x	x	x	x	x	0200		V13	0	8169	15388
						x	0200/0220/0240		V07	01B	19172/17472/16272 112	17431/16131/14431 414
x	x						0210/0310 tue, when msg		E06	01A	11567/14568 537	11454/14456 537
		x	x				0300/0400		E06	01A	15726/13384 361	15641/13392 361
x	x	x	x	x	x	x	0300		V13	0		15388
	x		x				0300/0320/0340		M12	01B	18767/17467/16267 742	18767/17467/16267 742
x	x						0315		E11	03	11581 25#	11581 25#
x	x	x	x	x	x	x	0400		V13	0		15388
x	x	x	x	x			0400/0420		S06	01A	11616/ 9322 480	11616/ 9322 480
x		x					0445		S11A	03	10728 79#	10728 79#
x							0450		E11	03	5371 41#	5371 41#
x	x		x		x		0455		HM01	18	10860	10860
x	x	x	x	x	x		0455		HM01	18	11462	11462
x	x	x	x	x	x	x	0500		V13	0		11430
x	x						0500/0510/0520 0530/0540/0550		XPB1	01B		13527/13927/14727 14927/15827/16327
x	x	x	x	x			0500/0520		M14	01A	12211/10243 952	12211/10243 952
x	x						0500/0520/0540		XPA2	01B		10249/11449/12149
		x	x				0500/0600	1/3	E06	01A		15645/17470 951
x	x						0510		S11A	03	23004 65#	23004 65#
x			x				0530		M01A	14	9441 751	9441 751
	x	x					0530		M01A	14	9129 or 9192 498	9129 or 9192 498
	x	x					0540		M01A	14	7692 536	7692 536
x	x		x		x		0555		HM01	18	10345	10345
x	x	x	x	x			0555		HM01	18	14375	14375
x	x						0600		E11	03	19515 94#	19515 94#
		x		x		x	0600		E11	03	8680 35#	8680 35#
x	x	x	x	x	x	x	0600		V13	0		11430
x	x						0600/0610/0620 0630/0640/0650		XPB1	01B	13562/14362/14862 15962/16262/17462	

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Mar kHz, ID, ...	Apr kHz, ID, ...
					x		0600/0620/0640		E07	01B		9261/10261/11461 224 <b>M i s s i n g</b>
x	x						0600/0620/0640		XPA2	01B	11157/12157/13557	
	x			x			0600/0620/0640		M12	01B		11468/12168/13368 413 <b>M i s s i n g</b>
		x	x				0600/0700	1/3	E06	01B	16230/19325 864	
x		x					0620		M01A	14	10233 or 10235 354/458	10233 or 10235 354/458
	x	x					0620		M01A	14	9421 135	9421 135
x		x					0630		M01A	14	9447 143/796	9447 143/796
	x	x					0630		M01A	14	8111 902/536	8111 902/536
x	x						0645		E11	03	8423 51#	8423 51#
x	x	x	x	x	x		0655		HM01	18	9330	9330
x	x	x	x	x			0655		HM01	18	13435	13435
x		x					0700		S11A	03	8597 47#	8597 47#
x		x	x				0700		E11	03	8180 57#	8180 57#
			x	x			0700		E11	03	9079 49#	9079 49#
x	x	x	x	x	x	x	0700		V13	0		15250
					x		0700		M01	01B	6510 463	6510 463
					x		0700/0720/0740		E07	01B	10268/11068/12168 201 <b>M i s s i n g</b>	
	x		x		x		0700/0720/0740		M12	01B	12184/13384/14794 <b>check</b> <b>M i s s i n g</b>	
x	x						0700/0720/0740		XPA2	01B		11409/12209/13409
x		x		x			0710		M01A	14	10651 297/358	10651 297/358
x	x	x					0710		M01A	14	9175 146/208	9175 146/208
x	x						0715		E11	03	15632 75#	15632 75#
x		x		x			0715		E11	03	x9963 63# <b>search</b>	x9963 63#
			x	x			0715		M01	14	<b>search</b>	<b>search</b>
x		x	x				0720		M01A	14	9151 728	9151 728
x	x	x					0725		S11A	03	21854 38#	21854 38#
			x		x		0730/0800		S06	01A	12093/10212 480 <b>check</b>	13945/11128 480 <b>check</b>
x							0745		E11	03	10213 26#	10213 26#

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Mar kHz, ID, ...	Apr kHz, ID, ...
	x		x				0745		E11	03	14865 22#	14865 22#
		x		x			0745		E11	03	17410 34#	17410 34#
x	x		x		x		0755		HM01	18	9065	9065
x	x	x		x			0755		HM01	18	11365	11365
x	x	x	x	x	x		0800		V13	0		15250
		x				x	0800/0820/0840		M12	01B	15848/17448/19148 841 <b>M i s s i n g</b>	
	x						0800/0820/0840		XPA2	01B	13931/14831/16131	
			x		x		0800/0820/0840		XPA2	01B		13881/14881/16281
x	x						0820		E11	03	19184 13#	19184 13#
		x	x				0820		E11	03	6807 43#	6807 43#
x			x				0830		E11	03	20170 18#	20170 18#
				x	x		0830		S11A	03	6433 37#	6433 37#
x	x						0845		E11	03	12202 71#	12202 71#
x	x	x					0845		E11	03	18168 15#	18168 15#
x	x		x		x		0855		HM01	18	9240	9240
x	x	x		x			0855		HM01	18	11462	11462
x	x						0900		E11	03	<b>x</b> 9968 53# <b>search</b>	<b>x</b> 9968 53#
		x		x			0900/0920/0940		XPA2	01B	15956/17456/18656	
x	x						0910/0930/0950		XPA2	01B	18333/16345/14838	18038/17474/16286
		x	x	x			0910/0930/0950		XPA2	01B	16261/15961/14861	15849/14659/13459
x			x				0915		S11A	03	6480 48#	6480 48#
	x	x					0930		E11	03	6940 27#	6940 27#
x	x	x	x	x	x	x	0930		M14	01A	17458 10.&25. 15994 11.&26. when msg	17458 10.&25. 15994 11.&26. when msg
	x						0930/1030		S06	01A	12188/10463 480	13547/11073 480
x	x		x		x		0955		HM01	18	9155	9155
x	x	x		x			0955		HM01	18	12180	12180
x		x		x			1000		E11	03	9951 30#	9951 30#
x	x	x	x	x	x	x	1000		V13	0		
x	x	x	x				1015/1025/1035		F01	01A	10861/ 8076/ 6974	10177/ 9317/ 7572
x		x					1045		E11	03	10200 69#	10200 69#
x				x			1100/1110/1110 1130/1140/1150		XPB1	01B	18253/17453/15953 14957/14353/13553	
	x			x			1100/1110/1110 1130/1140/1150		XPB1	01B		13562/12162/11562 11162/10562/10262
x		x		x			1100/1120/1140		XPA2	01B	14639/13539/12139	16341/14841/13941
	x	x	x				1100/1120/1140		XPA2	01B	15861/14431/13431	17426/16326/14926

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Mar kHz, ID, ...	Apr kHz, ID, ...
		x					1110/1130/1150		M12	01B	13386/12189/11491 725	13386/12189/11491 725
x	x	x	x	x	x	x	1200		V13	0	9276,13974	9276,13974,15890
x				x			1200/1210/1210 1230/1240/1250		XPB1	01B		17474/16274/15974 14974/14374/13874
	x			x			1200/1210/1210 1230/1240/1250		XPB1	01B	14621/13921/13421 12121/11121/10421	
x					x		1200/1220/1240		XPA2	01B	13384/13984/14984 <b>M i s s i n g</b>	14442/15842/16342 <b>M i s s i n g</b>
x		x					1200/1220/1240		XPA2	01B	14956/16356/17456	
x	x						1205		E11	03	9399 46#	9399 46#
x		x					1210/1230/1250		XPA1	01B		13368/12168/11168
x		x					1230		E11	03	12530 33#	12530 33#
x		x					1300		E11	03	5371 31#	5371 31#
x	x	x	x	x	x	x	1300		V13	0	7688, 9276,11430 13974	7502
x			x				1300/1310/1310 1330/1340/1350		XPB1	01B	20072/19572/18372 17472/16272/14972	20038/19538/18268 17468/16268/15868
				x			1300/1320/1340		E07	01B		12176/11576/10276 512 <b>M i s s i n g</b>
x		x					1310/1330/1350		XPA1	01B	14451/13451/12151 441	
x	x	x					1325/1425 sporadic		S06	01A	15643/12176 583	<b>search</b>
x			x				1400		S11A	03	11420 42#	11420 42#
x		x					1400/1420/1440		M12	01B	20849/19449/18249 842	20971/20371/19271 932
				x			1400/1420/1440		E07	01B	12143/11143/10443 114 <b>M i s s i n g</b>	
	x		x	x			1410/1430/1450		E07	01B	16284/14854/13384 328	16331/15831/14831 893
x			x		x		1430		E11	03	14972 91#	14972 91#
				x			1500		M01	14	6260 463	6260 463
x	x	x					1500/1600 sporadic		S06	01A	14913/10387 387	<b>search</b>
x			x				1500/1520/1540		E07	01B	14571/15851/17451 584	16257/18257/19157 221
				x			1500/1520/1540		XPA2	01B		15881/14481/13381
	x		x				1530		E11	03	10330 26#	10330 26#
x	x	x	x	x	x	x	1555		HM01	18	11435	11435
	x				x	x	1600/1620/1640		M12	01B		16321/15821/14721 387 <b>M i s s i n g</b>
				x			1600/1620/1640		XPA2	01B	12163/10863/ 9363	
x	x						1600/1620/1640		XPA2	01B	13994/13494/12194	15819/14919/13919

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Mar kHz, ID, ...	Apr kHz, ID, ...
				x			1600/1630		S06	01A	10755/ 9073 480 <b>check</b>	11487/ 9412 480 <b>check</b>
	x				x		1605		E11	03	5176 23#	5176 23#
	x			x			<b>1610</b>		E11	03	4181 39# <b>check</b>	4181 39#
				x	x		<b>1645</b>		E11	03	4505 36# <b>check</b>	4505 36#
x	x	x	x	x	x	x	1655		HM01	18	11530	11530
	x		x				1715		E11	03	6923 97#	6923 97#
		x					1730		E11	03	7864 41#	7864 41#
x					x		1745		E11	03	13470 24#	13470 24#
x	x	x	x	x	x	x	1755		HM01	18	11635	11635
	x		x				1800		M01	14	5475 463	5475 463
	x		x				1800/1820/1840		XPA2	01B		15873/14973/13873 <b>check</b>
			x				1800/1820/1840		M12	01B	11435/10598/ 9227 938	11435/10598/ 9227 938
			x		x		1815		E11	03	11116 92#	11116 92#
x		x					1840/1850/1900	1	F01	01A		12194/10581/ 8112
	x			x			1850		S11A	03	10213 28#	10213 28#
x		x					1900		E11	03	7317 64#	7317 64#
	x						1900/1920/1940		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
x		x					1900/1920/1940		M12	01B		13564/12164/11164 511
		x					1900/2000	1/3	S06	01A		<b>search</b> 842
		x		x		x	1910		E11	03	8530 61#	8530 61#
x		x					1940/1950/2000	1	F01	01A	10467/ 8094/ 6779	
		x			x		2000		E11	03	5737 52#	5737 52#
x	x	x					2000		M01	14	5020 463	5020 463
x		x					2000/2020/2040		M12	01B		12139/11139/10239 234
	x		x				2000/2020/2040		M12	01B	10238/ 9138/ 7838 218	
			x				2000/2100	1/3	S06	01A	842 <b>search</b>	
x	x	x	x	x			2055		HM01	18	11635	11635
x	x	x	x	x			2055		HM01	18	16180	16180
			x	x			2100/2120/2140		M12	01B		7575/ 8175/ 9175 511
x	x	x	x	x	x	x	2155		HM01	18	10715	10715
x	x	x	x	x	x	x	2155		HM01	18	17480	17480

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Mar kHz, ID, ...	Apr kHz, ID, ...
				x	x		2200/2220/2240		M12	01B	8126/ 7526/ 6826 178	
					x		2230/2240		F01	01A	20700/18726	22953/19405
x		x					2300/2320/2340		M12	01B	9157/ 7957/ 6857 917	
	x				x		2310/2330/2350		M12	01B	13571/12171/10871 <b>check</b>	/13921/12221 <b>check</b>
				x			2330/2340		F01	01A	20700/18726	22953/19405

## M01 FREQUENCY LIST

Frequencies may vary by a few kHz

JAN FEB NOV DEC

M01/1

197

DAY	TIME UTC	FREQ kHz
TUE / THU	1800	5320
TUE / THU	2000	4490
SAT	1500	5810
SUN	0700	5465

MAR APRIL SEPT OCT

M01/2

463

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

MAY JUNE JULY AUG

M01/3

025

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

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jan kHz, ID, ...	Feb kHz, ID, ...	Mar kHz, ID, ...	Apr kHz, ID, ...	Remarks
x	x				0315		E11	03		8456 25#	8456 25#	11581 25#	11581 25#	since 01/14, last log 02/24	
x	x				0445		S11A	03		11559 79#	11559 79#	10728 79#	10728 79#	since 05/22, last log 02/24	
x					0450		E11	03		4909 41#	4909 41#	5371 41#	5371 41#	since 02/10, last log 02/24 2nd transmission Thu 1730z	
x	x				0505		E11	03		12153 33#	12153 33#			since 10/11, last log 02/24 Mar/Apr/Sep/Oct at 1230z, Mai-Aug at 1645z	
x	x				0510		S11A	03		21906 65#	21906 65#	23004 65#	23004 65#	since 08/19, last log 02/24	
x	x				0600		E11	03		23004 94#	23004 94#	19515 94#	19515 94#	since 07/17, last log 02/24	
		x	x	x	0600		E11	03		7850 35#	7850 35#	8680 35#	8680 35#	since 04/15, last log 02/24	
x	x				0645		E11	03		7840 51#	7840 51#	8423 51#	8423 51#	since 07/09, last log 02/24	
x	x				0700		S11A	03		9050 47#	9050 47#	8597 47#	8597 47#	since 04/10, last log 02/24	
x	x				0700		E11	03		6804 57#	6804 57#	8180 57#	8180 57#	since 01/12, last log 02/24	
		x	x	x	0700		E11	03		5371 49#	5371 49#	9079 49#	9079 49#	since 07/15, last log 02/24	
x	x				0715		E11	03		11104 75#	11104 75#	15632 75#	15632 75#	since 06/21, last log 02/24	
x	x				0715		E11	03		9130 63#	14975 63#	x9963 63#	x9963 63#	since 02/11, last log 02/24	
	x	x		x	0725		S11A	03		23486 38#	23486 38#	21854 38#	21854 38#	since 05/14, last log 02/24	
x					0745		E11	03		10213 26#	10213 26#	10213 26#	10213 26#	since 03/14, last log 02/24 2nd transmission Thu 1530z	
x	x				0745		E11	03		13908 22#	13908 22#	14865 22#	14865 22#	since 01/20, last log 02/24	
	x	x		x	0745		E11	03		17378 34#	17378 34#	17410 34#	17410 34#	since 06/17, last log 02/24	
x	x				0820		E11	03		14611 13#	14611 13#	19184 13#	19184 13#	since 12/18, last log 02/24	
	x	x		x	0820		E11	03		6986 43#	6986 43#	6807 43#	6807 43#	since 10/09, last log 02/24	
x		x		x	0830		E11	03		23353 18#	23353 18#	20170 18#	20170 18#	since 07/15, last log 02/24	
		x	x	x	0830		S11A	03		5371 37#	5371 37#	6433 37#	6433 37#	since 02/14, last log 02/24	
x	x				0845		E11	03		12067 71#	12067 71#	12202 71#	12202 71#	since 09/10, last log 02/24	
x	x				0845		E11	03		17378 15#	17378 15#	18168 15#	18168 15#	since 07/17, last log 02/24	
x	x				0900		E11	03		11092 53#	15915 53#	x9968 53#	x9968 53#	since 10/05, last log 02/24	
x		x		x	0915		S11A	03		6252 48#	6252 48#	6480 48#	6480 48#	since 04/19, last log 02/24	
	x	x		x	0930		E11	03		7469 27#	7469 27#	6940 27#	6940 27#	since 02/14, last log 02/24	
x	x	x			1000		E11	03		9079 30#	9079 30#	9951 30#	9951 30#	since 11/16, last log 02/24	
x	x			x	1045		E11	03		11100 69#	11100 69#	10200 69#	10200 69#	since 03/18, last log 02/24	
x	x			x	1205		E11	03		11559 46#	11559 46#	9399 46#	9399 46#	since 03/10, last log 02/24	
x	x			x	1230		E11	03				12530 33#	12530 33#	since 10/11, last log 10/23 May-Aug at 1645z, Nov-Feb at 0505z	
x	x			x	1300		E11	03		4909 31#	4909 31#	5371 31#	5371 31#	since 07/14, last log 02/24	
x	x	x		x	1400		S11A	03		10448 42#	10448 42#	11420 42#	11420 42#	since 02/10, last log 02/24	
x	x	x		x	1430		E11	03		13363 91#	13363 91#	14972 91#	14972 91#	since 10/15, last log 02/24	
x	x			x	1530		E11	03		5409 26#	5409 26#	10330 26#	10330 26#	since 06/14, last log 02/24 2nd transmission Mon 0745z	
x	x			x	1605		E11	03		5432 23#	5432 23#	5176 23#	5176 23#	since 11/15, last log 02/24	
x	x	x		x	1610		E11	03		4505 39#	4505 39#	4181 39#	4181 39#	since 02/14, last log 02/24 until 01/24 1910z	
x	x			x	1645		E11	03						since 10/11, last log 08/22 Mar/Apr/Sep/Oct at 1230z, Nov-Feb at 0505z	
		x	x	x	1645		E11	03		4909 36#	4909 36#	4505 36#	4505 36#	since 03/14, last log 02/24 2nd transmission Thu 1530z until 01/24 1530z	
x	x	x		x	1715		E11	03		5082 97#	5082 97#	6923 97#	6923 97#	since 02/15, last log 02/24	
	x			x	1730		E11	03		5779 41#	5779 41#	7864 41#	7864 41#	since 03/10, last log 02/24 2nd transmission Mon 0450z	
x			x	x	1745		E11	03		12924 24#	12924 24#	13470 24#	13470 24#	since 04/18, last log 02/24	
	x	x	x	x	1815		E11	03		6849 92#	6849 92#	11116 92#	11116 92#	since 05/16, last log 02/24	
x	x	x	x	x	1850		S11A	03		11486 28#	11486 28#	10213 28#	10213 28#	since 06/17, last log 02/24	
x	x		x	x	1900		E11	03		6849 64#	6849 64#	7317 64#	7317 64#	since 05/16, last log 02/24	
	x	x	x	x	1910		E11	03		10487 61#	10487 61#	8530 61#	8530 61#	since 04/17, last log 02/24	
	x	x	x	x	2000		E11	03		5082 52#	5082 52#	5737 52#	5737 52#	since 05/15, last log 02/24	

## XPA1 Wednesday/Friday schedule

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

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

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

## **SPECIAL MATTERS**

### **Thanks to all our contributors:**

Ary, BR, CC, DanAr, E, F5, HH, HJH, JkC, Jochen, KW, Malc, MaleAnon, PoSW, PLdn, RNGB,  
Apologies to anyone missed.



### **MESSAGES:**

**E: Thanks for post; Sangean doing FB. All's well thanks. Good Easter to you also.**

### **RELEVANT WEBSITES**

ENIGMA 2000 Website: <http://www.enigma2000.org>

More Info on 'oddities' can be found on Brian of Sussex' excellent web pages: <http://www.brogers.dsl.pipex.com/page2.html>

Time zone information: <http://www.timeanddate.com/library/abbreviations/timezones/>

Encyclopedia of Espionage, Intelligence, and Security <http://www.faqs.org/espionage/>

# **2024**

<b>January</b>						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

<b>February</b>						
S	M	T	W	T	F	S
			1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

<b>March</b>						
S	M	T	W	T	F	S
			1	2		
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

<b>April</b>						
S	M	T	W	T	F	S
1	2	3	4	5	6	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

<b>May</b>						
S	M	T	W	T	F	S
		1	2	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

<b>June</b>						
S	M	T	W	T	F	S
		1				
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

<b>July</b>						
S	M	T	W	T	F	S
1	2	3	4	5	6	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

<b>August</b>						
S	M	T	W	T	F	S
		1	2	3		
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

<b>September</b>						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

<b>October</b>						
S	M	T	W	T	F	S
1	2	3	4	5		
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

<b>November</b>						
S	M	T	W	T	F	S
		1	2			
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

<b>December</b>						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

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