

ENIGMA 2000 NEWSLETTER



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ROCKEX cipher machine

As removed from British Embassy Peking August 1967 during the Chinese Cultural Revolution

DRONE SPECIAL

[Page 55]

ISSUE 156
September 2026

<http://www.enigma2000.org>

REMINDER: IN KEEPING WITH OUR ANNOUNCEMENT IN OUR RECENT NEWSLETTERS ENIGMA2000 WILL NOT DISCUSS THE RUSSIAN/UKRAINE or ISRAEL/GAZA MATTERS BEYOND TECHNICAL MATTERS

WE WILL NOT BE ANSWERING E MAILS SENT FROM THE PARTICIPATING COUNTRIES CONCERNING OUR SUBJECT MATTER

An apology to PoSW; I am very sorry to say that whilst transferring his files to my PC they were totally deleted; not saved in the 'Recycle Bin' I was unable to recover. The only file I had managed to transfer being that on Beacons with Brian. **My sincere apologies Peter.**

If you would care to submit your opening August letter next time I'd be more than obliged, given the China RCI and Cuba information.

Editorial

Propagation has once again been an issue; solar disturbance making themselves known across the HF spectrum. In the South of England we have had more than our fair share of Lightning storms.

I have two HF antennas in my garden; one an EFHW inverted L for 80 to 6m and a random open wire, via a Z Match and usually for use with my FRG 7700. There is also the pending installation of an active unit.

On one occasion the lightning and thunder almost together I was watching the lightning map as seen on <https://map.blitzortung.org/#1/38.5/8> when I was aware of a 'crackling sound' within the shack. The open wire was happily discharging into the oak shutters where I park it when not in use. The EFHW terminates with a PL259 plug being a coaxial feed that runs some 30M along the ground and into the shack.

Another problem [twice] was that of squirrels; they seem to have a liking for my coax and indeed my bungee cords. I have found they do not approach gold or yellow covered bungees. I mentioned this problem to a past student [well done on your PhD] whilst on business in my Uni and the solution, he stated was obvious: Coat the coax with hot chilli sauce. Interesting idea which I will try on the feed to my 4M vertical in the first instance.

Reminds me of a small cheese roll stealing incident at a school where I was part of the science staff. Nipping down to the kitchen to get a cheese roll I left same, in its bag, on the end of a bench in the prep room. It started disappearing. My wife is of Indian lineage and they have a condiment that is very strongly 'hot'. It is called achar; a pickle that is sinisterly black in colour. Buying two rolls, I put one in my pocket, the other I fill with lashings of this stuff. That was the last time my roll disappeared; it was also found in the Head of Science's bin. [!]

Not much change in the Number Station scene it seems.

I received an enquiry about the discone antenna and its use on milair intercepts. Well it's wideband and there's the answer! I suggested a planar antenna, which apart from being easy to make can be configured more easily. Then, of course, there's the flowerpot antenna [just another EFHW but VHF/UHF. I use one for Airband and it works well; I hope the enquirer makes one of these and is satisfied with the results.



For Christ's sake contact your controller [or at least clear that DLB]

Whatever is wrong with a proper numerical or alpha group message in the 'Personal' section of The Times or Telegraph? Metro is a bit slummy to be honest.

A letter received by yours truly wisely stated, "No more lost Iraqi passports recently – they must have noted your comments and used the adverts for fortune tellers and spiritual healers instead" Please don't give these persons ideas; the weaponising of Mystic Meg!

I wonder what the URL is for the site where you type in the Ref No LR2025 06 30 [It's a date as stated below] D187-67BC 11A997E6 and there's your message!

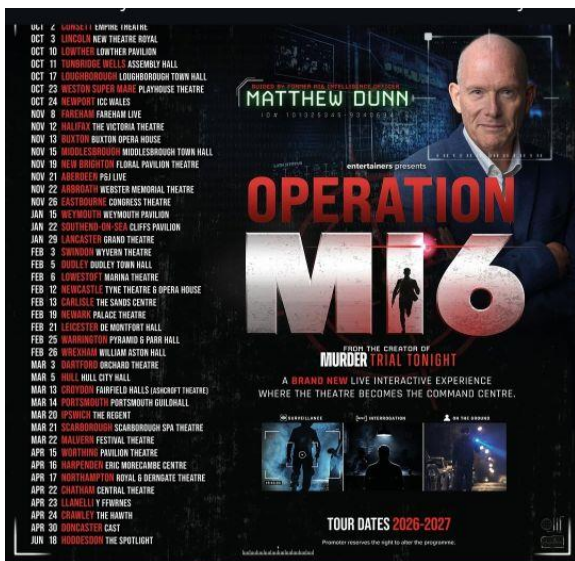
Sometime ago I found myself in an official building discussing the remote interception of computer screen displays [Van Eck]. It is something I have had a wide experience in having designed and built a unit to intercept and display. The heart of which was a Yaesu FRG9600 scanner with vdo card plus a variable line oscillator, linked to a designed VLF Rx 10 to 200kHz I seem to recall to ensure a rock solid image. We used specially made antennas too. The reason we developed this was to allow us to develop [and we did] a device to stop remote interception in this manner. It worked. I can say no more about this unit.

This all came to mind when I read this rather interesting idea, which, due to medical reasons I won't be trying.

[Get Your Monitor Transmitting VHF With A Browser Tool | Hackaday](#)

Incidentally, intercepting PC screens and PC emanations is still a viable thing; you rebuild the image pixel by pixel.

Here's a couple of posters seen by yours truly. Both booked, my pension must be too much!



Matthew Dunn, an interesting character id; Special Branch don't come knocking, also writes spy oriented novels using the moniker 'William Morrow.' No idea what his offering will be like but we'll find out in March 2027.

Then there is the fantastic Lives of Others, seen the film, got the T Shirt, been to STASI Museum Normanstrasse [Remember that 499?] and a good weeks jolly that was; two ex-squaddies loose in what was once East Germany.

Anyway That's booked for December 2026 and if it is as decent as the film its brilliant. The film had one of the most decent endings I have ever seen. I could witter on about STASI files and a member who has his own – brown envelope in a pub, absolutely swilling in beer and then, 'Look at this.' No names.....

Radio Conditions seem pretty poor at the start to July, a weather eye on the MUF showed nothing really above 7.2MHz for a 300km hop and not much better for 3000km stuff. I was forced to use SDR Twente a number of occasions too. A very decent online receiver. Again very poor on 24th July too; normally strong signal on Twente was S3/4 [XPA2 TuF 1120z, null msg].

Whilst we're mentioning all things entertainment UK Channel 4 is airing series 2 of The Undeclared War; events and actions at GCHQ. In this particular series due to political incompetence [the writer seems to be having a right dig and being spot on for real life] and to find a solution to some enemy hacking, Chin and Russia in the frame here – or should I say Sandbox [?] this know all and headstrong politician [aren't they all] and in answer to the directors mention of 'not enough skilled operatives in GCHQ' has members of 14 Signals Regiment placed in GCHQ.

The storyline also features a couple of nasty, arrogant and self-serving politicians – you know the type very well.

One would imagine there would already be a military presence in GCHQ, possibly from RAF Digby, and vice versa. Well, I had to mention this because when this erstwhile bunch of internet tapping squaddies turn up, one in a wheelchair, the state of the headdress is well pathetic. My personal beret, issued in 1968 is in better condx when worn at Remembrance; but just look at this image. The woman is meant to be some Lt Colonel – dead feisty – but look at that beret.



Thought that was a Busby --- there you go 499, Jimmy to the fore [still looks like Interflora].

Members will all have seen my message [below] of 23rd July via group, but not so badly illustrated!:

For those interested there will be a documentary on UK TV channel; 'Terror in the Skies: Stopping the Liquid Bomb Plot' will be aired on ITV1 and ITVX at 2220 Sunday 26th July. What you didn't see was this:



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Apologies for lack of a top; 38°C and very humid [Tropical Rain Forest] demands some sensible behaviour.

Note the Sony ICF-SW100e; still doing good service today

I am particularly interested in this matter being on the peripheral of the activity

As I prepared to take some pics of the US Embassy in Guyana some woman appears at the main entrance toting a rifle and shouts for every one to clear off. (I went to the rear of the Embassy, by the Everest Cricket Ground, and took my pics).

The cellphone rings as we're driving into Georgetown to tell me of the bomb plot. I went into my carriers office where I was given a telex alert saying why all flights (except the one with head of MI5 and John Reid) had been cancelled.

I returned to where I was staying on West Bank Demerara and tuned up BBC World Service to find out more. See pic!

There was a decent piece made and aired on TV and I wonder if this is it;

[The Liquid Bomb Plot \(Crime Documentary\) | Real Stories](#)

All very true and something that has once again been discussed at the dinner table between my family members.

This popped up today [16/08/2026] and I just had to make it known – there's a warning to us all:

2 ex-Chinese military personnel arrested in South Korea for alleged espionage

By HYUNG-JIN KIM

Updated 11:27 AM UTC, August 11, 2026

https://apnews.com/article/south-korea-china-us-espionage-c77d40c0c5b406b81d976a2449d9f0d2?fbclid=IwY2xjawTu4aRwZG9mAWV4dG4DYWVtAjExAHNydGMGYXBwX2lkEDiyMjAzOTE3ODgyMDA4OTIAAR5m9QHmOorzbolEC_HWPqHncei-cSV-L9E3mGuUXiGiKEAhDX-of-35pLU3Yw_aem_OzJ0DjD93sCDJY_hw0mUEA

SEOUL, South Korea (AP) — Two former Chinese military servicemembers were arrested in South Korea for alleged espionage, accused of acts including intercepting communications between fighter jets and ground control and collecting information on movements of U.S. armaments, police said Tuesday.

Police said that one of the suspects, a Chinese national in his 60s, set up an interception device consisting of an **software-defined radio receiver, an antenna and a laptop at a hotel near an air base** jointly used by South Korean and U.S. air forces in southern South Korea.

Police said the man is accused of intercepting communications between fighter jets flown by South Korean and U.S. pilots and air traffic controllers at the base several times since 2024.

Police said he previously served in the Chinese military but refused to disclose further details about his identity. The police statement said the man was arrested Monday for violating laws on aiding the enemy and protecting communication secrets.

Police said they were conducting a forensic examination of his laptop to find if he relayed any of the intercepted communications to Chinese authorities.

The man told investigators that it was his hobby to listen to communications between civilians planes and air traffic controllers and he wanted to listen to communications involving fighter jets as well.

Police said they also arrested another Chinese man in his 40s on Monday on accusations of illegally collecting information from the U.S. military headquarters near Seoul, including information on U.S.-South Korean military drills, photos showing the movements of weapons at the headquarters, and personnel changes of top U.S. military officers, according to police.

Police allege that he obtained some of the information from a South Korean woman working at the U.S. command. Police say he gave her money in return for the information and they suspect the pair had a romantic relationship.

The man, who runs a military supply store near the U.S. command, argued during questioning that he sought the information believing it would help his business.

Police said the man also previously served in the Chinese military. Police said he violated laws on aiding the enemy and protecting military installations in South Korea.

Calls to the Chinese Embassy in Seoul were unanswered after business hours Tuesday.

The police announcement came a day after South Korean and U.S. militaries said they would start large-scale annual exercises next week. The U.S. stations about 28,500 troops in South Korea to help deter potential aggressions from North Korea.

https://apnews.com/article/south-korea-china-us-espionage-c77d40c0c5b406b81d976a2449d9f0d2?fbclid=IwY2xjawTu4aRwZG9mAWV4dG4DYWVtAjExAHNyGMGYXBwX2lkEDlyMjAzOTE3ODgyMDA4OTIAAR5m9QHmOorzbolEC_HWPqHncei-cSV-L9E3mGuUXIGiKEAhDX-of-35pLU3Yw_aem_OzJ0DjD93sCDJY_hw0mUEA

From South Korean perspective:

Rising Chinese espionage exposes gaps in S. Korea's counterintelligence system

<https://m.koreaherald.com/article/10843139>

Two Chinese nationals were arrested earlier this month for allegedly collecting classified information related to South Korea-US military exercises and intercepting fighter jet communications near an air force base, police said on Aug. 11.

One of the suspects, a Chinese man in his 40s, allegedly recruited a South Korean civilian employee at Camp Humphreys, a major US military base in Pyeongtaek, Gyeonggi Province, and obtained information on the locations of US command facilities, weapons movements within the base and materials related to the annual Ulchi Freedom Shield joint military exercise. Police believe he used a military-surplus store he operated near the main gate of Camp Humphreys as a cover for his alleged espionage activities.

The other suspect, a Chinese national in his 60s, was caught after setting up surveillance equipment, including a receiver and an antenna, in a hotel room near the military airport in Gunsan, North Jeolla Province, and listening in on radio communications between air traffic controllers and pilots. Police say he had repeatedly traveled to South Korea on tourist visas since 2024, eavesdropping on military communications each time the South Korean and US Air Forces held joint exercises.

Both suspects were found to be former members of China's People's Liberation Army, raising suspicions that they may have been involved in an organized espionage operation.

However, they cannot be charged with espionage under the Criminal Act.

The reason is that while the National Assembly passed a revision in February allowing those who detect, collect, leak or transmit military secrets for foreign countries or equivalent organizations to be punished for espionage — not just for an “enemy state,” referring to North Korea — the revised law will not take effect until Sept. 13.

Police charged them with aiding the enemy under the Criminal Act and violating the Protection of Military Bases and Installations Act, offenses that carry lighter penalties than espionage.

Suspected Chinese espionage activities targeting military intelligence in South Korea and US Forces Korea have increased in recent years.

Two Chinese high school students who entered South Korea on tourist visas without a tour guide were caught photographing fighter jets taking off from and landing at Suwon Air Base in March 2025.

In June 2024, Chinese students attending a university in Busan were arrested for photographing a US aircraft carrier docked in the city. Authorities found that they had illegally filmed military bases and US aircraft carriers with drones on nine occasions.

In November 2024, a Chinese national was arrested after flying a drone to photograph the National Intelligence Service headquarters.

According to the NIS, more than 10 cases were recorded between 2023 and 2025 in which Chinese nationals were caught secretly photographing key national facilities using drones and other equipment.

The US Senate and House Armed Services Committees directed the Department of Defense to submit a report on the Chinese Communist Party's malign activities in South Korea as part of the report accompanying the fiscal 2027 National Defense Authorization Act. This can be seen as reflecting the view that China's espionage activities in South Korea pose a threat to US defense interests.

Chinese spies are targeting not only US military intelligence but also South Korea's cutting-edge technology. In particular, South Korea's advanced semiconductor technology is China's most coveted industrial asset.

In April, a former senior manager and a former researcher of Samsung Electronics were sentenced to prison for leaking the company's DRAM manufacturing technology and process information to CXMT, China's No. 1 DRAM maker.

At a time when South Korea needs to strengthen its counterintelligence capabilities, the Lee Jae Myung administration is moving in the opposite direction.

The National Intelligence Service's counterespionage investigative authority was already abolished in 2024 at the initiative of the Democratic Party of Korea, and the Lee administration, citing the alleged “insurrection” involvement as a pretext, split up and dismantled the Defense Counterintelligence Command.

There are concerns about whether fragmented investigative jurisdictions can effectively thwart increasingly sophisticated espionage activities at an early stage.

Who recalls the 'Airfix 12' arrested in Greece in the early 2000s? Who remembers a certain set of intercepts near Normanstrasse in 2010 [499 and 613]? See image below.....



*Imagine being 613 and getting caught with that lot in your hotel room; antenna on roof 3mins after entering rooms..
Imagine arguing about paying for breakfast you'd not had. Breakfast in tent outside STASI HQ much tastier
and the Fraulien with a Steiner of beer there at 0900.
All true as 419 would confirm. Nice grub too!*

Newsround

I worked in a besieged Tehran embassy. We'd have drinks as they rioted

The British outpost remains central to western intelligence but is constantly targeted by furious protests
Iranian police stand guard in front of the British Embassy in Tehran during an anti-UK demonstration, with graffiti on a concrete barrier reading "UK" and a Star of David.

Maryam Rahmanian/Alamy
Matthew Gould

Saturday July 18 2026, 9.45pm BST, The Sunday Times

<https://www.thetimes.com/article/03fade2d-53b5-4675-8be7-af9ee235596a?shareToken=2530be7a6a403c01f14d676a7f2fadde>

On Sir Dominick Chilcott's first day as British ambassador to Iran in October 2011, a protester climbed over the embassy wall and started throwing Molotov cocktails. Chilcott assumed it was a random act of vandalism. His colleagues told him it had been a message from the regime: welcome to Tehran.

He had arrived at one of the most remarkable, important and sensitive diplomatic missions in the world, the fulcrum of a relationship that carries both a huge weight of history and an enduring strategic importance.

Last week, the British government designated the Islamic Revolutionary Guard Corps a terrorist organisation, falling into line with the United States, the EU, Canada and Australia. One of the reasons that we had been at the back of the pack in doing so had been a concern about what it might mean for the safety of the diplomats in Tehran.

The British embassy has long been treated by the regime and its supporters with suspicion. Even under the shah, Iranians were paranoid about what they thought went on behind its high brick walls. In the 1960s, the UK government agreed to an Iranian suggestion that perceptions might improve if sections of the walls were replaced by metal railings, revealing the interior of the compound. In 2011, student militia described it as the "second spy nest", the US embassy having been the first.

In fact, the US embassy has not been open since 1979, which has increased the importance of the British outpost. It means Tehran is one of a few postings where the British ambassador to Iran does not feel they are playing second fiddle to the American. It also means we have unique insight to offer in an otherwise asymmetric special relationship with the US. But it means that the British embassy is the first place that protesters go.

In the weeks that followed his arrival, Chilcott was to discover the reality of life as a British diplomat in Iran. The so-called "green revolution" had failed, but left the regime shaken. The re-election of Mahmoud Ahmadinejad as president in 2009 had enraged the public further. A number of the embassy's Iranian staff had been arrested, and released only after a massive lobbying campaign by Chilcott's predecessor.

Chilcott inherited an embassy metaphorically, and sometimes literally, under siege. Six weeks after he arrived, there was a protest on Ferdowsi Street outside the compound to mark the first anniversary of the killing of Majid Shahriari, a prominent nuclear engineer and professor who had been assassinated in Tehran with a car bomb. Some in Tehran wrongly blamed the UK for his death.

This was Chilcott's first experience of a protest at the gates, but the embassy was well used to it. There had been a series of attacks on the building ever since a major incursion in November 1978, as the shah's regime was beginning to collapse, during which the office had been set on fire.

More recently, with demonstrations obviously under regime control, the embassy had developed a standard drill: non-essential staff stayed at home, diplomatic staff stayed inside the main building, and hoses were laid out ready for use.

The theatre of protest

In my time in Tehran first as deputy ambassador to Iran then charge d'affaires (acting ambassador), five years earlier, I watched this scenario play out dozens of times. It was pure theatre. Protesters would arrive across the road, chant slogans and throw stones, visibly being distributed by IRGC personnel. On our side of the road there would be a line of Iranian riot police protecting us, and sometimes even getting injured — one part of the Iranian regime protecting us from another.

These protests rarely did more than smash the windows. I remember one afternoon when a group of us had cocktails in the garden of the second secretary as a riot took place just yards away, like a scene from Carry On Up the Khyber.

Chilcott and his team thought this riot would be the same, and that the riot police would protect the embassy as usual. But when the police didn't show, Chilcott's deputy, Jane Marriott, called the Ministry of Foreign Affairs. "They're just around the corner," a ministry official assured her, which they were — but they were sitting in their vehicles. Then a couple of protesters got into the compound. One ran to the flagpole, took down the Union Jack and raised the Iranian flag. And then, suddenly, the mob was on the inside — someone had managed to open the gates. For several hours they went round the compound trashing and ransacking each building in turn.

The rioters were not able to get into the main Chancery building, so they set fire to it instead. Chilcott told me that he noticed the smell first, and when he opened the heavy metal security door there was thick smoke billowing up the stairwell. He led his team down a staircase at the back and took refuge in the embassy club, on the advice of a plain-clothes police officer who then stationed several officers outside to keep them safe.

For the diplomats holed up in the club, the fear was that this might be a repeat of 1979 when the US embassy was invaded and its diplomats held hostage for 444 days. (Less well remembered is the fact that the British embassy had also been attacked by armed men the next day and staff held at gunpoint for several hours.) The British government had to make a huge diplomatic effort to persuade the Iranian regime to call a halt to the invasion. After several hours of parading around the compound the protesters left, taking their loot with them.

Once the protesters had nearly departed, Marriott led a team back in to complete the destruction of paper files and electronics, determined that the Iranians would not get their hands on them. Chilcott and his team departed the next day, flying back to the UK on David Cameron's instruction with little more than the clothes they were wearing. It took several months for Pumpkin, the Chilcotts' dog, to get back to the UK, having been given refuge by a friendly diplomatic power in the meantime. It was four years until the embassy reopened.

Professor Ali Ansari, the brilliant Iran watcher at St Andrews University, said the security of embassy staff is "never far from the minds of the FCDO". Despite the recent designation of the IRGC, however, Ansari believed the Iranians were likely to keep the embassy open, so they could keep their embassy in London open, too — both because of its political value, and because it is a popular posting with Iranian diplomats.

The British embassy in Tehran is divided between two large compounds. The main embassy is on a 15-acre compound in the old heart of the city. Behind high walls sits the beautiful residence of the British ambassador to Iran, now Hugo Shorter, together with the much less beautiful annex where they actually live, and the equally un-beautiful main embassy building, both from the late 1960s.

In 1981, the Iranian authorities changed the name of the street on which the embassy was located from Winston Churchill Street to Bobby Sands Street, after the member of the Provisional IRA who died while on hunger strike in prison. The embassy bricked up its old entrance and opened a new one on Ferdowsi Avenue, so that it didn't have to put Bobby Sands Street on its letterhead. (In a dark twist, an enterprising Iranian lacking historical perspective then opened the Bobby Sands burger bar.)

The other compound was in a cooler northern suburb called Gholhak, where British diplomats — including myself — lived in 49 acres of beautiful forest filled with streams, next to the crumbling summer residence of the ambassador and a large cemetery of Commonwealth war graves.

At the beginning of this war between the US, Israel and Iran in February, the embassy was temporarily closed and evacuated of staff. It is understood that some staff are now back in country.

Even with the embassy open, diplomacy in Iran is never simple. Working there as a British diplomat was an extraordinary experience, and a privilege — the Iranian people were unfailingly courteous and hospitable, and I was allowed to travel all over the country. Its beauty, culture and history are unsurpassed.

But access was challenging. My predecessor told me, when I arrived in 2003, that there were 200 Iranian officials authorised to speak to foreigners. It was easy to speak to those 200 and impossible to speak to the 201st. Undaunted, I drew up a spreadsheet of all the other Iranian officials I was going to befriend during my posting. After two and a half years, the number of those on my spreadsheet that I had managed to meet was zero.

I once went to the Iranian Ministry of Foreign Affairs to complain about aggressive surveillance. For weeks, I had been tailed at a few metres' distance by an armed man filming everything I did on a video camera. A friend had come to visit and was immediately deported. Worse still by far, a human rights activist I had met in the Kurdish part of the country had been arrested and charged with working for a hostile power.

The head of the UK desk, later to become Iran's foreign minister, told me that this was my own fault. I had failed to follow the diplomatic norms, he said. When I asked him to explain these norms, he said that Iran expected foreign diplomats only to speak to each other and to the ministry.

I spoke to one former British head of mission who had served in Iran on both sides of the 1979 revolution. He said that under the shah, access was easy but frequently painful. "The shah's regime was arrogant and often awful to deal with. They had got used to westerners coming and competing for contracts."

Echoes of the revolution as Iran's regime rounds up reformists

They had told the embassy not to meet dissidents, making clear that they were all monitored and the authorities would find out. As a result, the embassy generally had to limit its contact to those of whom the court approved. This was good for business, but bad for understanding the country, and the embassy famously failed to see the 1979 revolution coming. (This failure led to David Owen, the foreign secretary at the time, commissioning a review into what happened — a devastating critique that has since been made public.)

The same former colleague told me that after the revolution the best access came not from the political section but from the world of commerce. Businessmen could speak more freely than officials, and often knew what was going on.

Interesting Iranians applying for visas were often invited in for a cup of tea as an extra part of their application process. Both routes are now largely closed to the embassy; it no longer promotes trade between the two countries and the visa process has been outsourced for efficiency reasons so those Iranians wealthy enough to afford one apply online and have their interviews in Dubai.

My own posting in Iran finished in 2005. Since then the restrictions have become heavier, the harassment and surveillance more obvious and the relationship much more fraught, as trust has broken down between the regime and its own people. According to another former ambassador, many Iranian people now look at the actions of the British embassy for signs of whether we are on their side or the regime's.

For all the hardships, the restrictions and the dangers, everyone I have spoken to shared a view that it was better to have an embassy in Tehran than not. Being on the ground, meeting people directly, forging links between professionals and seeing how the Iranian regime communicates with its own people all give insights that are impossible to get from a distance.

In a country where the personal is tightly woven into the political, maintaining the embassy affords us an invaluable window and a foundation for diplomacy that would be hard to replace.

<https://www.thetimes.com/article/03fade2d-53b5-4675-8be7-af9ee235596a?shareToken=2530be7a6a403c01f14d676a7f2fadde>

TIME TO GET A WIRE UP AND FIRE UP THE Mk123!

Then there's this; much discussed previously to this article appearing, especially in the Turkish Café frequented by yours truly:

Iran smuggling agents into UK as Channel migrants Tehran boasts it is positioning 'revolutionary people' in London through secret network

Richard Holmes
Forensic Investigations Editor
Published 24 July 2026 9:14pm BST

<https://www.telegraph.co.uk/news/2026/07/24/iran-smuggling-agents-into-uk-as-channel-migrants/>

Iran has been caught sending suspected covert operatives across the English Channel into the UK, The Telegraph can reveal.

Individuals with links to Tehran's intelligence agencies are understood to have been intercepted by UK authorities while attempting to enter Britain on small boats.

People smugglers working on the Continent told The Telegraph that the Iranian regime facilitated the passage to Britain of migrants living at Calais in exchange for a "favour" for Iran after they settled in England.

Home Office officials have thwarted Iranian-linked individuals arriving in Britain from small boats by using drones and surveillance watchtowers fitted with artificial intelligence to monitor vessels crossing the English Channel.

Smuggling networks run by Iran are responsible for transporting people with links to the Iranian regime across Europe and into Britain, Tehran's officials told The Telegraph.

They added that some human trafficking routes between the Middle East and the Channel were "owned" by the Iranian Revolutionary Guard Corps (IRGC).

It comes after Iran vowed to attack RAF Fairford following Andy Burnham's decision to renew permission for the US to use the British base to launch air strikes.

Suspected Iranian operatives intercepted in small boats are thought to have links to the Ministry of Intelligence and Security, the country's primary intelligence and domestic security agency responsible for overseas operations.

"Revolutionary people" have been positioned in London through the smuggling networks, which The Telegraph understands are being operated by the IRGC's Unit 700.

Unit 700 is the logistics branch of the Quds Force, the IRGC's covert foreign operations division. The Quds Force has been linked to supplying weapons and funding to Hamas, Hezbollah and the Houthis, among other Islamist terror groups.

An Iranian official said: "Of course, don't forget that our armed forces have influence and run the [smuggling] routes in some cases if they want.

"At the moment we have people right there in London, revolutionary people who care about the world and the lives of children – they wait for us to tell them what to do. We have not done that yet, but we can easily make London unsafe for you if we want to.

"These smuggling routes are more important and useful than the missiles for us – we do not need a missile to target London, it's easier than that."

On Thursday, a mega-dinghy containing 165 migrants crossed the channel, setting a new record for the number of arrivals on a single small boat.

It is understood that the number of threats arriving via small boats is dwarfed by the amount of IRGC-affiliated people entering Britain on legal flights from Europe.

Officials also told The Telegraph that the radicalisation and activation of Iranian diaspora in London and the use of proxies in Britain posed a bigger national security risk than small boats, which are often an expensive and unreliable route.

Ken McCallum, the MI5 director-general, warned in October that his agency had tracked "more than 20 potentially lethal Iran-backed plots" over the previous 12 months.

He also warned that Iran was making “extensive use of criminals”, including drug traffickers as proxies to carry out missions for Tehran in the UK.

Last month, a man with dual British-Iranian nationality was charged with setting fire to a memorial wall commemorating anti-regime protesters killed in Iran. The April blaze triggered an investigation by counter-terror police.

Two Iranian smugglers said they were aware that some of their routes were run by the Iranian government.

One said: “We do not know the extent, but some of the money definitely goes to them. It’s the casual and normal route people take but run in the background by the Iranian government.”

A second smuggler said: “It’s all drugs as far as I can see and tell you, but of course you [Iran] own the route, which is a great advantage point – you can do what you like.”

They added: “For Britain, you hang out in a park in Calais or Dunkirk, then someone who may work for Iran but does not know about it approaches you, then you are in a boat to London in less than a week.

“Most of these people are fleeing poverty and will do whatever favour they’re asked for when they arrive in the UK [in exchange] for a cheaper journey.”

Migrants

Migrants are helped to cross the Channel by Iran in return for ‘favours’ when they settle in the UK

Alicia Kearns, the shadow security minister, said: “The Government needs to face facts: the IRGC is exploiting the small boats crisis to put its operatives on British streets.

“We need an urgent taskforce to root out Iranian agents among those arriving and who’ve arrived on our shores, designation of the Ministry of Intelligence and Security under hostile state legislation, and emergency powers to shut down IRGC cut-outs like the Islamic Centre of England.

“Tehran is openly threatening Britain and we have a Prime Minister silent on our national security – our people deserve answers, action and leadership.”

Dr Kristian Gustafson, deputy head of Brunel University’s Centre for Intelligence and Security Studies and a former Sandhurst lecturer, suggested that Iran was more likely to use local criminals to do its bidding than to bring in its own operatives.

“Were they to do this, they would probably use, as they have so far, locally recruited individuals,” Dr Gustafson said. “So you play on anti-Israeli, anti-Zionist sentiment to recruit young local men who have a bee in their bonnet over the Gaza war and ongoing actions of Israel and the United States in the Middle East.”

A Home Office spokesman said: “Our first priority is national security. There are stringent security checks for small boat arrivals. Those identified as a threat will be detained immediately and we will do everything in our power to remove them at the earliest opportunity.

“On top of these robust processes, we have fast-tracked a change in the law to outlaw support for the IRGC, equipping the police and intelligence service with more powers to disrupt those working on their behalf, and making it easier to prosecute them.”

<https://www.telegraph.co.uk/news/2026/07/24/iran-smuggling-agents-into-uk-as-channel-migrants>

Worth visiting for the graphics.

Japan is building its own MI6 after 80 years, but how? Citizens were delighted when the intelligence services were dismantled after the Second World War. Creating them anew will not be easy

Christopher Harding

Saturday July 25 2026, 3.30pm BST, The Sunday Times

<https://www.thetimes.com/article/49e2fbce-eafc-48f9-9b8e-34261a106799?shareToken=c042d95c2ef9efea5697a2ff459bcc6d>

Before 1945, Japan had perhaps the most effective security services in Asia. At home, its feared Special Higher Police carried out surveillance of suspected spies and political dissidents. Abroad, agencies including the Imperial Japanese Army’s military police (Kenpeitai) engaged in clandestine operations, ran networks of informants, oversaw prisoner-of-war camps and suppressed dissent.

After the end of the Second World War, however, and the creation of its American-authored postwar constitution, these organisations were dismantled and Japan was left with no foreign intelligence agency at all. The country had no law that specifically criminalised espionage, so it became known as a “spy’s paradise”.

Sanae Takaichi, the prime minister today, wants to change that. In recent weeks a law has been passed creating what is in effect a domestic intelligence agency. A National Intelligence Council will be formed as a kind of command centre, as well as a foreign intelligence agency from next year, and anti-espionage legislation to tackle Japan’s vulnerabilities.

It is a substantial task and will pose serious challenges for Takaichi’s government at home and abroad. The process is naturally shrouded in secrecy, but there are clues: Australia’s next ambassador to Japan, Andrew Shearer, used to be his country’s director-general of national intelligence, and Takaichi has publicly expressed her gratitude for the appointment of an ambassador with an intelligence background. Co-operation is said to have been sought with the United States and Germany’s foreign intelligence service, the BND.

Britain may also be involved. Japanese officials are known to have looked closely, in the 2010s, at MI6 as a potential model for their own foreign intelligence service. Given the strong and developing defence relationship between Britain and Japan, including joint military exercises and co-operation on a new fighter jet, it would be no surprise to find that MI6 is providing assistance.

Japan used to be good at this. At the beginning of the 20th century, Makiyo Ishimitsu, graduate of Japan’s Army College, set up a laundrette in Russian-occupied Harbin, in Manchuria, northeast China, as a means of listening in on conversations by Russian soldiers. He established a chain of photo studios to the same end. Most famously, Takeo Yoshikawa toured the Hawaiian island of Oahu in 1941, by taxi, boat and plane. He noted the positions and movements of US military assets, helping to prepare the ground for the attack on Pearl Harbor that year.

This sort of activity did not end entirely after 1945. Japanese trade representatives and diplomatic staff would feed useful information back to Tokyo where they could, and Japan's defence attaché system has been particularly useful in recent years. But while the nation is a world leader in signals intelligence — intercepting electronic communications — its human intelligence remains underdeveloped and it relies heavily on allies.

So how do you recruit enough spies to fill a new agency? Japan is thought to be looking at creating a training school whose graduates would work alongside personnel seconded from organisations including the National Police Agency and the Public Security Intelligence Agency. Direct recruitment from universities has been mooted, as has scouting private cybersecurity firms for personnel who may want to serve their country.

All this is likely to be a slow process. It took years for the Self-Defence Forces, Japan's military in all but name, to gain their current shape and win public trust and approbation. In 2007 a junior officer copied highly sensitive data about the US Aegis radar system on to a compact disc, which he passed round fellow officers, who all made fresh copies for themselves. This was bad practice rather than proven malice, but it was one of several astonishing breaches that caused allies such as the US to regard Japan as dangerously leaky, and to rethink their co-operation. Should the job of creating Japan's answer to MI6 be rushed, there is a risk of half-trained agents getting themselves into a mess around the world and ruining the agency's reputation at the outset.

It is not a universally welcomed idea at home either. The dismantling of espionage organisations after the Second World War was so popular in Japan that plans to create an equivalent of the FBI had to be shelved. Having lived under an authoritarian regime, people were fiercely protective of the civil liberties enshrined in the postwar constitution, from freedom of thought and speech to guaranteed due process. Critics have been on the lookout ever since for instances of state overreach, whether that be the Self-Defence Forces being called in to put down protests — as nearly happened in 1959-60 — or attempts to give police the sorts of intrusive powers they enjoyed before the war.

Anti-espionage legislation, in particular, could be controversial. Hirohito Ogi, a senior research fellow at the International House of Japan and a former official with Japan's foreign and defence ministries, says that if the government is clear it is targeting foreign intelligence-gathering rather than the lives of ordinary Japanese, they may face less opposition because "most people will feel it is not relevant to their daily lives".

Christopher Hughes, professor of international politics and Japanese studies at the University of Warwick, points out that Takaichi's Liberal Democratic Party is adept at using media contacts to help manufacture a sense of necessity surrounding legislation of this kind. "The LDP are masterful at massaging public opinion and creating a sense of crisis to which Japan needs to respond," he said. If the party can combine this with assurances on privacy, then anti-espionage laws may well pass.

There has certainly been growing recognition that Japan can no longer afford parts of its postwar settlement. The US remains a close ally, but a less predictable one. China, Russia and North Korea have made no secret of their evolving military capabilities. The same could be said of the decision, a few months ago, to lift longstanding restrictions on the supply of Japanese-made weapons to key allies, with the aim of developing its defence industry.

Japan's shift began in 2013 when Shinzo Abe, the late prime minister who mentored Takaichi, created a National Security Council to centralise security policy. He also passed a law allowing official secrets, something for which allies such as the US had been pushing after those dangerous leaks. Last year came an "active cyberdefence law", under which the government can monitor suspicious online activity and intercept foreign internet traffic as it encounters domestic infrastructure.

Japan clashes with China over claims of 'neo-militarism'

But it is Takaichi's creation of a domestic National Intelligence Bureau, operating under the Council, that will be particularly significant. That is because it replaces an old system in which a jumble of competing agencies passed information they thought might be relevant up the line to the political leadership. The agencies will remain, but what Hughes describes as a "push" system is being replaced by a "pull": government ministers can now require agencies to go out and gather specific intelligence, to meet their priorities and guarantee the country's security.

Combined with the expected anti-spy legislation, these measures are intended to counter threats emerging on Japanese soil. This month The New York Times reported that agents expelled from various European countries had redeployed to Japan, including from Russia, partly in order to obtain components for weapons systems used in Ukraine.

At least as serious is the Chinese threat. This often went unreported, Hughes said, because Japan's relations with China were at a low ebb and required delicate management. It would not be smart diplomacy to make a show of throwing Chinese diplomats out of the country. Nevertheless, there have been cases of Chinese people suspected of buying up land around Japanese military bases or trying to build ties with Japanese officials.

Having its own foreign intelligence agency and associated networks will not only help Japan to better protect itself. It will give it additional clout with allies as a valued source of information. Intelligence relationships depend as much on reciprocity as on trust that partners are leakproof.

But Japanese officials will be thinking hard about how to sell this new reality to the public. Look out, over the coming years, for attempts to use popular culture to shape how people inside and outside Japan think about this new agency — particularly if recruitment is open, rather than done by way of a tap on the shoulder. Manga and mascots have been used in the past to try to persuade the Japanese public of the virtues of the Self-Defence Forces. It may not be long before we encounter Japan's answer to James Bond too.

Christopher Harding is a senior lecturer in Asian history at the University of Edinburgh

<https://www.thetimes.com/article/49e2fbce-eafc-48f9-9b8e-34261a106799?shareToken=c042d95c2ef9efea5697a2ff459bcc6d>

E's splendid newsround follows on Page 49

Morse - Number Stations

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

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

We start the Morse section with a couple of unidentified Morse intercepts from 'E' :-

6767	2012z	02 Aug	Morse – Numbers & letters. Ends BT x 1	'E'	SUN
12464	1816z	09 Aug	Morse – Single number groups. Ends BT x 1 at 1820z	'E'	SUN

Unusual Activity from Russian Beacon

While doing a routine check on the Russian beacons, an unusual output was noted on 16331.8 kHz – usually the home of the 'P' beacon.

These beacons, usually nesting in close proximity to each other are referred to as 'cluster Beacons', operated by the Russian navy & ostensibly serving as propagation beacons in a number of clusters across the short wave bands.

The operation of these beacons is automated & it is not unusual to note one of these malfunctioning & sending some odd characters for a while, until rectified. However, the output is usually loosely related to the original letter, with omissions or additions to the intended output.

The frequency of 16331.8 kHz usually carries the 'P' beacon, but on Tuesday, 11 August was sending 005006, repeatedly, with none of the errors, glitches or timing slips that would indicate that the beacon was malfunctioning. First noted at 0820z the beacon was checked several times over the day & found to be still sending the same, perfect output.

Ary, (AB), reported the signal still active & audible at 1649z, && also noted that in the 10 MHz & 13 MHz clusters, the 'P' beacon was operating as normal.

The beacon was still active the following day, Wednesday, 12 August, also on Thursday, 13 August – Although several earlier checks had not found the beacon active, so it may not be active at all times.

16331.8	0802z	11 Aug	Sending 005006 (Continuous)	Fair	BR	TUE
	1649z	11 Aug	Sending 005006 (Continuous)		AB	TUE
	0800z	12 Aug	Sending 005006 (Continuous)	Fair	BR	WED
	0850z	13 Aug	Sending 005006 (Continuous) Not present on several earlier checks – May be intermittent		BR	THU

Further daily checks failed to find the signal active & it was thought to have ceased until Ary reported it on-air, once-again, on Monday 17 August

0600z	17 Aug	Sending 005006 (Continuous)	AB	MON
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Peter, PoSW, also monitored the activity on 16331kHz & had first monitored the signal on Sunday, 02 August– Here is his report:-

Single letter marker beacons:-

The collection of these just above 16331 kHz showed some unusual behaviour recently. Usually the letters “D” and “S” are strong signals but nothing was heard from either of these in the first week of July, doing a quick check on the frequency for a few minutes at several times during the day although a weak “P” was heard from time to time but perhaps like everything else on short-wave it was all down to propagation.

A strong “D” was heard on 08-July-26 when monitored at 1450 UTC. Both “D” and “S” were strong in the last week of July but there was something unusual in the first week of August:-

02-Aug-26, Sun:- “D” and “S” with strong signals but something even stronger, CW sending “...005 006 005 006 005 006...” continuously. It was not heard on following days but was back on 09-Aug-26 at 1720 UTC. Was also heard on 17-Aug-26, Mon, at 0640 UTC over-riding “D” and “S” but has not been heard since.

Thanks for the report, as always, Peter

Nothing further heard or reported. So, was this unusual output on a beacon frequency a malfunction or does the output have another purpose entirely?

Morse - Number Stations

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

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

July 2026:

4903	2000z	14 Jul	'025' 869 30 == 69699 33765 ... 40988 66987 ==	Fair, fast. Numerous errors. Restart after several grps	BR	TUE
	2000z	21 Jul	'025' 703 30 == 84293 47309 ... 58011 30589 ==	Fair with QSB. Fast. Excellent Morse. No errors	BR	TUE
	2000z	23 Jul	'025' 912 30 == 76812 36197 ... 56497 68561 ==	Fair, slow delivery with spaced characters. 29 grps sent	AB/BR	THU
	2000z	28 Jul	'025' 778 30 == 00041 26334 ... 97624 07888 ==	Fair, fast. Good Morse. Grps 03, 05, 10 & 23 sent once	BR	THU
	2000z	30 Jul	'025' 123 30 == 67453 12143 ... 67587 67546 ==	Fair, fast. Excellent Morse with no errors. Perfect!	BR	THU
5280	1800z	07 Jul	'025' 657 30 == 75634 26597 ...	Very weak, slow, spaced figures. Poor copy	BR	TUE
	1800z	09 Jul	'025' 730 30 ==	Very poor signal. Partially audible. No useful copy	BR	THU

1800z	14 Jul	'025'	457 30 == 58869 0 . 9. ... 48698 44980 ==	Very weak, fast. Numerous errors – some corrected	BR	TUE
1800z	16 Jun	'025'		Very poor signal. Partially audible. No useful copy	BR	THU
1800z	23 Jul	'025'		Very poor signal. Partially audible. No useful copy	BR	THU
1800z	28 Jul	'025'	947 30 == 02634 11967 ... 04699 04523 ==	Very weak. Fast delivery. Some hesitation. Poor copy	BR	TUE
1800z	30 Jul	'025'	777 30 ==	Very weak. Poor copy	BR	THU]
6780	0700z	26 Jul		NRH – Strong WB digital signal on freq	BR	SUN
August 2026:						
4903	2000z	06 Aug	'025' 638 30 == 37954 16847 ... 75489 05489 ==	Fair, fast. Excellent Morse with no errors. Perfect!	BR	THU
	2000z	11 Aug	'025' 111 30 == 67564 ... 98675 34254 ==	Fair, fast. Excellent, brisk Morse. No errors	BR	TUE
	2000z	13 Aug	'025' 711 30 == 91425 05576 ... 04711 04783 ==	Fair, fast. Good Morse. Several errors noted	BR	THU
	2000z	18 Aug	'025' 549 30 == 84682 15847 ... 84673 00101 ==	Fair, V.fast. Excellent, brisk Morse. No errors	BR	TUE
	2000z	25 Aug	'025' 908 30 == 10928 20918 ... 28716 33091 ==	Fair, fast. Excellent Morse. Several errors noted	BR	THU
5280	1800z	11 Aug	'025' 884 30 ==	Very weak signal. No useful copy	BR	TUE
	1800z	13 Aug	'025' 898 30 == 91243 16723 ... 12453 06877 ==	Weak, fast. Poor in places. Good Morse. Errors noted	BR	THU
	1800z	18 Aug	'025' 607 30 == 21307 742 .5	V.weak. Fast delivery. V.poor copy. Faded to nothing	BR	TUE
	1800z	20 Aug	'025' 7 . 3 30 ==	V.Weak. Delivery with spaced characters. Very Poor	BR	THU
	1800z	25 Aug	'025' 657 30 == 65018 22091	V.Weak. Fast delivery. Very poor copy	BR	THU
6435	1500z	08 Aug	'025' 363 30 == 86754 58343 ==	V.Weak.Slow delivery with spaced characters.Poor copy	BR	SAT
	1500z	29 Aug	'025' 312 30 == 61980 20918 ... 29017 67165 ==	Fair with QSB. Poor copy in places. Errors noted	BR	SAT
6780	0700z	02 Aug		NRH – Strong WB digital signal on freq	BR	SUN
	0700z	16 Aug	'025' 978 30 == .84 . .6 27863....	V.Weak. Very poor copy	BR	SUN
	0700z	23 Aug		NRH – Strong WB digital signal on freq	BR	SUN
	0700z	30 Aug		NRH – Strong WB digital signal on freq	BR	SUN

M01/3	4903kHz	2000z	21 July 2026
025 (R4m) 703 703 30 30 ==			
84293	47309	75487	19112 05480 75893 17512 57428 05984 65943
60859	57661	75489	75490 78489 09541 56803 76555 97808 45707
89430	46373	75486	48693 76589 03891 76589 47393 58011 30589
== 703 703 30 30 0000			
Courtesy BR			

M01/2	4903Hz	2000z	23 July 2026
025 (R4m) 912 912 30 30 ==			
76812	36197	67453	40781 25463 67343 40891 27584 56297 68465
85612	37561	49786	95743 47681 23978 56482 35409 65978 86712
36454	50897	67671	24375 67396 84631 23245 56497 68561
== 912 912 30 30 000			
Courtesy BR			

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

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

Asiatic M12 Logs

13931/12153/11536	0800/20/40z	03 Jul	915 1 (3131 198) 54285 94772....	(Via SDR Japan)	BR	FRI
	0800/20/40z	06 Jul	915 1 (2154 120) 56356 34455....	(Via SDR Japan)	BR	MON
	0800/20/40z	10 Jul	915 1 (2154 120) 56356 34455....	(Via SDR Japan)	BR	FRI
	0800/20/40z	13 Jul	915 1 (5988 182) 09355 94983....	(Via SDR Japan)	BR	MON
13457/12161/10928	0800/20/40z	10 Aug	419 1 (2968 134) 35601 58179....	(Via SDR Japan)	BR	MON
	0800/20/40z	24 Aug	419 1 (3142 78) 29569 15499....	(Via SDR Japan)	BR	MON
	0800/20/40z	28 Aug	419 1 (3142 78) 29569 15499....	(Via SDR Japan)	BR	FRI

European M12 Logs

July 2026: New scheds in bold type

11564/10487/9319	1900/20/40z	02 Jul	258 1 (8594 274) 40718 35944....	BR	THU
	1900/20/40z	04 Jul	258 1 (8594 274) 40718 35944....	BR	SAT
	1900/20/40z	09 Jul	258 1 (9246 263) 21475 34862....	BR	THU
	1900/20/40z	11 Jul	258 1 (9246 263) 21475 34862....	BR	SAT
	1900/20/40z	16 Jul	258 1 (4155 285) 38073 22818....	BR	THU
	1900/20/40z	18 Jul	258 1 (4155 285) 38073 22818....	BR	SAT
	1900/20/40z	23 Jul	258 1 (2561 258) 19597 64542....	BR	THU
	1900/20/40z	25 Jul	258 1 (2561 258) 19597 64542....	BR	SAT
13409/12195/11526	1900/20/40z	05 Jul	397 1 (4621 170) 92212 99717....	BR	SUN
	1900/20/40z	06 Jul	397 1 (3655 192) 04104 11847....	BR	MON
	1900/20/40z	12 Jul	397 1 (3655 192) 04104 11847....	BR	SUN
	1900/20/40z	13 Jul	397 1 (6218 170) 30989 48048....	BR	MON
	1900/20/40z	19 Jul	397 1 (6218 170) 30989 48048....	BR	SUN
	1900/20/40z	20 Jul	297 1 (8078 158) 17166 02128....	BR	MON

	1900/20/40z	26 Jul	297 1 (8078 158) 17166 02128....	BR	SUN
	1900/20/40z	27 Jul	297 1 (9209 195) 32137 93234....	BR/E'	MON
17453/16312/15836	2100/20/40z	03 Jul	438 000	BR	FRI
	2100/20/40z	04 Jul	438 000	BR	SAT
	2100/20/40z	11 Jul	438 1 (9646 163) 07930 75061....	BR	FRI
	2100/20/40z	17 Jul	438 1 (9646 163) 07930 75061....	BR	FRI
	2100/20/40z	18 Jul	438 1 (9646 163) 07930 75061....	BR	SAT
	2100/20/40z	24 Jul	438 000	BR	FRI
	2100/20/40z	31 Jul	438 000	BR	SAT

August 2026:

11564/10487/9319	1900/20/40z	01 Aug	258 1 (9167 263) 90059 62427....	BR	SAT
	1900/20/40z	06 Aug	258 1 (5387 278) 75130 06529....	BR	THU
	1900/20/40z	08 Aug	258 1 (5387 278) 75130 06529....	BR	SAT
	1900/20/40z	13 Aug	258 1 (2248 279) 0834 . 34539....	BR	THU
	1900/20/40z	15 Aug	258 1 (2248 279) 08346 34539....	BR	SAT
	1900/20/40z	20 Aug	258 1 (5329 286) 81189 56900....	BR	THU
	1900/20/40z	22 Aug	258 1 (5329 286) 81189 56900....	BR	SAT
	1900/20/40z	27 Aug	258 1 (5185 287) 15356 91442....	BR	THU
	1900/20/40z	29 Aug	258 1 (5185 287) 15356 91442....	BR	SAT
12189/13475/14643	2100/20/40z	08 Aug	146 1	V.Weak BR	SAT
	2100/20/40z	14 Aug	146 1 (9373 74) 74563 60401....	BR	FRI
	2100/20/40z	15 Aug	146 1 (9373 74) 74563 60401....	BR	SAT
	2100/20/40z	21 Aug	146 1 (5915 151) 51250 29608....	BR	FRI
	2100/20/40z	22 Aug	146 1 (5915 151) 51250 29608....	BR	SAT
	2100/20/40z	29 Aug	146 1 (5915 151) 51250 29608....	BR	SAT
13409/12195/11526	1900/20/40z	02 Aug	397 1 (9209 195) 32137 93234....	BR/E'	SUN
	1900/20/40z	03 Aug	397 1 (1612 153) 13109 20470....	BR	MON
	1900/20/40z	09 Aug	397 1 (1612 153) 13109 20470....	BR	SUN
	1900/20/40z	10 Aug	397 1 (6278 151) 60541 37803....	BR	MON
	1900/20/40z	17 Aug	397 1 (1359 131) 52624 45212....	BR	MON
	1900/20/40z	23 Aug	397 1 (1359 131) 52624 45212....	BR	SUN
	1900/20/40z	24 Aug	397 1 (9459 169) 52129 88050....	BR	MON
	1900/20/40z	30 Aug	397 1 (9459 169) 52129 88050....	BR	SUN
	1900/20/40z	31 Aug	397 1 (4372 186) 89363 80848....	BR	MON

M14 IA MCW / ICW Short 0

No Reports

M23 O ICW

July 2026:

6806	2100 – 2125z	10 Jul	0 (R3m) 6 (R4m) 0 (R3m) 6 (R4m) 0 (R5m) Off at 2125z	AB	FRI
	2100 – 2125z	11 Jul	0 (R) 6 (R4) 0 (R) 6 (R) 0 (R) 6 (R) 0 (R) Off at 2125z	AB	SAT
	2100 – 2125z	13 Jul	0 (R) 6 (R) 0 (R) 6 (R) 0 (R) 6 (R) 0 (R) Off at 2125z	AB	MON
		15 Jul	0 (R) 6 (R) 0 (R) 6 (R) 0 (R) 6 (R) 0 (R) Off at 2125z	AB	WED
	2100 – 2125z	15 Jul	0 (R) 6 (R) 0 (R) 6 (R) 0 (R) 6 (R) 0 Ends abruptly	Good BR	WED
	2100 – 2125z	16 -19 Jul	0 (R) 6 (R) 0 (R) 6 (R) 0 (R) 6 (R) 0 Off at 2125z	AB	THU-SUN
6806	0400 – 0425z	11 Jul	3 (R5m) 0 (R9m) 3 (R6m) 333 000 (R1m) 333 00 (1x) 333 0 (R1m) 333 00 (R1m30s) 33 (1x) O0 (O null) (R21s) Off at 0425z	AB	SAT
	0400 – 0425z	12 Jul	Series of 3 0 combinations: 3, 0, 3, 333 000, 333 00, 333 0, 333 00, 33, O0 (O zero) off at 0425z	AB	SUN
	0400 – 0425z	14 Jul	3 (R) 0 (R) 3 (R) 333000 (R) 33300 (1x) 3330 (1x) 30 (R) 300 (1x) 3300 (R) O0 (O zero) (R) off at 0425z	AB	TUE
		17 - 20 Jul	3 (R) 0 (R) 3 (R) 333000 (R) 33300 (1x) 3330 (1x) 30 (R) 300 (1x) 3300 (R) O0 (O zero) (R) off at 0425z	AB	FRI-MON

Nothing further heard

A single QSO transmission was caught on 6806kHz by Ary on Wed, 15 July:-

6806	1518z	15 Jul	VVV VVV VVV VVV RP RP RP ?? DE KPM MFM KM DE VM VM K K DE RP RP ____ II DE VM VM K K DE RP RP CQ CQ CQ CQ DE VM VM K K DE RP QRA 3 QSA 3 K KM KM DE VM QSA 1 QSA 1 QRK 0 QRK 0 HI HI RP RP RP RP VM K DE RP K RP DE VM VM QSA1 QRT ____ QRK 0 QRK 0 HI HI HI VM VM VM K	AB	WED
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Poor signal. Partly unreadable.

Again we see the same use of calls / initials used in previous exchanges:- RP, VM

August 2026:

6936	1459z	02 - 05 Aug	00000 33333 55555 77777 (R25m)	AB	SUN - WED
	1529z	02 - 05 Aug	00000 33333 55555 77777 (R25m)	AB	SUN - WED
6936	1459z	03 -12 Aug	00000 33333 55555 77777 (R25m)	AB	MON - WED
	1529z	03 -12 Aug	00000 33333 55555 77777 (R25m)	AB	MON - WED
4880	1859z	09 - 27Aug	00000 33333 55555 77777 (R25m)	AB	SUN - WED
	1929z	09 - 27 Aug	00000 33333 55555 77777 (R25m)	AB	SUN - WED

'E' also managed to catch the M23 transmissions on 4880kHz, with logs from 31 July onwards:-

4880	1909z	31 Jul	77777x5, 00000x5, 33333x5, 55555x5	'E'	FRI
			Heard 6/8, 7/8, 2/8, 3/8, 4/8, 5/8, 12-1/8. OFF 1925z		
			Under QRM Only station heard below 5200KhZ		

7668	1059z	28 Aug	00000 33333 55555 77777 (R25m)	AB	FRI
	1129z	28 Aug	00000 33333 55555 77777 (R25m)	AB	FRI

Hourly beeps noted at times

M32 Russian / CIS Ukrainian Military Nets FAPSI (Federal Agency for Government Communications & Information)

M32	5294kHz	1808 - 1820z	25 Aug	DSDG calling outstations – Then sending message to 9QTO	BR	THU
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[There is a pause between the call-ups & the RK response – Presumably where the outstation replies on a duplex frequency]

CX5K DE DSDG K RK
 BCAG DE DSDG K RK
 RP9V DE DSDG K RK RK
 9QTO DE DSDG K
 9QTO DE DSDG QRO K
 S3BJ DE DSDG K RK
 K3SW DE DSDG K RK

9QTO DE DSDG GC K
 9QTO DE DSDG QTC K
 9QTO DE DSDG QTC K
 RPT K
 9QTO DE DSDG GC K

DSDG 401 37 25 2104 401 = 401 =
 S41 =
 SKASW [Msg send in Cyrillic Morse]

Morse Stations - Not Number Related

M42 IC

M42 is a designation originally assigned by the original ENIGMA group & covered a number of formats & modes. The group of stations was later identified as belonging to the Russian government / intelligence / diplomatic services & as such was deleted from the ENIGMA Control List as being outside of the numbers station remit. However, the station still attracts interest and is regularly still monitored & will be featured in forthcoming newsletters.

Mode is Morse or Baudot ITA2 50/500, (RTTY - FSK) 3rd Cyrillic alphabet with Op. chat in CW both before & after the main message transmission.

Due to space constraints these logs show only main detail of the exchanges logged.

Ary, (AB), logged these examples of the weekly exchange between the Ministry of Foreign Affairs in Moscow & The Russian Embassy in Havana, Cuba –

The exchange uses duplex frequency working, UAL – Moscow is shown in the left column, with UAG – Cuba in the right column.

UAG – Russian Embassy, Havana, Cuba

UAG – Russian Embassy Havana working UAL - MFA Moscow

18726 kHz 1300z 16 July FSK CW + FSK 75/500

After the message freq change to 17442 kHz.

UAG UAG UAG (followed by operator chat and a message)

[illegible]

Courtesy AB

UAL - MFA Moscow working UAG – Russian Embassy Havana

16156 kHz 1300z 27 August FSK CW + FSK 50/500

UAL UAL UAL (followed by operator chat and a message)

RYYR
YBYBYBYBYBYBYBY

11100 70103 63195 27107 04009
69617 14907 94965 47706 20638 91441 01098077203 70031086537
10028 534-2 31236000721 66262 83385 35362 48352 10419 89159
64074 65648 38116 96506 59056 02014 75348 05308 44320 74352
68820 34993 21460 89058 14647 61815 25170 61376 73874 90204
48577 86796 48259 25396 75160 44207 14730 39514 77909 35457
41986 48295 71719 91043 37659 40651 29931 96590 99475 28245
00976 19824 68870 07280 86058 42716 10466 49678 63806 28496
65879 65843 72833 78215 55277 06192 88147 56542 25123 93642
52349 91490 65554 04251 47546 77754 45827 38175 18933 38352
41260 48157 85965 24252 50125 17722 02073 56675 23914 06255
48840 41764 59422 03182 75601 12296 26088 58394 20381 76143
27017 81157 73119 76155 17146 24641 67126 91147 26964 98294
09683 32704 65239 75238 87753 17458 99193 86861 09726 19550
35545 21816 69126 32954 50879 71590 41245 98350 44761 89854
48605 74237 14053 57761 56226 56969 71846 72393 82598 79405
59474 00539 37326 42688 25015 64992 21367 62075 66747 55557
50802 27761 64977 81944 90083 16654 50686 10756 05690 03507
84430 53733 76130 54865 43933 99466 19234 09262 43804 05747
22660 73522 35828 94749 88568 89876 63251 18239 28396 53551
67520 84977 68648 85545 70888 67536 53689 90263 83343 30675
65422 52703 07290 48404 32825 54879 38423 02599 81270 16175
86229 78254 92571 87303 62554 01080 01680 52574 11674 81106
76990 20146 80309 56606 08174 04952 51021 54800 78488 33996
87412 11658 32494 28692 64596 17955 75123 43946 83350 83795
63028 68664 91395 38780 74158 17368 60247 09996 66491 67619
91070 45039 61866 22930 47973 72235 15852 05940 42178 15257
59584 10875 15518 04327 24518 72036 96671 51183 86020 24544
28606 80009 86760 65495 90636 31502 25806 43146 63562 82277
24396 29482 11293 46792 04300 55787 77432 53973 39716 15885
20228 15741 68645 66338 34747 29618 74668 81112 32895 82602
75075 31962 88140 48501 76281 13249 54352 95908 82463 26883
21218 49015 68351 90445 71254 68433 52130 45416 39671 44238
29365 70570 00100 18397 53901 30237 24649 78777 76683 12111
91713 91935 78407 34303 39970 66848 56971 26317 92001 66803
55641 13634 95994 11612 42876 60603 58932 37342 79760 91325
69736 05764 35957 13196 35783 80684 40145 12832 81236 13367
75863 79031 80634 04219 58701 32485 26173 32938 55771 26904
52108 74301 33413 31267 64735 41786 44052 07865 51363 26213
88153 65835 66736 21594 12412 94872 20334 55373 28731 08799
12983 65257 69071 53688 96226 89802 05201 60233 52888

UAG – Russian Embassy Havana working UAL - MFA Moscow

18726 kHz 1300z 27 August FSK CW + FSK 50/500

UAG UAG UAG (followed by operator chat and a message)

[illegible]

11100 70103 12456 27107 04003
43714 94483 76606 66097 20565 16078 75064 29869 92050 12722
34742 12402 34708 22355 96577 49607 59217 29022 09000 99623
11229 10749 86029 27063 61343 33206 94384 32282 20192 68873
68019 17847 39561 46374 73554 09411 85472 52669 75012 73155
94191 91809 71312 97016 47068 32921 04959 27859 25171 97118
65349 81792 29647 68034 35162 69834 78730 27637 53234 06075
17360 48058 92392 90558 00325 51073 75655 84058 34888 64960
79257 16935 93814 33406 95919 99255 34753 56148 56819 24385
86894 66040 35685 83206 90867 72242 83458 31184 02774 24197
66959 75440 98342 76103 09994 74044 38103 56565 60340 64688
79541 73100 31050 64954 47158 06202 89507 11342 96383 72638
92673 29262 32268 62678 91966 51166 68901 80929 56200 25014
40492 45479 86036 80257 00042 25018 18371 43535 66555 18650
44099 21257 06725 08052 87702 91273 62022 36697 22084 70813
57143 95808 17101 52878 50730 21737 45216 28287 14323 34465
92730 35541 50467 71871 50005 05719 85922 99624 79132 04976
00904 00938 82487 19037 80293 76590 20588 40266 97769 09207
52719 60517 68777 71885 98739 25935 33285 85734 45521 52496
54268 56028 46456 17294 42843 41655 87464 82331 46012 37557
17950 43026 57932 74851 70120 18611 40664 68302 15145 26616
65325 65857 29545 08617 09594 79910 70293 99443 72500 05000
82028 57033 92435 51614 84843 95115 79325 50801 16081 85911
96898 09263 24556 25051 55989 19628 40679 75874 04819 55589
70871 35321 27177 06587 89756 88585 84463 31736 28527 44731
62502 37650 82947 70451 09087 10029 89425 62157 73184 53176
42577 37579 81874 18000 52749 97135 14984 24435 66903 42037
66298 93661 01331 21692 97375 89147 59611 19210 24819 72028
34268 53435 98982 49714 15554 16614 61045 02891 55793 89887
89251 60438 62744 03810 70234 99841 20386 36072 56388 77773
60598 63619 95207 20546 34147 11351 41534 29103 54428 64589
88657 78264 12408 37507 79194 14885 86180 14699 81698 84630
93603 08084 43920 42056 61431 96326 58674 23671 09390 38970
03238 88677 72631 82455 38215 57078 11007 00233 76827 99829
78590 34135 60535 60735 51896 29210 01954 14767 40226 79196
80992 92492 26575 24838 05147 25314 12554 72208 69895 91184
65743 23246 80127 65511 92930 35690 18550 06909 87659 54585
71992 32516 25542 82571 51573 62545 05752 81118 67640 38753
62151 19908 45441 46533 92487 16554 92450 95305 79087 33834
53297 36893 99493 26634 13220 26574 50488 55781 36005 56500
33918 10969 47331 16165 77791 09936 99454 59608 91049

Courtesy AB

M51 XIX

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

No reports – M51b format in use

M51a (FAV22) Daily schedules Mon – Fri also Sat & Sun. See NL 72 for details

3881//6825
1131 - 1205z 28 Aug Vendredi- Leçon 05-2/1 Codé, 05-2/2 Clair, 05-2/3 Codé, 05-2/4 Clair (960 grps/hr) BR FRI

3881//6825
0700 – 0736z 15 Aug Samedi 2-Leçon Numéro 1/1 Vitesse 420 Codé Samedi 2-Leçon Numéro 2/1 Vitesse 420 Clair BR SAT

3881//6825
0700 – 0734z 30 Aug Dimanche 4-Leçon Numéro 1/1 Vitesse 420 Codé Dimanche 4-Leçon Numéro 2/1 Vitesse 420 Clair BR SUN

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

3881 1956z 24 Aug Non-stop 5-character groups composed of M51a messages 6825kHz - NRH BR MON

M89 O

This is a summary of activity from the M89 stations.

Traffic & Operator Chat from M89

Traffic & Op. chat reported on the following freqs. (All in kHz). Bold type indicates repeated use of freq.

3000	4145	5019	(Cont'd)	6214	7013	8074	9023	10185
3136	4222	5028	5623	6255	7119	8080	9028	10211
3272	4258	5036	5630	6323	7142	8434	9049	10256
3284	4266	5123	5656	6416	7151	8436	9190	10898
3411.5	4284	5124	5658	6454	7467	8556	9431	
3456	4300	5131	5663	6458	7474	8683	9680	
3568	4342	5163	5665	6472	7498	8980		
	4384	5176	5667	6474	7510			
	4391	5232	5670	6491	7592			
	4397	5258	5672	6518	7741			
	4411	5320	5678	6519	7765			
	4437	5323	5680	6541	7820			
	4455	5340	5681	6543	7821			
	4471	5367	5698	6547	7877			
	4482	5377	5700	6548	7890			
	4510	5380	5710	6594	7923			
	4533	5382	5711	6600	7967			
	4535	5407	5721	6618	7990			
	4551.5	5415	5748	6631				
	4567	5426	5770	6640				
	4573	5428	5775	6645				
	4593	5443	5792	6660				
	4599	5454	5824	6666				
	4630	5467	5833	6693				
	4705	5475	5836	6740				
	4754	5481	5837	6749				
	4774	5489	5850	6843				
	4786	5491		6854				
	4796	5493		6875				
	4861	5500		6899				
	4912	5526		6960				
	4946	5555		6975				
	4955	5566						
	4991	5610						
		(Cont'd)						

New Scheds for Jul / Aug 2026:**From logs submitted from JPL**

3833//5407	New Frequency for this Round Slip	First heard 30 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K
5407	New Frequency & Round Slip	First heard 06 July	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K
7015	New Frequency for this Round Slip	First heard 13 July	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K
7015//9350	New Frequency for this Round Slip	First heard 31 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K
4850//5450	Changed Round Slip for this freq. pair	First heard 08 Aug	VVV UIS (x3) DE HV4 (x2) (R5) QSA ? K

The following transmissions have appeared since the beginning of November 2025 sending, what would appear to be a test Round Slip, moving from one frequency to the next.

8359.5	New frequency for this Round Slip	First heard 19 Aug	ABCDEFGHIJKLMN OPQRSTUVWXYZ TAU34567DN III AS VA M (Cont'd)
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<u>Freq in KHz</u>	<u>Call Slip</u>
3611	V TG1Y (x3) DE X9FW (x2)
3611//4522	V TG1Y (x3) DE X9FW (x2)
3611//5419	V TG1Y (x3) DE X9FW (x2)
3611//4522//5419	V TG1Y (x3) DE X9FW (x2)
3611//4522//5419//9251//13362	TG1Y (x3) DE X9FW (x2)
3611//4522//5419//13362	TG1Y (x3) DE X9FW (x2)
3833//5407	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K
4522	TG1Y (x3) DE X9FW (x2)
4522//5419//9251//13362	TG1Y (x3) DE X9FW (x2)
4850//5450	VVV UIS (x3) DE HV4 (x2) (R5) QSA ? K
4860// 6840	V Q2M (x3) DE NYZ (x2)

<u>Freq in kHz</u>	<u>Call Slip</u>
5150	VVV WNF (x3) DE FXM
5407	AA8V (x3) DE HJRA (x2) (R5) QSA ? K
5419//9251//13362	TG1Y (x3) DE X9FW (x2)
5672	Y3JI DE N6WX (Repeated)
6840	VVV (x3) Q2M (x3) DE NYZ (x2)
6840//8290	V Q2M (x3) DE NYZ (x2)
7015	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K
7015//9350	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K
7620//8350	VVV WNF (x3) DE FXM (x2)
8350	VVV WNF (x3) DE FXM (x2)
9251	TG1Y (x3) DE X9FW (x2)
9251//13362	TG1Y (x3) DE X9FW (x2)
13362	V TG1Y (x3) DE X9FW (x2)

Courtesy JPL

Logs:

Note: The EEE before Msg NR actually the barred letter E in morse /.../. I believe this denotes a high priority message, ie Flash msg.

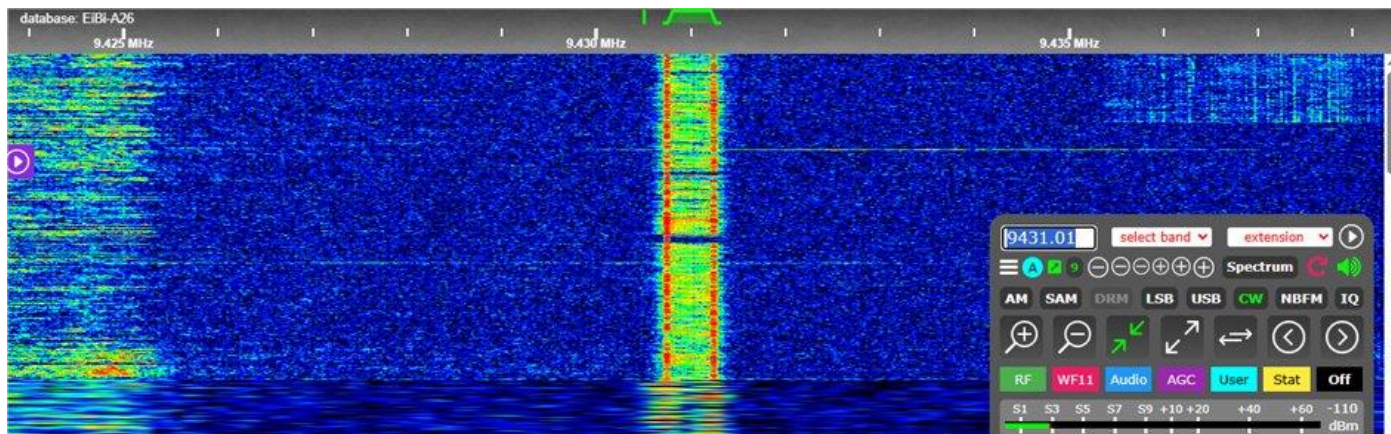
3272	(In tfc)	1513z	21 Jul	NR .. CK 121 20 0721 2225 RMKS 01.7 TO 0.40 BT	(Remote tuner Japan)	JPL	TUE
3411.5	(In tfc)	1549z	05 Aug	ABCDEFGHJKLMNOPQRSTUVWXYZ TAU34567DN III AS VA M (Cont'd)	(Remote tuner Japan)	JPL	WED
3456	(In tfc)	1546z	30 Jul	F F NR 241/EX 2341 RMKS 6419 TO 1658 BT IDU2/W8Z AR	(Remote tuner Japan)	JPL	THU
3611		1523z	03 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	FRI
		1200z	02 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	SUN
				588/4656/4333/36/37/6333/477/A			
3611//4522		1115z	06 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	MON
3611//5419		1610z	19 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	WED
3611//4522//5419		1536z	09 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	THU
		1539z	10 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	FRI
		1043z	17 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	FRI
		1244z	19 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	SUN
		1715z	22 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	WED
		1532z	28 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	TUE
		1106z	30 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	THU
		1553z	05 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	WED
		1742z	07 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	FRI
		1640z	11 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	TUE
		1703z	16 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	SUN
		1547z	18 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	TUE
		1203z	17 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	MON
		1618z	28 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	FRI
		1127z	29 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	SAT
		1126z	31 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	MON
3611//4522//5419//6881//9251		1103z	13 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	MON
3611//4522//5419//13362		1040z	04 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	TUE
3611//4522//5419//9251//13362		1059z	21 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	TUE
		1127z	23 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	THU
		1055z	31 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	FRI
		1108z	01 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	SAT

		1113z	03 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	MON
		1050z	08 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	SAT
		1123z	14 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	FRI
		1038z	20 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	THU
		1128z	24 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	MON
		1111z	30 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	SUN
3833//5407		1443z	30 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SUN
		1532z	31 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
4258	(in tfc)	1505z	06 Jul	NR CK .. 53 0706 2020 RMKS 0436 TO 0475 BT	(Remote tuner Japan)	JPL	MON
4284	(In tfc)	1145z	07 Aug	F NR 0635/EX 1948 RMKS 9121 TO 9186 BT A6UZ/ZDZ AR In tfc - Other stn on QSY 06	(Remote tuner Japan)	JPL	FRI
4397	(In tfc)	1520z	21 Jul	NR 56/EX 2322 RMKS 1781 TO 1788 BT Q3M/E2A AR	(Remote tuner Japan)	JPL	TUE
4411	FBEJ	1519z	14 Aug	In tfc - DE FBEJ	(Remote tuner Japan)	JPL	FRI
4522		Replaced	3JWV DE QH4P				
		1155z	31 Jul	TG1Y (x3) DE X9FW (x2) Sent svc msg - only got end - /631/A	(Remote tuner Japan)	JPL	FRI
4522//5419//9251//13362							
		1058z	03 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	FRI
		2218z	14 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	TUE
		1115z	26 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	SUN
4535	(In tfc)	1225z	03 Aug	NR 6149 CK 52 .. 0803 20.1 RMKS 7135 TO 8.35 BT	(Remote tuner Japan)	JPL	MON
4551.5	(In tfc)	1109z	08 Aug	ABCDEFGHJKLMNOPQRSTUVWXYZ TAU34567DN III AS VA M (Cont'd)	(Remote Japan)	JPL	SAT
	(In tfc)	1610z	08 Aug	ABCDEFGHJKLMNOPQRSTUVWXYZ TAU34567DN III AS VA M (Cont'd)	(Remote Japan)	JPL	SAT
	(In tfc)	1004z	12 Aug	ABCDEFGHJKLMNOPQRSTUVWXYZ TAU34567DN III AS VA M (Cont'd)	(Remote Japan)	JPL	WED
	(In tfc)	1158z	14 Aug	ABCDEFGHJKLMNOPQRSTUVWXYZ TAU34567DN III AS VA M (Cont'd)	(Remote Japan)	JPL	FRI
	(In tfc)	1711z	16 Aug	ABCDEFGHJKLMNOPQRSTUVWXYZ TAU34567DN III AS VA M (Cont'd)	(Remote Japan)	JPL	SUN
	(In tfc)	1610z	18 Aug	ABCDEFGHJKLMNOPQRSTUVWXYZ TAU34567DN III AS VA M (Cont'd)	(Remote Japan)	JPL	TUE
	(In tfc)	1243z	24 Aug	ABCDEFGHJKLMNOPQRSTUVWXYZ TAU34567DN III AS VA M (Cont'd)	(Remote Japan)	JPL	MON
	(In tfc)	1626z	28 Aug	ABCDEFGHJKLMNOPQRSTUVWXYZ TAU34567DN III AS VA M (Cont'd)	(Remote Japan)	JPL	FRI
	(In tfc)	1152z	29 Aug	ABCDEFGHJKLMNOPQRSTUVWXYZ TAU34567DN III AS VA M (Cont'd)	(Remote Japan)	JPL	SAT
	(In tfc)	1453z	30 Aug	ABCDEFGHJKLMNOPQRSTUVWXYZ TAU34567DN III AS VA M (Cont'd)	(Remote Japan)	JPL	SUN
	(In tfc)	1128z	31 Aug	ABCDEFGHJKLMNOPQRSTUVWXYZ TAU34567DN III AS VA M (Cont'd)	(Remote Japan)	JPL	MON
4593	Y7G3	1508z	06 Jul	In tfc - DE Y7G3 working outstations	(Remote tuner Japan)	JPL	MON
4599	(In tfc)	1210z	17 Aug	NR 9013 CK 61 28 0817 2000 RMKS 4357 TO 4350 BT Other stn not on this freq	(Remote tuner Japan)	JPL	MON
4754	(In tfc)	1125z	08 Aug	F F F NR 3043/EX 1925 RMKS 7234 TO 7251BT X2HJ/J3N4 AR	(Remote tuner Japan)	JPL	SAT
4850//5450		1640z	08 Aug	VVV UIS (x3) DE HV4 (x2) (R5) QSA ? K	(Remote tuner Hong Kong)	JPL	SAT
4860//6840							
		1120z	06 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
		1220z	06 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
		1620z	09 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	THU
		1720z	10 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	FRI
		1235z	13 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
		1120z	17 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	FRI
		1220z	17 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	FRI
		1120z	21 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	TUE
		1220z	21 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	TUE
		1520z	21 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	TUE
		1745z	22 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	WED
		1120z	28 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	TUE
		1120z	30 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	THU
		1120z	31 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	FRI
		1620z	31 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	FRI
		1120z	02 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SUN
		1220z	02 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SUN
		1520z	02 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SUN
		1120z	04 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	TUE
		1220z	04 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	TUE
		1620z	05 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	WED
		1120z	08 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SAT
		1220z	08 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SAT
		1620z	08 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SAT
		1535z	14 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	FRI
		1655z	14 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Vietnam)	JPL	FRI
		1720z	14 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Nepal)	JPL	FRI
		1720z	16 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SUN
		1120z	20 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	THU
		1220z	20 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	THU

		1320z	17 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
		1120z	24 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
		1620z	28 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	FRI
		1120z	29 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SAT
		1220z	29 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SAT
		1920z	30 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SUN
		1120z	31 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
4861	MNJ1	1105z	06 Jul	In tfc - DE MNJ1 working outstations	(Remote tuner Japan)	JPL	MON
	MNJJ	1620z	09 Jul	F F F NR 22/EX 1910 RMKS CQ BT 21./T17 AR (Very fast - changed his call before sending FFF msg) F F NR 447/EX 0024 RMKS 2157 TO 2179 BT M3BH/Y1S8 AR (x3) F F NR 447/EX 0026 RMKS 2179 TO 2157 BT M3BH/YJS8 AR (x3)	(Remote tuner Japan)	JPL	THU
4946	(In tfc)	1645z	21 Jul	NR 181 CK 91 08 0722 0010 RMKS 4586 TO 4666 BT	(Remote tuner Japan)	JPL	TUE
5019	(In tfc)	1128z	26 Jul	In tfc - Both stns on this freq NR 001 CK 81 10 0726 1925 RMKS 6883 TO 6880 BT	(Remote tuner Japan)	JPL	SUN
5028	(In tfc)	1615z	19 Jul	F F F NR 245/EX 0013 RMKS 5463 TO 5429 BT R2K7/8LB4 AR F F F NR 245/EX 0016 RMKS 5429 TO 5463 BT R2K7/8LB4 AR	(Remote tuner Japan)	JPL	SUN
5036	(In tfc)	1527z	21 Jul	F F F NR 4047/EX 2325 RMKS 2903 TO 2980 BT P5X4/L2D9 AR	(Remote tuner Japan)	JPL	TUE
5123	(In tfc)	1125z	29 Aug	/EX RMKS 2540 TO 2575 BT RIJU/LPGG AR K	(Remote tuner Japan)	JPL	SAT
5150		1630z	08 Aug	VVV WNF (x3) DE FXM (x2) (R5) QSA ? K (// 4720 N/H)	(Remote tuner Hong Kong)	JPL	SAT
5163	(In tfc)	1716z	16 Aug	RMKS 6888 TO 6378 BT	(Remote tuner Japan)	JPL	SUN
5323	(In tfc)	1553z	18 Aug	F NR 1824/EX 2352 BT CF1/W2 AR QSY 03 QSY 03	(Remote tuner Japan)	JPL	TUE
	(In tfc)	1550z	31 Aug	HR SVC GA 240 2345 RMKS 0615 TO 0847/0805 BT COMM/0030/667A/0615/0847 AR	(Remote tuner Japan)	JPL	MON
5367	R3PM	1219z	02 Aug	In tfc - DE R3PM working outstations on another freq	(Remote tuner Japan)	JPL	SUN
5382	G3MY	1218z	13 Jul	G3MY(Cont'd) FFF NR 1974/EX 2015 BT QBE6/G3H2 AR (x3) QSY 39 QSY 39 VV	(Remote tuner Japan)	JPL	MON
5407		Probably replaced N3DT DE LZHI on 5107 and 7133.					
		1515z	06 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K Note: New call and frequency. CQ3W 189. TO 865/4999 UGNT MM 26536/7866 1895 20535578055/003/1895 AR (Poor copy)	(Remote tuner Japan)	JPL	MON
		1539z	09 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	THU
		1541z	10 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	FRI
		1219z	13 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
		2225z	14 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	TUE
		1209z	17 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	FRI
		1242z	19 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SUN
		1627z	19 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K MSG NR 077 CK 499 24 0720 0000 BT	(Remote tuner Japan)	JPL	SUN
		1749z	22 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	WED
		1129z	23 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	THU
		1547z	28 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	TUE
		1109z	30 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	THU
	(In tfc)	1645z	01 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SAT
	(In tfc)	1228z	02 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SUN
	(In tfc)	1115z	03 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
		1615z	05 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	WED
		1642z	11 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	TUE
		1207z	14 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	FRI
		1549z	18 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	TUE
		1212z	20 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	THU
		1208z	17 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
		1225z	24 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
		1635z	28 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	FRI
		1154z	29 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SAT
		1113z	30 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SUN
5416	(In tfc)	1154z	06 Jul	NR 3026 CK 73 89 0706 1940 RMKS 2324 TO 2359 BT	(Remote tuner Japan)	JPL	MON
5419//9251//13362		1018z	30 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	THU
5428	(In tfc)	0929z	12 Aug	NR 001 CK 38 94 0812 1727 RMKS 6457 TO 6479 BT	(Remote tuner Japan)	JPL	WED
5443	(In tfc)	1123z	03 Aug	F NR .../EX 1921 RMKS 6620 TO 6677 BT QJX2/B3C5 AR QSL ? NR 2732 CK 36 42 0803 1929 RMKS 6620 TO 6677 BT In tfc - Other stn not on this freq	(Remote tuner Japan)	JPL	MON
5454	(In tfc)	1219z	18 Aug	/31/22/22/222232/X732A/COMM/6273 AR 22222 BT 784/XZ56/7253/27/30/22/X723A/COMM/6273 AR BT 784/XZ52/6056/274/38/52/X752A/COMM/6273 AR	(Remote tuner Japan)	JPL	TUE
5489	(In tfc)	1553z	19 Aug	NR 382 CK 51 77 0820 0146 RMKS 3384 TO 5698 BT	(Remote tuner Japan)	JPL	WED

				In tfc - Both stns on this freq			
5566	(in tfc)	1012z	04 Jul	NR 042/EX 1802 RMKS ABCD TO 1234 BT BBD8/OJHH AR	(Remote tuner Japan)	JPL	SAT
5475	QFB7	1510z	17 Jul	In tfc - DE QFB7- Working outstations	(Remote tuner Japan)	JPL	FRI
5577	(In tfc)	1619z	05 Aug	NR 1116 CK 201 3. 0805 ..05 RMKS CQ BT (In tfc – V.slow)	(Remote tuner Japan)	JPL	WED
5656	(In tfc)	1125z	20 Aug	VVV FF NR 5542/EX 1927 RMKS 5930 TO 2868 BT HD0/KBH AR (x3)	(Remote Japan)	JPL	THU
5665	(In tfc)	1840z	06 Jul	/DEF2 AR	(Remote tuner Japan)	JPL	MON
				(Both stn on this freq. Appears to practice - very slow CW - lots of mistakes. Only sent msg header)			
				F F NR 249/EX 0241 RMKS 0436 TO 0329 BT IUD2/JED1 AR			
				NR 250 CK 249 17 0707 0140. RMKS 9634 TO 9352 BT			
	(In tfc)	1531z	14 Aug	NR 250 CK 249 53 0707 0140 RMKS 0436 TO 032N BT	(Remote tuner Japan)	JPL	FRI
				NR 2800 CK 79 58 0814 2332 RMKS 5795 TO 5798 BT			
				In tfc - Both stns on this freq			
5667	(In tfc)	1122z	28 Jul	NR 2500 CK 191 54 0728 1845 RMKS 8741 TO 8756 K	(Remote tuner Japan)	JPL	TUE
				In tfc - Both stns on this freq			
5672		1632z	19 Jul	Y3JI DE N6WX (Repeated)	(Remote tuner Japan)	JPL	SUN
		1247z	03 Aug	Y3JI DE N6WX (Repeated)	(Remote tuner Japan)	JPL	MON
		1119z	04 Aug	Y3JI DE N6WX (Repeated)	(Remote tuner Japan)	JPL	TUE
		1208z	08 Aug	Y3JI DE N6WX (Repeated)	(Remote tuner Japan)	JPL	SAT
5680	(In tfc)	1200z	29 Aug	F F NR 635/EX 1955 RMKS 6276 TO 6970 BT C2K3/D5F4 AR	(Remote tuner Japan)	JPL	SAT
				F F F NR 635/EX 1955 RMKS 6970 TO 6276 BT			
				In tfc - Other stn on another freq			
5681	VN5J	1219z	24 Aug	In tfc - VN5J working outstations - Other stns on another freq	(Remote tuner Japan)	JPL	MON
5698	(In tfc)	1210z	01 Aug	RMKS 7494 TO 7029 BT - Both stns on this frequency)	(Remote tuner Japan)	JPL	SAT
5721	(In tfc)	1213z	14 Aug	F F F NR 716/EX 2005 RMKS 6223 TO 8971 BT B2Q6/Y3P4 AR	(Remote tuner Japan)	JPL	FRI
				In tfc - Other stn not on this freq			
5792	E8VU	1040z	08 Aug	In tfc - Other stn on another freq - E8VU – Outstations	(Remote tuner Japan)	JPL	SAT
6416	(In tfc)	1249z	19 Jul	NR.... CK 121 35 81 0719 ..30 RMKS 4855 TO 4666 BT (Very fast)	(Remote tuner Japan)	JPL	SUN
6454	(In tfc)	1253z	19 Jul	In tfc - QSL NIL SK GB	(Remote tuner Japan)	JPL	SUN
	(In tfc)	1235z	17 Aug	NR 2573 CK 49 20 0817 2030 RMKS 5... TO 5411 BT	(Remote tuner Japan)	JPL	MON
				Other stn not on this freq			
6458	(In tfc)	1133z	05 Aug	F NR 2763/EX 1933 RMKS 9133 TO 9102 BT UA/D4 AR (x3)	(Remote tuner Japan)	JPL	WED
				In tfc - Other stn on another freq			
6474	(In tfc)	1111z	19 Aug	Working outstations NR 234 CK 71 36 0819 ..65 RMKS.... 374 AR	(Remote tuner Japan)	JPL	WED
6548	(In tfc)	1116z	08 Aug	F F NR .../EX 191. RMK 64.4 TO 702. BT NN1./IFO. AR (V.Weak)	(Remote tuner Japan)	JPL	SAT
6594	(In tfc)	1118z	13 Jul	NR 228 CK 095 25 0713 1915 RMKS 1466 TO 1442 BT	(Remote tuner Japan)	JPL	MON
				(Other station not on this freq)			
6631	(In tfc)	1512z	03 Jul	0703 2240 RMKS 6811649 TO 56164. BT	(Remote tuner Japan)	JPL	FRI
6660	(in tfc)	1219z	27 Jul	In tfc - NR 415 SK	(Remote tuner Japan)	JPL	MON
6749	(In tfc)	1223z	27 Jul	In tfc - RMKS 7333 TO 9333 K	(Remote tuner Japan)	JPL	MON
6840		2220z	14 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	TUE
6840//8290		1020z	28 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	TUE
		1020z	30 Jul	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	THU
		1020z	04 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	TUE
		1020z	08 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SAT
		0920z	12 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	WED
		1020z	31 Aug	V Q2M (x3) DE NYZ (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
6854	(In tfc)	1714z	21 Jul	RMKS 4792 .271 TO 4702 279 BT (Possibly the other end of 6618)	(Remote tuner Japan)	JPL	TUE
6975	L2WA	1044z	06 Jul	In tfc - DE L2WA	(Remote tuner Japan)	JPL	MON
7015		1058z	13 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
		1026z	17 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	FRI
		0951z	19 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SUN
		1111z	21 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	TUE
		1118z	26 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SUN
		1227z	27 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
		1026z	28 Jul	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	TUE
		1112z	01 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SAT
		1018z	02 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SUN

		0930z	04 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	TUE
		0902z	05 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	WED
		1012z	08 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SAT
	(In tfc)	0950z	12 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	WED
		1055z	19 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	WED
		1042z	20 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	THU
		1129z	24 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
		1029z	31 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
7151	(In tfc)	1103z	31 Aug	NR 538 CK 0831 104 RMKS 2254 TO 2221 K In tfc - Both stn on this freq - Very weak	(Remote tuner Japan)	JPL	MON
9350//9350		1050z	31 Aug	V AA8V (x3) DE HJRA (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	MON
7112	(In tfc)	1118z	10 Jul	NR ... CK 61 20 1007 1900 RMKS CQ BT Note: Switched to unknown digital mode after.	(Remote tuner Japan)	JPL	FRI
7498	(In tfc)	1155z	24 Aug	- 999B DE Y... - Other stn on another freq	(Remote tuner Japan)	JPL	MON
7620//8350		1130z	08 Aug	VVV WNF (x3) DE FXM (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SAT
7741	R3PM	1218z	29 Aug	R3PM working outstations on another freq	(Remote tuner Japan)	JPL	SAT
7765	(In tfc)	1026z	13 Jul	F F NR/EX 1848 RMKS 4671 TO 2911 BT A6C8/B7D4 AR (Other station not on this freq)	(Remote tuner Japan)	JPL	MON
7821	(In tfc)	143z	19 Jul	RMKS 4826 TO 4857 4854 5935 .. BT	(Remote tuner Japan)	JPL	SUN
7890	(In tfc)	1258z	17 Aug	F F NR 1300/EX 2105 RMKS 4424 TO 4428 BT AC7/DW AR Other stn not on this freq	(Remote tuner Japan)	JPL	MON
7923	(In tfc)	1043z	30 Jul	F NR 0364/EX 1841 RMKS CQ BT JEL/Y AR (IRS9 working outstations on another freq)	(Remote tuner Japan)	JPL	THU
8080	(In tfc)	1106z	20 Aug	VVV (x) NR 2344/EX 1903 BT 2XB8/JCD5 AR QSY 36 QSY 36 QSY 36 (Remote Japan)	(Remote tuner Japan)	JPL	THU
8350		1030z	08 Aug	VVV WNF (x3) DE FXM (x2) (R5) QSA ? K	(Remote tuner Japan)	JPL	SAT
8359.5	(In tfc)	1042z	19 Aug	ABCDEFGHJKLMNOPQRSTUVWXYZ TAU34567DN III AS VA M (Cont'd)	(Remote tuner Japan)	JPL	WED
	(In tfc)	1057z	20 Aug	ABCDEFGHJKLMNOPQRSTUVWXYZ TAU34567DN III AS VA M (Cont'd)	(Remote tuner Japan)	JPL	THU
8556	(In tfc)	1700z	24 Aug	NR 226 CK 51 53 0829 0100 RMKS 8636 TO 8573 BT FF NR 89/EX 0108 RMKS 8573 TO 8536 BT ABC1/DEF2 AR K (2nd stn) FF NR 235/EX 0107 8539 TO 8573 BT ABC1/DEF2 BT NR 888 CK 51 .3 08 0110 RMKS 8573 TO 8539 BT In tfc - Both stns on this freq	(Remote tuner Japan)	JPL	FRI
9023	(In tfc)	0207z	04 Aug	F NR 5259/EX 1005 RMKS 4428 TO 4421 BT SA8/DW AR In tfc - Other stn on another freq	(Remote tuner Japan)	JPL	TUE
9049	(In tfc)	1541z	21 Jul	NR 224 CK 201 46 0721 2120 RMKS 8930 TO 5545 BT	(Remote tuner Japan)	JPL	TUE
9251		0946z	19 Jul	TG1Y (x3) DE X9FW (x2) 024/6239 /6111/12/68/6957/635/A AR	(Remote tuner Japan)	JPL	SUN
		1005z	19 Jul	TG1Y (x3) DE X9FW (x2) 024/6689/6111/12/68/6917/668/A AR	(Remote tuner Japan)	JPL	SUN
9251//13362		0942z	04 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	SAT
		1035z	06 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	MON
		1021z	17 Jul	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	FRI
		0956z	28 Jul	TG1Y (x3) DE X9FW (x2) Sent a svc msg - too weak to copy	(Remote tuner Japan)	JPL	TUE
		1015z	02 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	SUN
		1010z	08 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	SAT
		1020z	19 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	WED
		1027z	31 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	MON
9431	PRJ8	1030z	30 Jul	PRJ8 (x3) DE YDBX (x2) BT (x2) QSY 32569 (x2) - OTA - 1034z YDBX DE PRJ8 QSA 3 (1037z) QTC (Switched to unk digital mode - 1050z) (May not be M89 related)	(Remote tuner Japan)	JPL	THU

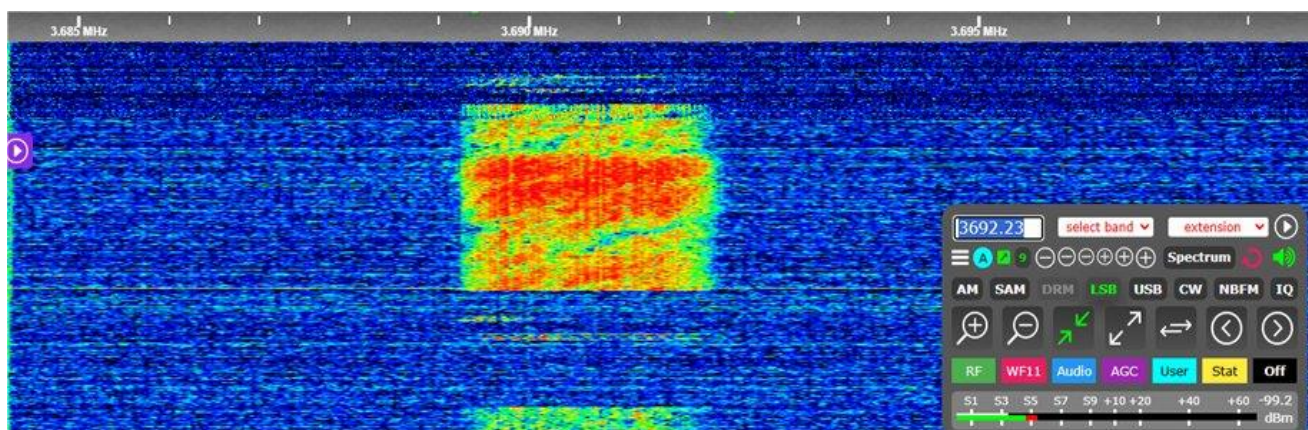


9431kHz	1050z	30 Jul	Unknown Digital Mode in Progress				Courtesy JPL
10211	T8GZ	1045z	31 Aug	In tfc - DE T8GZ working outstations on another freq	(Remote tuner Japan)	JPL	MON
13362		0138z	04 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	TUE
		0940z	05 Aug	TG1Y (x3) DE X9FW (x2)	(Remote tuner Japan)	JPL	WED

M95 / Q26 O

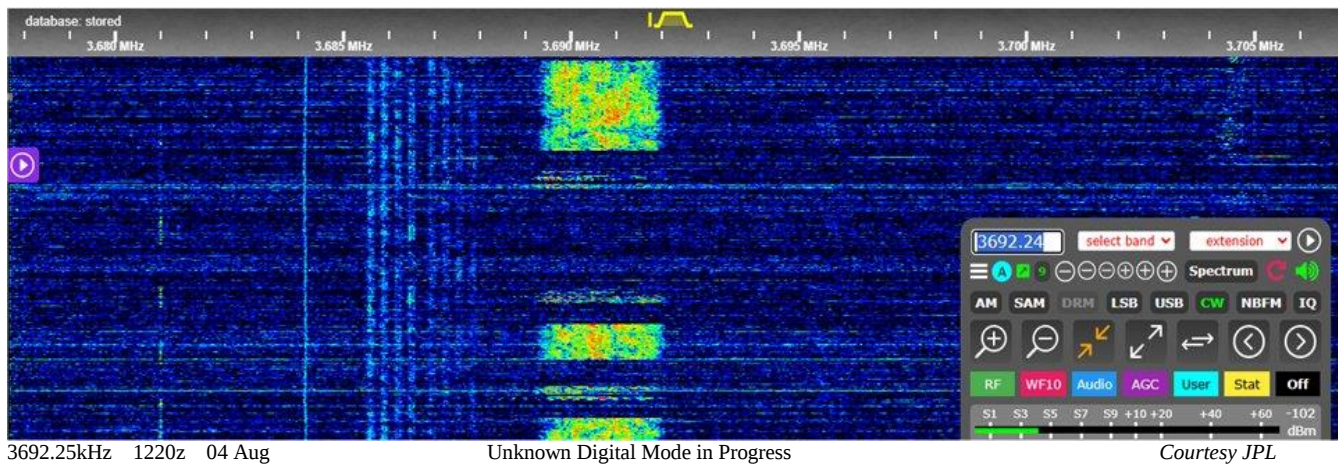
M95 Morse Logs (Bold type indicates new logging)

3169	(Into tfc)	1202z	10 Jul	Into Tfc - OTA 1204z Q26 XXXYXXYYXY HR TRY LL 4482 1859 6282 5008 3319 8780 2727 8722 0000 0000 9619 9457 7660 8547 9436 6545 9446 9976 5001 3203 0427 8958 8553 7197 6475 7103 2029 5214 5347 5376 0028 7551 8276 4790 4849 7819 2748 9518 4273 7985 8684 8023 8551 8336 8420 7155 1917 0435 3445 1804 QSL?: (x2)	(Remote tuner Japan)	JPL	FRI
3375	(In tfc)	1232z	08 Aug	NR 781/CCK CK 91 28 0808 2015 RMKS 0352 TO 0330 BT	(Remote tuner Japan)	JPL	SAT
3688.25	(In tfc)	1219z	04 Aug	In tfc - OTA 1234z - Lost the SDR connection Q26 Unable to decode this Q26 tx.	(Remote tuner Japan)	JPL	TUE
3692.25	(In tfc)	1156z	04 Aug	In tfc - OTA 1157z - Switched to unknown digital mode Q26 XXXYXXYYXY HR TRY LL 2163 5748 4102 3596 7821 4093 5798 2601 7835 4096 7651 3842 1340 9526 7492 1830 2516 0789 5840 3679 5146 3827 9623 1540 7203 8149 0521 9867 4978 3065 5348 7162 0369 5412 3091 8742 2916 0587 6837 5490 3675 2814 2506 3491 8013 4792 5726 9810 8073 9645 QSL?	(Remote tuner Japan)	JPL	TUE



3692.25kHz	1157z	04 Aug	Unknown Digital Mode in Progress				Courtesy JPL
3692.25	(In tfc)	1213z	04 Aug	In tfc - OTA 1220z - Switched to unknown digital mode Q26	(Remote tuner Japan)	JPL	TUE
MSG AGN MZ=1234651=05=092424=283866=302352=204=259=091001=091124=15=114=090504 MZ=1234652=05=092525=283867=302353=205=260=091102=091125=10=115=090515 MZ=1234653=05=092626=283868=302354=206=261=091103=091126=13=116=090526 MZ=1234654=05=092727=283869=302355=207=262=091001=091127=09=117=090537 MZ=1234655=05=092828=283870=302356=208=263=091102=091128=15=118=090548							

MZ=1234656=05=092929=283871=302357=209=264=091103=091129=10=119=090559
MZ=1234657=05=093030=283872=302358=210=265=091001=091130=13=120=090518
MZ=1234658=05=093131=283873=302359=211=266=091102=091131=09=121=090545
MZ=1234659=05=093232=283874=302360=212=267=091103=091132=15=122=090536
MZ=1234660=05=093333=283875=302361=213=268=091001=091133=10=123=090603
MZ=1234661=05=093434=283876=302362=214=269=091102=091134=13=124=090614
MZ=1234662=05=093535=283877=302363=215=270=091103=091135=09=125=090625
MZ=1234663=05=093636=283878=302364=216=271=091001=091136=15=126=090636
MZ=1234664=05=093737=283879=302365=217=272=091102=091137=10=127=090647
MZ=1234665=05=093838=283880=302366=218=273=091103=091138=13=128=090658
MZ=1234666=05=093939=283881=302367=219=274=091001=091139=09=129=090630
MZ=1234667=06=094040=283882=302368=220=275=091000=091140=15=130=090500
MZ=1234668=06=094141=283883=302369=221=276=091001=091141=10=131=090501
MZ=1234669=06=094242=283884=302370=222=277=091102=091142=13=132=090502
MZ=1234670=06=094343=283885=302371=223=278=091103=091143=09=133=090503
QSL?IKN
//&&/ 4.&&
.13610=944236=032242901029111=1=954
.1=620=955236=0332=20010=9011=0=955
.1=630=966236=0342621010=9161=1=956
.13640=977236=03527220=+=9112=1=957
.1=650=988237=0362823010=9181=1=958
.13660=999237=037292=010=9091=1=959
.13670=900237=0382=25010=9101=2=958
.13680=911237=0392=21010=9110=2=955
.13640=922237=0306=27010=9121=2=956
.1=600=933237=0316=28010=9033=0=963
.13610=944232=0326429010=9141=2=964
.13620=955237=0332=20010=9110=2=965
.13630=966237=0342621010=9166=2=966
.1=640=977237=035272201032011=2=967
.13650=988238=0362823010=9181=2=968
.13660=999238=0372924010=9190=2=960
.13670=900238=0382=25019=9111=3=900
.13680=91123860392126010=9111=0=951
.13690=928438=0307=21010=9111=3=952
.13600=933238=0312=28010=91=0=3=953
1B
YMYMH S A
ZVWRTVTPWWRIIYEWTVPTVOPQPQWVTQRPP
ZVWRTVTPWWVIIIEWTVPVYVOQWPQWVPQTTPQ
ZVWRTVTPWWVIIIEWTVPVYVOQEPQWVEQYPPW
ZVWRTVTPWWVIIIEWTVPWYVOPQPQWVOQUPPE
.243=5022=803325=0262312012=518004
EMWRTVTPWWVIIIEWTVPVYVOQEPQWQPQPPT
ZVWRTVTPPEVIIIEWPVQVYVOPQPQEVEQPPQ
ZVWRTVTPPEVIIIEWTVPVQVVOQWPQEVOQPPR
ZYWRTVOPEVIIIEWYVQVYPOQEPQEVQWPPE
ZVWRYVTPEVIIIEWYVQVYVOPQPQEVQPPPM
ZVWFYVTPEVIIIEWYVQVYVOQWPQEVEQRPQ
=246=5033=883326=1=7=913013=915002
ZVWRYVTPEVIIIEWYVQVUVOQEPQEVQYYPE
ZVWQYVTPEEVFWEUWGVQVUVOQWPQEVPQUPPRY
EVWRYVTPEEIIPEWIVQVUVOQEPQEVEQYWPT
EYWRYVTPEVIIIEWYVQVUVOQWPQEVOPOPPE
ZVWRYVYPRRVIIWEWYVWVUVOQPPRETQPPPP
ZVWRYVYPRRVIIIEWYVWVQVOPQPQRPVQPPPP
ZVWREVPREVIIIEWPVWVUVOQPPQRPVEQWPPP
ZMWRUVYPRRVIIIEWUVWVUVOQEPQRPVOQEP
ES G
VM13610=948236=0325=29010=9141=1=954
.1=620=985236=0332=20010=9011=01955
.13630=966236=0342621010=91=6=1=956
.13640=977236=0352=22010=1110=1=957
.1=650=988237=0362=23010=9181=1=958
..13660=999237=0322=24019=9019=1=959
5=.13600=900237=0382025010=9101=2=958
.41=683=911337=0392=26010=9110=9=955
.1=690=922037=0306=27010=9121=2=956
.13600=933237=0316328010=9013=2=963
.13610=944237=0326=29010=9141=2=964
.13620=955237=0332=20010=9110=2=965
.13630=966237=0322=21010=9161=2=966
.13640=973237=0352722010=9011=2=967
=.13650=988238=0362823010=9111=2=968
.QVYYPVOOOWEIVPEUWVWRPQPVOQOPVWVOYP
.1=670=900238=0382=25010=9111=3=950
.1=6
0=911238=0392=26010=9111=0=951
.1=690=928438=0302=27010=9121=3=952
.1=600=933238=0327=28010=9130=3=953
1B



3903	Call Sign HBDD (x2)	Replaced YHDX DE SAQC on 3968, 6936, 5479 & 10722kHz				
	1535z	28 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	TUE
	1626z	31 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	FRI
	1600z	03 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	MON
3903//6557	Call Sign HBDD					
	1310z	03 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	MON
3903//6886	Call Sign HBDD	Replaced YHDX DE SAQC on 3968, 6936, 5479 & 10722kHz				
	1517z	03 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	FRI
	1553z	17 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	FRI
	1258z	19 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	SUN
	1508z	21 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	TUE
	1718z	22 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	WED
	1533z	23 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	THU
	1539z	30 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	THU
	1511z	01 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	SAT
	1539z	04 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	TUE
	1558z	05 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	WED
	1745z	07 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	FRI
	1646z	11 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	TUE
	1706z	16 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	SUN
	1551z	18 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	TUE
	1612z	19 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	WED
	1645z	17 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	MON
	1504z	24 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	MON
	1628z	28 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	FRI
	1447z	30 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	SUN
	1530z	31 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	MON
4156//6352//9042	Call Sign XS24					
	1142z	06 Jul	In Q26 - Into M95 - 1150z NR 12 CK 182 35 0706 1552 BT	(Remote tuner Japan)	JPL	MON
	1151z	10 Jul	In M95 NR 20 CK 147 35 0710 1545 BT	(Remote tuner Japan)	JPL	FRI
	1154z	13 Jul	Into M95 NR 091 CK 65 35 0713 1532 BT NR 26 CK 156 35 0713 1539 BT	(Remote tuner Japan)	JPL	MON
	1140z	17 Jul	Into V26 - FF - Into Q26 - 1142z - Into M95 - 1149z NR 099 CK 26 35 0717 1509 BT NR 065 CK 19 35 0717 1536 BT NR 34 CK 180 35 0717 1536 BT	(Remote tuner Japan)	JPL	FRI
	1142z	21 Jul	Into Q26 - Into M95 - 1149z NR 087 CK 17 35 0721 1455 BT NR 008 CK 17 35 0721 1500 BT NR 42 CK 119 35 0721 1601 BT	Q26/M95 (Remote tuner Japan)	JPL	TUE
	1154z	23 Jul	In M95 NR 46 CK 132 35 0723 1521 BT	(Remote tuner Japan)	JPL	THU
	1148z	26 Jul	In M95	(Remote tuner Japan)	JPL	SUN
	1143z	30 Jul	Into Q26 - M95 NR 026 CK 41 35 0730 1504 BT NR 60 CK 108 35 0730 1540 BT	Q26/M95 (Remote tuner Japan)	JPL	THU
	1140z	31 Jul	Into V26 - Into Q26 - 1144z - Into M95 - 1148z NR 62 CK 212 35 0731 1515 BT	(Remote tuner Japan)	JPL	FRI

	1140z	01 Aug	Into V26 - Into Q26 - 1142z - Into M95 - 1147z NR 030 CK 15 35 0801 1450 BT NR 02 CK 105 35 0801 1523 BT		(Remote tuner Japan)	JPL	SAT
	1142z	02 Aug	Into Q26 - Into M95 - 1147z NR 032 CK 29 35 0802 1501 BT NR 04 CK 094 35 0802 1526 BT	V26/Q26/M95	(Remote tuner Japan)	JPL	SUN
	1146z	03 Aug	In Q26 - Into M95 - 1147z NR 034 CK 38 35 0803 1506 BT NR 06 CK 094 35 0803 1547 BT	Q26/M95	(Remote tuner Japan)	JPL	MON
	1149z	04 Aug	Into M95 NR ... CK 132 35 0804 1522 BT	M95	(Remote tuner Japan)	JPL	TUE
	1154z	08 Aug	In M95 NR 044 CK 61 35 0808 1459 BT NR 16 CK 141 35 0808 1543 BT	M95	(Remote tuner Japan)	JPL	SAT
	1146z	14 Aug	In Q26 - In to M95 - 1148z NR 056 CK 37 35 0814 1454 BT NR 28 CK 126 35 0814 1518 BT	Q26/M95	(Remote tuner Japan)	JPL	FRI
	1154z	19 Aug	In Q26 - In to M95 - 1148z NR 38 CK 164 35 0819 1453 BT	Q26/M95	(Remote tuner Japan)	JPL	WED
	1152z	20 Aug	In to M95 NR 40 CK 159 35 0820 1505 BT	M95	(Remote tuner Japan)	JPL	THU
	1210z	24 Aug	In tfc - Unknown - NR 48 CK 154 35 0824 1526 BT	V26.Q26/M95	(Remote tuner Japan)	JPL	MON
	1147z	29 Aug	In to M95 NR 011 CK 13 35 0829 1432 BT NR 58 CK 162 35 0829 1547 BT	M95	(Remote tuner Japan)	JPL	SAT
	1151z	30 Aug	In to M95 NR 014 CK 29 35 0830 1530 BT NR 088 CK 49 35 0830 1531 BT NR 60 CK 186 35 0830 1534 BT	M95	(Remote tuner Japan)	JPL	SUN
	1152z	31 Aug	In to M95 NR 62 CK 140 35 0831 1517 BT	M95	(Remote tuner Japan)	JPL	MON
4167.75	1529z	03 Jul	In Q26 - OTA 1530z Q26		(Remote tuner Japan)	JPL	FRI
4225//6516//9392 (In tfc)	Call Sign XS24 0921z	05 Aug	NR 685 CK 198 35 0805 1428		(Remote tuner Japan)	JPL	WED
4268	Call Sign M7LV 1725z	22 Jul	New Call and frequency V DHFG (x3) DE M7LV (x3) (Cont'd)	V.Weak	(Remote tuner Japan)	JPL	WED
4297	1552z	09 Jul	In tfc - OTA 1553z Q26		(Remote tuner Japan)	JPL	THU
4338	1132z	23 Jul	In tfc - OTA 1133z Q26		(Remote tuner Japan)	JPL	THU
4437	(In tfc) 1419z	03 Aug	NR 68./CKC CK 99 55 0803 2211 RMKS 2807 TO 2800 BT In tfc - Both stns on this freq		(Remote tuner Japan)	JPL	MON
4469.25	P0JW 1228z	03 Aug	In tfc - OTA 1233z Q26		(Remote tuner Japan)	JPL	MON
HS2A HS2A HS2A DE P0JW P0JW P0JW XYXYXYXYXYXY HR MSG GA PSE NOTE CYL 0001=CCK 141 24 0803 2030 QW11--- XJII 4172 8529 9812 7159 3458 2980 2151 3290 0298 1 1072957 3742 8467 3536 1926 5039 9332 7243 1481 9808 2498 8392 3229 9548 9574 2668 6983 7934 4790 7041 7401 3001 6284?2972 0989 8631 6503 7281 2381 3689 2953 2041 5106 6840 4654 1373 9479 4358 9341 3754 7223 2069 8580 8213 5079 7227 2446 7327 9664 7161 0693 0775 5748 1301 6808 4991 0834 5746 2586 3006 7049 8168 6556 0776 2174 7604 5081 6710 5019 0115 3538 5769 0325 3063 3172 0994 0487 3568 5654 6740 8721 1531 1428 6995 6548 5141 4531-1 4210 5063 4159 0198 6531 0312 7809 7378 0298 0002 7898 2395 5723 2754 519 4162 3250 9179 9790 8735 W968 0973 629- 0830 8265 1430 8510 9665 5073 3574 7110 43							

4534.75	(In tfc)	1559z	19 Aug	In tfc - OTA - 1606z - V26 After - Into unknown digital mode	Q26/V26 (Remote Japan)	JPL	WED
4542	(In tfc)	Call Sign XS30 1225z	20 Aug	NR 689 CK 042 35 0820 1656 BT	(Remote tuner Japan)	JPL	THU
4542//6876		Call Sign XS30 1132z	06 Jul	Into Q26 - Into M95 - 1140z - BNGC DE XS30 Note: Unable to copy msg due to poor signal quality.	(Remote tuner Japan)	JPL	MON
		1131z	10 Jul	Into Q26 - Into M95 - 1148z - BNGC DE XS30 Q26/M95 Note: Unable to copy msg due to poor signal quality	(Remote tuner Japan)	JPL	FRI
		1131z	13 Jul	Into Q26 - OTA 1148z - BNGC DE XS30 Q26 Note: Did not go into M95.	(Remote tuner Japan)	JPL	MON
		1131z	17 Jul	Into Q26 - Into M95 - 1138z - BNGC DE XS30 Q26/M95 NR 0563 CK 284 35 0717 1542 BT	(Remote tuner Japan)	JPL	FRI
		1131z	21 Jul	In Q26 - Into M95 - 1137z - BNGC DE XS30 Q26/M95 NR 0571 CK 249 35 0721 1549 BT	(Remote tuner Japan)	JPL	TUE
		1131z	23 Jul	In Q26 - Into M95 - 1150z - BNGC DE XS30 Q26/M95 NR 0576 CK ... 35 0723 1627 BT (Sent more than 1 msg)	(Remote tuner Japan)	JPL	THU
		113z	26 Jul	In Q26 - Into M95 - 1143z - BNGC DE XS30 Q26/M95 NR 0592 CK 049 35 0726 1513 BT NR 0593 CK ... 35 0726 15.. BT	(Remote tuner Japan)	JPL	SUN
		1134z	28 Jul	In Q26 - Into M95 - 1138z - BNGC DE XS30 Q26/M95 NR 0599 CK 281 35 0727 1641 K	(Remote tuner Japan)	JPL	TUE
		1130z	30 Jul	Into Q26 - Into M95 - 1138z - BNGC DE XS30 Q26/M95 NR 0603 CK 254 35 0730 1451 BT	(Remote tuner Japan)	JPL	THU
		1130z	31 Jul	Into Q26 - Into M95 - 1136z - BNGC DE XS30 Q26/M95 NR 0605 CK ... 35 0731 BT (Heavy QRM on frequency)	(Remote tuner Japan)	JPL	FRI
		1132z	01 Aug	Into Q26 - Into M95 - 1137z - BNGC DE XS30 Q26/M95 NR 0607 CK 224 35 0801 1551 BT	(Remote tuner Japan)	JPL	SAT
		1134z	02 Aug	In Q26 - Into M95 - 1141z - BNGC DE XS30 Q26/M95 NR 0609 CK 293 35 0802 1601 BT	(Remote tuner Japan)	JPL	SUN
		1132z	03 Aug	In Q26 - Into M95 - 1142z - BNGC DE XS30 Q26/M95 NR 0613 CK 408 35 0803 1558 BT	(Remote tuner Japan)	JPL	MON
		1130z	04 Aug	Into V26 - Into Q26 - 1130z - Into M95 - 1145z - BNGC DE XS30 NR 0615 CK 045 35 0804 1552 BT	(Remote Japan)	JPL	TUE
		1132z	08 Aug	In Q26 - Into M95 - 1151z - BNGC DE XS30 Q26/M95 NR 06.3 CK ... 35 0808 1... BT	(Remote tuner Japan)	JPL	SAT
		1130z	14 Aug	Into Q26 - Into M95 - 1145z - BNGC DE XS30 Q26/M95 NR 06659 CK 370 35 0814 1522 BT	(Remote tuner Japan)	JPL	FRI
		1130z	19 Aug	Into V26 - Into Q26 - 1131z - Into M95 - 1151z - BNGC DE XS30 NR 0678 CK 693 35 0819 1635 BT	(Remote Japan)	JPL	WED
		1131z	20 Aug	Into Q26 - Into M95 - 1149z - BNGC DE XS30 NR 0687 CK 602 35 0820 .52 BT	(Remote tuner Japan)	JPL	THU
		1230z	24 Aug	Into Q26 - OTA 1232z - Did not go to M95 - BNGC DE XS30	(Remote tuner Japan)	JPL	MON
		1131z	29 Aug	Into Q26 - Into M95 - 1145z - BNGC DE XS30 Q26/M95 NR 0742 CK 690 35 08UN A6AN BT	(Remote tuner Japan)	JPL	SAT
		1131z	30 Aug	Into Q26 - Into M95 - 1148z - BNGC DE XS30 Q26/M95 NR 0745 CK 695 35 0830 1647 BT	(Remote tuner Japan)	JPL	SUN
		1131z	31 Aug	Into Q26 - Into M95 - 1149z - BNGC DE XS30 Q26/M95 NR 0750 CK 643 35 0831 1635 BT	(Remote tuner Japan)	JPL	MON
4827	(In tfc)	1226z	06 Jul	NR 007/CCK CK 199 95 0706 2000 RMKS 7144 TO 7172 BT	(Remote tuner Japan)	JPL	MON
4885	(In tfc)	1214z	03 Aug	NR 2182/CCK CK 91 68 0803 2000 RMKS 1951 TO 1059 K Other stn on another freq	(Remote Japan)	JPL	MON
5017	(In tfc)	1459z	30 Aug	NR 001/CCK CK 41 01 0003 RMKS 6030 TO 6010 BT	(Remote tuner Japan)	JPL	SUN
5040	(In tfc)	1335z	17 Aug	191 24 01 8 094 3930 RMKS 13US TO 69U6 NR 1492/CCK CK 191 25 0818 094 30 094 0940 0945 RMKS JS TO 693U6 1296/CCK CK 2191 24 618 0943 030 RMKS 1WUU TO NNO N NR 1282/CCK 191 34 0618 08 0940 RMKS JUUS TO 69UB TO 4950 RMKS JUUS TO 69UB BBBB	(Remote tuner Japan)	JPL	MON

91 (Cont'd)

5222	C39K	1005z	04 Aug	In tfc - DE C39K M95 MSG TO U LSN NOTE CY U NR 001/CCK CK 51 46 0804 1800 RMKS BT 6109 TO 6114 AR K	(Remote tuner Japan)	JPL	TUE
5284.75	(In tfc)	1107z	04 Aug	In tfc - OTA 1117z Q26	(Remote tuner Japan)	JPL	TUE
5288.50	(In tfc)	1052z	08 Aug	In tfc - OTA 1053z Q26	(Remote tuner Japan)	JPL	SAT
5289.66	(In tfc)	1227z	24 Aug	In tfc - OTA 1228z Q26	(Remote tuner Japan)	JPL	MON
5415	(In tfc)	1146z	27 Jul	In tfc - Other stn on another freq NR 667/CCK CK 91 36 0727 1925 RMKS 7042 TO 7567 K	(Remote tuner Japan)	JPL	MON
5423.15	(In tfc)	1543z	18 Aug	In Q26 - OTA - 1244z Q26	(Remote tuner Japan)	JPL	TUE
5457.60	(In tfc)	1053z	06 Jul	In tfc - OTA 1058z Q26	(Remote tuner Japan)	JPL	MON
5457.75	(In tfc)	1210z	17 Jul	In tfc - OTA 1212z Q26	(Remote tuner Japan)	JPL	FRI
				WB66---1XPA 1213 0030 4620 6320 8741 5446 7335 7880 6990 3917 7936 7036 1360 8394 4649 3668 8666 5781 8260 2117 5256 0473 7341 6768 6195 4956 7087 6753 3438 AHR ZNN SK			
	(In tfc)	1002z	02 Aug	In tfc - OTA 1010z Q26 ZNN SK ZNN SK ZNN SK ZNN SK ZNN SK ZNN SK ZNN SK ZNN SK ZNN SK (Cont'd)	(Remote tuner Japan)	JPL	SUN
	(In Q26)	1221z	17 Aug	In Q26 - OTA - 1228z Q26 8T6K 8T6K 8T6K DE JP5H JP5H JP5H XYXYXYXYXY HR MSG GA 5257 25 51 0817 1111 QLII---P9FI 1213 0030 2240 7540 3611 0651 4299 1066 0837 4726 5207 3305 3394 9112 3336 2481 1595 3497 1244 0149 8301 1760 7559 7646 1964 MSG AGN	(Remote tuner Japan)	JPL	MON
5565.50	(In tfc)	1222z	13 Jul	In tfc - OTA 1222z Q26	(Remote tuner Japan)	JPL	MON
5565.75	(In tfc)	1228z	02 Aug	In tfc - OTA 1229z Q26	(Remote tuner Japan)	JPL	SUN
5602.75	(In tfc)	1201z	27 Jul	In ffc OTA - 1210z Q26	(Remote tuner Japan)	JPL	MON
5659.25		1115z	03 Jul	In Q26 - OTA 1158z Q26 Note: Lost SDR. Changed SDR and still active. OTA 1250z. File contained only idling. No msg sent.	(Remote tuner Japan)	JPL	FRI
5672	(In tfc)	1205z	20 Aug	NR 006/CCK CK 40 91 1820 2000 RMKS 7833 T0 5325 7205 5079 BT	(Remote tuner Japan)	JPL	THU
5751		1025z	19 Aug	In Q26 - OTA 1028z - Very poor signal - QRM	(Remote tuner Japan)	JPL	WED
5751.75	(In tfc)	1034z	07 Aug	In tfc - OTA 1034z Q26	(Remote tuner Japan)	JPL	FRI
5754.25	(In tfc)	0906z	04 Aug	In tfc - OTA 0925z Q26	(Remote tuner Japan)	JPL	TUE
5888	(In tfc)	1045z	04 Jul	NR 0370/CCK CK 91 24 0704 1530 RMKS ZAF0 TO ZABN K	(Remote Japan)	JPL	SAT
6278.25	(In tfc)	1608z	03 Aug	In tfc - OTA 1609z Q26	(Remote tuner Japan)	JPL	MON
6425	(In tfc)	1209z	30 Jul	In tfc - OTA 1210z Q26	(Remote tuner Japan)	JPL	THU
6426.75	(in tfc)	1234z	02 Aug	In tfc - OTA 1235z Q26	(Remote tuner Japan)	JPL	SUN
6516	Call Sign	XS24 0918z	09 May	In tfc - BNEC DE XS24 NR 385 CK 135 35 0509 1428	(Remote tuner Japan)	JPL	SAT
		2317z	14 Jun	In M95 - ZNN SK - BNEC DE XS24	(Remote tuner Japan)	JPL	TUE
	(In tfc)	0933z	04 Aug	In tfc - 3 Fig - ZNN SK - Into V26 M95/V26	(Remote tuner Japan)	JPL	TUE
6531	(In tfc)	0949z	04 Aug	NR 030/CCK CK 49 58 0803 1848 RMKS 3267 TO 3257 BT	(Remote tuner Japan)	JPL	TUE
6550	(In tfc)	1048z	02 Aug	NR 010 CK 51 50 0803 0100 RMKS BT Q26 In tfc - Both stns on this frequency	(Remote tuner Japan)	JPL	SUN
6552.25	5PYB	0908z	05 Aug	In tfc - OTA - 0919z Q26	(Remote tuner Japan)	JPL	WED

NK6U NK6U NK6U DE 5PYB 5PYB 5PYB
 XYXYXYXYXYXY CY GD QSL 1715 AHR MSG GA
 2991=CCK 191 24 0805 1700
 5692-1590
 1986 8986 8134 8910 9401 5892 7570 2167 1265 4231
 2548 6570 9791 9827 4545 9568 8412 9867 7345 7684
 4195 0359 0384 1645 0542 7932 3687 8035 3815 5163
 6341 5838 9080 7261 3720 9312 9582 2471 2804 4532
 7929 7973 6170 5607 7662 5407 2883 3207 4393 0494
 4516 9242 2966 9264 5409 4661 1369 0629 5030 2910
 1019 1238 4360 0336 2117 3157 1941 4351 7561 0187
 7121 7553 4856 5813 9821 5208 7427 6068 2861 3514
 6734 3920 8831 0351 9986 0820 5306 7462 2897 7952
 8254 3895 3726 4304 9734 0970 6745 8436 0208 6740-1
 6254 5497 4148 2352 9593 1836 6408 4220 3579 6734
 2838 7860 6292 7234 4375 1725 9639 5387 0351 4598
 4949 6443 1861 0716 5152 5326 2368 7080 7901 0489
 1709 0386 1903 6847 2474 7032 1962 8940 7971 8221
 5347 5149 4920 5324 2012 2119 6097 5458 0574 5098
 6765 4578 4084 8003 2317 5189 6146 9763 4676 9648
 8774 4191 4539 2576 2963 5018 9040 6715 0609 0151
 6487 1201 7249 5624 3761 6332 2559 5886 3871 7615
 3040 3989 2856 9378 7624 0628 2581 3707 9679 8053
 3131
 1590=1711=1834

QSL?QSL?QSL?QSL? X
 QSL?QSL?QSL?#5/QSL?QSL?QSL?

YCI8 YCI8 YCI8 DE Q6EA Q6EA Q6EA
 XYXYXYXYXYXY CY GD QSL 1715 BOZ NIL SK X
 NK6U NK6U NK6U DE 5PYB 5PYB 5PYB
 NK6U NK6U NK6U DE 5PYB 5PYB 5PYB
 NK6U NK6U NK6U DE 5PYB 5PYB 5PYB

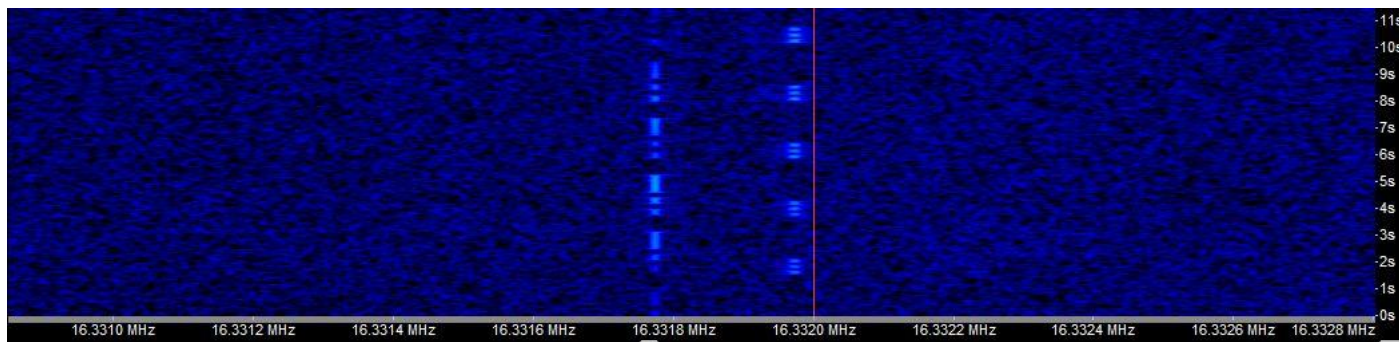
XYXYXYXYXYXY OK BOZ NIL SK X

6557//11475	Call Sign HBDD		Replaced YHDX DE SAQC on 3968, 6936, 5479 & 10722kHz		
	1111z	17 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL FRI
	1200z	23 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL THU
	1110z	03 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL MON
	1038z	04 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL TUE
	1202z	08 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL SAT
	1206z	17 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL MON
	1126z	24 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL MON
	1208z	29 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL SAT
	1108z	30 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL SUN
6669.25	1459z	03 Jul	In Q26 - OTA 1506z Q26	(Remote tuner Japan)	JPL FRI
6884.60	1101z	21 Jul	In tfc - OTA 1102z Q26	(Remote tuner Japan)	JPL TUE
6886	Call Sign HBDD		Replaced YHDX DE SAQC on 3968, 6936, 5479 & 10722kHz		
	1832z 06 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	MON
	1543z 09 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	THU
	1253z 14 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	TUE
	1552z 14 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL	FRI
7022	(In tfc)	1107z	10 Jul NR ...CCK CK 15 .. 1007 1900 RMKS 2954 TO 2428 TO 2436 TO 0484 BT		
			(Remote tuner Japan)	JPL	FRI
7662.25	(In Q26)	1248z	17 Aug In Q26 - Very weak - OTA - 1255z Q26	(Remote tuner Japan)	JPL MON
7766	(In tfc)	1225z	29 Aug NR 3585/CCK CK 19 25 0836 1000 RMKS GZGG TO 45GK BT	(Remote tuner Japan)	JPL SAT
8039	(In tfc)	1105z	03 Jul NR 127/CCK CK 142 25 0703 1900 RMKS RZV TO AB4 K		
			(Remote tuner Japan)	JPL	FRI
11475	Call Sign HBDD		Replaced YHDX DE SAQC on 3968, 6936, 5479 & 10722kHz		
	1056z	03 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL FRI
	0940z	04 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL SAT
	1106z	10 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL FRI
	0935z	19 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL SUN
	1055z	21 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL TUE
	1050z	31 Jul	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL FRI
	1012z	02 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL SUN
	0134z	04 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL TUE
	0907z	05 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL WED
	0927z	12 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL WED
	1018z	19 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL WED
	1036z	20 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL THU
	1019z	31 Aug	V WCJJ (x3) DE HBDD (x2)	(Remote tuner Japan)	JPL MON

Marker Beacons (MX MXI)

3168.5	1928z	24 Aug	MX	CW	Beacon	"L"	(Fast)	Weak	BR	MON
5153.7	1921z	05 Aug	MXI	CW	Beacon	"D"	Sevastopol	V.Weak	BR	WED
	1930z	24 Aug	MXI	CW	Beacon	"D"	Sevastopol	V.Weak	BR	MON
5153.9	2030z	15 Jul	MXI	CW	Beacon	"S"	Severomorsk	Weak	BR	WED
	1921z	05 Aug	MXI	CW	Beacon	"S"	Severomorsk	Weak	BR	WED
	1930z	24 Aug	MXI	CW	Beacon	"S"	Severomorsk	Weak	BR	MON
5154.1	2029z	15 Jul	MXI	CW	Beacon	"A"	Astrakhan	Weak	BR	WED
	1931z	24 Aug	MXI	CW	Beacon	"A"	Astrakhan	Weak fading in & out	BR	MON
5156.8	2031z	15 Jul	MX	CW	Beacon	"L"	St Petersburg	Fair	BR	WED
	1923z	05 Aug	MX	CW	Beacon	"L"	St Petersburg	Fair	BR	WED
	1932z	24 Aug	MX	CW	Beacon	"L"	St Petersburg	Fair under digi QRM	BR	MON
7508.7	0539z	11 Jul	MXI	CW	Beacon	"D"	Sevastopol	Fair	BR	SAT
	2033z	15 Jul	MXI	CW	Beacon	"D"	Sevastopol	Good	BR	WED
	1926z	05 Aug	MXI	CW	Beacon	"D"	Sevastopol	Good	BR	WED
	0823z	11 Aug	MXI	CW	Beacon	"D"	Sevastopol	Weak	BR	TUE
	0543z	17 Aug	MXI	CW	Beacon	"D"	Sevastopol	Weak	PLdn	MON
	2340z	22 Aug	MXI	CW	Beacon	"D"	Sevastopol		PLdn	SAT
	1934z	24 Aug	MXI	CW	Beacon	"D"	Sevastopol	Good	BR	MON
7508.9	0539z	11 Jul	MXI	CW	Beacon	"S"	Severomorsk	Weak	BR	SAT
	2035z	15 Jul	MXI	CW	Beacon	"S"	Severomorsk	Fair	BR	WED
	1926z	05 Aug	MXI	CW	Beacon	"S"	Severomorsk	Fair	BR	WED
	0824z	11 Aug	MXI	CW	Beacon	"S"	Severomorsk	Weak	BR	TUE
	2340z	22 Aug	MXI	CW	Beacon	"S"	Severomorsk		PLdn	SAT
	1935z	24 Aug	MXI	CW	Beacon	"S"	Severomorsk	Fair	BR	MON
8494.7	1927z	05 Aug	MXI	CW	Beacon	"D"	Sevastopol	Fair	BR	WED
	1937z	24 Aug	MXI	CW	Beacon	"D"	Sevastopol	Fair under QRM	BR	MON
8494.9	0530z	11 Jul	MXI	CW	Beacon	"S"	Severomorsk	Weak under QRM	BR	SAT
	2036z	15 Jul	MXI	CW	Beacon	"S"	Severomorsk	Fair under QRM	BR	WED
	1928z	05 Aug	MXI	CW	Beacon	"S"	Severomorsk	Fair (In the clear)	BR	WED
	0822z	11 Aug	MXI	CW	Beacon	"S"	Severomorsk	Fair	BR	TUE
	1936z	24 Aug	MXI	CW	Beacon	"S"	Severomorsk	Fair under QRM	BR	MON
8495.1	1929z	05 Aug	MXI	CW	Beacon	"A"	Astrakhan	Weak	BR	WED
8497.8	0525z	11 Jul	MX	CW	Beacon	"L"	St Petersburg	Fair	BR	SAT
	2036z	15 Jul	MX	CW	Beacon	"L"	St Petersburg	Fair	BR	WED
	1930z	05 Aug	MX	CW	Beacon	"L"	St Petersburg	Fair	BR	WED
	0811z	11 Aug	MX	CW	Beacon	"L"	St Petersburg	V.Weak	BR	TUE
	1938z	24 Aug	MX	CW	Beacon	"L"	St Petersburg	Fair	BR	MON
10871.7	0513z	11 Jul	MXI	CW	Beacon	"D"	Sevastopol	V.Weak	BR	SAT
	1932z	05 Aug	MXI	CW	Beacon	"D"	Sevastopol	Fair	BR	WED
	1940z	24 Aug	MXI	CW	Beacon	"D"	Sevastopol	Fair	BR	MON
10871.8	0510z	11 Jul	MXI	CW	Beacon	"P"	Kaliningrad	Weak	BR	SAT
	0809z	11 Aug	MXI	CW	Beacon	"P"	Kaliningrad	Fair	BR	TUE
	1939z	24 Aug	MXI	CW	Beacon	"P"	Kaliningrad	Good	BR	MON
10871.9	0511z	11 Jul	MXI	CW	Beacon	"S"	Severomorsk	Weak	BR	SAT
	2027z	15 Jul	MXI	CW	Beacon	"S"	Severomorsk	Fair	BR	WED
	1932z	05 Aug	MXI	CW	Beacon	"S"	Severomorsk	Fair	BR	WED
	0810z	11 Aug	MXI	CW	Beacon	"S"	Severomorsk	Fair	BR	TUE
	1940z	24 Aug	MXI	CW	Beacon	"S"	Severomorsk	Fair	BR	MON
10872	1933z	05 Aug	MXI	CW	Beacon	"C"	Moscow	Fair	BR	WED
13527.7	0507z	11 Jul	MXI	CW	Beacon	"D"	Sevastopol	Weak	BR	SAT
	1935z	05 Aug	MXI	CW	Beacon	"D"	Sevastopol	Weak	BR	WED
	1943z	24 Aug	MXI	CW	Beacon	"D"	Sevastopol	Fair	BR	MON
13527.8	0510z	11 Jul	MXI	CW	Beacon	"P"	Kaliningrad	V.Weak	BR	SAT
	0804z	11 Aug	MXI	CW	Beacon	"P"	Kaliningrad	Good	BR	TUE
	1942z	24 Aug	MXI	CW	Beacon	"P"	Kaliningrad	Fair	BR	MON
	1212z	26 Aug	MXI	CW	Beacon	"P"	Kaliningrad	[Still up 1344z]	PLdn	WED
13527.9	0507z	11 Jul	MXI	CW	Beacon	"S"	Severomorsk	V.Weak	BR	SAT
	2038z	15 Jul	MXI	CW	Beacon	"S"	Severomorsk	Fair	BR	WED
	1935z	05 Aug	MXI	CW	Beacon	"S"	Severomorsk	Fair	BR	WED
	1943z	24 Aug	MXI	CW	Beacon	"S"	Severomorsk	Weak	BR	MON
13528.1	2040z	15 Jul	MXI	CW	Beacon	"A"	Astrakhan	Weak	BR	WED
	1936z	05 Aug	MXI	CW	Beacon	"A"	Astrakhan	Weak	BR	WED
16331.7	1450z	08 Jul	MXI	CW	Beacon	"D"	Sevastopol	Strong	PoSW	WED
	0505z	11 Jul	MXI	CW	Beacon	"D"	Sevastopol	Weak	BR	SAT
	2040z	15 Jul	MXI	CW	Beacon	"D"	Sevastopol	Fair	BR	WED
		02 Aug	MXI	CW	Beacon	"D"	Sevastopol	Strong	PoSW	SUN
	1937z	05 Aug	MXI	CW	Beacon	"D"	Sevastopol	Strong	BR	WED
	0756z	11 Aug	MXI	CW	Beacon	"D"	Sevastopol	Good	BR	TUE
	0545z	17 Aug	MXI	CW	Beacon	"D"	Sevastopol	Weak	PLdn	MON
	1944z	24 Aug	MXI	CW	Beacon	"D"	Sevastopol	Good	BR	MON
16331.8		02 Aug	Sending 005006 (Continuous)					Strong	PoSW	SUN

	1720z	09 Aug	Sending 005006 (Continuous)				Strong	PoSW	SUN
	0802z	11 Aug	Sending 005006 (Continuous)					BR	TUE
	0910z	11 Aug	Sending 005006 (Continuous)					AB	TUE
	1629z	11 Aug	Sending 005006 (Continuous)					AB	TUE
	1649z	11 Aug	Sending 005006 (Continuous)					AB	TUE
	0800z	12 Aug	Sending 005006 (Continuous)				Fair	BR	WED
	0850z	13 Aug	Sending 005006 (Continuous) Not present on several earlier checks					BR	THU
	0600z	17 Aug	Sending 005006 (Continuous)					AB	MON
	0640z	17 Aug	Sending 005006 (Continuous)					PoSW	MN
16331.9		02 Aug	MXI	CW	Beacon "S"	Severomorsk	Strong	PoSW	SUN
	1938z	05 Aug	MXI	CW	Beacon "S"	Severomorsk	Weak	BR	WED
	0757z	11 Aug	MXI	CW	Beacon "S"	Severomorsk	Fair	BR	TUE
	0546z	17 Aug	MXI	CW	Beacon "S"	Severomorsk	Weak	PLdn	MON
	1945z	24 Aug	MXI	CW	Beacon "S"	Severomorsk	Fair	BR	MON
16332.1	1940z	05 Aug	MXI	CW	Beacon "A"	Astrakhan	Weak	BR	WED



16332kHz 0545z Mon 17 August

'D' & 'S' Beacons in Progress

Courtesy PLdn

Oddities

S28 'The Buzzer'

4625	2100z	15 Jul	S28	'The Buzzer' Marker – Music playing under signal	USB	Good	BR	WED
	1940z	05 Aug	S28	'The Buzzer' Marker – Normal Buzzer sound	USB	Good	BR	WED
	1946z	24 Aug	S28	'The Buzzer' Marker – Normal Buzzer sound	USB	Fair	BR	MON

S30 'The Pip'

3756	2044z	15 Jul	S30	'Pip' marker (Night freq)	USB		BR	Fair	WED
	1941z	05 Aug	S30	'Pip' marker (Night freq)	USB		BR	Weak	WED
	1947z	24 Aug	S30	'Pip' marker (Night freq)	USB		BR	Weak	MON

New Additional 'Pip' Markers

4141	2044z	15 Jul	'Pip' type Marker – (Not in sync with 3756kHz)			USB	BR	Fair	TUE
	1942z	05 Aug	'Pip' type Marker – (Not in sync with 3756kHz)			USB	BR	Fair	WED
3363	2043z	15 Jul	'Pip' type Marker – (On alternative beat to 3756kHz)			USB	BR	Fair	TUE
	1949z	24 Aug	'Pip' type Marker – (On alternative beat to 3756kHz)			USB	BR	Weak	MON
6807	2000z	24 Aug	'Pip' type Marker – (Not synched with 3756kHz))			USB	BR	Fair	MON

4326.1//4327.1 'T' Marker (New Frequencies – previously on 4183.7//4184)

	2050z	15 Jul	T Marker Fair under QRM			USB	BR		WED
	1945z	05 Aug	T Marker Fair under QRM			USB	BR		WED

Contributors:

AB, BR, 'E', JPL, PLdn, PosW

Thank you all for your logs.

Voice stations, Polytones and Hybrids

E06

July/Aug log:

RNGB writes 'NO reports from E06'

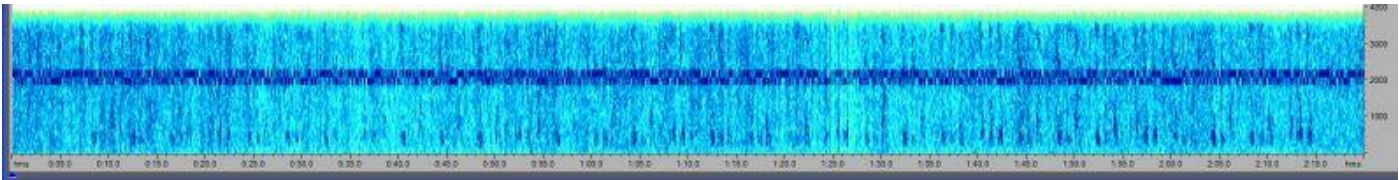
E07

E07 July/Aug log:

Tuesday/Friday

July 2026

1500z 16232kHz 1520z 18332kHz 1540z 19132kHz

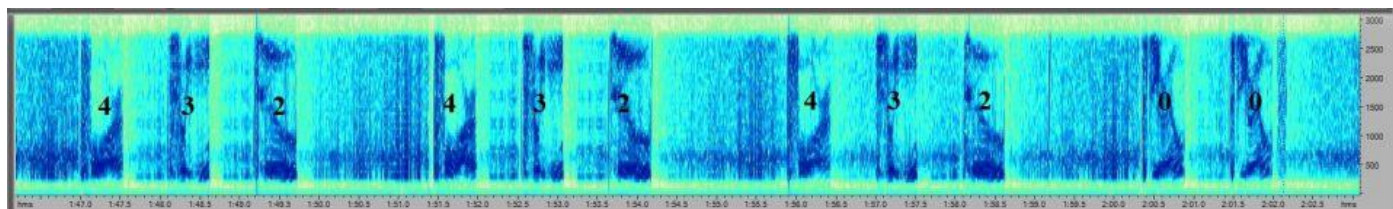


E07 TuF 16232kHz 1500z 03/07/2026 TTY QRM2

03/07	231 000	1500z Fair, TTY QRM2, 1520z NRH [see above]		
07/07	231 1 979 122 30996 ... 44086 000 000	SDR Twentw [all QSB to nil in places]		
10/07	NRH across schedule at PLdn QTH			
14/07	231 000	Fair	HJH, MG	TUE
17/07	231 000	1500z Weak. 1520z NRH		
21/07	231 1 981 190 54692 ... 42622 000 000	1500z Weak TTY QRM, 1520z Good/Fair, 1540z Strong	MG, HJH, PLdn	TUE
231 231 231 1 981 190 981 190				
54692 30115 67156 07805 17398 88883 82447 17431 58040 32935 62901 18406 33052 04853 06085 30121 64419 52496 67185 18736 10526 60535 54885 32143 87461 74581 85506 61257 84131 11375 64740 31227 72052 35417 96415 47120 19795 54656 85204 35553 91485 96532 37123 47901 04201 68654 54512 91653 50558 63342 35865 95543 05846 20505 45291 50543 93880 76499 32403 26918 35573 55554 95500 65203 63927 73172 60152 07386 94948 45545 88575 29188 36123 42466 00760 00470 71082 04440 76319 45878 01844 10501 63005 77466 44836 38652 51802 69657 08892 16274 24157 56587 15040 78901 11508 23583 55559 51909 84082 37605 70380 48660 82452 86803 37783 11432 37957 73320 37472 29882 36021 23641 05680 07638 13405 15330 65582 54201 87711 74774 47582 24042 56621 24067 04155 87404 28504 58719 75327 49574 -2145 25728 95551 84636 95431 73235 74929 04742 17236 05482 38175 31573 16587 95362 95836 10557 94905 65195 11582 62287 81205 86735 36200 22542 20126 25472 14076 05048 56787 95457 17283 18683 79056 84358 87044 46153 51576 25208 16243 01128 79285 01665 61612 31250 35636 32583 87463 60657 80273 56305 76109 02488 57393 10538 30830 11953 37539 47725 79025 42622 000 000				
Courtesy HJH				
24/07	231 1 981 190 54692 ... 42622 000 000	[Via SDR Twente]		

August 2026

1500z	17453kHz	1520z	18353kHz	1540z	19253kHz		
04/08	432 1 6473 105 25004 26108 83536 11220 47694...				1520z Weak QSB, 1540z Fair	MG	TUE
07/08	Not monitored						
11/08	432 000				Good QSB	MG	TUE
14/08	432 000				1500z Strong, 1520z Fair/Weak	MG	FRI
18/08	432 1 741 80 56621 ... 18082 000 000				1540z NRH, rest Weak 1500z QSB2, 1520z QSB to nil.		
	However, Manolis in Crete reports problems with the 1540z sending; "E07 19253 kHz 1540z 18/08 [432 1 741 80 56621 72897 48454 84508 33458...] 1546z pause, 432 1 rptd, 40202 ... ended with 000 at 1552z Good " Certainly some hold up; my timing of the message was 9m11s					MG, PLdn	TUE
21/08	MISSED						



25/08	432 000	Ended with 00 only on 1500z sending [2m02s lg]; 1520z ending correctly [2m08s lg] Both Weak	PLdn	Tue
28/08	432 000	Twente SDR; QRN2 noted, 1520z noticeably weak		

Thursday/Saturday

July 2026

1000z	19235kHz	1020z	18368kHz	1040z	17421kHz		
04/07	234 1 6921 109 54973 ... 57805 000 000				SDR Twente Read notes below:		
	All frequencies via SDR Twente were audible, but weak on the S meter. All scheduled slots suffered QSB to nil whilst 1000 and 1020z slots had brief sounds of a jammer in the background. XWP heard briefly in b/g of 1040z slot which suffered QSB to nil at 1041 and 1050z Altogether very poor conditions and copy. The total sending lasted 12m55s						
09/07	234 000				1000z Weak, 1020z Fair	BG	THU
11/07	NRH						
16/07	234 1 1144 181 21372 16681 ...				Strong, QRM Twente SDR	MG	THU
18/07	MISSED						
23/07	234 000				Weak		
25/07	NRH						

August 2026

1000z	18241kHz	1020z	17456kHz	1040z	15937kHz		
01/08	249 1 (1091 176) 47273 89056 18752 85708 16820....				Fair 1020z only	BR	SAT
06/08	249 000				1500z Fair, 1520z Weak	BR, MG	THU
08/08	MISSED, off watch						
13/08	249 1 (9148 179) 98077 01703 29946 57875 20809...				Weak	BG, PLdn	THU
15/08	249 1 <u>9114</u> 179 98077 rest not monitored. [1000/1020z NRH]				Note late start; Weak and difficult copy	PLdn	SAT
20/08	249 000				Fair/Weak	BR	THU
22/08	249 000				Weak/Fair	PLdn	SAT
27/08	NOT MONITORED, Lightning						
29/08	NOT MONITORED, Lightning						

E11 & E11a log July/August

4783khz	1610z	11/07 [399/00]	Gary H, Manolis	SAT
	1610z	22/07 [392/00] Out 1613z Fair	Manolis	WED
	1610z	12/08 [390/00] Out 1613z Good	Manolis	WED
	1610z	19/08 [393/00] Out 1613z Good	Manolis	WED
	1610z	29/08 [399/00] Out 1613z Strong	Manolis	SAT
5082kHz	1645z	11/07 [364/00] Out 1648z Good (Twente SDR)	Manolis, Swan	SAT
	1645z	19/07 [366/00] Out 1648z Fair (Twente SDR)	Manolis	SUN
	1645z	25/07 [368/00]	Gary H	SAT
	1645z	08/08 [368/00]	E	SAT
	1645z	29/08 [366/00] Out 1648z Good	Manolis	SAT
	1645z	30/08 [365/00] Out 1648z Weak	Manolis	SUN
5231kHz	1605z	12/07 [233/00] Out 1608z Fair (Twente SDR)	Manolis	SUN
	1605z	14/07 [235/00]	Gary H, Manolis	TUE
	1605z	11/08 [231/00] Out 1608z Weak	PLdn	TUE
	1605z	18/08 [238/00] Out 1608z Good	Manolis, PLdn	TUE
	1605z	30/08 [233/00] Out 1608z Weak	Manolis	SUN
5409kHz	2000z	02/07 [521/00] Out 2003z Fair	PLdn	THU
	2000z	09/07 [521/00] Out 2003z Strong	PLdn	THU
	2000z	16/07 [525/00] Out 2003z Strong	PLdn	THU
	2000z	23/07 [524/32 50629 15588 29350 10675 21074 18498 26657 64838.....92628 42833] Out 2009z	Manolis	THU
	2000z	30/07 [525/00] Out 2003z Good	Manolis, Gary H	THU
	2000z	02/08 [528/00]	E	SUN
	2000z	13/08 [527/00] Out 2003z Strong	PLdn	THU
	2000z	20/08 [524/00] Out 2003z Good	Manolis	THU
5737kHz	1300z	20/08 [612/34.....] becoming unworkable	Gary H	THU
6923khz	0930z	01/07 [279/00] (Polish SDR)	Brian	WED
	0930z	02/07 [271/00] Very weak	RNGB, Brian	THU
	0930z	08/07 [270/00] Good	RNGB, Brian	WED
	0930z	09/07 [276/00] Weak	Brian	THU
	0930z	15/07 [275/00] Out 0933z Good	Manolis	WED
	0930z	16/07 [278/00] Weak	Brian, PLdn	THU
	0930z	22/07 [271/00] Very weak	Brian, Manolis	WED
	0930z	23/07 [271/00] Very weak	Brian	THU
	0930z	05/08 [270/00] Weak	Brian	WED
	0930z	06/08 [270/00] Weak	Brian, Manolis	THU
	0930z	12/08 [279/00] Weak	Brian	WED
	0930z	13/08 [276/00] Weak	Brian, Manolis	THU
	0930z	20/08 [278/00] Very weak	Brian	THU
	0930z	26/08 [278/36 79540 75247 21488 41420 97920 79992 42307 37387.....46858 10153]	RNGB	WED
7377kHz	0700z	04/07 [498/39 95513 81501 17132 79593 60438 46880 85558 37512.....68059 25837] Fair	RNGB, Manolis	SAT
	0700z	11/07 [498/00] Fair	RNGB	SAT
	0700z	19/07 {49*} NRH	Ary	SUN
	0700z	25/07 [496/00] Out 0703z Good (Twente SDR)	Manolis	SAT
	0700z	08/08 [492/00]	E	SAT
	0700z	15/08 [492/00] Good	RNGB	SAT
	0700z	22/08 [492/32 29380 55478 03567 31786 84861 35396 48000 98752.....70182 45875] Good	RNGB, Manolis	SAT
	0700z	29/08 [495/00] Out 0703z Very Strong (Twente SDR)	Manolis	SAT
7600kHz	1900z	02/07 [647/00] Out 1903z Fair	PLdn	THU
	1900z	06/07 [646/00] Out 1903z Strong	PLdn	MON
	1900z	09/07 [649/00] Out 1903z Strong	PLdn	THU
	1900z	13/07 [644/00] Out 1903z Strong	PLdn	MON
	1900z	16/07 [643/00] Out 1903z Strong	PLdn	THU
	1900z	20/07 [648/00] Out 1903z Strong	PLdn	MON
	1900z	23/07 [648/00] Out 1903z Strong	PLdn	THU
	1900z	27/07 [648/34 78963.....70127] Out 1910z Strong	PLdn	MON
	1900z	13/08 [641/00] Out 1903z Fair	PLdn	THU
	1900z	17/08 [649/00] Out 1903z Strong	PLdn	MON
	1900z	24/08 [649/00] Out 1903z Fair	PLdn	MON
	1900z	31/08 [640/00] Out 1903z Strong	PLdn	MON
7863kHz	1715z	01/07 [974/00] Out 1718z Weak	PLdn	WED
	1715z	03/07 [976/00] Out 1718z Fair	PLdn	FRI

	1715z	08/07 [978/33 57679.....52388] Out 1725z Fair	PLdn	WED
	1715z	10/07 [978/33 57679 29715 50400 00599 62330 57273 15735 17801.....94476 52388] Strong	Manolis	FRI
	1715z	15/07 [970/00] Out 1718z Fair	PLdn	WED
	1715z	17/07 [970/00] Out 1718z Weak	PLdn	FRI
	1715z	22/07 [978/00] Out 1718z Strong	Manolis, PLdn	WED
	1715z	24/07 [970/00] Out 1718z Good	Manolis, PLdn	FRI
	1715z	29/07 [978/00] Out 1718z Strong	PLdn	WED
	1715z	07/08 [972/38 83520 77753 29281 01318 79649 10888 34001 27750.....66422 62910] Out 1726z	Manolis	FRI
	1715z	12/08 [974/00] Out 1718z Weak	PLdn	WED
	1715z	14/08 [975/00] Out 1718z Fair	PLdn	FRI
	1715z	19/08 [974/00] Out 1718z Strong	Manolis	WED
	1715z	21/08 [970/00] Out 1718z Good	Manolis	FRI
7984khz	0720z	02/07 [432/00] Good	RNGB	THU
	0720z	03/07 [432/00] Good	RNGB	FRI
	0720z	09/07 [430/00] Good	RNGB, Brian	THU
	0720z	16/07 [430/00] Good	RNGB	THU
	0720z	23/07 [431/38 92489 08363 11625 30262 45480 72046 83280 81734.....17760 14371] Good	RNGB	THU
	0720z	30/07 [432/00] Weak	Brian	THU
	0720z	06/08 [439/35 94299 63828 87721 41536 63763 30241 22983 38271.....34939 55308] Strong	RNGB, Brian	THU
	0720z	13/08 [431/00] Fair	Brian	THU
	0720z	14/08 [436/00] Good	RNGB, Brian, Manolis	FRI
	0720z	20/08 [434/00] Good	RNGB	THU
	0720z	27/08 [430/00] Fair	Brian	THU
	0720z	28/08 [430/00] Fair	Brian	FRI
8274khz	1205z	25/08 [464/00] Out 1208z Strong	Manolis	TUE
8680kHz	0700z	03/07 [574/00] Out 0703z Weak	PLdn, Manolis	FRI
	0700z	07/07 [571/00] Good	RNGB	TUE
	0700z	10/07 [575/00] Good	RNGB, PLdn	FRI
	0700z	14/07 [571/00] Good	RNGB	TUE
	0700z	17/07 [570/00] Out 0703z Weak	PLdn	FRI
	0700z	21/07 [577/00] Out 0703z Weak	PLdn	TUE
	0700z	31/07 [579/35 81399 52117 62497 01329 41795 37118 75274 23548.....75693 86681] Good	RNGB	FRI
	0700z	04/08 [570/00] Good	RNGB	TUE
	0700z	11/08 [573/35 15298 33352 63278 38731 39221 55188 79097 00984..... 03404 37758] Good	RNGB, PLdn	TUE
	0700z	18/08 [576/00] Fair	Brian, PLdn	TUE
	0700z	25/08 [577/00] Good	RNGB, PLdn, Manolis	TUE
9150kHz	0600z	03/07 [355/00] Out 0603z Weak	Manolis	FRI
	0600z	10/07 [354/00] Out 0603z Weak	Manolis	FRI
	0600z	19/07 [354/00] Good	RNGB	FRI
	0600z	24/07 [353/00] Out 0603z Weak	Manolis	FRI
	0600z	26/07 [355/00] Out 0603z Weak	Manolis	SUN
	0600z	02/08 [351/00] Out 0603z Weak	Manolis	SUN
	0600z	07/08 [355/00] Out 0603z Fair	Manolis	FRI
	0600z	09/08 [352/00] Out 0603z Fair	Manolis	SUN
	0600z	23/08 [350/00] Out 0603z Weak	Manolis	SUN
9339kHz	0645z	13/07 [414/36 35960 71971 34038 72061 59019 78700 73651 84370.....08258 01844]	Ary	MON
	0645z	03/08 [410/00] Out 0648z Strong (Twente SDR)	Manolis	MON
	0645z	24/08 [414/00] Good	RNGB, Manolis	MON
	0645z	26/08 [416/00] Strong	Manolis	WED
9610kHz	1910z	03/07 [613/00] Out 1913z Strong	PLdn	FRI
	1910z	05/07 [617/00] Out 1913z Weak	PLdn	SUN
	0745z	06/07 [267/34 88143 15801 46284 08369 17923 29894 37869 91408.....02485 78314] Fair	Brian	MON
	1910z	10/07 [614/00] Out 1913z Strong	PLdn	FRI
	1910z	12/07 [618/00] Out 1913z Strong	PLdn	SUN
	0745z	13/07 [267/00] Good	RNGB, Brian	MON
	1910z	17/07 [616/30 11182.....60052] Out 1919z Weak	PLdn	FRI
	0745z	20/07 [264/00] Good	RNGB, Brian	MON
	1910z	24/07 [610/00] Out 1913z Weak	PLdn	FRI
	1910z	26/07 [611/00] Out 1913z Fair	PLdn	SUN
	0745z	27/07 [261/00] Good	RNGB, Brian	MON
	1910z	31/07 [616/00]	E	FRI
	1910z	02/08 [614/00]	E	SUN
	0745z	03/08 [266/00] Good	RNGB	MON
	1910z	07/08 [616/00]	E	FRI
	1910z	14/08 [612/00] Out 1913z Fair	PLdn	FRI
	1910z	16/08 [618/00] Out 1913z Strong	PLdn	SUN

	0745z	17/08 [266/33 20978 35712 02243 92973 61656 44021 22548 21816.....61080 35470] Good	RNGB	MON
	1910z	21/08 [612/00] Out 1913z Strong	PLdn	FRI
	1910z	23/08 [616/00] Out 1913z Strong	PLdn	SUN
	0745z	24/08 [269/00] Good	RNGB, Brian	MON
	0745z	31/08 [261/00] Good	RNGB, Brian	MON
10210khz	1045z	01/07 [694/00] Fair	Brian	WED
	1045z	08/07 [696/34 61573 03688 20378 78418 56107 98086 08530 98643.....29120 73451] Fair	Brian	WED
	1045z	22/07 [698/00] Fair	Brian	WED
	1045z	03/08 [698/00] Fair	Brian	MON
	1045z	19/08 [691/00] Fair	Brian	WED
	1045z	31/08 [698/00] Fair	Brian	MON
10356khz	1530z	02/07 [267/00]	Gary H	THU
	1530z	09/07 [267/34 88143 15801 46284 08369 17923 29894 37869.....02485 78314] Out 1540z Weak	Manolis	THU
	1530z	14/07 [261/00]	Gary H	TUE
	1530z	23/07 [261/00] Out 1533z Fair	Manolis	THU
	1530z	13/08 [269/00] Out 1533z Fair	Manolis	THU
	1530z	20/08 [266/33 20978 35712 02243 92973 61656 44021 22548 21816..... 61080 35470] Strong	Manolis	THU
10508kHz	0645z	01/07 [413/00] Fair	RNGB	WED
	0715z	03/07 [639/00] Good	RNGB, Brian	FRI
	0715z	07/07 [637/00] Good	RNGB, PLdn	TUE
	0645z	08/07 [415/00] Out 0648z Good	Swan	WED
	0715z	10/07 [635/00] Out 0718z Weak	PLdn	FRI
	0645z	13/07 [41*] NRH (Moved to 9339kHz)	RNGB	MON
	0715z	14/07 [639/35 71187 19934 70838 51514 10629 66703 5685287498 74271 91481] Good	RNGB	TUE
	0715z	21/07 [637/00] Out 0718z Weak	PLdn	TUE
	0715z	24/07 [630/00] Weak	Brian, PLdn	FRI
	0715z	28/07 [630/00] Out 0718z Fair	PLdn, Brian	TUE
	0715z	31/07 [637/00] Good	RNGB	FRI
	0715z	11/08 [630/00] Good	RNGB, PLdn	TUE
	0715z	14/08 [637/00] Good	RNGB, Brian, PLdn	FRI
	0715z	18/08 [637/00] Fair	Brian, PLdn	TUE
	0715z	21/08 [637/00] Good	RNGB, PLdn	FRI
	0715z	25/08 [630/00] Good	RNGB, Brian, PLdn	TUE
11092khz	0645z	07/07 [519/36 55607 24319 21009 44529 67044 86470 59688 98070.....13867 76443] Good	RNGB	TUE
	0645z	14/07 [510/00] Good	RNGB	TUE
	0645z	11/08 [515/37 99544 47576 57460 42603 09488 97647 97093 08232.....67111 50419] Good	RNGB	TUE
	0645`	25/08 [512/00] Good	RNGB, Manolis	TUE
11116kHz	0900z	01/07 [535/00] Weak	Brian, RNGB	WED
	0900z	06/07 [530/00] Fair	Brian, PLdn	MON
	0900z	08/07 [534/00] Fair	Brian	WED
	0900z	13/07 [533/37 79142 47714 08407 01116 94389 35654 64150.....58184 68032] Fair with QRM	RNGB, Brian, Manolis	MON
	0900z	20/07 [533/00] Out 0903z Weak (Twente SDR)	Manolis, PLdn	MON
	0900z	22/07 [532/00] Out 0903z Weak	Manolis	WED
	0900z	27/07 [530/00] Fair with QRM	RNGB, Brian, PLdn	MON
	0900z	29/07 [536/00] Out 0903z Weak	PLdn, Brian	WED
	0900z	03/08 [538/32 26292 67820 07187 89994 78606....etc] Fair	Brian	MON
	0900z	10/08 [533/00] Fair	Brian	MON
	0900z	12/08 [537/00] Good	RNGB, Brian, PLdn	WED
	0900z	17/08 [530/00] Out 0903z Weak	PLdn	MON
	0900z	19/08 [537/00] Out 0903z Strong	PLdn	WED
	0900z	24/08 [532/00] Weak	Brian, PLdn	MON
	0900z	26/08 [535/00] Fair	RNGB, Brian, PLdn	WED
	0900z	31/08 [538/00] Good	RNGB, Brian, Manolis	MON
12153kHz	1000z	03/07 [304/32 38180 33956 10415 46516 52919 69115 21758.....27028 38847 15730] Good	RNGB, Brian	FRI
	1000z	07/07 [307/00] Fair	Brian, PLdn	TUE
	1000z	10/07 [304/00] Fair	Brian, PLdn	FRI
	1000z	14/07 [302/38 10058 73858 68670 24635 44123 62592 64389 43447.....22261 91212] Good	RNGB, Brian, Manolis	TUE
	1000z	21/07 [304/00] Good	RNGB, Brian, PLdn	TUE
	1000z	24/07 [304/00] Fair	Brian	FRI
	1000z	28/07 [309/00] Out 1003z Weak	PLdn, Brian	TUE
	1000z	04/08 [300/00] Fair	Brian	TUE
	1000z	07/08 [300/00] Fair	Brian	FRI
	1000z	11/08 [305/26 49695 58135 61910 07076 51346 95126 43322 41838.....43950 59551] Fair	Brian, PLdn	TUE
	1000z	18/08 [300/00] Fair	Brian, Manolis	TUE
	1000z	21/08 [300/00] Out 1003z Very weak	Manolis	FRI
	1000z	25/08 [305/00] Very weak	Brian, Manolis	TUE

1000z	28/08 [307/00] Good	Brian, PLdn	FRI
12229kHz	1815z 03/07 [922/00] Out 1818z Strong	PLdn	FRI
	1815z 05/07 [924/00] Out 1818z Weak	PLdn	SUN
	1815z 10/07 [926/00] Out 0818z Strong	PLdn	FRI
	1815z 12/07 [925/00] Out 1818z Strong	PLdn	SUN
	1815z 19/07 [922/37 42669.....71251] Out 1826z Strong	PLdn	SUN
	1815z 24/07 [920/00] Out 1818z Weak	PLdn	FRI
	1815z 26/07 [927/00] Out 1818z Strong	PLdn	SUN
	1815z 02/08 [925/00]	E	SUN
	1815z 14/08 [924/00] Out 1818z Strong	PLdn	FRI
	1815z 16/08 [922/00] Out 1818z Fair	PLdn	SUN
	1815z 23/08 [929/00] Out 1818z Strong	PLdn	SUN
12815kHz	0845z 01/07 [718/00] Weak	PLdn, RNGB	WED
	0845z 06/07 [716/34 95364 50617 40358 14631 38998.....etc] Weak	Brian	MON
	0845z 13/07 [710/00] Good	RNGB, Brian	MON
	0845z 15/07 [713/00] Out 0848z Good	Manolis	WED
	0845z 20/07 [713/00] Out 0848z Good	Manolis	MON
	0845z 22/07 [710/00] Out 0848z Fair	Manolis	WED
	0845z 27/07 [711/00] Good	RNGB, Brian	MON
	0845z 29/07 [715/00] Out 0848z Weak	PLdn, Brian	WED
	0845z 03/08 [718/00] Weak	Brian	MON
	0845z 05/08 [711/00] Weak	Brian, Manolis	WED
	0845z 10/08 [719/00] Fair	Brian	MON
	0845z 12/08 [715/00] Fair	RNGB, Brian	WED
	0845z 19/08 [713/00] Weak	Brian, PLdn	WED
	0845z 24/08 [719/32 67880 47171 24954 79242 41098 98360 71305 49747.....53598 80566]	RNGB, Brian, Gary H	MON
	0845z 31/08 [713/00] Weak	Brian, Manolis	MON
12984khz	1430z 04/07 [918/38 37181 27574 05983 24801 49485 68392 89977 14235.....09385 48805]	Gary H, Manolis	SAT
	1430z 07/07 [912/33 52100 91338 88631 31626 76768 26169 28916 70574.....76096 73798] Good	RNGB	TUE
	1430z 14/07 [915/00] Good/Fair	Manolis	TUE
	1430z 21/07 [910/00] Out 1533z Good	Manolis, PLdn	TUE
	1430z 25/07 [915/00]	Gary H, PLdn	SAT
	1430z 28/07 [915/00] Out 1433z Weak	PLdn	TUE
	1430z 01/08 [919/00]	E	SAT
	1430z 08/08 [914/00]	Gary H	SAT
	1430z 11/08 [914/00] Out 1433z Weak	PLdn	TUE
	1430z 15/08 [917/00] Out 1433z Fair	PLdn	SAT
	1430z 18/08 [919/00] Out 1433z Weak	Manolis	TUE
	1430z 25/08 [918/31 34666 74268 17128 88623 42932 59695 89195.....18242 82657] Out 1439z Weak	Gary H, PLdn	TUE
14410kHz	1745z 06/07 [247/00] Out 1748z Good	Swan	MON
	1745z 19/07 [248/00] Out 1748z Fair/Good	Manolis	SUN
	1745z 20/07 [249/00] Out 1748z Weak	PLdn	MON
	1745z 27/07 [249/00] Out 1748z Fair	PLdn	MON
	1745z 02/08 [246/00]	E	SUN
	1745z 23/08 [247/36 21326.....92673] Out 1756z Fair	PLdn	SUN
	1745z 31/08 [242/00] Out 1748z Fair	PLdn	MON
14575kHz	1645z 09/07 [337/00] Out 1648z Weak	Manolis	THU
	1645z 14/07 [335/38 77253 61628 78033 23378 89032 15832 59723.....61742 92998] Out 1656z	Manolis	TUE
	1645z 21/07 [332/00] Out 1648z Fair	Manolis	TUE
	1645z 23/07 [332/00] Out 1648z Fair	Manolis	THU
	1645z 06/08 [337/35 94377 01704 60457 95754 40606 43661 63661 64601.....66030 30735] Good	Manolis	THU
	1645z 11/08 [337/00] Out 1648z Fair	Manolis	TUE
	1645z 18/08 [337/00] Out 1648z Strong	Manolis	TUE
	1645z 20/08 [330/00] Out 1648z Fair	Manolis	THU
15720kHz	1020z 03/07 [346/00] Very weak	Brian	FRI
	0745z 08/07 [343/00] Weak	Brian	WED
	1020z 10/07 [346/00] Very weak	Brian	FRI
	1020z 17/07 [346/00] Weak	Brian	FRI
	0745z 22/07 [344/34 62375 73041 90916 45759 72156 84179 32410 06956.....15424 67436] Good	RNGB, Brian	WED
	0745z 29/07 [343/00] Fair	RNGB, Brian	WED
	1020z 07/08 [347/00] Weak	Brian	FRI
	0745z 12/08 [347/00] Fair	Brian	WED
	1020z 14/08 [348/00] Weak	Brian	FRI
	0745z 19/08 [347/00] Extremely weak	Brian	WED
	1020z 21/08 [347/00] Weak	Brian	FRI
	0745z 26/08 [349/31 88465 21523 18323 10446 44632 16710 75815 97063.....41481 49221] Out 0754z	Manolis, RNGB	WED

15825kHz	0715z	06/07 [750/00] Weak	(Polish SDR)	Brian	MON
	0715z	08/07 [751/00]		Brian	WED
	0715z	13/07 [753/00] Very weak		Brian, Manolis	MON
	0715z	20/07 [755/00] Good		RNGB, Brian	MON
	0715z	22/07 [751/00] Fair with QSB		RNGB	WED
	0715z	29/07 [753/38 43194 77399 61815 74157 40134.....etc] Weak	Rpt of msg of Mon 27 Jul	Brian	WED
	0715z	05/08 [751/34 62212 35409 09409 73384 63905 70260 11231.....81859 78947] Polish SDR		RNGB, Brian	WED
	0715z	10/08 [759/00] Out 0718z Good		Manolis	SUN
	0715z	12/08 [750/00] Good		RNGB, Brian	WED
	0715z	19/08 [757/00] Very weak		Brian	WED
	0715z	24/08 [752/00] Fair		Brian, Manolis	MON
	0715z	26/08 [753/00] Out 0718z Strong		Manolis, Brian	WED
	0715z	31/08 [753/00] Very weak		Brian	MON
15915kHz	0715z	01/07 [752/00] Fair		RNGB	WED
16335kHz	0830z	03/07 [185/00] Good		RNGB, Brian	FRI
	0830z	06/07 [182/34 21708 05115 70123 06907 73360.....etc] Weak		Brian, PLdn	MON
	0830z	10/07 [185/34 22678 99611 20267 42206.....etc] Weak		Brian	FRI
	0830z	13/07 [189/00] Fair with QRM		RNGB, Brian, PLdn	MON
	0830z	17/07 [180/00] Weak		Brian	FRI
	0830z	20/07 [189/00] Fair		Brian, PLdn	MON
	0830z	24/07 [185/00] Fair		RNGB	FRI
	0830z	27/07 [184/00] Fair		Brian, PLdn	MON
	0830z	03/08 [188/00] Very weak		Brian	MON
	0830z	07/08 [181/00] Fair		Brian	FRI
	0830z	10/08 [183/00] Fair		Brian	MON
	0830z	14/08 [181/00] Very weak		Brian	FRI
	0830z	21/08 [185/00] Good		RNGB, Brian	FRI
	0830z	24/08 [183/35 86810 04429 46878 33918 30918 11790 39367 59737.....57681 71642] Fair		Brian	MON
	0830z	28/08 [189/35 93185 66817 82424 30741 91773.... etc] Weak		Brian	FRI
	0830z	31/08 [181/00] Good		RNGB, Brian, Manolis	MON
17378kHz	0820z	01/07 138/34 56403 88084 61727.....etc] Weak		Brian	WED
	0930z	07/07 [134/00] Fair		Brian	TUE
	0820z	08/07 [131/00] Good		RNGB, Brian	WED
	0930z	14/07 [135/00] Fair		Brian, Manolis	TUE
	0820z	15/07 [134/00] Weak	(Polish SDR)	RNGB	WED
	0930z	21/07 [130/35 29490 53580 11876 80056 12708 52529 50032 93840.....86612 76842] Good		RNGB, Brian	TUE
	0820z	22/07 [130/35 29490 53580 11876 80056 12708....etc] Weak		Brian, Manolis	WED
	0930z	28/07 [132/00] Good		RNGB, Brian	TUE
	0820z	29/07 [132/00] Weak		RNGB, Brian	WED
	0930z	04/08 [134/00] Weak		RNGB, Brian	TUE
	0820z	05/08 [135/00] Weak		Brian	WED
	0930z	11/08 [138/00] Out 0933z Good		Manolis	TUE
	0820z	12/08 [138/00] Weak		RNGB, Brian, PLdn	WED
	0930z	18/08 [131/36 77041 46762 37990 88082 03511.....etc] Weak		Brian	TUE
	0930z	25/08 [136/00] Extremely weak		Brian, Manolis	TUE
	0820z	26/08 [133/00] Weak		RNGB, Brian	WED
19184kHz	0845z	02/07 [155/00] Out 0848z Weak		PLdn, Brian	THU
	0845z	07/07 [150/34 34265 57485 52178 31460 51106 36723 77045 30158.....75097 65684] Fair		Brian	TUE
	0845z	14/07 [156/00] Fair		RNGB	TUE
	0845z	16/07 [156/00] Weak		Brian, PLdn	THU
	0845z	21/07 [159/00] Fair		Brian	TUE
	0845z	23/07 [151/00] Weak		Brian, PLdn	THU
	0845z	28/07 [152/00] Good		RNGB	TUE
	0845z	30/07 [154/00] Weak		RNGB, Brian	THU
	0845z	04/08 [155/00] Extremely weak		Brian, Manolis	TUE
	0845z	06/08 [155/00] Weak		Brian	THU
	0845z	11/08 [156/00] Fair		Brian, PLdn	TUE
	0845z	13/08 [154/00] Fair		Brian	THU
	0845z	18/08 [150/00] Fair		Brian, PLdn	TUE
	0845z	20/08 [150/00] Weak		Brian	THU
	0845z	25/08 [152/35 05083 95309 95705 35223 56196 36948 48363.....32812 17946] Polish SDR		RNGB, Brian, Manolis	TUE
20640kHz	0745z	02/07 [225/32 34100 08728 15380 21662 60700 53443 98943 35589.....67266 02283] Weak		RNGB	THU
	0745z	07/07 [227/00] Fair		RNGB, Brian	TUE
	0745z	14/07 [225/00] Good	(Polish SDR)	RNGB, Brian	TUE
	0745z	16/07 [224/00] Weak		RNGB, Brian	THU
	0745z	23/07 [228/00] Good		RNGB, Brian	THU

0745z	30/07 [223/37 76912 21124 81154 84392 88246 36703 81939 44856.....00312 49489]	Fair	RNGB, Brian	THU
0745z	04/08 [227/00] Good	(Polish SDR)	RNGB	TUE
0745z	06/08 [229/00] Good	(Polish SDR)	RNGB, Brian	THU
0745z	11/08 [225/39 47186 86927 26432 26200 65336.....etc]	Very weak	Brian	TUE
0745z	18/08 [224/00] Weak		Brian	TUE
0745z	20/08 [220/00] Fair		RNGB, Brian	THU
0745z	25/08 [228/00] Extremely weak		Brian, Manolis	TUE
0745z	27/08 [220/00] Fair		RNGB, Brian	THU
21906kHz	0600z	13/07 [940/00] Out 0603z Very strong	Manolis	MON
	0600z	20/00 [949/00] Fair with QRM	RNGB	MON
	0600z	22/07 [949/00] Out 0603z Strong	Manolis	WED
	0600z	29/07 [949/00] Out 0603z Strong	Manolis	WED
	0600z	31/08 [944/00] Out 0603z Weak	Manolis	MON

S06

S06 log July/August

1st & 3rd Fridays	2000z	11149kHz	2100z	9205khz
17/07	'842' 00000			
		1900z	11149kHz	2000z
07/08	'842' 00000			9205kHz

S11a log July/August

5149khz	0830z	04/07 [373/00] Weak	RNGB, Manolis	SAT
	0830z	05/07 [370/00] Fair	RNGB, Manolis	SUN
	0830z	12/07 [377/00] Weak	RNGB	SUN
	0830z	19/07 [378/35 82212 50192 28831 16359 78054 56521 04146 21395.....69536 94441]	Fair	RNGB, Ary
	0830z	25/07 [379/00] Konyets 0833z Good	Manolis	SAT
	0830z	01/08 [370/00] Good	RNGB	SAT
	0830z	08/08 [376/00] Good	RNGB	SAT
	0830z	09/08 [376/00] Fair	RNGB	SUN
	0830z	16/08 [372/33 97255 08885 20305 65843 99574 23284 04111 16269.....66528 38970]	Weak	RNGB
	0830z	22/08 [372/00] Konyets 0833z Fair	(Twente SDR)	Manolis
	0830z	23/08 [371/00] Weak	RNGB, Manolis	SUN
	0830z	29/08 [372/00] Good	RNGB	SAT
6814khz	1040z	10/07 [480/00] Good	RNGB	FRI
	0915z	13/07 [480/00] Good	RNGB, Manolis	MON
	1040z	24/07 [482/00] Fair	RNGB	FRI
	0915z	27/07 [487/35 42638 87765 10804 10345 36948 47769 51339 39144.....43352 83994]	Fair	RNGB
	1040z	07/08 [487/00] Fair	RNGB	FRI
	0915z	24/08 [481/00] Good	RNGB	MON
	0915z	31/08 [483/00] Fair	RNGB	MON
9339khz	0700z	02/07 [475/00] Fair	RNGB	THU
	0700z	09/07 [479/00] Good	RNGB	THU
	0700z	16/07 [476/33 68869 40705 88440 66781 48800 00599 05578 36387.....60175 65480]	Good	RNGB
	0700z	20/07 [478/00] Good	RNGB	MON
	0700z	23/07 [477/00] Good	RNGB	THU
	0700z	27/07 [475/00] Good	RNGB	MON
	0700z	03/08 [477/00] Fair	RNGB, Manolis	MON
	0700z	06/08 [476/00] Good	RNGB	THU
	0700z	10/08 [477/00] Konyets 0703z Strong	Manolis	MON
	0700z	13/08 [471/00] Strong	RNGB	THU
	0700z	24/08 [470/33 55868 50905 82717 27989 08819 93606 98482 19506.....77450 60081]	Good	RNGB, Manolis
9448kHz	1400z	03/07 [429/00]	Gary H	FRI
	1400z	14/07 [421/00] Konyets 1403z Fair	(Twente SDR)	Manolis
	1400z	21/07 [424/00] Konyets 1403z Strong	Manolis	TUE
	1400z	04/08 [426/00]	Gary H	TUE
	1400z	18/08 [422/00]	Manolis	TUE
12457khz	1850z	01/07 [285/00] Konyets 1853z Weak	PLdn	WED
	1850z	15/07 [286/30 26711.....80841]	Konyetz 1900z Strong	PLdn
	1850z	18/07 [288/30 35359.....72992]	Konyets 1900z Strong	PLdn

1850z	22/07 [287/00] Konyets 1853z Strong	PLdn	WED
1850z	25/07 [286/00] Konyets 1853z Fair	PLdn	SAT
1850z	08/08 [287/00]	E	SAT
1850z	12/08 [287/00] Konyets 1853z Weak	PLdn	WED
1850z	15/08 [284/00] Konyets 1853z Strong	PLdn	SAT
1850z	19/08 [286/00] Konyets 1853z Strong	PLdn	WED
1850z	22/08 [284/00] Konyets 1853z Strong	PLdn	SAT
16357kHz 0510z	22/07 [656/00] Konyets 0513z Weak	Manolis	WED
18773kHz 0735z	01/07 [385/00] Fair	RNGB	WED
0735z	03/07 [387/00] Strong	RNGB	FRI
0735z	08/07 [387/00] Weak	RNGB	WED
0735z	15/07 [382/32 51775 40615 32860 12459 24890 37985 49244 44065.....45338 32227] Fair	RNGB	WED
0735z	22/07 [385/00] Good	RNGB	WED
0735z	24/07 [384/00] Fair (Polish SDR)	RNGB	FRI
0735z	29/07 [380/00] Good	RNGB	WED
0735z	31/07 [389/00] Strong	RNGB	FRI
0735z	05/08 [385/00] Fair	RNGB	WED
0735z	12/08 [387/00] Good	RNGB	WED
0735z	14/08 [381/00] Weak	RNGB	FRI
0735z	21/08 [371/00] Fair (Polish SDR)	RNGB	FRI
0735z	26/08 [382/37 98932 17130 98516 78752 87691 23135 35994 32572.....59262 22639] Weak	RNGB	WED

V07

Sunday

July 2026

0700z	13978kHz	0720z	13378kHz	0740z	12178kHz		
12/07	931 1 5089 97 92174 ... 33249 000 000					Ary, DanAR	SUN

931 931 931 1 5089 97 5089 97
92174 41803 16294 23729 72529 76827 58436 34840 57708 86779
90607 30974 98542 49450 06821 63458 26400 60912 27089 66565
19509 35848 89166 38823 12258 26805 01856 57396 46850 62545
01350 97497 89202 58323 33085 10431 50979 15863 86845 84190
68250 30320 51676 79152 71048 92498 95741 68976 81723 54173
10832 81367 12263 89574 87752 43036 22937 69097 28753 98840
84553 70107 93009 63390 12457 67900 12994 79300 69404 47131
83477 02756 73481 09958 47260 54736 35951 97163 27552 31197
76071 81391 79164 37196 31592 47303 05900 17120 07497 92188
91808 22994 80028 61762 22383 53810 55249 000 000

Courtesy Ary

19/07	931 1 9452 127 13778 ... 12831 000 000	Ary, Dan AR	SUN
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931 931 931 1 9452 127 9452 127
13778 14073 34003 24454 54111 90489 34429 17289 15173 67871
79786 74559 81049 03678 12553 15742 19732 62927 87409 22582
84087 72014 27133 07092 31273 95398 47990 55280 63635 82786
91715 78499 56135 12759 99913 06025 35400 63390 66305 50045
79370 18359 51783 40752 11460 34228 30317 93680 41899 84144
65454 71265 27626 67896 68592 08934 18486 96054 23568 50461
11308 26201 42209 13243 65495 78196 95554 67962 64842 24049
19562 86366 84012 32861 68100 98215 99422 23797 44606 01149
96722 97650 18863 86581 66677 67526 78274 27835 92609 44333
45378 97384 11351 31600 69874 86009 48073 51333 56843 33209
56293 25116 42192 86732 01113 08587 13801 84346 75361 29522
18430 55294 40242 28429 99447 51223 01756 40666 04994 78445
81044 72766 72922 11144 24670 97281 12831 000 000

Courtesy Ary

13978kHz 0700z 26/07 931 931 931 000	QSA2	DanAR	SUN
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August 2026

0700z	13408kHz	0720z	12208kHz	0740z	11508kHz		
09/08	425 1 2296 116 49327 ... 78387 000 000					Ary	SUN

425 425 425 1 2296 116 2296 116
49327 49697 45639 42900 36616 58707 10348 37921 01586 45651

12053 23030 11460 14417 41961 59495 70050 97462 88997 45166
69482 39887 86051 09067 08399 65680 18626 34175 64198 74517
15350 30527 76314 27900 60727 30516 50866 58040 82905 64712
41573 14310 00447 53144 03518 79452 93681 40403 24358 63068
81314 11956 81698 09984 78656 57113 25879 97491 15434 68205
76780 99181 96852 35890 29848 91521 51728 07857 50150 31276
45893 18406 43890 08912 35974 82374 77484 94860 11894 31495
75209 58599 06097 27975 26921 88575 73081 05565 74944 14945
46206 98997 44225 65799 00340 61725 10823 59725 69364 36852
06917 66390 97457 89802 59808 50098 36170 47556 01855 12359
76667 39214 89295 02793 57275 78387 000 000 *Courtesy Ary*

V13 [New star/ Star Start Radio]

July 2026

22/07	13:00-13:13 and again 13:30-13:43UTC on 11430khz SAM synth female voice Mandarin 5 figure groups good signal throughout. Conditions not so good today	Darryl	WED
25/07	10:30-10:44 11:00-11:14 11:30-11:44 UTC on 13974khz SAM synth female voice Mandarin 5 figure groups. 13:00-13:13 13:30- 13:43UTC on 11430khz SAM same as above. Poor signal throughout.	Darryl	SAT
27/07	12:00-12:13 12:30-12:43UTC on 13974khz SAM synth female voice Mandarin 5 figure groups. 13:00-13:13 13:30-13:43UTC on 11430khz SAM same as above. 14:00-14:13UTC on 14944khz SAM same as above. This last one the best signal.	Darryl	MON
28/07	12:00-12:59UTC on 13974 kHz SAM carrier no broadcast. 13:00-13:59UTC on 11430khz SAM carrier no broadcast.	Darryl	TUE

August 2026

01/08	14:30-14:43UTC on 11430khz SAM synth female voice Mandarin 5 figure groups good signal.	Darryl	SAT
02/08	14:00-14:13 14:30-14:43 15:00-15:13UTC on 11430khz SAM synth female voice Mandarin 5 figure groups good signal. 15:30- 15:43UTC on 14944khz SAM same as above	Darryl	SUN
07/08	Unable to find all week	Darryl	FRI

V15 Nil Reports

North Korea Spy Numbers Broadcasting via Pyongyang BS

V24 Nil Reports

South Korean Intelligence.

V26 Nil Reports

Polytones

XPA1 Wed/Fri

Wed/Fri

July 2026

1210z	13368kHz	1230z	12168kHz	1250z	11168kHz
01/07	311 000 03723 00001 00000 ... 10140				1250z NRH, rest Weak 1230z with QSB5 during Tx.
03/07	311 000 07008 00001 00000 ... 10140				Weak

08/07	311 1 09662 00142 12786 ... 56466	1210z Weak, 1230z Unworkable, 1250z NRH
10/07	311 1 09662 00142 12786 ... 56466	1210z Weak, 1230z Unworkable, 1250z NRH
15/07	311 1 09662 00142 12786 ... 56477	1230z Fair, rest Weak [Corrects last group sent 10/07]

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

09662 00142 12786 20289 82956 66058 66229 33676 20071 76809
05556 92795 31699 84630 23271 73272 48797 72013 89158 69159
63716 13037 79727 64618 34337 26680 38424 45308 16668 04651
55491 32266 40707 74066 61484 03858 21340 79502 69983 21118
09508 75362 93201 14424 37167 87452 09503 23381 92989 00153
76957 52726 25461 57811 01509 93446 54006 07563 49468 08029
62690 75931 95581 60657

83471 27426 97298 79419 78028 94817 33213 84411 16876 49581
64683 89728 56393 35354 07075 99843 52245 49545 37733 46121
18098 53862 68249 31514 16630 64598 90021 08225 74547 05669
11444 64464 39448 87099 88202 94454 67800 31926 64002 70090
14550 21225 04522 59972 27916 38589 08118 72930 08877 36194
09044 41110 30799 91177 05909 63007 29181 20327 60397 97618
41091 00784 53109 15720

81258 78422 43501 96060 08785 92279 78451 67882 28017 16511
74271 63351 81388 36161 78290 72743 56477 *Courtesy PLdn*

17/07	311 1 09662 00142 12786 ... 56477	1250z Weak, rest Unworkable
22/07	311 000 08273 00001 00000 ... 10140	Weak
24/07	1230z Unworkable, rest NRH	

August 2026

1210z	13491kHz	1230z	12191kHz	1250z	10691kHz		
05/08	Full message ~6m lg					MG	WED
07/08	MISSED, off watch						
12/08	Full message ~6m06s lg						
14/08	416 1 01885 00379 17404 ... 74431				[6m19s lg] 1100z NRH, 1120z Unworkable, 1140z Weak, QSB3/4		
19/08	416 1 06073 00224 ***** ... 76543				1250z Weak, QSB3, rest Unworkable. Apologies missed dk. <i>[Repeated whipping with a wet Woodbine to be endured until I promise not to do it again]!</i>		
21/08	Full Msg 4m43s lg				1230z NRH, rest Unworkable		
26/08	416 1 06073 00224 10681 ... 76537				1250z Unworkable, rest Weak. 1210z OTHRQRM3		
28/08	416 1 06073 00224 10681 ... 76537				Weak		

XPA2 MW

Monday/Wednesday

July 2026

0700z	14837kHz	0720z	15854kHz	0740z	.16326kHz
01/07	03238 00001 00000... 10140				Via SDR Twente
06/07	06551 00001 00000 ... 10140				0740z Fair, rest Weak
08/07	07010 00001 00000 ... 10140				0700z Weak, rest Fair
13/07	00393 00264 68695 ... 13530				0700z Weak, rest Fair

00393 00264 68695 04422 96327 46750 78360 14940 04474 09676
19024 24631 66498 09227 39641 98967 58025 83489 51597 13162
85959 47878 88496 09224 94729 32134 76114 03271 73664 87735
59646 21184 59089 55976 84601 21301 14607 65076 09997 64202
95080 18922 11179 73035 43439 41126 98236 30536 27462 90377
75667 00927 49708 55636 95099 85219 91002 94327 43182 30224
01087 17930 08180 92723 79047 78588 27875 74925 06265 74761
88191 89785 18344 66147 73029 20866 66716 49872 26384 48447
09486 86911 48328 06388 16041 57867 32447 60143 22108 51122

53065 12664 04952 89702 45707 96053 23044 07851 05862 97364
31037 85887 65161 49421 82666 34570 44418 78408 91054 75593
47611 26408 75244 25674 08549 30556 34389 12006 56009 26195
01030 90809 41552 96691 83148 73266 66493 59926 33428 94677
49986 63410 92821 88379 41769 53994 17019 18617 70816 78601
77298 05807 14778 37789 42601 45282 11988 81496 95247 04170
53770 89544 53577 60293 23455 13265 97532 76774 91998 13490
11491 39991 12739 02701 96405 98192 85497 51923 46413 16821
27702 92357 96188 41252 86539 34009 60289 85291 66411 46544
53545 88807 45576 10794 50726 94649 27641 31530 98338 44867
01314 55179 88142 91003 63109 68078 76433 26800 15385 92740
28398 42820 65894 95588 18157 85503 35483 57797 65611 53078
71493 60549 80814 60259 39918 64463 48090 03283 74674 27361
14849 23233 71166 06498 91752 49504 04704 45960 84621 84106
18801 10977 94387 04073 79876 77878 51748 91811 66183 54491
85160 66730 37321 85794 37694 39966 54937 79557 47285 30147
05623 39347 57662 01345 63843 20628 42009 45745 66658 94101
05681 96291 48779 82038 92020 20826 13530 *Courtesy PLdn*

15/07	00393 00264 68695 ... 13530	0740z NRH, rest Weak
20/07	00393 00264 68695 ... 13530	0700z Fair, rest Strong
22/07	00393 00264 68695 ... 13530	0700z Unworkable, rest Fair
27/07	09730 00001 00000 ... 10140	0700z Fair, rest Strong
29/07	MISSED, off Watch	

August 2026

0700z	15843kHz	0720z	16218kHz	0740z	17424kHz	[Tnx Priyom]
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03/08 MISSED, off Watch

05/08 MISSED, off Watch

10/08 00717 00341 19299 ... 57765 Fair

00717 00341 19299 97971 47008 04684 21651 52066 57289 83446
73303 18480 17413 13325 75111 67226 22823 97214 06392 50685
44194 96933 90951 05704 16853 10737 73011 15355 12698 37462
01834 21991 58574 04652 27768 56769 78038 16059 47671 65810
72006 49358 22769 11893 41846 39827 29718 51705 12724 15708
36674 54259 58952 53198 61796 93861 89700 41584 53690 12970
28063 05363 98354 37269 62547 83966 15587 15601 50679 47268
63906 64979 65965 82467 84389 93332 40617 00215 83875 51599
52122 38176 99244 52431 35418 97268 64342 64511 24511 69698
80933 12631 92284 30799 00533 25917 86644 45929 35964 51013
26913 90100 82742 64484 42610 17563 03594 33099 11950 64546
44973 56906 13697 84033 39704 76515 02559 90868 78918 96526
33665 83927 77990 26921 62618 72686 33973 88933 17074 71473
25734 54892 43396 75429 26338 92233 41045 15502 92560 12395
17915 88592 58712 76204 03188 77482 91754 21095 01058 30586
90547 88015 04009 33164 84372 83912 07269 34726 17153 44198
11564 29339 49032 40254 65972 12160 50543 53171 60511 23193
96311 97408 99195 36298 76104 07517 60193 09093 91614 25164
36873 33441 84127 98062 73196 92746 49611 56396 27790 61129
80361 21749 11775 85878 29768 77811 87408 95466 88744 89605
10536 30836 25980 35873 22797 87561 37570 86638 45382 21952
28173 22200 86957 94477 91418 99104 68631 65161 68501 53770
37199 96574 60954 15881 94577 88387 61748 11129 26493 43514
88158 88782 35316 02494 04868 46253 42467 19475 77200 72637
75039 83395 43948 53428 40089 11544 46818 44798 57674 57037
36186 29980 55097 66279 23123 27467 94468 45974 43197 64049
89602 87701 83623 86218 03658 97609 14097 27929 02375 79209
08312 49850 40416 22865 62967 94611 62040 71949 16258 23021
00709 29664 27188 26754 70467 43896 48216 97245 19096 66250
81712 98814 55869 36843 41472 06939 88061 73047 40705 55005
88144 54095 85616 64554 12828 96476 09269 83042 51949 68988
09579 10060 75526 92012 09458 38913 17605 06348 38641 90851
98652 61727 68499 57345 30780 00096 10119 70538 54596 34714
33524 30779 23154 44110 49257 68843 19983 84476 20468 77696
34372 89702 55218 57765 *Courtesy PLdn*

12/08	00717 00341 19299 ... 57765	0700z Fair, 0720z Strong, 0740z Weak
17/08	00717 00341 19299 ... 57765	0740z Fair, rest Strong. 0740z QRM2
19/08	00717 00341 19299 ... 57765	0740z Unworkable, rest Fair

24/08	00922 00212 83723 ...50374	0700z Fair, QRM2, 0720z Strong, 0740z Weak, QRM2
00922 00212 83723 48490 04557 58846 27619 57380 44126 65488 07761 21937 66387 28169 50716 76259 38004 34079 22994 96198 00353 46567 42241 47280 67372 03990 78260 88780 72211 10625 83346 63461 23195 54330 12069 38056 29398 85497 73142 23736 85943 45150 54558 40450 16006 01079 84403 49235 17516 95867 60124 22480 31661 35379 54805 83882 12893 56970 12429 32448 58070 15072 41104 56874 24725 77773 55673 66057 45684 18764 48803 01162 26905 16785 14802 26298 11426 85495 34026 14040 39155 21123 00585 81770 46564 58286 35441 43406 59563 20267 96116 14818 28431 51482 03386 24199 19931 33350 26702 43655 57292 73766 65880 07431 99468 47456 83833 09915 10833 06378 22286 07526 76557 02804 66939 84637 90281 14983 59481 70010 49245 85589 97726 87785 14892 10215 53409 26025 80477 75742 83161 54960 07468 94677 66257 81799 53065 31135 27547 22239 04404 24390 84797 20762 18728 80758 27913 95482 31537 35471 66160 86486 96076 63075 47630 79634 14935 13166 52265 95831 61780 91990 79084 69476 33530 72337 71966 84494 42718 46828 40980 08950 34114 21385 35890 29630 24647 13013 94420 41802 07124 04233 58854 36376 14733 24985 70483 03496 26917 31732 59421 95694 87641 99841 00369 94692 11418 73832 77846 43625 86064 13880 59935 85059 19209 61663 42637 89954 32898 11406 89985 46855 69315 44537 50374		
	<i>Courtesy PLdn</i>	
26/08	00922 00212 83723 ... 50374	0740z Fair, rest Strong
31/08	00922 00212 83723 ... 50374	0720z Strong, 0740z Fair, 0700z MISSED

XPA2 MSa

Monday/Saturday

July 2026

1500z	18034kHz	1520z	17469kHz	1540z	16091kHz
04/07	09762 00090 58984 ... 35526				1540z Weak; Condx poor rest of freqs not found.
06/07	03285 00001 00000 ... 34663				1520z Fair, rest Weak
11/07	NRH				
13/07	NRH				[Poor condx? MUF 15.4MHz]
18/07	00985 00113 33060 ... 13760				1500z NRH, rest Fair [1520z QSB4 at beginning]
20/07	04519 00001 00000 ... 40255				1500z Weak, rest Fair
25/07	04490 00001 00000 ... 33265				Fair
27/07	08882 00165 62515 ... 60052				1500z NRH, rest Weak, 1540z QSB3

August 2026

1500z	18064kHz	1520z	17419kHz	1540z	16038kHz	[Tnx Priyom]
03/08	MISSED, off Watch					
08/08	MISSED, off Watch					
10/08	1500z NRH, rest Unworkable					
15/08	09296 00147 71082 ... 64053					1520z Fair, rest Weak, 1540z QSB3/4
17/08	05811 00001 00000 ... 35656					1520z Fair, rest Weak
22/08	09138 00001 00000 ... 10140					1500z NRH, 1520z Weak, 1540z Unworkable
24/08	05914 00220 28915 ... 26470					1500z Unworkable, rest Weak
29/08	05914 00220 28915 ... 26470					Via Twente SDR; Weak across schedule
31/08	01520 00001 00000 ... 10140					1520z Fair, rest Weak with QRM3

XPA2 TuF

Tuesday/Friday

July 2026

1100z	14958kHz	1120z	13958kHz	1140z	12158kHz
03/07	08455 00001 00000 ... 10140				1100z Weak, rest Unworkable
.					
07/07	05012 00072 46305 ... 24726				1120z OTHRQRM5, rest Weak
05012 00072 46305 95820 53867 74629 71543 44792 35382 64573 08100 93199 90151 80438 61693 69020 60470 60080 63183 18571 39854 09186 03536 58150 60997 29368 23253 16332 59700 30692 81122 54293 26643 56736 09617 99426 18581 99240 79718 08404 16843 38381 71040 11571 61328 45471 35101 49060 51349 94876 89578 81546 20376 41452 10353 74825 73615 49861 39564 37375 45486 49097 09237 59201 67880 23585 90293 42958 80731 19964 38102 30362 92228 91450 24726 <i>Courtesy PLdn</i>					
10/07	05012 00072 46305 ... 24726				1120z NRH, rest Weak
14/07	05235 00055 49925 ... <u>77100</u>				1100z Weak, rest NRH
17/07	05235 00055 49925 ... 77100				1120z NRH, rest Weak
21/07	05932 00001 00000 ... 10140				1100z Unworkable, 1120z NRH, 1140z Weak
24/07	03314 00001 00000 ... 10140				1140z Weak, rest NRH
28/07	09298 00078 73905 ... 35004				1140z Weak, rest NRH
31/07	MISSED, off Watch				

August 2026

1100z	13887kHz	1120z	12187kHz	1140z	10387kHz
04/08	MISSED, off Watch				
07/08	MISSED, off Watch				
11/08	Null Msg, 2m11s lg				1100z Unworkable, rest NRH
14/08	07505 00001 00000 ... 10140				1100z Weak, rest Unworkable
18/08	nnnnn 00001 00000 ... 10140				1120z Poor copy [First Group lost], rest Unworkable
21/08	Null Msg 2m11s lg				1140z Unworkable, rest NRH
25/08	09123 00131 92624 ... 71623				1120z Weak, rest NRH
09123 00131 92624 89666 98076 43749 16153 97629 12896 08901 12403 61420 37896 06053 51196 36170 10893 41337 45033 29854 40424 68379 47510 33328 34106 39596 24739 16320 24699 76403 24938 56355 02340 93049 93384 51805 19949 54954 65167 35856 24811 69813 05774 27887 09853 40756 54211 78861 00503 39864 33147 10127 30335 91910 84818 29085 15643 01151 16490 86742 59867 46880 82797 79423 28016 89718 68139 62139 03689 19371 15904 97414 90178 34814 43332 93917 37848 26818 66049 88842 56823 88367 53537 65941 56891 58324 51878 84716 14415 39846 29012 98644 52146 55175 87007 59047 35185 31546 15544 04229 57227 22427 94353 92794 45938 67688 10638 48133 07425 85747 53012 93649 27215 88087 25169 63138 78012 48914 41374 34749 42177 67030 14214 67912 69370 52023 36839 48025 44916 45705 23281 72345 98894 71623 <i>Courtesy PLdn</i>					
28/08	05123 00131 71623 ...	end lost on QSB			1120z Weak, QSB4, rest Unworkable.

Other XPA2

XPA2 18048 kHz 1100z 05/08 [02467 00001 00000 10140] 1102z Fair QSB	MG	WED
XPA2 16271 kHz 1120z 05/08 [02467 00001 00000 10140] 1122z Fair	MG	WED
XPA2 14494 kHz 1140z 05/08 [02467 00001 00000 10140] 1142z Fair QSB	MG	WED

XPA2 18376 kHz 0900z 06/08 [00634 00085 66926 13307 83911...] 0903z Strong QSB	MG	THU
XPA2 17431 kHz 0920z 06/08 [00634 00085 66926 13307 83911...] 0923z Good	MG	THU
XPA2 17431 kHz 0920z 06/08 [00634 00085 66926 13307 83911...] 0923z Strong Twente SDR	MG	THU

00634 00085 66926 13307 83911 61719 48294 82604 22509 85102
 45668 03800 63290 22847 13099 42782 56785 02220 04981 94163
 18540 38739 24370 40265 14535 43592 06650 25295 78525 74670
 79604 41447 86643 93269 00821 82663 11009 48925 35914 63501
 66374 75270 01822 35080 21761 28156 95437 21745 13232 64043
 39426 36410 69005 67429 42546 93723 26555 25563 88156 06568
 87474 65985 10077 05700 85486 92769 67487 16322 13360 10122
 79929 20835 62111 90492 56414 05203 75359 23960 82085 49257
 18329 57582 99745 63268 92479 53478 98321 26623 *Courtesy MG*
(Message decoded from a recording obtained from Twente SDR at 0920z)

XPA2 16184 kHz 0940z 06/08 [00634 00085 66926 13307 83911...] 0943z Fair/Weak	MG	THU
XPA2 16184 kHz 0940z 06/08 [00634 00085 66926 13307 83911...] 0943z Strong, local QRM	MG	THU

XPA2 16184 kHz 0940z 06/08 [00634 00085 66926 13307 83911...] 0943z Fair/Weak	MG	THU
XPA2 16184 kHz 0940z 06/08 [00634 00085 66926 13307 83911...] 0943z Strong, local QRM	MG	THU

XPA2 18376 kHz 0900z 13/08 [06493 00001 00000 10140] 0902z Fair	MG	THU
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X06 Mazeilka

Date	Day	UTC	Freq	Scale	Monitor	Comments
20260701	Wed	1110-1116	18280	215346	Rycat	Alert2 (TX to Mumbai, G25) 1
20260701	Wed	1117-1122	16115	215346	Rycat	2.2
20260703	Fri	1025-1034	14824	625413	Andrew/SE	TX to Tel Aviv, G56
20260703	Fri	1323-1328	12200	241563	Rycat	Alert7 (Karachi, G50) 1 (ANSYNC) 20260703 Fri 1329-1333
16320	241563	Rycat	7.2	(ANSYNC)		
20260703	Fri	1335-1343	16320	241563	Dave/AU	7.3
20260703	Fri	1344	14720	241563	Dave	7,4: end missing, after 1415 UTC
20260707	Tue	0835-0840	13401	154263	Dave	TX to Rome, G7
20260710	Fri	0740-0744	14863	615243	Andrew	TX to Geneva, G127
20260710	Fri	0820-0822	10653	356412	Andrew	TX to Berlin, G126
20260710	Fri	0828-0920	11550	1--6--	Andrew	Very long X06b test
20260712	Sun	1029-1032	14414	145632	Andrew	TX to Algiers, G135
20260713	Mon	0948-0950	19235	463125	Andrew	TX to Rabat, G77
20260714	Tue	0818-0823	13420	534216	Ary/NL, Dave	TX to Bagdad, G87
20260715	Wed	1110-1112	16115	215346	Dave	TX to Mumbai, G167
20260715	Wed	1538	12186	214356	Ary	TX to Amman, G394
20260721	Tue	0810-0811	13411	165423	Dave	TX to Brussels, G151(1)
20260726	Sun	0618	13378	1--616	Andrew	X06b before V07
20260726	Sun	0918-0921	16060	261453	Andrew	TX to Cairo, G285
20260726	Sun	1031-1034	17430	145632	Andrew	TX to Algiers, G284
20260727	Mon	0812-1006	18350	1-----	Andrew	Very long X06d test (CW)
20260727	Mon	0817-0818	20690	156234	Andrew	TX to Kampala, G203
20260727	Mon	0944-1004	19235	463125	Andrew	TX to Rabat, G222
20260727	Mon	1006	19350	1-----	Andrew	X06d - end missing
20260728	Tue	0743-0745	10767	534216	Dave	TX to Bagdad, G232
20260728	Tue	0751	16324	1--616	Andrew	X06b before XPA1
20260728	Tue	0755-0803	16257	542136	Andrew	TX to Beijing, G88
20260728	Tue	0955	14958	1--6--	Andrew	X06b before XPA2
20260728	Tue	1002	14958	1-61-6	Andrew	X06b before XPA2
20260728	Tue	1002	14958	1-----	Andrew	X06d (CW) before XPA2
20260728	Tue	1002	14958	1-61-6	Andrew	Last X06b before XPA2
20260728	Tue	1003-1008	14970	216354	Andrew	Alert2 (Chennai, G228) 1(2)
20260728	Tue	1008-1012	20813	216354	Andrew	2.2
20260802	Sun	0658	14595	452163	RadiotehnikaT	TX to Kabul, G66
20260803	Mon	0758-0805	12157	165324	Andrew	TX to Vienna, G1
20260803	Mon	0806-0808	13395	532614	Andrew	TX to Paris, S7, G4
20260803	Mon	0832-0834	13875	1-----	Andrew	X06d (CW)
20260804	Tue	0747-0750	15989	125643	Dave	TX to Ulanbatar, G317
20260804	Tue	0829-0831	12149	154263	Dave	TX to Rome, G7
20260805	Wed	0605	16218	1--6--	Andrew	X06b before XPA2
20260805	Wed	0633-0705	13838	256341	Dave	Very long TX to Beirut, G311
20260805	Wed	0747	17472	1--6--	Andrew	X06b before XPA2(3)
20260805	Wed	1101-1109	16115	215346	Andrew, Dave	TX to Mumbai, G25
20260805	Wed	1116	10691	161-6-	RadiotehnikaT	X06b
20260806	Thu	0936-0941	18197	645321	Andrew	TX to Ho Chi Minh City, G310

- 1) Buried in STANAG
- 2) 0951 UTC: serdo test
- 3) Additional test signal approx. 1 kHz high

Jochen Schäfer, Numbers-, X06 Database and Teamkopf

Hybrids

HM01

No apparent Cuban numbers stuff but Ary kindly posted his spendid intercept;
Russian Embassy Cuba **Thanks Ary!**

UAL UAL UAL followed by operator chat and a message

18726 kHz, 27-08, 1300 UTC, FSK CW + FSK 50/500
UAG: Russian embassy Havana wkg UAL: MFA Moscow.

[illegible]

Russian Embassy Havana

‘E’s’ Newspiece

EU News

Media reports that Russia has been spying on NATO military bases through civilian cameras connected to the internet. Dutch intelligence services have said that Kremlin-based hackers accessed the devices to monitor the transfer of military equipment to Ukraine. Their joint investigation found the Russian operation had targeted cameras pointing towards military transport routes in the hope of identifying what weapons were being sent to Kyiv.

“Organisations with IP [internet protocol] cameras on these routes have now been warned so that they could take action,” the agencies warned after exposing what they described as a “large-scale Russian operation”. They said it had targeted “European NATO member states, including the Netherlands, and Ukraine”.

Internet protocol cameras, which are cameras with internet access, have proliferated in recent years because of cheap Chinese imports and high-speed broadband connections. While the intelligence agencies did not specify the type of cameras hacked, the doorbell systems are frequently used by people to monitor their property from mobile phones. Hackers then use readily available apps to scan for devices that might be accessible.

A Dutch investigation found that many of the cameras were not secure and “often have standard passwords, outdated firmware and standard configurations”. They said: “When the IP camera is identified, the malicious party can attempt to access the IP camera via the internet. This is often relatively easy, because many IP cameras connected to the internet are insufficiently secure.”

UK News

A man has appeared in court accused of offering his skills to a contact he believed to represent the Iranian authorities. Vahid Aberi, 39, from Liverpool, has been charged with assisting a foreign intelligence service relating to Iran after an investigation by Counter Terrorism Policing. Aberi, who has been charged with the National Security Act offence, appeared at Westminster Magistrates’ Court earlier and spoke only to confirm his name and date of birth. The dual British/Iranian national has been accused of engaging in conduct between 17 December 2025 and 16 July 2026, intending that conduct to materially assist a foreign intelligence service in carrying out UK-related activities. The alleged conduct includes offering his skills to a contact he believed to represent the Iranian authorities, picking up a phone in London and identifying possible storage locations for his contact.

He is also alleged to have travelled to London to secure a bag of material from his contact, picked up a bag from a luggage storage point in Marble Arch, agreed to store a bag on behalf of his contact and allegedly provided a contingency plan to his contact to allow for the retrieval of the bag.

RAF Akrotiri

A British man has been arrested on suspicion of spying on a UK military base in Cyprus on behalf of the Iranian military. The UK has maintained a permanent base at RAF Akrotiri since the 1950s. Rashad Sultanov, 44, of Islington, north London, is accused of carrying out “hostile surveillance” on RAF Akrotiri and sharing information with the Islamic Revolutionary Guards Corps. Sultanov, who also holds Azerbaijani citizenship, was arrested by Cypriot police on 17 July and is in custody pending extradition proceedings.

The Crown Prosecution Service has said he will be charged under the National Security Act – the first time an alleged offence under the 2023 law has been investigated in an overseas territory. The investigation, which was led by Counter Terrorism Policing (CTP) London, focused on alleged spying between 11 May 2025 and 22 June 2025. Commander Helen Flanagan, head of CTP London, said: “This case shows we are able to use the National Security Act overseas when British military bases are allegedly targeted by hostile state activity.”

Russian ships

The Royal Navy has warned of a significant increase in Russian naval activity near UK waters, having spent 21 days in July monitoring Moscow’s vessels. Naval operations to track Russian ships surged by 25 per cent in July compared to last year, with warships repeatedly traversing the Dover Strait and North Sea.

Offshore patrol vessels HMS Tyne, HMS Mersey and HMS Severn were deployed throughout the month to monitor Russian frigates Neustrashimy and Admiral Grigorievich, which are tasked with escorting so-called “shadow fleet” tankers. Russia uses its ageing shadow fleet to evade international sanctions on its oil exports and help fund its war in Ukraine.

A Russian warship, shadowed by a Royal Navy vessel, carried out a live-fire artillery exercise just 46 miles (74km) south of Plymouth in July. The Royal Navy monitored the exercise and is tracking “the vessel’s activity closely”, a Ministry of Defence spokesperson said.

Prior to opening fire, Russian frigate Neustrashimy had informed the Royal Navy Offshore Patrol Vessel, HMS Tyne, of its intention to conduct gunnery activity. Newly appointed Defence Secretary Wes Streeting called the exercise “performative and irresponsible”. The Kremlin has signalled there was no link between the exercise and Andy Burnham taking office as prime minister.

Royal Navy drones

Cameras fitted to Royal Navy surveillance drones were found communicating with a system in China, in the latest security scare involving Chinese-linked technology and critical British infrastructure. The cameras, fitted to the Navy's K3 Scout uncrewed vessels, were discovered sending so-called "heartbeat communications" to a device in China during a routine security assessment. The transmissions are understood to have simply confirmed that the cameras were online and functioning, with the Ministry of Defence insisting there is no evidence sensitive information was sent.

The discovery has raised more questions about the security of foreign-made components being fitted to British military equipment at a time of growing warnings over the threat posed by China. A Ministry of Defence spokesperson said the transmissions were identified during a "routine cyber vulnerability assessment" of the K3 drone.

German News

In early August a drone loaded with explosives reached a runway at Leipzig airport, renewing talk in Europe of hybrid war. The German interior minister is warning of a "new level of danger" from an attack that "may involve foreign powers".

There is no proof at this stage to link it directly to Russia, which denies any role. The quadcopter was discovered at Leipzig airport forcing one runway to close. The detonator had broken according to media reports and the drone was close to a Ukrainian jet reportedly carrying munitions. It was reportedly kicked out of the air by a bus driver and it crashed. Leipzig is a major cargo hub for the Ukraine War with Ukrainian An-124 cargo jets and NATO flights. There is an unconfirmed report that another aircraft hit an object, possibly a drone, in mid-air that evening.

It is possible this is another attack on aircraft by Russian operatives. It is hard to prove and potentially devastating if successful. Leipzig was the scene of a previous thwarted aircraft fire bomb attack. It does seem that a hybrid war is in full swing as Russia stalls on the battlefield in an endless war burning up money, equipment and human life. It is likely that many more operations like this will be undertaken against logistics centres supporting the war and we will have to live with it. Only luck and vigilance will likely prevent a major incident. What would happen if a jet carrying munitions and fuel is brought down over an urban area in a NATO country? How would we respond and would there be escalation? The scope for miscalculation, particularly if low-level, uncontrolled criminals are used, is huge. Hopefully they won't hit Gatwick before | depart for some possible winter sun in November (but we will probably have perished from heat stroke before then!)

Italian News

Two retired Italian intelligence officials have been arrested for alleged espionage, with police identifying a military attaché at the Russian embassy in Rome as their main handler. According to Rome prosecutors and police, the Russian attaché discussed Moscow's information requests and payment details with Gavino Raoul Piras, a retired senior Carabinieri officer previously involved in intelligence matters. Information was reportedly passed to Russia over a 12 year period.

Russia wanted information about air defence capabilities provided by western nations to Ukraine. Police who filmed and tapped an alleged Russian military intelligence officer quizzing an accused informant in Italy heard him demanding information on systems such as Europe's Samp-T, which has been given to Kyiv, and the Michelangelo Dome, an air defence system developed by Italy's Leonardo due to be tested in Ukraine in November.

The Russian accused of being an officer with Russia's military intelligence agency GRU was followed as he met with Gavino Piras, 59, a former member of Italy's secret service, who was arrested this week along with a second former Italian intelligence official.

Piras is accused of using cash supplied by the Russian official, Mikhail Astakov, to recruit informants in the Italian military who fed him secret information Astakov asked for. Five alleged informants are under investigation. Astakov — who was a military attaché at the Russian embassy in Rome — gave Piras lists of information requests from his superiors at secret meetings and was given microSD cards packed with information which were left in a hole in a wall for collection.

The Russian paid out €4,000 (\$4,600) in cash for each package of information, the investigators said. The requests show a determination to find out exactly how Europe was helping Ukraine defend itself from Russian missile and drone attacks. Following a demand for information about the European Samp-T air defence system supplied by Italy and France to Ukraine, Piras refers to data about the battery he has passed over, and he also fields requests about the MBDA CAMM-ER air defence missile, which Ukraine is in talks to build. Astakov also asked about Leonardo's planned Michelangelo Dome, an air-defence system designed to allow partner countries to link existing assets and make them interoperable.

One note delivered in September 2025 requested information on a variety of topics including "Efficiency of attacks on Iranian nuclear structures, damage to the program, prospects of work restarting," as well as Italy's plans to purchase Storm Shadow missiles, rearmament plans for Italy, EU and NATO, "Priorities and objectives of EU defence" and "Help for Ukraine to build long distance missiles."

The Russian was also curious about a Leonardo sub-sea drone the firm is testing in La Spezia in Italy. In the transcripts reported in the court documents, Piras tells the Russian that British, not Italian, intelligence is assisting Ukraine in its long range strikes against Russia oil facilities.

Piras also claims that Italian experts are studying the workings of the Russian T90 tank. “They don’t understand how the machine gun mounted on it works autonomously. If they manage to steal the secret they will, so be careful,” he tells Astakov. In April 2025, Astakov requested information on Avio, the Italian propulsion firm, months after it partnered with the US Army to supply missile solid rocket motors.

After Piras was arrested on Tuesday, his lawyer denied he had passed any classified information to Russia.

The investigation shows the continuing importance of HUMINT insider threats within defence and intelligence organisations across Europe. Despite numerous expulsions, Russian intelligence still continues to function as it deals with the quagmire the Ukraine war has turned into. Note that former members of staff who had classified access can still pose a potent threat if motivated by financial gain or grievance. While technological security continues to improve, trusted individuals with authorized access remain among the most valuable targets for foreign intelligence services seeking military, political, and strategic information. Protecting classified information therefore requires continuous vetting, robust monitoring, and strong counterintelligence programs alongside cyber security measures. Even with all this, there are still leaks and individuals who are prepared to endanger life for money, even when a war with Russia is a real possibility. Russia also likely seeks to make its attacks on Ukraine more effective as it is bogged down on the battlefield and seeks to blunt Ukraine’s attacks which are bringing the war home to the people of Russia.

The case serves as a reminder that espionage remains a central feature of strategic competition among major powers, even in the high-tech digital age. As geopolitical tensions increase, NATO members will likely increase efforts to detect insider threats, safeguard sensitive information, and reinforce alliance security against both traditional human intelligence operations and emerging hybrid threats. With Russian intelligence, they face a well-resourced, experienced and robust enemy. Note that most espionage will likely not involve numbers stations and much is on-line, making it hard to assess the scale of activity and how much damage is being done. This is likely to get worse over the coming years — God help us!

Polish News

Prosecutors in Poland have charged an 18-year-old Ukrainian man with carrying out sabotage acts on behalf of Russian intelligence aimed at inciting tensions between Poland and Ukraine. The suspect, identified as Illia K, under Polish privacy laws, was charged with 47 criminal acts between November 2024 and August 2025, when he was arrested.

The alleged sabotage included desecrating memorials to Polish victims of the UPA, the Ukrainian Insurgent Army that took part in the murder of tens of thousands of Poles during the Second World War known as the Volynia massacre. “The aim was to incite ethnic tensions between Poland and Ukraine,” Poland’s Internal Security Agency (ABW) said in a statement.

Prosecutors said that although the suspect himself had acted for financial rather than ideological reasons most of the alleged acts were “for the benefit of foreign intelligence”. The ABW said in May that it had launched 48 espionage investigations last year, more than double the number in 2024. Russia’s secret services had focused on discrediting Poland internationally and exploiting “historical ethnic antagonisms, mainly in Polish-Ukrainian relations”, it said.

The 18-year-old was also charged with making preparations to fly a drone over Polish president Karol Nawrocki’s vehicle during last year’s Polish Armed Forces’ Day parade in Warsaw on August 15. He was arrested three days before the event took place. The suspect, who faces life in prison if found guilty, allegedly recruited people to take part in the crimes, using cryptocurrencies registered in Russia and China to pay them, the ABW said. According to prosecutors,

Illia K was given tasks by an unidentified person via a messaging service. He sent photos back proving he had carried out the tasks.

There seems to be no shortage of people who are willing to take money and perform acts to benefit a state their country could go to war with (if that war has not already started?) They also get younger and younger; simply used and thrown away.....

Cyber attack

A cyber-attack that threatened to cut heating to half a million people in Poland last winter was formally attributed Monday to Russia’s Federal Security Service (FSB), as the United Kingdom and European Union imposed their first coordinated package of cyber sanctions against Russian hackers. The allies blamed Centre 16, the FSB’s signals intelligence arm, for acts of attempted cyber sabotage targeting Poland’s energy sector and water treatment facilities, alongside “a wide range of malicious cyber activities with growing severity.”

According to the European Union, the broader range of activities have included “infiltration of governmental networks and sabotage of critical infrastructure” targeting “France, Germany, Poland, Cyprus, the Netherlands, Austria, Slovakia, Romania and Finland.”

Last December’s attack on Poland’s energy grid came “very close” to causing a “blackout,” a senior minister said at the time. It was described as “reckless” by British authorities, adding it was “another example of the Russian state’s irresponsible attempts to sow chaos across Europe.” Initial attributions by cybersecurity companies ESET and Dragos had attributed the attack to a group tracked as Sandworm, linked to Russia’s military intelligence agency. This was first disputed by CERT Polska who traced the infrastructure behind the intrusion and matched it to a cluster linked to the FSB. Separately, Poland’s domestic intelligence service warned in May that cyber intrusions targeting water treatment facilities in the country have posed “a direct risk” to the continuity of water supply.

Since the beginning of 2026, tens of millions of nearly identical posts have appeared on Telegram, offering high pay for what is described as easy work in Ukraine and beyond, according to Lithuanian media. They have studied this activity closely over several months.

The investigative reporters found that the work involved carrying out acts of sabotage like setting cars on fire in Poland, purchasing and delivering detonators in the Czech Republic, and filming drone launches and setting military vehicles on fire in Lithuania.

On May 12 alone, around 10,000 nearly identical job postings appeared in Russian and Ukrainian employment chats on Telegram. Every one of them listed the same contact: the Telegram account Jan Pol. The posts promised "simple technical work" with flexible hours and reliable, on-time pay. Recruits were assured that the assignments were safe. Yet the very first message from Jan Pol made clear that the so-called side job involved breaking the law. One enquirer was offered a sum to set fire to a NATO vehicle. The message referred to the Russian-language Telegram channel Underground / Sich. Its creators describe it as "a community of active citizens ready to fight for truth and justice." The channel regularly publishes videos of vehicles belonging to Ukraine's army recruitment centres being set on fire, along with calls to target their personnel and oppose the Ukrainian authorities. At the same time, a pinned post claims that "the channel is not Russian propaganda and has absolutely no connection to Russia".

A "manual" was available which included a detailed price list for different types of sabotage in Ukraine. Destroying a cell tower, for example, was listed at \$500; setting fire to a recruitment centre vehicle or a luxury car would earn \$1,000; and an attack on a police building was priced at \$7,000. Recruiters also promise a \$100 referral bonus for every new saboteur brought into the network. According to them, payment is transferred to any cryptocurrency wallet or bank card within an hour after the arson attack is completed and verified with a video. The Telegram account used by the recruiter under the name Jan Pol was registered to an Afghan phone number.

After learning that his contact supposedly lived near the NATO training area outside the Lithuanian town of Pabradė, the recruiter suggested filming military personnel and equipment as a reconnaissance mission. "Think you could get a little closer to the training ground? Shoot a bit of video. I talked to the bosses, and they said they could throw you a little extra if you provide reconnaissance of the site — what's there and what they've got."

After consulting his "senior boss", Sasha came back with another assignment: gather proof that drones are allegedly being launched at Russia from Lithuanian territory.

"We need 100 percent proof that drones are being launched from Lithuania. Even better if you can actually catch one in flight on video. They're ready to pay \$500 for that."

The proposal to film drone launches came on May 15. Just four days later, Russia's Foreign Intelligence Service (SVR) claimed that Ukraine was planning to launch drone attacks on Russian targets from the territory of the Baltic states, specifically Latvia. The agency warned that Russia would retaliate.

After several days of conversations, Sasha also offered the reporter \$1,500 to set fire to a NATO military vehicle. A slightly lower reward — \$1,000 — was offered for burning luxury cars with Ukrainian license plates in Lithuania. Journalists found that Telegram is being used to run a large-scale recruitment campaign for would-be saboteurs. Since the beginning of 2026 alone, more than 20 million job advertisements have appeared across Telegram job-search chats, concealing offers to carry out arson attacks and other acts of sabotage in Ukraine. However, recruiters have also been posting their offers of easy, well-paid work in Russian-language communities in the United Arab Emirates, Thailand, the United States, Germany, Poland, and more than 20 other countries.

The recruitment process follows the same pattern in every case. The hundreds of job ads are not posted by the recruiters themselves, but by intermediary accounts — many of which exist for only a few days before being deleted.

During more than six months of monitoring the recruitment network, journalists had never before seen operations in Europe included in the price list sent during the initial contact. The recruiter, who used the Telegram name Moroz, operated an account registered to a Russian phone number. His primary interest was in finding someone to carry out an assignment in Riga.

"A couple of Molotov cocktails through the window. Quiet building, no cameras. It belongs to a political party," he wrote, without initially specifying which party's office he meant.

An analysis of verdicts handed down by Ukrainian courts in 2026, using the Unified State Register of Court Decisions, found that as of June 1, 2026, Ukrainian courts had issued 25 convictions since the beginning of the year for acts of sabotage under Article 113 of the Criminal Code of Ukraine. In 19 of those cases, the court documents explicitly stated that the defendants had been recruited via Telegram. During the same period, courts handed down 22 convictions for terrorist acts under Article 258 of the Criminal Code of Ukraine. In 14 of those cases, the recruitment had likewise taken place through Telegram.

In its official response, the Security Service of Ukraine (SBU) described the recruitment network as part of "Operation Diversionary Noise". It is a campaign that, according to Ukrainian authorities, Russian intelligence services have been carrying out since 2023. Over that period, Ukraine has documented more than 1,400 crimes allegedly committed on Russia's behalf, including around 800 in 2025 alone. Judging by the price lists received by reporters in the spring of 2026, the operation's geographic scope is no longer limited to Ukraine

Young, naive people are easy to recruit and likely do not consider the implications of their actions. They likely just want money and some excitement. If they are caught Russia probably does not care so long as the sabotage is done and there are plenty more people where they came from. If they are caught after the crime and before payment then it costs Russia nothing. A useful and effective technique. If Russia is not controlling the operatives closely and they go over the top, how do they control escalation when these attacks occur in NATO countries? It is a huge and dangerous risk.

Swedish News

The government is launching a new spy agency, the Utrike underrättelsetjänst (UND), or Foreign Intelligence Service. Officials describe it as a civilian agency, comparable to the UK's SIS. It will sit alongside MUST (military intelligence) and take over some of its clandestine responsibilities, including oversight of a unit that conducts human intelligence—covert operations involving agents in foreign territory. Apparently with MUST, Sweden was good at tracking the movements of military hardware but the system was less effective at judging foreign political intelligence. This analytical gap is where UND could have an impact.

There seems to be urgent pace and scale with Sweden's parliament likely approving UND's creation in August. The new agency will start its work as soon as January, only eight months after the reforms were announced. Meanwhile, the government aims to spend 3.5% of GDP on defence by 2030 and it is also sending Ukraine sixteen Gripen fighter jets.

Russian News

Aman has been arrested in Russia on accusations of spying for New Zealand. In a statement, the Russia's Federal Security Service (FSB) said the Russian Federation had "identified and stopped the illegal activity of a citizen of the Russian Federation suspected of committing treason".

The FSB said it had established a Khabarovsk resident, born in 1971, "proactively established" contact with the New Zealand Security Intelligence Service (NZSIS). Russia's Ambassador to New Zealand told RNZ on Tuesday the person had given the NZSIS information. He is alleged to have used email and messaging apps to pass on material that "could be used against Russia's security".

A NZSIS spokesperson told RNZ it would not comment on what "may or may not be an operational matter".

New Zealand's intelligence services are part of the Five Eyes intelligence-sharing alliance which includes Australia, Canada, Britain and the United States.

The FSB said the contact was done "for selfish motives, on instructions from a foreign intelligence service, using foreign email services and instant messengers, transmitted information to the foreign intelligence service that could be used against the security of the Russian Federation". Video footage by FSB shown by Russian media showed authorities rushing over to the man on a street pavement and pinning him to the ground before locking him in handcuffs.

US News

The C.I.A. has secretly established a Cuba task force, setting in motion plans for a more concerted campaign to pressure the Cuban government to make the economic, political and leadership changes demanded by President Trump, according to people briefed on the action.

The creation of the task force will allow the agency to quickly direct more financial, human and technical resources at Cuba, they said. The task force has begun adding case officers who recruit and manage spies, intelligence analysts, officers who conduct cyber operations and officers who specialize in covert influence operations, the people said.

The people briefed on the new task force said its mandate is more limited: to create fissures among the Cuban political elite, in hope of pressuring the Cubans to replace perceived anti-American hardliners with more practical leaders more amenable to Mr. Trump's demands. The C.I.A. declined to comment.

Japanese News

Dozens of Russian spies banished from Western capitals after the start of the Ukraine war have reportedly turned up in Japan, according to intelligence officials. They were pushed out of the West to make it harder for the Kremlin to collect intelligence and obtain sensitive equipment that could be used to make weapons.

Access to Japan's hi-tech defence industry has become a key part of Russia's war machine, current and former officials at five Western intelligence agencies told the New York Times. According to the Ukrainian government, 90 per cent of Russian missiles and drones contain Japanese components that are used in daily attacks on Ukraine's cities and troops. The officials argued that Moscow's continued access to technologies developed by the West and available in Japan — despite bans on military-related exports — had allowed it to continue its full-scale war for more than four years. Some of these technologies are dual-use with legitimate civilian applications.

The spies, posing as businessmen or diplomats, had been attempting to solicit deals or steal technology to be smuggled back to Russia and used on the battlefield. Ukrainian officials were said to have shown Japan evidence that its technology was being used in Russian weapons, citing documents and interviews. Yet Tokyo has allegedly been slow to act.

Officials have said they are aware of the threat and are working to improve intelligence gathering.

The government added that it was working with Western allies to ban the export of military-related items to Russia. In part, this stems from post-war constraints implemented by the Allies, including disbanding its intelligence-gathering operations. It still has no foreign intelligence service and has largely been dependent on US intelligence. Russian intelligence inside Japan is likely to raise security concerns over Tokyo's joint development of a new sixth-generation stealth fighter alongside the UK and Italy. The £4.6bn Global Combat Air Programme, announced earlier in July, will be a highly sensitive project. The jets are supposed to enter service in 2035

Many thanks to 'E' for his hard work in creating this column

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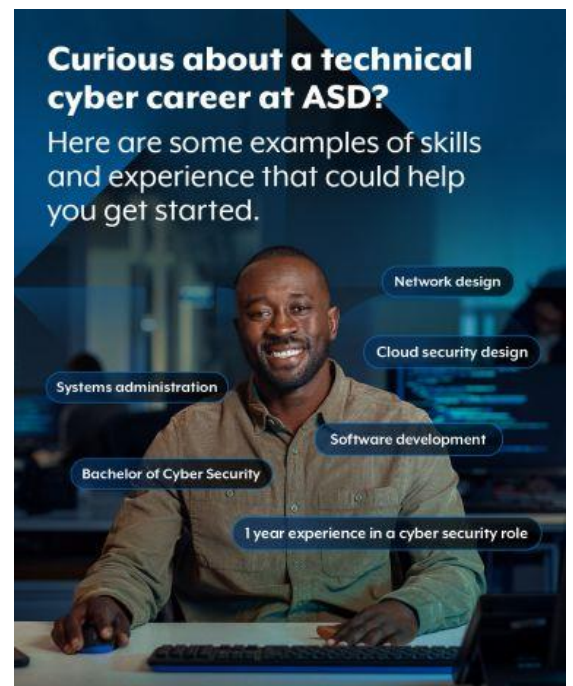
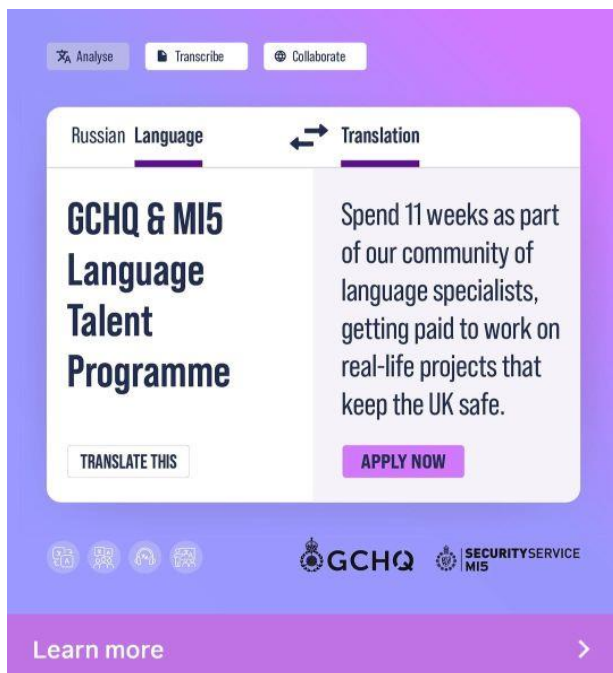
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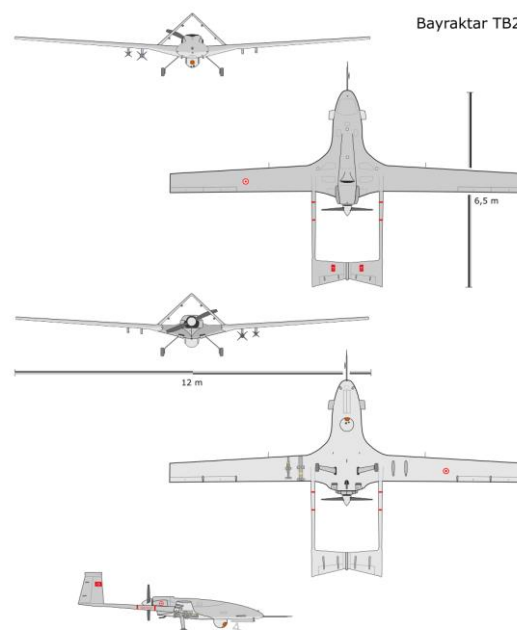
Just when you E2K dudes thought it was safe to open your NL, up pops another piece from HJH. This one I wish to dedicate to my late great friend, Albert James, who died 3 weeks back. A true friend of 40 years, to say I will miss him is understatement at its very best. A whiz at electronics and mechanics, he worked many years in TV, on outside broadcasting and making special effects devices. If you watched Dr Who, Torchwood or others, you may have seen his gizmos whirling and flashing. He helped me in numerous radio and electronics projects, and in my shack, I have many devices he gave me over the years, and many people, besides his family and mine, mourn his passing. Now read on guys, and my thanks for putting up with this.

As is usual, a disclaimer. Most of this article is based on open source intelligence, and is in no way connected to any military, civil, or government body with which I am now, have in the past been, or may in the future be, associated. The opinions expressed, or conclusions drawn, are mine alone. It concerns the use of drones in the Ukraine conflict, and, as is E2K policy, no comments on the conduct of that conflict will be expressed. It is merely a piece on the use of drones by both sides. Hence the title!

This conflict has lasted 4 years now, and is remarkable in one respect. The use of trench warfare, and the use of drones, be they remote controlled, or purely autonomous. My, and many other grandfathers, would be at home in those trenches, but would be puzzled by the use of 21st Century drones, and the associated electronic equipment this conflict has seen in use, in many cases for the first time, not to mention the drone controllers, many of which are merely PlayStation 5 control boxes. I wondered why Number One Son asked if I still had my old Army Russian phrase book! Drone versus drone is now a reality, as, sadly, is drone versus man.

Nor are the drones in use confined to UAVs, unmanned aerial vehicles. Also in use are unmanned sea vessels, (USVs) and unmanned ground vehicles, (UGVs) all unmanned, and some very deadly, whatever mode of control is in use. First off, the UAVs I mentioned earlier. The Ukrainians and Russians have many of this type: (See below)

BELOW: 5-view drawing of a Turkish Bayraktar TB2 tactical drone in flight configuration. The craft is armed with a MAM-L bomb on an inner and a MAM-C bomb on an outer starboard. Hardpoint.



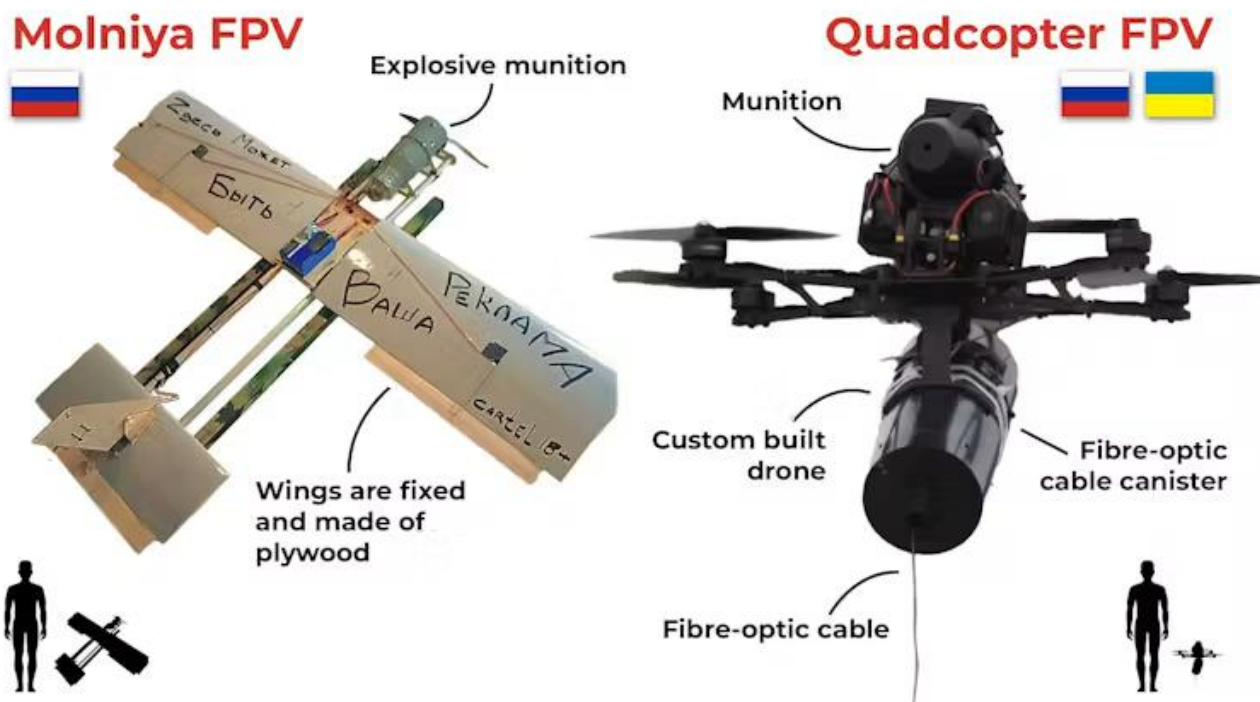
In Ukrainian service called a TB2, this started life as a Turkish product, and is ground controlled from a land based station. Anti jamming devices have reportedly been fitted to Ukrainian TB2s, although details are not known, nor are likely to be disclosed.
(Photo Credit: Wikipedia)

Given that the TB2 drone has, as recently as June 25 2026, been credited with the sinking of 3 Russian unmanned drone boats off the coast of Ukraine, it would seem to be an effective weapon.

Russian UAVs.

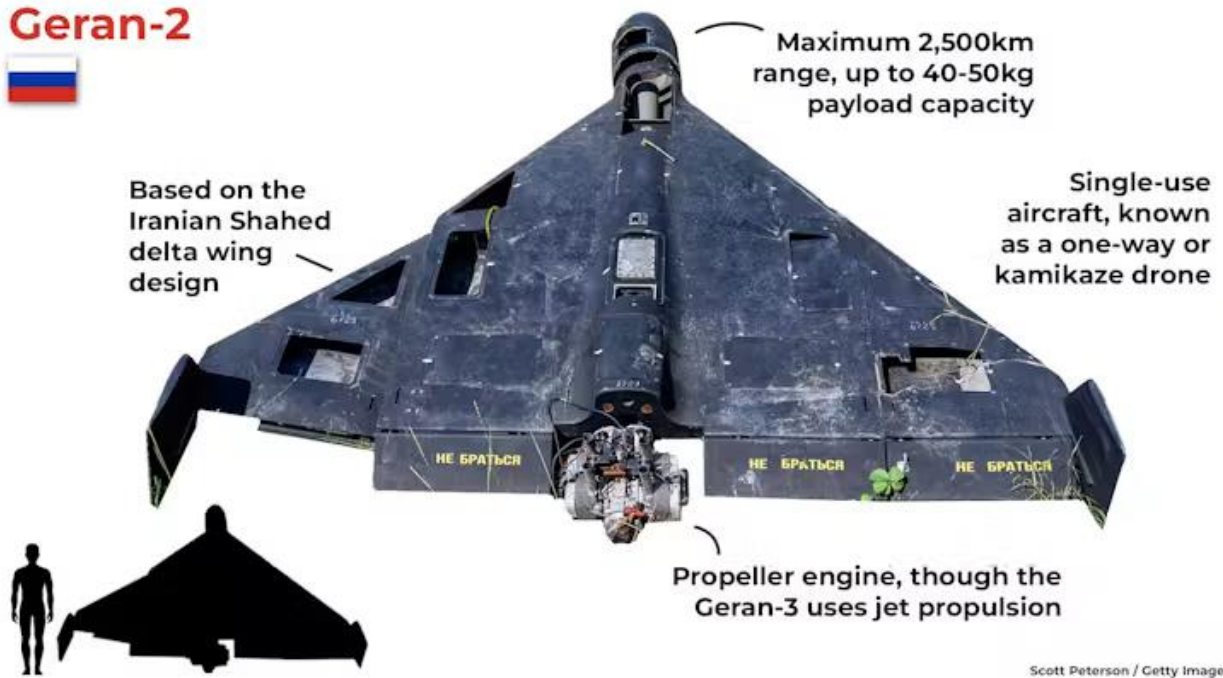
Not to be outdone, the Russians have equipped themselves with many UAVs of various types, two of which are shown below. As is apparent, the Molniya 2 is the Kamikaze type drone of very basic type, as is to be expected in such a weapon. The Quadcopter is far more sophisticated, and has the latest in anti jamming technology,

which is nothing more than a control cable, eliminating the need for radio control, albeit that the cable is fibre optic. This limits the range of the UAV. The latest drones are called FPV or first person view. They are controlled by men wearing virtual reality goggles in a nearby location, viewing through the UAVs onboard camera. What the drone camera sees, the operator sees. This mode of control is in use by both sides. The Molniya 2 is the most prolific Russian FPV UAV and is said to cost less than 1000 Dollars, being made chiefly of plywood and using mortar or artillery shells for warhead.



The Quadcopter is more sophisticated, being not only FPV capable, but also remote controlled by up to 40 kilometres of fibre optic cable by its controller. Thus it is immune to any electronic counter measures such as radio jamming. Both sides are now incorporating AI into drones to render them autonomous, and thus completely free from the need for human input. Such UAVs will be truly free from counter measures short of being shot down. Below is the Geran 2, which is based on the Shaheed drone of Iranian manufacture, although Russia now has a factory capable of manufacturing these UAVs. As is apparent from the drawing, it is not very sophisticated compared to some UAVs, but very effective nonetheless. Russia intends manufacturing these UAVs in huge numbers, something at which they are historically good. The latest version of Geran 2 is fitted with a jet engine, capable of speeds of up to 300 KPH.

Geran-2



Weaponised drones, such as is shown above in the wire guided example, can be fitted with a warhead from a RPG7 , (Rocket Propelled Grenade.) or artillery shell, and the drone flown into the target. Loss: Drone and warhead worth 1000 to 1500 dollars. Gain: Dead tank worth maybe 4,000,000 dollars.

A Life on the Ocean Wave—Or NOT!

Nor should we forget the sea going unmanned vehicles. First, one of the Ukrainian boats used as drones, known as USVs or Unmanned Surface Vehicles. That seen below was in use as early as 2022, when on October 29, these were used in conjunction with UAVs to attack the Russian Navy in its base at Sevastopol, damaging 2 frigates and a minesweeper. From July 6 to July 12 2026, Ukrainian USVs, with UAV support, have destroyed or damaged 105 Russian vessels in the Sea of Azov.



Figure 1:

RUSSIAN USVs

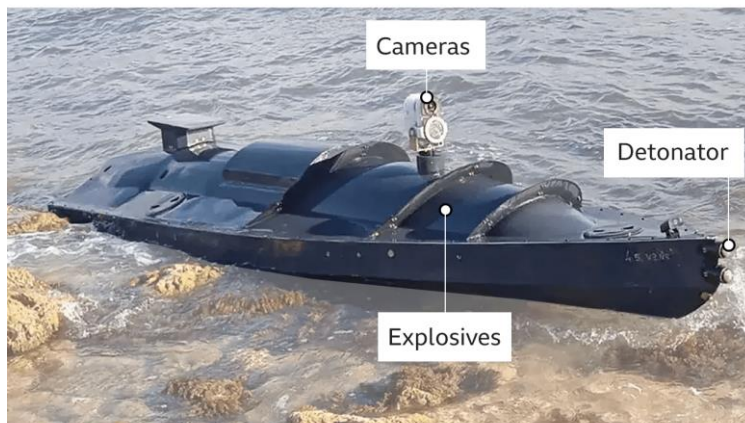
The above vessel is controlled in the same way as its Ukrainian adversary.

Nothing New?

Just to give truth to the old expression that there is nothing new under the sun, consider the following. As regards the manually guided UAV drones, as early as 1943, the Germans were using missiles, some capable of TV guidance, to attack and sink allied warships. One, named the Henschel 293, was air launched from bombers such as JU 88, He 111, or other bombers in Luftwaffe use. Using a radio control link, it was initially radio controlled from its launch aircraft. On the

Allies introducing radio jamming, having lost several ships to this weapon, they introduced wire guidance. This consisted of reels of copper wire which carried control signals which could not now be jammed. A further version, luckily too late to see action, had a TV camera mounted in the nose to ensure a first round hit probability.

Ukraine's drone boats



Source: Rybar

B B C Figure 3: HS 293

Such wire guidance is still in use today, as in the Milan anti tank missile, British Swingfire, and French anti tank missiles.

Meanwhile, Back On Land---

We must not forget the land based drones in use by both sides. As early as 1902, a Spanish engineer experimented with a radio controlled ground vehicle. 1914 saw the French develop explosive, remotely controlled land torpedoes. In the 1930s, the Russians developed a radio controlled tank. Called Teletank, it was controlled by radio from another accompanying tank. "Black Prince" was a British radio controlled AFV. It was a Matilda II infantry tank capable of being radio controlled. Costs and mechanical difficulties saw the programme cancelled. (Sound familiar guys?) In 1942, the Germans used a miniature remote controlled tank named Goliath. This, in its turn, is said to have been derived from the earlier French idea, which was dumped in the Seine at wars end in an effort to keep it secret.



Figure 4: German WW2 Goliath UGV

Initially petrol engined, later electrically motor powered, it had a built in warhead, and was intended for demolishing bunkers, strong points, or enemy AFVs. Depending on type, 302 or 303a or 303b, they carried 130 or 220 pounds of high explosives. Fast forward to 21st Century, in 2005, the Gladiator UGV was developed in USA. (Photo Credit: Wikipedia)



Figure 5: Gladiator UGV. (USA)

Gladiator is capable of surveillance and reconnaissance, and can be fitted with one of 2 types of LMG, or an anti personnel explosives package. It is not in general use by USMC or US Army.

UKRAINE

Below is just one of the bad boys deployed in action in Ukraine, known as D-21-12R. Fitted with 20mm cannon, while others are fitted with a .50cal machine gun. It also has equipment suitable for surveillance, patrolling, or fire support, and can be remotely controlled.



This is but one of many types of UGVs deployed by Ukraine. Others are capable of, besides surveillance and combat, load carrying, and personnel evacuation (wounded)

RUSSIA (Below)

This is a Russian UGV used for logistics, such as ammunition carrying, general load bearing, and even personnel evacuation. Also, below that, is a system currently being developed as a multi launch rocket system, remotely controlled.



Figure 6 TOSS1A

DRONE COUNTER MEASURES

Just cut the String!

Sounds a simple way to destroy cable guided missiles and drones, but this is actually what Ukrainians and Russians are trying to do to bring down these wire guided missiles. They are fitting blades to UAVs and trying to sever the controlling cables of the attacking drone. Another counter drone technology is nothing more than a strong net over the potential target. This will stop the drone impacting the target, although unless the net is far off the ground, the target may well suffer shrapnel damage. There are roads in Ukraine which are covered by netting for miles to protect the convoys on which troops and civilians must depend. Reminds the author of the old BAOR saying, “What is green and brown and weighs 5 tons?” Answer: “A soaking wet camouflage net!” Oh, how we wished for those lovely German army nylon ones with plastic scrimming!

As regards, AFV protection, tanks and APCs have been seen fitted with makeshift frames covered in netting to protect them from drone attack. Also noticed are the blocks resembling bricks around turrets and other parts of AFVs. This ERA or Explosive Reactive Armour which works on the principle that a warhead impacting the ERA will explode, deflecting the blast outwards.

A far more sophisticated anti drone weapon is the Lynx Skyranger system. A SPG system (Self propelled gun) it mounts a Rheinmetall 30mm cannon on a tracked chassis. The weapon is radar predicted, and can fire 1200 rpm (rounds per minute) which can be set to explode at preset ranges or altitudes. Ammunition can be of the shotgun cartridge type, exploding into pellets for higher kill probability. It is radar predicted, having a radar capable of tracking and scanning. It is in service with Ukraine.

Another, and far more basic anti drone system, is a shotgun fitted beneath the wing of a radio controlled drone, which is of very basic construction. Shotgun is of the self loading variety, obviously, and this would not appear to be a very effective system.

The commonality of equipment to both Russia and Ukraine is apparent, and stems from the time Ukraine was part of the Soviet Union. One AFV which is common to both is the BRDM 2, an armoured car which has long been in service with both. In Ukraine, ArmspetsTechnology has adapted a demonstration model it to be radio controlled, for purposes of personnel evacuation, or load carrying. Others have been fitted as anti drone vehicles. Around the top sides of the vehicle are fitted 32 net dispensers, which can be fired from within the vehicle on a drone attack.



Figure 8: BRDM 2 with fittings for net dispensers

And, just to set your minds completely at rest that Arnie will not “Be Back” (supply own Austrian accent) across the pond in USA, Epirus Technologies have produced Leonidas, the ultimate drone killer, which will counter the nightmare of all drone defenders, the swarm attack of many drones attacking at once. Leonidas (no relation to the Spartan king who fought off Persians in their hundreds, of the same name!) Described by Epiras as a software defined high powered microwave system capable of being ground or vehicle mounted and capable of defeating drone swarms. A form of Directed Energy Weapon, a test seen by this author downed 500 drones simultaneously. The USA Army already has, as at 2023, 6 systems. This author will put plenty of the folding green stuff that many more are on the production line.



Figure 9: LEONIDAS mounted on Stryker AFV.

This is by no means an exhaustive description of drone use and technology as it is today in use in Ukraine. (Although it exhausted this author!) It is intended to show the large improvements made in such technology and the increased use of such machines in warfare. So, there you go guys, worry not about drones. Well, not unless Andy Burnout gets his way, and we all pay much more in taxes and have to sell off the rest of our armed forces. (NOT a typo!)

ALBERT JAMES: In Remembrance:
HJH July 2026

Thanks 499

Chart Section Index

Predictions

M01 Schedule

Polytones, XPA1, XPA2

En156

September 2026

PREDICTIONS

Daily Calendar

September 2026

Zulu Time

	Fam 3 E11/S11a [Sept & Oct]		E07	V32 0200 & 1800z	XPA1	XPA2	XPA2 MW
SUN	0600 8680 0700 9079 0830 6433 1605 5176 1645 4505 1745 13470 1815 11116 2000 5737			7842 or 7910 or Search			
MON	0315 11581 0450 5371 0600 19515 0700 8957 0715 19515 0745 10213 0900 13117 0915 6840	1045 12385 1300 5371 1745 13470 1900 7317		7842 or 7910 or Search		MSa 1500 17479 1520 16094 1540 14926	MW 0700 16113 0720 17497 0740 18179
TUE	0445 10728 0645 13470 0700 8180 0715 10213 0745 22995 0820 19185 0845 18168 1000 9951	1400 11420 1430 14972 1605 5176	TuF 1500 17452 1520 16272 1540 14875	7842 or 7910 or Search		TuF 1100 13431 1120 12131 1140 11431	
WED	0315 11581 0510 23004 0600 19515 0715 19515 0745 17410 0900 13117 0930 6940 1045 12385	1205 9399 1610 4181 1715 6923 1853 10213		7842 or 7910 or Search	WF 1210 12137 1230 11137 1250 10237		MW 0700 16113 0720 17497 0740 18179
THU	0445 10728 0645 13470 0700 8957 0745 22995 0820 9150 0930 6940 1300 5371	1530 10330 1715 12385 1900 7317 2000 5737	ThSa 1000 18287 1020 17471 1040 16135	7842 or 7910 or Search			
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SAT	0700 9079 0830 6433 1645 4505 1430 14972 1853 10213		ThSa 1000 18287 1020 17471 1040 16135	7842 or 7910 or Search		MSa 1500 17479 1520 16094 1540 14926	

PREDICTIONS

Daily Calendar

October 2026

Zulu Time

	Fam 3 E11/S11a [Sept & Oct]		E07	V32 0200 & 1800z	XPA1	XPA2	XPA2 MW
SUN	0600 8680 0700 9079 0830 6433 1605 5176 1645 4505 1745 13470 1815 11116 2000 5737			7842 or 7910 or Search			
MON	0315 11581 0450 5371 0600 19515 0700 8957 0715 19515 0745 10213 0900 13117 0915 6840	1045 12385 1300 5371 1745 13470 1900 7317		7842 or 7910 or Search		MSa 1500 1520 1540	MW 0700 0720 0740
TUE	0445 10728 0645 13470 0700 8180 0715 15720 0745 22995 0820 19185 0845 18168 1000 9951	1400 11420 1430 14972 1605 5176	TuF 1500 17461 1520 16161 1540 14361	7842 or 7910 or Search		TuF 1100 14537 1120 13437 1140 10737 [Expect weak]	
WED	0315 11581 0510 23004 0600 19515 0715 19515 0745 17410 0900 13117 0930 6940 1045 12385	1205 9399 1610 4181 1715 6923 1853 10213		7842 or 7910 or Search	WF 1210 14564 1230 13564 1250 11464		MW 0700 0720 0740
THU	0445 10728 0645 13470 0700 8957 0745 22995 0820 9150 0930 6940 1300 5371	1530 10330 1715 12385 1900 7317 2000 5737	ThSa 1000 17456 1020 16291 1040 14893	7842 or 7910 or Search			
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SAT	0700 9079 0830 6433 1645 4505 1430 14972 1853 10213		ThSa 1000 17456 1020 16291 1040 14893	7842 or 7910 or Search		MSa 1500 1520 1540	

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

XPA1 Wednesday/Friday schedule

Zulu >	XPA1 Wed/Fri Schedule		
Month v	H+10 1210 / 1310z	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 p Schedule [Mon/Wed]

Zulu >	XPA2 Sched p		
Month v	H 00 0700 / 0800z	H+20	H+40
Jan			
Feb			
Mar	17459	18578	19101
Apr	16342	17454	18345
May	16336	17462	18053
June	14878	15863	16347
July	14837	15854	16326
Aug	15843	16218	17424
Sept	16113	17497	18179
Oct			
Nov			
Dec			

SPECIAL MATTERS

Thanks to all our contributors:

Ary, BR, dMHZ, DanAR, Darryl, E, Gert, Hiram, HJH, Jochen, JPL, MG, PLdn, PoSW, RNGB

Apologies to anyone missed.



MESSAGES:

E: . Thanks for all your work and getting stuff in early. Hope all's well for you and yours.

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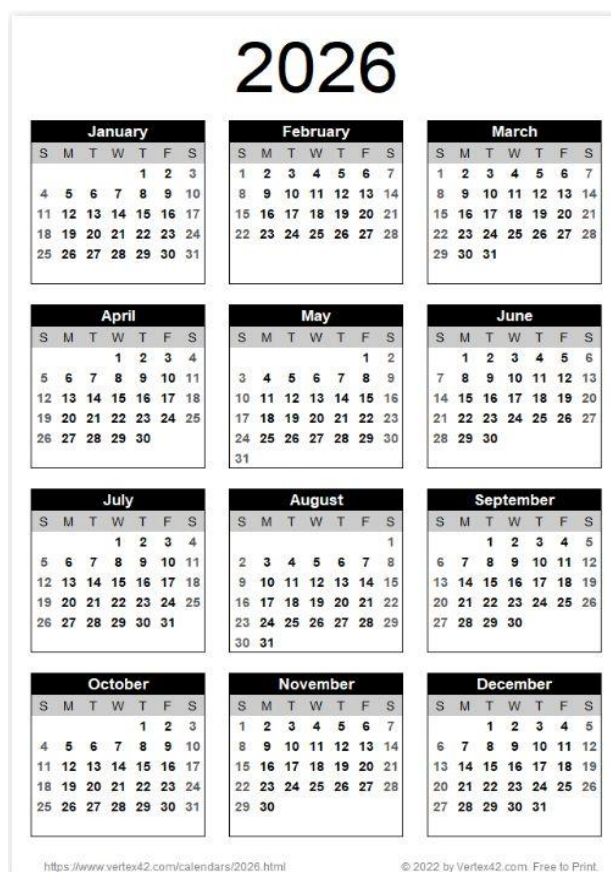
<http://www.enigma2000.org.uk>

Time zone information:

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

Encyclopedia of Espionage, Intelligence, and Security

<http://www.espionageinfo.com/>



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