ENIGMA 2000 NEWSLETTER

http://www.enigma2000.org.uk

The Military Commission for the City of Moscow

An interesting variety of antennae for which the word 'intercept' doubtless applies.
Note antenna bottom left.
Many thanks to contributing member

Change to ENIGMA 2000 Site Hosting

Some of you may have noticed that the site hosting ENIGMA 2000 website changed on the 06 June 2018.

Our new hosting has the added advantage of giving us considerably more space, so we have been able to restore all of the ENIGMA 2000 newsletters to the site for public reference & downloading.

Please note that links using the dsl.pipex.com generic addresses will cease to work at some time after the 16 July 2018 & that all sites linking to ENIGMA 2000 should only use our domain **http://enigma2000.org.uk** & no other address.

Thanks to Mike L for his support & assistance with the domain & changes

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http://www.enigma2000.org.uk

Editorial

Several interesting developments in the world of number stations noted over the last two months; there was an alternate day schedule from the S06 Russian Man first noted in the second week of May and carried on into early June, last heard at the end of the first week of that month but not found in the following days so possibly ran for about one month. The group count was always 50, first sending was at 1800z on 10423 kHz, although it was sometime before this was discovered owing to the weak signal, the second sending was always much stronger on 8167.

The first + third Fridays in the month S06, 2000 + 2100 UTC in June – it has the habit of moving back and forth by one hour on a regular basis - showed up with a full message of 95 5F groups on the 15th, a change from the usual four minutes of all the zeroes.

The Sunday + Wednesday E07 has been heard with messages which would at one time have been considered as unusually long with group counts of over 100 but are somewhat modest compared with the transmissions consisting of well over 200 5F groups heard in April.

Some unusual short-wave propagation observed in recent weeks, for example in the 40 metre amateur band on several occasions in the late afternoon and early evening the band was busy with many "inter-G" contacts, i.e. UK stations in QSO with each other, often with very strong signals. Usually a listen on 40, propagation is such that stations from Europe are heard, French, German, Italian and Spanish call-signs much in evidence, often heard talking to stations in the UK although these cannot be heard. On Sunday 24-June there were many UK stations on 40, including one operating /P in Yorkshire with only 20 watts and being heard with a strong signal, all commenting on how unusual it was to be able to communicate with each other so well.

Not number station but possibly interesting:-

Return of Shannon VOLMET on 5505 to a strong signal:- this SSB station which continually broadcasts weather information for various airports in western Europe has been a useful indicator of short-wave propagation for many years - until early November of last year when it was noted as a very weak signal and generally unreadable.
The poor reception continued right through the end of 2017 and into 2018 and it was clear that this was not due to propagation. Checking 5505 on most days always came up with a signal way down in the noise until 30-May-18 when a chance tuning over this part of the band found the Irish colleen back with a strong signal the like of which had not been heard for half a year. Slight background buzz noted and also that rustling or crackling sound which had been a feature in the past. Nevertheless, it has been a good signal at all times of the day since then, especially strong in the evening time.
One is given to wonder what was going on here? If it was a transmitter fault it seems strange that this would not have been noticed and the problem fixed early on.
The other thought that occurred was that had the transmit power been deliberately greatly reduced as the prelude to closing it down altogether? After all, HF SSB is a somewhat "old school" mode of communication in this day and age, and there must be other technologies such as digital data over geostationary satellites which could be used to sendinformation to commercial airliners in flight. If that was the case someone must have had second thoughts and cranked the power back up again.

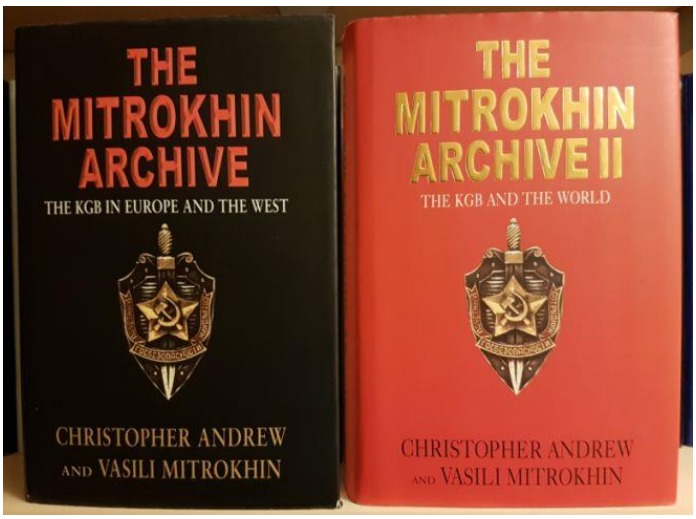
On another positive note, the other SSB weather station in this part of the short-wave spectrum on 5450, a YL voice with a distinctly British accent, now has a slower rate ofbspeech than was the case not so long ago.

Unusual traffic on M51/M51a frequency:- The station on 6825 kHz, usually operating in parallel with 3881 although this is not so well received in daylight hours, can often be heard with fast CW sending groups of five letters and sometimes with a few numbers and punctuation thrown in, as well as going into VVV DE FAV22.." mode at various times.
However, tuning in to 6825 at around 1720 UTC on Thursday 21-June - exact time not noted due to unfortunate events, I had started an audio cassette recorder going in order to be able to read the Morse at a leisurely pace but upon replay there was dead silence – not even some background hiss.
The first thought was that the ancient recorder had finally given up the ghost but the fault was with the C90 cassette; a piece of flat spring material which is there to act on a small felt pad which in turn pushes the tape firmly against the record/playback head had broken loose. In the half-century or so that the audio cassette has been around I have never known this to happen before. Sod's Law strikes again.
To return to the subject, the CW heard, as far I was able to read it, was "CQF CQF CQF DE F9(something), followed by what appeared to be a long list of French amateur radio call-signs, F4, F5 and F6 prefixes heard, each followed by three letters. A short while afterwards "VVV.....something" was heard, and some CW which appeared to be hand keyed. I have never heard this type of signal on 6825 before.

Station "RMP" still on with Morse traffic:- a daily transmission in CW had been noted in March and April starting up in the UK evening time with a "REO DE RMP" routine, heard on two different frequencies, 5293 and 8417 kHz. Not heard in May but was found in the second half of the month on another frequency:-

18-May-18, Friday:- 1833 UTC, 8191 kHz, weak CW in progress, appeared to be the same format as heard earlier in the year, the sequence "TIRE" heard several times, confirmed asbeing from the same source when it paused around 1830z then started up again with the familiar "REO REO REO DE RMP RMP QTC....." Heard many times in May and June starting up around 1700 UTC, nowhere near as strong as it was on 5293 back in March. Russian Navy in Kaliningrad, we are told, looks like this fits in with the M32a designation in the E2k Active Stations list.

Recommended Reading



Two excellent books compiled from carefully written notes by Vasili Mitrokhin, 'a major and senior archivist for the Soviet Union's foreign intelligence service, the First Chief Directorate of the KGB, who defected to the United Kingdom in 1992 after providing the British embassy in Riga with a vast collection of KGB files, which became known as the Mitrokhin Archive.' [Wikipedia].
These notes, apparently consisting of 25,000 pages and stored in a trunk under the floor of Mitrokhin's dacha were retrieved by MI6 officers on the exfiltration of Vasili and his family to Britain.
Interestingly Richard Tomlinson, the MI6 officer imprisoned in 1997 for attempting to publish a book about his career, and eventually published in Russia, was one of those involved.

Co authored with Christopher Andrew the two books provide an insight into the world of the KGB and indeed the SVR, its methods and many caught up in the Soviet web for reasons of ideology, money or blackmail. Codenames are provided and can easily be noted in the index.

One person who appears, an acquaintance of mine, was ex Detective Sergeant John Symonds who in his service with the Metropolitan Police was once partnered with rugby playing Detective Constable Alan 'Taffy' Holmes who later committed suicide in 1988 for reasons that cannot be discussed beyond what is written in the media of yesteryear.
SKOT, for that became John Symonds' codename, was investigated under Operation Countryman that dealt with corruption. Fearing the game was up [JS always stated his innocence to me in conversation] SKOT fled the UK and became the 'Romeo Spy.' A good looking chap the KGB trained him to seduce diplomat's wives and to pump them for secrets. One such contact was a woman employee at the British Embassy, Moscow codenamed VERA. Another was a female employee in India and codenamed JILL. From what John said to me the take from those women was dire and he never actually spied against the Crown.
John's story is interesting – did he use radio for contact from his handler ? He did but not in number station format.

In 1980 SKOT planned a return to the UK and arrived in 1981. On presenting himself to MI5 to be debriefed for his activities as a romeo spy Symonds was told to go away, branded a fantasist and a liar but later offered immunity from prosecution in 1984. The damning evidence here is that MI5 told JS to 'sling his hook.' You can imagine the bollockings that must have echoed around Thames House, and perhaps elsewhere, when the Mitrokhin Archive was released.

In his travels John went to Bulgaria where in Sofia, he met, courted and married Nelli Genkova. Incorrectly in this book Professor Andrew stated that Nelli Genkova Symonds was a member of the Bulgarian Intelligence Service [P563 in affected copies]. This was not so and a letter dated 19th August, 2003 apologises to John and Nelli Symonds for this statement and notes that the publishers of the book 'will be instructed forthwith to sign a letter guaranteeing that future editions of the book will be amended in an appropriate fashion.'

For the record, John who will soon be 83, is not a well man and with whom I have not had any contact with for some years is being looked after by his wife, Nelli. Whether he is in a home for the elderly or remains in his Folkestone flat is not known but one interesting thing has occurred in the interim.
Irrespective of promises of film blockbusters of his story, there have been at least three that have not occurred, JS managed to pen a book which Nigel West, a writer and commentator on intelligence matters, had dealings with and actually provided a foreword. John did tell me the reasons for him putting the manuscript on the internet and shunning West in its publication.

John Symonds' book not surprisingly was entitled 'Romeo Spy' You can download the script here: www.cryptome.org/0002/romeo-spy.doc

There is so much more in both these volumes, indeed there are names of people that I know, thankfully not because of business matters. The complexity of these two volumes does not suggest bedtime reading being more a reference work. Excellent volumes both.

A close up of the working parts atop the building in Moscow … note dipoles but also discones.

A book review from the Daily Telegraph [tnx KomradRuski Anon]

The spy who came into the lab — how the Soviets infiltrated MIT
Frances Wilson
24 June 2018 • 8:00am

https://www.telegraph.co.uk/books/what-to-read/spy-came-lab-soviets-infiltrated-mit/

Frances Wilson reviews The Spy Who Changed History by Svetlana Lokhova

This is Svetlana Lokhova's first book, but not her first brush with fame. Two years ago, she was awarded a £3 million payout against her former employer, the Russian bank Sberbank, for a campaign of sexual discrimination, harassment and victimisation that caused her a mental breakdown. Among the host of humiliations that Lokhova, a brilliant Cambridge graduate and By-Fellow of Churchill College, suffered at the hands of her male colleagues were the appellations "Crazy Miss Cokehead" and "Miss Bonkers".

No sooner had she won her legal case than Lokhova found herself falsely accused on social media of being a Russian spy and of setting a "honeytrap" for Donald Trump's former national security adviser, General Michael Flynn (who resigned from his post after 24 days). So it is a not inconsiderable achievement to have produced, amid this mayhem, a superbly researched and groundbreaking account of Soviet espionage in the Thirties.

The Spy Who Changed History is about how, in 1931, Stanislav Shumovsky (code name BLERIOT; known in America as Stan), a former Red Army solider, enrolled at the Massachusetts Institute of Technology to study aeronautical engineering. His remit, beyond getting a Master's degree, was to recruit American students as agents, and to identify, copy and send to Uncle Joe every technological treasure he could find. "We are 50 or 100 years behind the advanced countries," warned Stalin. "We must catch up in 10 years. Either we do it, or they will crush us."
spy

At stake was the defence of Russia against the threat of chemical warfare. Stalin urgently needed an aviation industry and the teachers at MIT were the best in the world. By 1947, the Soviets were able to build the Tu-4, a clone of the American Boeing B-29 Superfortress, and the most advanced strategic bomber in the world. Based on Shumovsky's intelligence, a "country of peasants with wood ploughs" had became a military powerhouse. Without him, Lokhova argues, it is hard to believe that the Soviets could have been prepared for Hitler, broken the US monopoly on the A-bomb or maintained the stalemate that kept the Cold War "from becoming a hot war".

The story of how one of America's top universities "gave" Soviet spies the means to build a superpower has been unearthed by Lokhova from previously undiscovered documents. The whole business beggars belief. NKVD agents were awarded long-term visas, allowed to film inside top defence and aviation plants, and regarded throughout without suspicion. So brazen was their intellectual heist that, within five years, Soviet students could enjoy the benefits of MIT's aeronautical expertise without needing to leave Russia because the spies even stole the course itself, transporting the content of the lectures back to Moscow.

Lokhova's aim is to unveil heroes – and a handful of heroines – rather than conduct a witch-hunt, and she describes her science-spies as "more talented and remarkable than the Cambridge Five traitors – Philby, Burgess, Maclean et al". As for her female intelligence officers, they were not, she insists, "honeytraps". Because Lokhova is on the side of the Soviets, she does little to explain the naivety of the Americans. It seems that, so long as the students paid their fees and remained more interested in understanding physics than undermining the government, nobody paid them much notice.

What it boils down to, Lokhova suggests, is that the Soviets overestimated the FBI and the FBI underestimated the Soviets. The head of the FBI's technical laboratory even demonstrated to a seminar of Soviet students the recently invented lie-detector, which would become a major tool in counter-espionage. Decades later, the FBI's chief investigator was still blind to the link between the Russian infiltration at MIT and the extent of Soviet science and technology espionage.

Lokhova describes her book as the "life story" of Shumovsky, but it is really a book about work, or the point at which dedication to work becomes your life. We know nothing about Shumovsky's private life – if such a thing existed. The fate of his first wife and daughter "is unclear", and his second wife, Tamara, with whom he had a son, is afforded one brief mention. Shumovsky appears in these pages an efficient cog in a wheel, an apparatchik hiding in plain sight. On a few occasions, Lokhova tries to humanise her subject: she describes him as having an "inward smile" when the Tu-4s soar through the air, and imagines him "breaking the tedium" of a plane journey back to Russia by "reflecting on the recent past".

This is an astonishing book about astonishing people, but its most remarkable achievement is to shift our perception of the centre of 20th-century espionage from Cambridge, England, to Cambridge, Massachusetts.

The Spy Who Changed History by Svetlana Lokhova
496pp, William Collins, £20, ebook £12.89
Call 0844 871 1514 to order from the Telegraph for £16.99

https://www.telegraph.co.uk/books/what-to-read/spy-came-lab-soviets-infiltrated-mit/

Jimmy Thirsk obituary
Intelligence analyst at Bletchley Park during the second world war who helped to crack the Enigma ciphers
Michael Smith

Mon 11 Jun 2018 17.25 BST

https://www.theguardian.com/world/2018/jun/11/jimmy-thirsk-obituary

Jimmy Thirsk joined the Intelligence Corps in 1942 and was first sent to Beaumanor in Leicesterhsire. A month later he and his colleagues moved to Bletchley Park

Jimmy Thirsk, who has died aged 104, was an intelligence analyst at Bletchley Park during the second world war, who worked with codebreakers to help crack the Enigma ciphers.

He joined the Intelligence Corps in April 1942, with no idea of what he was going to be doing, and was sent to Beaumanor, a large Victorian mansion near Loughborough, in Leicestershire, which had been requisitioned as a secret army base.

He was greeted by Lt Rodney Bax, the officer in charge, with the words: "I expect you're wondering what you've let yourself in for, Bombardier Thirsk?" Bax explained that he and his team were reading the "logs" taken by British intercept operators of German radio communications to work out which German units were located where and what they were doing.

Jimmy's first question was, were the British able to read the machine-generated Enigma ciphers used by the German troops? Jimmy recalled that Bax "told me that there had been occasional successes with simple ciphers but that we were not concerned with cryptography. He was a good liar."

A month later, Jimmy and his colleagues moved to Bletchley Park where the secret was finally revealed to them by Gordon Welchman, the head of Hut 6 where the German army and airforce Enigma ciphers were broken.

In The Bletchley Park Codebreakers (2011), a volume of accounts by former codebreakers and historians, co-edited by Ralph Erskine and myself, Jimmy described what a difference this made to their work.

"It was a memorable day for all of us. Before we were told about Enigma, we were trying to construct a picture with a jigsaw lacking many pieces. Now we had a new zest for the work, with access to a wealth of information about the German networks we were studying."
Jimmy Thirsk after giving a talk at Kellogg College, Oxford, in 2017 standing alongside a photograph of his wife, Joan, who was an honorary fellow of the college.
Jimmy Thirsk after giving a talk at Kellogg College, Oxford, in 2017 standing alongside a photograph of his wife, Joan, who was an honorary fellow of the college. Photograph: John Cairns

Jimmy spent three years at Bletchley, tracking the movement of German army and air force networks across Europe. Loose chatter by the German operators, a substantial amount of analysis and clever detective work, plus technical systems such as direction-finding, allowed Jimmy and his colleagues to build up an extensive picture of what each German unit was doing, ensuring the Bletchley intelligence reports could give a far more detailed account of the forces confronting the allies.

Welchman recalled in his own account, The Hut Six Story (1997), that the codebreakers at Bletchley were "amazed" by how far Jimmy and his fellow analysts "had been able to get without seeing a single decode". Their work provided frequent "cribs" – pieces of potential plain text believed to correspond with a part of the encoded message, that could be tested using the Bombe, an electro-mechanical device invented by Alan Turing – and they could often say when a message sent in one form of the cipher had also been sent in another, allowing both types of cipher to be broken.

Jimmy was born in Hull, east Yorkshire, where his father, Christian, was a Customs and Excise officer. He was brought up in nearby Beverley, initially by his mother, Clara, because his father had enlisted in the army at the start of the first world war.

After leaving Beverley grammar school at 16, Jimmy worked initially in the East Riding county library in Beverley and, after qualifying, crossed the Pennines to become branch librarian at Great Harwood in Lancashire. He was called up into the army in September 1940 and, after short spells in both the infantry and the artillery, applied to join the Intelligence Corps, which sent him first to Beaumanor and then to Bletchley Park.

At the end of the war in Europe, the German messages stopped coming in, to be replaced by French and Russian intercepts, to the consternation of Jimmy and some of his colleagues, who could not understand why the British were now collecting intelligence on their wartime allies.

"There was a group of us who didn't like this at all and we had, not exactly a mutiny, but a delegation," he said. "A group of 15 or 20 of us went to one of the officers in charge and made our complaint and said we didn't want to do it and he said: 'Well if you don't want to do this you're redundant.'"

While at Bletchley, Jimmy had met and fallen in love with a fellow intelligence analyst, Joan Watkins. They married in September 1945 and moved to London, where Jimmy returned to his job as a librarian, initially in Hornsey, north London, and Joan resumed her studies, becoming a leading agrarian historian.

When Jimmy retired in 1974, they moved first to Oxford, where Joan was reader in economic history, and then, on her retirement, to Hadlow in Kent. He remained active even after Joan died in 2013, taking river cruises along the Rhine from Amsterdam to Basle in 2016, and from Beaune to Avignon a year ago. Last year he received a standing ovation for a speech at Kellogg College, Oxford, to celebrate the college's links to Bletchley Park.

Alongside his contribution to The Bletchley Park Codebreakers, Jimmy wrote three books of his own, A Beverley Child's Great War (2000), Boyhood in Beverley: A Mosaic of the 1920s (2004) and a memoir of his wartime service, Bletchley Park: An Inmate's Story (2008), which was typically modest, making more of what his colleagues did than of his own work. "A lot has been made of Bletchley being full of geniuses," he said. "But most of us were just ordinary people doing our jobs."

He is survived by his son, Martin, and daughter, Jane, four grandchildren, Tom, James, Tim and Kate, and a sister, Betty.

• Jimmy Thirsk, intelligence analyst and librarian, born 30 May 1914; died 2 June 2018

https://www.theguardian.com/world/2018/jun/11/jimmy-thirsk-obituary

An interesting piece from 11th February 2018 Sunday Times:

INSIDE GCHQ
GCHQ Scarborough fixes its eyes on Moscow

A resurgent Russia is driving GCHQ to recruit more spies, David Collins discovers on an exclusive tour of its secret Scarborough outpost
David Collins, Northern Correspondent

February 11 2018, 12:01am, The Sunday Times
https://www.thetimes.co.uk/article/gchq-scarborough-fixes-its-eyes-on-moscow

On a windy hill in Scarborough, next to a slightly ramshackle sheep farm, one of Britain's most secret buildings sits behind a barbed-wire fence. It is a GCHQ base dating from the First World War, when our spies intercepted messages to and from the German fleet. More recently it spearheaded an investigation into Manchester bomber Salman Abedi's terror network.

The Sunday Times has been given exclusive access to the base as GCHQ today announces a significant expansion of its northern spy hub. It is recruiting 100 extra personnel to counter the threat from domestic terror and Russia.

A web of tall, thin antennae can be seen rising out of the surrounding fields as we drive to the base along a narrow road. We are greeted at the entrance by a group of senior intelligence officers and have to give up mobiles, tablets and laptops.

Simon, the head of GCHQ Scarborough, takes us inside the bunker and into the event management centre, where intelligence officers dealt with the aftermath of the Manchester bomb. We are the first news organisation to visit.

There are rows of computers and spotless white desks; no documents are left on show. In a room with walls of opaque glass is a live feed to GCHQ headquarters in Cheltenham. Staff dressed in casual shirts and jeans buzz around, looking more like Q than James Bond. Binary code decorates the walls.

"The Manchester bomb was a terrible night," says Simon, who is from Wales, speaks five languages, including Russian and Serbo-Croatian, and joined the spy agency in 1987 as the Cold War neared its end. Many of the officers we meet speak with surprising emotion of the night of the attack.

"I can't imagine what it must have felt like for those parents with children inside [the Manchester Arena] — the panic," he adds. "I had tickets to watch Kiss in concert [there] about a week later; it was an attack that felt very close to home. There was shock, then the training kicked in.

"We had a counterterror team working here through the night. There was an inevitable feeling of failure. A good day for us is when nothing happens. But then that's the problem. It's like the old saying: 'We have to get lucky all the time; they only have to get lucky once'.

"We can scan the horizon and prioritise but we can't see everything."

Simon is about 5ft 7in, with dark, slicked-back hair, and keen to emphasise that GCHQ wants a diverse range of staff. He says things have changed since the 1980s, when white, male Oxbridge types dominated the intelligence agencies.

GCHQ deals with intelligence from electronic communications and signals, which means intercepting messages. It also protects us from cyber-attacks. The Nazis' Enigma code was cracked by Alan Turing, who worked at Bletchley Park, a precursor to GCHQ.

Nik Mehta, a deputy director, says Stonewall has just named GCHQ one of the top 100 LGBT employers in the UK, and there is clearly a sense of pride in that achievement. A member of staff shows us a blog written by Emma G, who came out as transgender in 2014. Emma is the operations chief analyst for the National Cyber Security Centre, part of GCHQ. She writes: "My chosen name is Emma and pronouns she/her."

During the tour, Simon opens up a little about GCHQ's priorities, and there is one buzzword in the building: Russia.

"When I joined, it was at the height of the Cold War against the Soviet Union," he recalls. "When it ended, we were actively encouraged to move away from Russia. Things like 9/11 and 7/7 gave us more live, active targets to look at. But now things are coming back around and Russia is becoming the priority."

And what about Edward Snowden, the American intelligence official who blew the whistle on National Security Agency and GCHQ surveillance programmes? In 2013, it was reported that GCHQ could circumvent the legal process to access emails, photographs and videos from internet companies based outside the UK. The reports were based on information Snowden took from a GCHQ PowerPoint presentation.

"One of the things that happened as a result of that was that encryption on the internet came about more quickly. Gmail, Hotmail . . . everything is encrypted now," says Simon.

"I think with Snowden, the danger is that when you see a PowerPoint briefing or document and don't understand fully how it is used then you get a message across which is distorted."

One effect of Snowden was that the public became concerned private communications were being tapped unnecessarily. "If you are not committing a serious crime or undermining the country then we are really not interested in you," Simon insists. "There are so many people who want to cause us harm as it is that we have to prioritise."

We enter a room where trainees form teams to hack each other's computer networks. Referring to the recruitment drive, Simon says with a smile: "We want more northerners — they are the smartest."

So northerners make the best spies? "We don't like being called spies," cuts in a senior staffer, a young woman with short, spiky hair who looks like someone straight from the cast of the television drama Spooks. "We prefer 'intelligence officers'."

"Yes, we're not much like Bond," adds another. "More like geeks."

Does anybody watch Spooks? There is a murmur of laughter. "There's a joke in the intelligence community," says the young woman. "MI6 get Bond; all we get is Ruth from Spooks. There's a drinking game people play: put on an episode and each time GCHQ is mentioned, you have to drink."

Steve, a senior staffer who knows Boris Johnson and Theresa May, and helped organise security at the 2012 London Olympics, shakes his head. "My wife doesn't let me watch it with her. Spooks, [the reality TV series] Hunted . . . they're all the same. They make the breakthroughs look so easy. I'll tut all the way through until she turns it off."

Staff at Scarborough appear relatively open with their closest family members; it is not as strict as MI5 or MI6. However, there is still the inevitable security risk of working for an intelligence agency.

Simon, for example, is not on any social media: "There's too much information on Facebook. It's a great tool for us." What does he tell friends and family about his job? "Close family know what I do. That was pretty much blown a long time ago. But most of my friends think I'm a boring old civil servant.

"The ones who know sometimes ask me about where they should go on holiday. Should I go to Egypt this year? Is it safe? That sort of thing. I tell them to go check the Foreign Office website."

At the end of the tour we are shown into a boardroom for tea and introduced to another Emma, a 26-year-old from Scarborough who changed careers from being a maths teacher. She was on placement at a local school when GCHQ staff gave a presentation to sixth-formers.

"They came for the students but convinced the teacher instead," she says.

The mood becomes serious when the conversation turns back to the Manchester attack. Another young spy, George, a 22-year-old English literature graduate, was part of the team working the day after the bomb went off.

"I didn't hear until the morning, when it was on the news," he says. "It's hard to put into words, seeing something like that. Coming into work that day was almost dreamlike. People were devastated. You are constantly thinking: could it have been stopped? Could we have done more? I guess that's what keeps us going."

WATCHING BRIEF: KEY BASES

CHELTENHAM
Beginnings Staff moved into purpose-built building, nicknamed "the Doughnut", in 2004
Claim to fame Largest building for secret intelligence operations outside US. GCHQ director said to have no office, merely a desk in an open office space
Number of workers 5,500. It is Gloucestershire's largest single employer.
Recent jobs London Bridge terrorist attack; Manchester bomb

SCARBOROUGH
Beginnings Signals base in area has been operational since 1912. Moved to current location in 1943
Claim to fame Believed to be the longest continuously serving site for signals intelligence (intercepting messages) in the world
Number of workers Just over 200 — soon to expand to more than 300
Recent jobs Manchester bomb; protecting infrastructure from Russian cyber-attacks

INSIDE GCHQ
Transgender Emma comes out — and fits in
One of GCHQ's most senior and experienced analysts is transgender. Emma G joined the organisation...
February 11 2018
https://www.thetimes.co.uk/article/gchq-scarborough-fixes-its-eyes-on-moscow

There are some interesting comments that follow the article; well worth a read ……..

Morse Stations

All frequencies listed in kHz. Freqs are generally +- 1k
This is a representative sample of the logs received, giving an indication of station behaviour and the range of times/freqs heard. These need to be read in conjunction with any other articles/charts/comments appended to this issue.

UNID CW

UNID 1 - North Korean Military

André caught this station on 13 June via the Japan SDR - (Later identified as North Korean Military).

3387	1303 - 1401z	13 Jun	9M0 Wkg 9D9 88I UF8 (QSO and QTC) in Simplex Traffic	Via SDR Japan	CW	F5JBR	WED

CQ DE 9M0 QSA ? 5263 5263
9M0 DE 9D9 QSA 5 7425 K
9M0 DE 88I QSA 4 21457 K
9M0 DE UF8 GA GA AS
VVV VVV 9M0 DE 88I QSA 5 ? ? 8269
VVV VVV 9M0 DE 88I QSA 5 ? ? 8269
88I DE 9M0 QSA 4 QRU K
DE 88I QSA 5 ?? 8269 K
9M0 DE 9D9 QSA 5 5801 K
9D9 DE 9M0 QSA 4 K
9M0 DE 88I QSA 5 ? ? 8269 K
UF8 DE 9M0 QTC K
9M0 DE UF8 QRV K
UF8 DE 9M0 QTC NR 01 14 01006 13 2225 3000510 = = = 54228 98520 13156 11576 30216 41366 96601 40625 32546 65338 K

UF8 DE 9M0 QSL 01 ? K
1344z
DE UF8 QSL NR 01 K
DE 9D9 QSL NR 01 K
DE 88I QSL NR 01 K
CQ CQ DE 9M0 QRV 01 QRV 01 QRV 01
vvv vvv CQ DE 9M0 QCZ QCZ QRV 01 QRV 01 QRV 01 K
9M0 DE 88I QTC QTC NR 01 14 01006 13 2245 3000510 = = = 54228 98520 13156 11576 30216 41366 96601 40625 32546 65338 K = = = ABV ABV QTC QTC
NR 01 14 01006 13 2245 3000510 = = = 54228 98520 13156 11576 30216 41366 96601 40625 32546 65338 K
1351z
9M0 DE 88I QSL ? QSL ? K
88I DE 9M0 OK SK SK
88I OK SK SK
9M0 DE UF8 QTC QTC NR 01 14 01006 13 2245 3000510 = = = 54228 98520 13156 11576 30216 41366 96601 40625 32546 65338 K = = = ABV ABV QTC QTC
NR 01 14 01006 13 2245 3000510 = = = 54228 98520 13156 11576 30216 41366 96601 40625 32546 65338 K
End traffic 1401z (very low)

UNID 2 - Russian Network

Another one from André, this one heard on 27 June. Any information on this network welcomed.

7881	1212z	27 Jun	BRB3	Russian Military BEB3 Wkg 5 outstations (QSO and QTCs : PPPPP – MMMMM) in Duplex – Qsx on 7956kHz	Via SDR Japan	CW	F5JBR	WED

Before heard on 7956 kHz the following QTCs:
1212z
PNN4 QTC K
PNN4 116 = FF13 0138 1611 6118 1060 1457 4028 K
1218Z
BCB3 DE J1M7 QTC K
J1M7 897 = FFF3 3537 1611 1116 4060 1503 2537 2707 QTC
J1M7 745 = FF13 3538 1661 4111 6050 2458 5052 2707 QTC K
J1M7 348 = FF23 3539 1161 1616 1060 1458 2527 2707 QTC K
J1M7 991 = FF33 3540 1111 1661 1060 1456 2527 2707 K
1225Z
BCB3 DE DL7M QTC K
DL7M 414 = FF31 0537 1561 1661 1050 1505 2527 QTC K
DL7M 500 = FF32 0538 6111 1146 1060 1505 2527 QTC K
DL7M 594 = FF33 0539 1611 1116 6060 1505 2527 K

Morse - Number Stations

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

May 2018:

4905	2000z	01 May	'025'	984 30 = = 76175 ... LG 62253 = =	Strong, fast. Almost faultless, one error noted in grp17	CB	TUE
	2000z	03 May	'025'	215 30 = = 42710 ... LG 83211 = =	Good, steady. Grps 14 & 15 repeated. Other errors noted	BR	THU
	2000z	08 May	'025'	734 30 = = 30050 ... LG 44814 = =	Numerous errors. Partly 5-fig grps with some nonsense strings	CB	TUE
	2000z	10 May	'025'	821 30 = = 95026 ... LG 559593	Several errors. Ended 821 821 30 30 000 = = Confusion reigns!	CB	THU
	2000z	15 May	'025'	217 30 55060 ... LG 67482	Strong, steady. Two errors noted. Missing = = at start & ending	CB	TUE
	2000z	18 May	'025'	720 30 = = 05229 ... LG 53734 = =	Strong, rapid. Several errors Start DK 722220, LG 537344444	CB	THU
	2000z	22 May	'025'	660 30 34683 ... LG 41831 = =	Strong, steady. Several errors noted. Ended 00000	CB	THU
	2000z	24 May	'025'	271 30 48525 ... LG 23475 = =	Strong, rapid. No errors in msg. Missing = = at start	CB	THU
	2000z	29 May	'025'	211 30 57361 ... LG 47791	Strong, fast. Numerous errors. Missing = = at start & ending	BR	TUE
	2000z	31 May	'025'	218 30 = = 06394 ... LG 34553 = =	Strong, med-fast. Errors noted grps08 & 17, otherwise good	BR	THU

5280	1800z	01 May	'025' 850 30 = = 96554 ... LG 29651 = =	Strong, steady. 8888886 + error at start. Other errors noted	CB TUE
	1800z	03 May	'025' 133 30 = = 72231 ... LG 19252 = =	Good, steady. Errors noted grps05 & 30	BR THU
	1800z	08 May	'025' 728 30 = = 27020 ... LG ..... = =	Weak, fast. Weak signal. Poor copy. Faded towards end of msg	BR TUE
	1800z	10 May	'025' 821 30 = = 58648 ... LG 02137	Weak, slow. Two errors noted. Ended 931 931 30 30 000 = =	BR THU
	1800z	15 May	'025' 137 = 30 94829 ... LG 20967 = =	Fair, Med-fast. Several errors noted. DK GC sent as format 2	CB TUE
	1800z	17 May	'025' 932 30 = = 58828 ... LG 51772 = =	Strong, steady. Errors noted. Difficult copy in places	CB THU
	1800z	22 May	'025' 159 30 42636 ... LG 43666 = =	Weak, med-fast. Errors noted. Ended 00000. End DK GC format 2	BR TUE
	1800z	24 May	'025' 234 30 = = 2232 . ... LG 88637 = =	Weak, fast. Longer pauses between grps. Errors noted	BR THU
	1800z	29 May	'025' 122 30 = = 62569 ... LG . . . . . = =	Weak, fast. Difficult copy due to poor signal. Errors noted	BR TUE
	1800z	31 May	'025' 143 30 = = 98662 ... LG 13 . .6 = =	Weak, med-fast. Difficult copy. Long & short zeros used for GC	BR THU
6435	1500z	05 May	'025' 110 30 = = 49248 ... LG 60216 = =	Fair, slow. Difficult copy due to local QRM	BR SAT
	1500z	12 May	'025' 451 30 28404... LG 51504 = =	Weak, fast. Grp & repeat sent without pauses. Two noted errors	BR SAT
	1500z	19 May	'025' 140 30 = = 25876 ... LG 63197 = =	Fair/Good, steady. 2 x two grps repeated without error character	BR SAT
	1500z	26 May	'025' 997 30 = = 53758 ... LG 60473 = =	Fair, fast. Error in DK at start, sent extra 99.... otherwise no errors	BR SAT
6787	07**02**z	06 May	'025' 502 30 = = 90373 ... LG 12314= =	**Appeared on 6787 vs 6780.** Strong, steady. One error noted	CB SUN
6788	0700z	13 May	'025' 454 30 = = 10315 ... LG 47794 = =	**Appeared on 6788 vs 6780**	AB SUN
6780	0700z	20 May	'025' 301 30 = = 01802 ... LG 23108 = =	Back on Correct freq. Strong, fast. Errors inc. number strings	CB SUN
	0700z	27 May	'025' 665 30 = = 36075 ... LG 46026 = =	Fair, fast. Apart from a couple of hesitant pauses, no errors noted	BR SUN

June 2018:

4905	2000z	05 Jun	'025' 324 30 = = 43623 ... LG 51792 = =	Strong, med-fast. Excellent Morse. Perfect sending. No errors	BR TUE
	2000z	07 Jun	'025' 389 30 = = 78453 ... LG 41333 = =	Good, med-fast. Excellent, steady. Perfect sending. No errors	BR THU
	2000z	12 Jun	'025' 754 30 = = 58769 ... LG 45113 = =	Strong, slow. Much hesitation throughout. No errors	BR TUE
	2000z	14 Jun	'025' 169 30 59041 ... LG 73026	Good, med-fast. Irregular. Several errors inc. grp01 & grp30	BR THU
	2000z	19 Jun	'025' 372 30 96119 ... LG 43896	Strong, med-fast. No = = sent at start or end of msg. Many errors	BR TUE
	2002z	21 Jun	'025' 821 30 = = 08229 ... LG 54799 = =	Good, fast. Irregular & hesitant. Errors noted.	BR THU
	2000z	26 Jun	'025' 434 30 95530 ... LG 61307	Strong, med-fast. Irregular & hesitant. No = = sent at start or end	BR TUE
	20**02z**	28 Jun	'025' 843 30 = = = = 97654 ... LG 26397 = = = =	Strong, slow. One error noted & LG sent once only	BR THU
5280	1800z	05 Jun	'025' .13 = = Very weak signal. No useful copy		BR TUE
	1800z	07 Jun	'025' 581 30 = = 155 .8 ... LG	Weak, med-fast. Difficult copy. Several corrected errors noted	BR THU
	1800z	12 Jun	'025' 583 30 = = 43901 ... LG 64215 = =	Good, med-fast. Errors in call-up. One grp sent with 4-fig repeat	BR TUE
	1800z	14 Jun	'025' 765 30 83099 ... LG 34439	Good, very slow. No = = sent at start or end of msg. No errors	BR THU
	18**02**z	19 Jun	'025' 228 30 48495 ... LG 20114	Good, med-fast. No = = sent at start or end of msg. Several errors	BR TUE
	1800z	21 Jun	'025' 828 30 = = 85928 ... LG	Weak, fast. Only first 3 grps readable. Faded completely by EOM	BR THU
	1800z	26 Jun	NRH - QRM from XJT on 5278kHz may have obscured a weak signal, but nothing from M01 was heard		BR TUE
	1800z	28 Jun	'025' 832 30 = = 29879 ... LG 10533 = =	Several errors noted. Long zero used & some 4 fig.	GD THU
6435	15**08z**	02 Jun	'025' 638 30 = = 57514 ... LG 07546 = =	Fair, med-fast. Late start with short call-up. One error in grp03	BR SAT
	1500z	16 Jun	'025' 303 30 = = = = 21022 ... LG .7094 = = = =	Weak, med-fast. Staccato style delivery. Poor copy	BR SAT
	1500z	23 Jun	'025' 579 30 = = 28179 ... LG 90790 SK SK	Corrected error grp12. Msg ends SK SK	AB SAT
	1500z	30 Jun	'025' 273 30 88074 ... LG 04507	= = missing from both start & end of msg. No other errors	GD SAT
6780	0700z	03 Jun	'025' 911 30 = = 32174 ... LG . . . . . = =	Weak, Poor copy due to poor signal & QRM from XJT 6783kHz	BR SUN
	0700z	10 Jun	'025' 753 30 = = 62241 ... LG 52222 = =	Fair, med-fast. Good, steady Morse. Two errors (4-fig repeats)	BR SUN
	0700z	17 Jun	'025' 121 30 = = 05908 ... LG 81728 = =	Fair, fast. Irregular delivery with numerous errors	BR SUN
	0700z	24 Jun	'025' 917 30 = = 14379 ... LG 30112 = =		AB SUN

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

9411	0532z	05 Jun	751 (x3) 96894 (x2) 751 (x3) 96894 (x2) 751 (x3) 97919 (x2)	CW	F5JBR	TUE
9051	0541z	05 Jun	216 (x3) 64614 (x2) 216 (x3) 67467 (x2)	CW	F5JBR	TUE
10233	0620z	05 Jun	354 (x3) 78505 (x2) 354 (x3) 79326 (x2) 111 999 0..70 00030 56702 35129 17824 68523 15582 04206 67458 60295 31435 89351 89849 34356 03461 43184 83537 23871 26000 93641 54691 75615 09882 52640 76898 00464 73132 41922 42132 68544 73252 15473 00030 00072 00000 = 072 35 000	CW	F5JBR	TUE
5743	1413z (IP)	16 Jun	24757 26955 11015 111 000	CW	F5JBR	SAT
5743	1435z	16 Jun	111 999 111 999 120 15 = 56754 34523 87967 75654 54323 98056 12354 78656 89709 12354 78656 54223 87909 78676 23423 = 120 15 111 = 75654 78656 = 111 000	CW	F5JBR	SAT

M01b

May 2018:

4895//5340	2010z	04 May	Carrier present on both freqs - No audible mod.	BR	FRI
	2010z	11 May	'467' 937 31 = 33025 .... 96341 000 Fair//Weak 5340kHz Carrier only	BR	FRI
	2010z	18 May	'467' 937 31 = 33025 .... 96341 000 Fair//V.weak	BR	FRI
	2010z	25 May	Carrier present on both freqs - No audible mod.	BR	FRI
5065//5805	1940z	03 May	Weak signal heard on 5065kHz. Carrier present on 5805kHz	BR	THU
	1940 - 1958z	10 May	'936' 937 31 = 33025 .... 96341 000 Fair//Weak	BR	THU
	1940 - 1958z	17 May	'936' 937 31 = 33025 .... 96341 000 Weak//Fair	BR	THU
	1940z	24 May	Carrier present on both freqs - No audible mod.	BR	THU
	1940z	31 May	Weak signal heard on 5065kHz. Carrier present on 5805kHz	BR	THU
5075//5465	1902z	04 May	'336' Too weak to copy Weak//Weak	BR	FRI
	1902z	11 May	Carrier present on both freqs - No audible mod.	BR	FRI
	1902z	18 May	'336' Too weak to copy Weak//V.weak	BR	FRI
	1902z	25 May	Carrier present on both freqs - No audible mod.	BR	FRI
5095//5760	1832 - 1850z	10 May	'815' 937 31 = 33025 .... 96341 000 Weak// Strong STANAG RN Toulon	BR/HFD	THU
	1832 - 1950z	17 May	'815' Too weak to copy Weak// Present under strong XJT	BR	THU
	1832z	24 May	Carrier present 5095kHz Strong XJT on 5760kHz	BR	THU
	1832z	31 May	Carrier present 5095kHz Strong XJT on 5760kHz	BR	THU
5125//5735	1810z	21 May	Carrier present on both freqs - No audible mod.	BR	MON
5150//5475	1915z	21 May	'858' 937 31 = 33025 .... 96341 000 Weak//Fair	BR	MON

June 2018:

5065//5805	1940z	07 Jun	Weak signal heard on 5065kHz. Carrier present on 5805kHz	BR	THU
	1940z	14 Jun	Weak signal heard on 5065kHz. Carrier present on 5805kHz	BR	THU
	1940z	21 Jun	Weak signal heard on 5065kHz. Carrier present on 5805kHz	BR	THU
	1940 - 2000z	27 Jun	'926' ..... 63072 90866 = = 238 238 38 38 000 Weak//Fair	BR	THU
5075//5465	1902z	15 Jun	Carrier present on both freqs - No audible mod.	BR	FRI
	1902z	22 Jun	Weak signal heard on both freqs - No useful copy	BR	FRI
5095//5760	1832z	07 Jun	Carrier present 5095kHz Strong XJT on 5760kHz	BR	THU
	1832z	14 Jun	Carrier present 5095kHz Strong XJT on 5760kHz	BR	THU
	1832z	21 Jun	Weak signal on 5095kHz Strong XJT on 5760kHz	BR	THU
	1832z	27 Jun	Weak signal on 5095kHz Strong XJT on 5760kHz	BR	THU
5125//5735	1810z	18 Jun	Carrier present on both freqs - No audible mod.	BR	MON
	1810z	25 Jun	Carrier present on both freqs - No audible mod.	BR	MON
5150//5475	1915z	04 Jun	Carrier present on both freqs - No audible mod.	BR	MON
	1915z	18 Jun	Weak signal heard on 5475kHz. Carrier only audible on 5150kHz	BR	MON
	1915z	25 Jun	Carrier present on both freqs - No audible mod.	BR	MON
4895//5340	2010z	15 Jun	Weak signal heard on both freqs - No useful copy	BR	FRI
	2010z	22 Jun	Weak signal heard on both freqs - No useful copy	BR	FRI
	2010 - 2029z	29 Jun	'467' 238 30 = 68979 31406 ... 63072 90866 000 Weak//Fair	BR	FRI

M01b 5095//5760kHz 1832 - 1850z 10 May 2018

815 (R4m) 937 937 31 31 = =

33025 64188 45896 75878 65698 32365 02546 75895 64855 62365
96301 65266 42163 02798 85462 30279 42875 63490 65241 12563
79587 20558 96745 36300 97301 10730 59648 48620 24836 01346
96341 = =

937 937 31 31 000

Courtesy BR

M08a XVIII ICW / CW, some MCW

The report from AnonUS on M08a activity is not good news. However, given the reappearance of some transmitter activity on the M08a frequencies, we are hoping that the station is only off the air temporarily. Here is his brief report:
Following reports in the newsletter of thing going awry with M08a the situation worsened as we entered May. On Sunday 06 May a very weak M08a was heard on 8096kHz and since then there has been nothing heard. The humming transmitter heard during previous M08a absences has been mostly absent.

The last activity noted was a very brief transmitter check at approximately 1345z on 8096kHz on July 2nd so hopefully the absence has been due to transmitter problems.

May 2018:

8096	1400z	06 May	[18262 22051 35022] Extremely weak signal	AnonUS	SUN

June 2018:

8009	11 Jun	Faint hum from transmitter	AnonUS	MON
	13 Jun	Faint hum from transmitter	AnonUS	WED

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

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

Asiatic M12 Scheds

12193/11093/---	**0500/20/40z**	**10 May**	**122 000**	AB	THU
11093	**0520z**	**22 May**	**122 000**	AB	TUE

European M12 Logs

May 2018: **New scheds in bold type**

8047/6802/5788	1800/20/40z	07 May	463 1 (2398 98) 51164 60292....	BR	MON
	1800/20/40z	14 May	463 1 (4850 91) 88388 77464....	BR	MON
	1800/20/40z	21 May	463 1 (3096 94) 68119 89934....	BR	MON
	1800/20/40z	28 May	463 1 (1184 97) 13758 40832....	BR	MON
9167/10267/---	0500/20/40z	12 May	125 000	BR	SAT
	0500/20/40z	19 May	125 1 (6792 141) 56768 42327....	BR	SAT
	0500/20/40z	26 May	125 1 (6810 69) 88750 32698....	BR	SAT
9241/7541/6841	2100/20/40z	09 May	258 000	BR	WED
	2100/20/40z	16 May	258 1 (6792 141) 56768 42327....	BR	WED
	2100/20/40z	23 May	258 1 (6810 69) 88750 32698 ... 35804 24182 000 000	Gert	WED
	2100/20/40z	30 May	258 000	BR/Gert	WED
10343/9264/8116	1900/20/40z	03 May	124 1 (1553 111) 68986 27022....	BR	THU
	1900/20/40z	10 May	124 1 (1833 124) 70485 25162 ... 41703 20954 000 000	Gert	THU
	2000/20/40z	14 May	124 1 (9384 110) 54431 71824 ... 01357 80033 000 000	Gert	MON
	1900/20/40z	17 May	124 1 (6630 115) 34602 31582....	BR	THU
	2000/20/40z	21 May	124 1 (9264 110) 64829 18535 ... 93127 31491 000 000	AB/Gert	MON
	1900/20/40z	24 May	124 1 (2816 114) 21555 51409....	BR	THU
8116	2040z	28 May	124 1 (5295 107) 88666 30564 ... 47237 48662 000 000	Gert	MON
	1900/20/40z	31 May	124 1 (2212 125) 65190 57817....	BR	THU
13381/12181/---	**2110/30/50z**	**24 May**	**317 000**	Gert	THU
		31 May	317 000	BR	THU
13926/12126/10926	1310/30/50z	05 May	919 1 (9890 49) 56553 47145....	BR	SAT
	1310/30/50z	10 May	919 000	BR	THU
	1310/30/50z	12 May	919 000	BR	SAT
	1310/30/50z	17 May	919 1 (6600 55) 33758 99053 ... 09226 46517 000 000	Gert	THU
	1310/30/50z	19 May	919 1 (6600 55) 33758 99053....	BR	SAT
			(Not heard after 19 May)		
14377/13461/12114	1700/20/40z	03 May	317 1 (5329 102) 15961 35204....	BR	THU
	1700/20/40z	17 May	317 1 (8090 108) 47184 84849....	BR	THU
	1700/20/40z	24 May	317 1 (8557 109) 82430 92048 ... 75230 97145 000 000	Gert	THU
	1700/20/40z	31 May	317 1 (5473 106) 88907 14068....	BR	THU
16194/14794/---	**1950/2010/2030z**	**04 May**	**173 000**	AB	FRI
14794	**2010z**	**09 May**	**173 000**	BR	WED
	1950/2010/2030z	11 May	173 000	AB/Gert	FRI
	1950/2010/2030z	18 May	173 000	BR	FRI
	1950/2010/2030z	23 May	173 000	Gert	WED
	1950/2010/2030z	25 May	173 000	BR	FRI
	1950/2010/2030z	30 May	173 000	Gert	WED
17451/15951/14451	1400/20/40z	02 May	494 000	BR	WED
	1400/20/40z	07 May	494 1 (964 77) 21311 86085.... (17451kHz NRH)	BR	MON
	1400/20/40z	16 May	494 000	BR	WED
	1400/20/40z	21 May	494 000	Gert	MON
	1400/20/40z	23 May	494 000	Gert	WED
	1400/20/40z	28 May	494 1 (502 133) 16230 43224....	BR	MON
	1400/20/40z	30 May	494 1 (502 133) 16230 43224 ... 32760 51835 000 000 Very weak	Gert	WED

June 2018:

8047/6802/5788	1800/20/40z	04 Jun	463 1 (2037 92) 48435 05435....	BR	MON
	1800/20/40z	11 Jun	463 1 (7121 97) 97981 49799....	BR	MON
	1800/20/40z	18 Jun	463 1 (2123 93) 57552 45776.... Ceased call-up at 1801z & restarted	BR	MON
	1800/20/40z	25 Jun	463 1 (3276 99) 99065 37668....	BR	MON

9282/10982/12182	0500/20/40z	02 Jun	291 000	BR	SAT
	0500/20/40z	09 Jun	291 1 (267 77) 05385 30724....	BR	SAT
	0500/20/40z	16 Jun	291 000	BR	SAT
	0500/20/40z	23 Jun	291 1 (7847 117) 46590 61917 ... 58824 40261 000 000	AB/HFD	SAT
	0500/20/40z	30 Jun	291 000	BR	SAT
9986/9086/7386	2100/20/40z	06 Jun	903 1 (267 77) 05385 30724....	BR/HFD	WED
10343/9264/8116	2000/20/40z	04 Jun	124 1 (7384 106) 92422 67258 ... 63933 22439 000 000	Gert	MON
	1900/20/40z	07 Jun	124 1 (6145 124) 35115 06501 ... 31996 49850 000 000	Gert	THU
	1900/20/40z	14 Jun	124 1 (2498 116) 38448 31587....	BR	THU
	1900/20/40z	21 Jun	124 1 (3563 128) 90861 13927....	BR	THU
	1900/20/40z	28 Jun	124 1 (4426 117) 24617 93497....	BR	THU
14377/13461/12114	1700/20/40z	07 Jun	317 1 (5728 102) 82743 20285....	BR	THU
	1700/20/40z	14 Jun	317 1 (8158 108) 98639 80592....	BR	THU
	1700/20/40z	21 Jun	317 1 (3765 110) 04276 63218....	BR	THU
	1700/20/40z	28 Jun	317 1 (7321 109) 48772 17109....	BR	THU
14493/13393/---	**2110/30/50z**	**21 Jun**	**431 000**	BR	THU
	2110/30/50z	**25 Jun**	**431 000**	BR	MON
	2110/30/50z	28 Jun	431 000	BR	THU
16117/14717/13417	1400/20/40z	04 Jun	174 1 (229 93) 72835 10878 ... 62037 50784 000 000	Gert/HFD	MON
	1400/20/40z	06 Jun	174 1 (229 93) 72835 10878 ... 62037 50784 000 000	Gert	WED
	1400/20/40z	11 Jun	174 000	BR	MON
	1400/20/40z	18 Jun	174 000	BR	MON
	1400/20/40z	25 Jun	174 1 (479 161) 54736 52526 ... 85162 84414 000 000	Gert	MON
	1400/20/40z	27 Jun	174 1 (479 161) 54736 52626....	BR	WED
16217/14817/---	**1950/2010/2030z**	**06 Jun**	**284 000**	HFD	WED
	1950/2010/2030z	13 Jun	284 000	BR	WED
	1950/2010/2030z	**15 Jun**	**284 000**	BR	FRI
	1950/2010/2030z	20 Jun	284 000	BR	WED
	1950/2010/2030z	22 Jun	284 000	BR	FRI
	1950/2010/2030z	27 Jun	284 000	BR	WED
	1950/2010/2030z	29 Jun	284 000	BR	FRI

M12 10343/9264/8116kHz 2000/2020/2040z 14 May 2018

124 124 124 1 (R2m) 9384 110 9384 110

54431 71824 69400 59616 32259 99591 52100 65068 82535 12903
44819 67874 95721 35172 14352 79989 64939 28594 25378 52311
92368 55505 96245 43695 96679 80522 66014 32181 86959 47495
42148 01853 17275 12873 61668 36043 83219 99706 24580 45976
88962 40041 44683 24088 42269 00075 41787 48832 16226 38173
25790 13404 76380 66266 78191 66720 78165 44440 02018 96164
77114 53066 80944 49870 02244 53405 23380 90559 74174 36051
87644 67972 30660 35044 48874 61326 25221 37656 76383 31596
95617 57050 74867 64763 99512 40795 97102 07348 46367 52826
85988 57440 40456 40885 82101 15121 14521 95337 49850 48834
26822 06510 30070 81717 40260 05710 67369 73958 01357 80033
000 000

Courtesy Gert

M12 9282/10982/12182kHz 0500/0520/0540z 23 June 2018

291 291 291 1 (R2m) 7847 117 7847 117

46590 61917 91921 87176 24339 61153 09804 83541 00511 80754
22054 55703 18768 77576 13143 59298 70780 87740 89721 36740
97942 81376 92147 17575 92481 75464 60442 58812 27546 67176
51819 49791 59612 28868 95149 75320 04848 89328 48955 67686
70519 31189 98025 84651 88784 67471 92610 26337 89150 58172
21196 12629 93272 89653 56635 60489 25734 48830 18794 43129
00618 19512 46834 53300 21230 12562 22174 12520 56736 31888
04277 52855 97869 95137 58399 14347 68416 69127 13976 62588
85418 72123 19670 57006 17495 77566 96446 41989 84902 38128
27995 68429 95218 72873 89930 64756 73228 39600 21596 53779
43077 49256 30544 46498 04613 52042 79193 28045 49157 00890
64326 47258 58304 14005 99099 58824 40261 000 000

Courtesy AB

M14 IA MCW / ICW Short 0

This report received from PoSW on the '725' call:

First + Third Wednesdays in the Month 1600 UTC M14 MCW:-

This M14 constant carrier keyed audio tone with the call “725” had been noted back in February of this year on a frequency in the 5 MHz band, still around in the early summer having moved up a couple of MHz:-

16-May-18:- 1602 UTC, 7323 kHz, found in progress with “725 725 725 00000”, close to a strong broadcast station on 7325. Stopped at 1604:45s UTC so may have started after the hour.

06-June-18:- 7323 kHz, started about ten seconds before the hour, “725...00000”, competing well with the BC station on the HF side.
20-June-18:- 7323 kHz, “725...00000” again, had started when tuned in at approx. 1559:45s UTC, stopped around 1603:45s. *PoSW*

May 2018:

4650	0900z	05 May	523 (273 55) = 74653 26354 ... 48736 91023 00000	(Via SDR Russia)	MCW	AB	SAT
	0900z	19 May	523 (707 23) = 34256 76845 ... 89043 77277 00000	(Via SDR Russia)	MCW	AB	SAT
4730	0800z	05 May	523 (273 55) = 74653 26354 ... 48736 91023 00000	(Via SDR Russia)	MCW	AB	SAT
	0800z	19 May	523 (707 23) = 34256 76845 ... 89043 77277 00000	(Via SDR Russia)	MCW	AB	SAT
7323	1600z	16 May	725 00000			PoSW	WED
16347	0930z	10 May	617 00000		CW	AB	THU
18041	0500z	10 May	952 (738 50) = 50634 28337 58406 ... 59912 19773 84733 = = 738 738 50 50 00000		CW	AB	THU
	0500z	11 May	952 (104 55) = 09437 00177 50819 ... 89824 93238 14997 = = 104 104 55 55 00000		CW	AB	FRI
	0500z	22 May	952 (104 60) = 04397 38609 84729 ... 01269 67336 28473 = = 104 104 60 60 00000		CW	AB	TUE

June 2018:

5430	0800z	23 Jun	171 (121 56) = 45644 45646 ... 81230 67312 00000	(Via SDR Poland)	MCW	AB	SAT
5560	0900z	23 Jun	171 (121 56) = 45644 45646 ... 81230 67312 00000 [Test at 0828z: 67 17612 57032 08145 04176 07859 76197 0302]	(Via SDR Poland)	MCW	AB	SAT
6856	1821z	12 Jun	163 (124 89) = 12345 ...			HFD	TUE
6948	1600z	05 Jun	725 00000			HFD	TUE
7323	1600z	06 Jun	725 00000			PoSW	WED
	1600z	20 Jun	725 00000			PoSW	WED
7606	1900z	01 Jun	735 (R 3m 40s) 73 pause (46 sec) 594 66463 25 000, then off. **7615 kHz was expected**		MCW	AB	FRI
9463	1230z	20 Jun	801 (637 25) = 12256 3730923780 ... 73899 02376 69325 = = 637 637 25 25 00000		CW	dmhz	WED
18041	0500z	18 Jun	952 (638 50) = 44808 36443 94971 ... 89008 02076 89500 = = 638 638 50 50 00000		CW	AB	MON
	0500z	25 Jun	952 (681 50) = 88569 48041 33356 ... 36251 79282 81940 = = 681 681 50 50 00000		CW	AB	MON

M14 4730kHz 0800z 19 May 2018

523 (R4m) 707 707 23 23 = =

34256 76845 89056 76834 89723 56723 78923 10201 78912 89032 89034 56775 89034 12367 89326 89008 34512 76675 10101 78934 56564 89043 77277 = =

707 707 23 23 00000

Courtesy AB

M14 9463kHz 1230z 20 June 2018

801 (R4m) 637 637 25 25 = =

12256 37309 23780 79563 87652 59137 22662 50304 61208 17106 18059 28014 18132 67321 15778 43069 92014 61308 66279 87004 11697 74096 73899 02376 69325 = =

637 637 25 25 00000

Courtesy dmhz

M23 O ICW

No reports - Not unusual for this station, which is irregular. Also, may be difficult to catch as often operates for short periods without a schedule.

M24 IA MCW / ICW / MCWCC (high speed version of M14), short 0

No reports of M24 for some time now, although the slow version, M14, continues to be regularly logged.

M76 Schedule on 3280kHz (Changes to 3820kHz or 3294kHz over the year). A detailed analysis can be found in ENIGMA Newsletter 93 - May2016.

Difficult to receive with a good signal into the UK most of the time, monitors rely on various SDRs for logs of this station.

No reports

M97 CW, partner station to V30 10375kHz Starts 1453 - 1500z (Variable) .

Due to the poor reception of this signal in both the UK and Canada, GlobalTuners receivers at Hong Kong, Mojave Desert & Sydney - as well as the Twente SDR, were used frequently to confirm the msg detail.

No reports for a long time on this one. May now have ceased.

Morse Stations - Not Number Related

M51 XlX

3881//6825 Usual unscheduled & random continuous transmissions heard throughout January & February, often ceasing just before, or commencing shortly after the daily M51a transmissions. These seem to be almost continuously transmitted on these two frequencies now.

6825	0937z	26 May	CVRTD XKALP DLMSH etc	Continuous Fast Morse	Very strong	PLdn	SAT
3881	0629z	31 May	MCIWO 52901 SNHWY etc	Fast sending	Very strong	PLdn	THU

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

3881	1959z	26 May	VVV VVV VVV DE FAV22 repeated [My stn closed due to storm]	Very strong	PLdn	SAT
6825	0905z	13 Jun	DE FAV22 FAV22 FAV22 repeated [slow then into fast groups at 0914z]	Very strong	PLdn	WED

3881//6825

1130 - 1156z	21 Jun	Jeudi- Leçon	04-1/1 Codé, 04-1/2 Clair, 04-1/3 Codé, 04-1/4 Clair (840 grps/hr)		BR	THU
1130 - 1217z	25 Jun	Lundi-Leçon	01-2/1 Codé 01-2/2 Clair, 01-2/3 Codé, 01-2/4 Clair (420 grps/hr)		BR	MON
1130 - 1206z	26 Jun	Mardi-Leçon	02-2/1 Codé 02-2/2 Clair, 02-2/3 Codé, 02-2/4 Clair (600 grps/hr)		BR	TUE
1130 - 1207z	27 Jun	Mercredi- Leçon	03-2/1 Codé, 03-2/2 Clair, 03-2/3 Codé, 03-2/4 Clair (720 grps/hr)		BR	WED

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).

3224 3619 3642	4367 4392 4393 4433 4521 4873	5054 5477 5556 5558 5678 5790 5885	6921		8797 8800	10332 10450 10566

New Scheds for May / Jun 2018: **From logs submitted from JPL & F5JBR**

3378	New Round Slip for this frequency	First heard 03 June	V 2VWR (x3) DE S4EB (x2) [//4783 still sending V C4TY (x3) DE NSF5 (x2)]
3378	Both frequencies sending same Round Slip // Round Slip being sent at a different speed	First heard 11 June	V C4TY (x3) DE NSF5 (x2)
3378	Sending different Round Slip Known Round Slip for this station	First heard 19 Jun	V JU7B (x3) DE 3FCSJ (x2) [//4783 still sending V C4TY (x3) DE NSF5 (x2)]
3378//4783	Both frequencies sending same Round Slip	First heard 19 Jun (Later)	V C4TY (x3) DE NSF5 (x2)
3642	New frequency for this Round Slip	First heard 20 Jun	V DKG6 (x3) DE 3A7D (x2)
5780	New frequency for this Round Slip	First heard 23 Jun	V DKG6 (x3) DE 3A7D (x2)

Chart of M89 Freq & Call signs heard in May / Jun 2018 **New Scheds shown in Bold Type** **From logs submitted from JPL & F5JBR**

Freq in KHz	Call Slip
3238//NRH	V M8JF (x3) DE RIS9 (x2)
3238//4870	V M8JF (x3) DE RIS9 (x2)
3238//6874//8157	V M8JF (x3) DE RIS9 (x2)
3238//4870//6874//8157	V M8JF (x3) DE RIS9 (x2)
3378//NRH	V C4TY (x3) DE NSF5 (x2)
3378//4783	**V 2VWR (x3) DE S4EB (x2)**
3378//4783	V C4TY (x3) DE NSF5 (x2)
3378//4783	V JU7B (x3) DE 3FCX (x2)
3378//4783	V C4TY (x3) DE NSF5 (x2)
3642//NRH	V DKG6 (x3) DE 3A7D (x2)
3642//5801//10180	V DKG6 (x3) DE 3A7D (x2)
4131//NRH	V JKDJ (x3) DE SLBC (x2)
4620//4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
4720//**5150**	VVV WNF (x3) DE FXM (x2)
4783//3378	**V C4TY (x3) DE NSF5 (x2)**
4860// 6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ?

Freq in kHz	Call Slip
4870//NRH	V M8JF (x3) DE RIS9 (x2)
4870//6874//8157	V M8JF (x3) DE RIS9 (x2)
5177//NRH	V JKDJ (x3) DE SLBC (x2)
5780//NRH	V DKG6 (x3) DE 3A7D (x2)
5801//NRH	V DKG6 (x3) DE 3A7D (x2)
5801//10180	V DKG6 (x3) DE 3A7D (x2)
6840//10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K
6874//NRH	V M8JF (x3) DE RIS9 (x2)
6874//8157	V M8JF (x3) DE RIS9 (x2)
7620//8350	V WNF(x3) DE FXM (x2) (R5) QSA ? QSV K
8157//NRH	V M8JF (x3) DE RIS9 (x2)
10180//NRH	V DKG6 (x3) DE 3A7D (x2)
10378//NRH	V C4TY (x3) DE NSF5 (x2)
10640//NRH	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K

5054	L4YK	1204z	19 Jun	L4YK (QSO and Message from XX4E)	Via SDR Japan	F5JBR	TUE
				NR 039 CK 10 24 06 19 2000 ; and QRU and SK) in Duplex – Qsx on 4804			
3619	H4VL	1330z	20 Jun	H4VL Wkg S..R DML8 DUK4	Via SDR Japan	F5JBR	WED
				Comms checks and MSG			
				NR 0166 CK101 27 06 20 2130 RMKS 3223 TO 3257 3389 = 5UTT 64A5 … / .. in Duplex – Qsx on 3829			
	DUK4 sent MSG on 3829 kHz			NR 0246 CK 101 27 06 20 2130 RMKS 3389 TO 3223 = A345 D65A …/…)			
7560	CQL2	0801z	27 Jun	CQL2 Wkg GUS4	Via SDR Japan	F5JBR	WED
				NR 0006 CK 100 65 06 27 1540 RKMS 9559 TO 9556 = (Grps 4 Letters/figures) in Duplex			

M89 3224kHz 1701 (IP) - 1703z 17 May 2018
39 TO 89.9 /8649/.97./8699/8669/8660/8989/5398EE (In Progress – Machine sent – 1701z)
RMKS BT 8939 TO 919/8649/8979/8699/.569/8660/8989/5398/8119/.41./8939 AR K (1702z)
MSG NR 1.. BT BT BT
5TN. D3U4 4U7N 7645 5DUA T743 A54N NTDU TA3N TTU5 563U ANDT (Cont'd – 1703z)

M89 10332kHz 1023 (IP) - 1040z 17 May 2018
1803 AR (IP – Hand sent – 1023z)
VV LFQC DE HVDK BT YR NR 05 7G QSL TIME 1803 AR (1023z)
VVV LFQC DE HVDK BT BT YR NR 05 MGS QSL TIME 1803 AR (Cont'd - 1037z) (Silent - 1040z)

M89 4783kHz 1513 (IP) - 1514z 07 June 2018
V C4TY (x3) DE NSF5 (x2) (IP - Cont'd)
MSG NR 028 CK 499 499 68 0607 BT (IP – 1513z)
U6DN 5A4N (Cont'd – 1514z) (// 3378 also in tfc - however sending slower)

M89 4521kHz 1212 (IP) - 1213z 08 June 2018
NR 910/EX 2015 BT (IP – 1212z)
FSD/0FC
NR 910/EX 2015 BT
NR 910/EX 2015 BT
FSD/0F AR QSY TO 11 NR QSY TO 11 NR QSY TO 11 NR VVV (1213z)

M89 6921kHz 1227 (IP) - 1234z 15 June 2018
OK NR NR 0384 CK 30 24 0615 2000 RMKS 5375 TO 7483 K K (IP - Hand sent - 1227z)
R NR NR 0384 CK 30 24 0615 2000 RMKS 5375 TO 7483 K K (1228z)
NR NR 0384 CK 30 24 0615 2000 RMKS 5375 TO 7483 K K (1230z)
R R BT BT (Other station N/H on this frequency)
76DT 7NT5 6U75 6UTN ATN4 UTA5 U46D U7T5 N643 A47N
536D 5T6U 533N 3ATD A7TU DTU4 547T DU7N 7DNA D4TU
6753 65TN3ANT NUA7 NT64 3D73 U6DN 5ANU 5N63 D64A AR AR K (1232z)
SK SK (1234z)

Courtesy JPL

M95 O XSV, XSV70, XSV85

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

3289//NRH	1212 - 1224z	15 Jun	MSG NR 184/CCK 199 96 0615 1640 RMKS BT 0346 TO 0303/9430//9430/0353/0383/0783/1661/0673/0563/0633/0883 TO 0346 AR K	JPL	FRI
3642//NRH	**Call Sign 3A7D**	(Active daily - only first log has been included)			
3642//7602	**Call Sign 3A7D**	(Active daily - only first log has been included)			
	1807z	01 May	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd) (Remote tuner Siberia)	JPL	TUE
4243//NRH	Message number differs from current XSV70 and XSV85 message numbers.				
	1142 (IP) - 1152z	23 May	NR 041 CK 18 35 0523 1515 BT (Remote tuner China)	JPL	WED
			NR 46 CK 126 35 0523 1625 BT	JPL	WED
	1143 (IP) - 1154z	25 May	NR 045 CK 20 35 0525 1530 BT (Remote tuner China)	JPL	FRI
			NR 050 CK 15 35 0525 1642 BT	JPL	FRI
	1144 (IP) - 1150z	07 Jun	NR 071 CK 18 35 0607 1513 BT (Remote tuner China)	JPL	THU
			NR 14 CK 14. 35 0607 1606 BT	JPL	THU
	1144 (IP) - 1200z	08 Jun	NR 073 CK 35 0608 1550 BT (Remote tuner China)	JPL	FRI
			NR 16 CK 125 35 0608 1605 BT	JPL	FRI
			NR 092 CK 14 35 0608 1622 BT	JPL	FRI
	2350z (IP)	11 Jun	Mostly Unreadable (Remote tuner China)	JPL	MON
	1144 (IP) - 1155z	12 Jun	NR 081 CK 28 35 0612 1530 BT (Remote tuner China)	JPL	TUE
			NR 005 CK 30 35 0612 1630 BT	JPL	TUE
			NR 24 CK 193 35 0612 1650 BT	JPL	TUE
	1143 (IP) - 1152z	15 Jun	NR 87 CK 17 35 0615 1500 BT (Remote tuner China)	JPL	FRI
			NR 30 CK 105 35 0615 1625 BT	JPL	FRI
	1146 (IP) - 1152z	22 Jun	NR 002 CK 17 35 0622 1506 BT (Remote tuner Siberia)	JPL	FRI
			NR 44 CK 130 35 0622 165. BT	JPL	FRI

4243//9054	Message number differs from current XSV70 and XSV85 message numbers.					
	1142 (IP) - 1216z	03 May	NR 001 CK 22 35 0503 1500 BT	(Remote tuner China)	JPL	THU
			NR 083 CK 18 35 0503 1602 BT		JPL	THU
			NR 06 CK 162 35 0503 1617 BT		JPL	THU
	1141 (IP) - 1212z	10 May	NR 015 CK 22 35 0510 1506 BT	(Remote tuner China)	JPL	THU
			NR 005 CK 13 35 0510 1636 BT		JPL	THU
			NR 20 CK 140 35 0510 1650 BT		JPL	THU
4364//8073	Call Sign XSV85					
	1130 - 1141z	03 May	NR 0375 CK 209 35 0504 1615 BT	(Remote tuner China)	JPL	THU
	1130 - 1139z	10 May	NR 0389 CK 150 35 0510 1308 BT	(Remote tuner China)	JPL	THU
	1130 - 1139z	23 May	NR 0413 CK 106 35 0523 1743 BT	(Remote tuner China)	JPL	WED
	1139 - 1143z	07 Jun	NR 0470 CK 234 35 06 07 1556 BT	(Remote tuner China)	JPL	THU
	1130 - 1143z	08 Jun	NR 0476 CK 266 35 0608 1601 BT	(Remote tuner China)	JPL	FRI
	1138 - 1142z	15 Jun	NR 0508 CK 285 35 0615 1614 BT	(Remote tuner China)	JPL	FRI
5414	**Call sign 5AQT**			(Via SDR Japan)		
	1320z	18 Jun	Wkg JC4Z MSG NR 06 CK23 44 0524 0810 = U67A U6N6 UN67 …/…) & KPW6 MSG NR 16 CCK CK20 89 06 03 1605 RMKS 3344 TO 3347 =		F5JBR	MON
5801//10180	Call Sign 3A7D	(Active daily - only first log has been included)				
	1108z	01 May	V DKG6 (x3) DE 3A7D (x2) (IP - Cont'd)	(Remote tuner Siberia)	JPL	TUE
5897	05 05 05					
	0750 (IP) - 0757z	02 May	R IEC BT 12345678 (Normally used during Exercise)	(Remote tuner South Korea)	JPL	WED
7123	1639z	19 Jun	QGZX Wkg GHYC (QSO and QTCs) in Duplex – Qsx on 6985	(Via SDR Japan)	F5JBR	TUE
7609	0915z	27 Jun	5HVN Wkg HF7X NR 143 CCK CK30 37 06 27 1715 RMKS 4596 TO 4651 = (Grps 4 Letters/figures) in Simplex	(Via SDR Japan)	F5JBR	WED
10180	**Call Sign 3A7D**	(Active daily - only first log of round slip has been included)				
	0657z (IP)	02 May	V DKG6 (x3) DE 3A7D (x2)	(Remote tuner Siberia)	JPL	WED
	0628z (IP) - 0632	03 May	HR SVC GA NR 046 1430 RMKS 5.1.2 TO 5526 BT	(Remote tuner Siberia)	JPL	THU

M95 4243//9054kHz 1142 - 1214z 03 May 2018

In Progress - In Chinese digital 4+4 QPSK 75/3000 - LSB

Switched to CW Hand sent (1147z)
VV HR MSG TO YR PSE CY (1147z)
NR 001 CK 22 35 0503 1500 BT
5TD UTT TT3 3U6 7TA N44 3A4 35U 4A5 34A N3D 4AA U7U N4A 446 3DA TTU TT3 773 447 3D3 4D6 AR
MSG AGN
NR 001 CK 22 35 0503 1500 BT (Rpts message – 1150z)
AR
A HR MSG GA
NR 083 CK 18 35 0503 1602 BT
UT5 TT3 3U6 3A4 TTA TTU TT3 773 35U U4T
353 4AU 446 467 4D6 N3D 4D3 3DU AR
MSG AGN
NR 083 CK 18 35 0503 1602 BT (Rpts message – 1153z)
AR
A HR MSG GA
NR 06 CK 162 35 0503 1617 BT
UTU TT3 3U6 3A4 TTU 773 N44 5AA 75U 35A (1156z)
AR (1204z)
7G GAN
NR 06 CK 162 35 0503 1617 BT (Rpts message – 1205z)
AR (1214z)
A HR UP SB WK (1214z)

Switched to voice – USB – Chinese – Female –
Now V26 Sked – 1216z

Courtesy JPL

M95 5700kHz 0756 - 0806z 18 May 2018

GMQM

V 7UG2 DE GMQM K (IP – Hand sent 0756z)
R QSA 2 K
R QSA 3 K (Both stations on this frequency)
R IEC BT 1323 AR K (Normally associated with exercise)
R ....
R HR 7G K
R OK GA
R 7G **NR 044/CCK CK 19 03 0518 1555 RMKS 7546 TO 7588 K**
R OK GA
R BT BT
.5D 3TA7 .4N6 53D A7U4 6NT5 3D.A 4U53 (Cont'd – 0758z)
AR
R
R QSL 155. K
R HR WK NR 1241 K
R NR .05 AR
R VA
R SK AR (0759z)
V YQ1N DE GMQM K (0801z)
R **IEC BT 1323 AR K** (Other station N/H on this frequency)
R 7G **NR 045/CCK CK 1. 03 0518 15.. RMKS 7546 TO 7515 K** (0803z)
R RPT NR 045/CCK CK
BT BT 6N4A UD3. T76A 4N.. (Cont'd – fading – 0803z)
AR
R HR WK NR 1241 K
R SK (0805z)
V AA. DE GMQM K (0805z)
V 4AE DE GMQM K
V S..... K
V VV (0806z)

Courtesy JPL

Contributors: AB, AnonUS, BR, CB, dmhz, F5JBR, GD, Gert, HFD, JPL, PLdn, PoSW *Thank you all for your logs.*

Voice, Polytone, Tones, Hybrids and FSK

E06

From RNGB : E06 May/June log:

Thursdays 0300z 14932kHz 0400z 12212kHz
28/06 '361' 857 36 22720……etc (Tks HfD)
No reports

First /Third Thursday (repeats Friday) 0500z 14565Hz 0600z 16125kHz
03/05 '460' 389 52 73293 57070 84265 84372 45063 62809 35598 95241 74044 06340 61127 35996 12003 10336 68431 90691 84068 02183 78110 55662 13586 81968 82470 26796 26741 89393 98842 59852 22922 99300 65956 46120 21730 00496 56830 70589 22596 37569 06596 44827 37927 20383 78701 31756 85728 30928 17935 04509 52631 82225 63697 06553 389 52 00000

17/05 '460' 237 51 88483 63671 21003 89273 36844 21657 84717 91120 84240 08318 10858 08165 12011 14113 45538 65088 89147 36903 17601 78740 38059 54536 20256 10063 12938 60405 07652 40716 51655 66692 29835 41606 87132 04972 54517 75489 29121 78866 49103 00848 52336 48439 21406 69222 51862 51014 42493 33194 51798 88108 00098 237 51 00000

0500z 13895kHz 0600z 15830kHz
21/06 '328' 609 54 26775 41945 36703 90583 13409 83590 86417 42227 64892 97722 91354 91682 03141 79252 27692 03044 39456 14161 47677 24233 21936 60281 02272 94020 39219 09820 72494 92474 41533 38294 32892 52070 64949 69596 95574 71616 69808 11851 08259 00218 29238 43755 04749 83428 28707 56107 31295 88814 62553 78190 97276 53084 38421 74601 609 54 00000

First/Third Thursday of month * 2030z 5948kHz (frequency may vary slightly)
No reports

Friday following First & Third Thursday 2130z 5731kHz (frequency may vary slightly)
04/05 & 22/06 '315' 183 77 73413 48673 92659 68289 43584 32573 24589 34134 65918 95946 19647 87484 25986 28546 59196 27324 59872 48247 28485 96176 87475 92763 83465 14592 56293 28983 29384 98329 21839 32874 93284 98324 59693 25932 15959 61893 26498 23128 96197 12387 13249 76324 76743 43656 87961 28763 54872 35812 54871 63248 64726 56295 91262 52964 52765 43532 47274 12636 32127 63163 47263 47623 76275 26543 76437 36437 64236 43764 28976 49276 42897 73428 34563 92473 91242 17492 27491 183 77 00000

From PoSW:

***First + Third Thursdays in the Month 2030 UTC Schedule:-**
17-May-18:- 5933 kHz, calling "724", DK/GC "134 134 57 57", one of the messages from a pool which appear frequently on both the Thursday/Friday E06 and related G06 schedules.

7-June-18:- 5934 kHz, call "724", DK/GC "847 847 58 58".

21-June-18:- 5940 kHz, "724" and "183 183 77 77", started almost one minute before the half-hour.

Friday 2130 UTC Schedule Following First + Third Thursdays:-
18-May-18:- 5731 kHz, call "315", DK/GC "134 134 57 57", as on Thursday 17-May.

8-June-18:- 5731 kHz, managed to be on frequency early enough to catch the start-up, voice began at 2128:23s UTC, "315", DK/GC "183 183 77 77".

E07

Readers will recall the question of Russian annexation of Crimea in February and March of 2014 and the apparent 'radio wars' that started with transmissions on 10243 and 10250kHz accordingly. Those transmissions were sent by Russia and answered in part by a mass of MainSail [or whatever they are called nowadays] from the US.
Thanks to Gert's diligence Russia's latest offering from 10250kHz comes to light; sent for whatever reason:

E07 10250kHz0930z 04/06 [687 1 6484 52 15480 ... not completed] Gert MON

Re commencing at 0933z, 10250kHz, in progress, with problems...
At 09.33z:
15480 49312 02368 53325 22078 63083 67477 04311 54828 66197
13730 85703 19585 37598 10209 83781 92012 30178 46270 58074
90215 01632 58994 89451 35803 57403 93941 99851 24853 67331
64451 4

Pause

687 687 687 1 (R9x)

6484 52 (R2x)

15480 49312 02368 53325 22078 63083 67477 04311 54828 66197
13730 85703 19585 37598 10209 83781 92012 30178 46270 58074
90215 01632 58994 89451 35803 57403 93941 99851 24853 67331
64451 41170 27592 28474 90849 86377 74087 48427 77158 58921
72692 65062 78492 87618 34297 19354 07050 57160 87790 93130
7274
Pause

687 687 687 1 (R6x)

90215 01632 58994 89451 35803 57403 93941 99851 24853 67331
64451 41

Transmission stopped. Message was not completed.

PoSW's logs and analysis:

Sunday + Wednesday Schedule, 1700 UTC Start:-
6-May-18, Sunday:- 1700 UTC, 14763 kHz, weak signal, unreadable, carrier went off around 1702:15s UTC so must be "no message".
1720 UTC, 13363 kHz, weak, could just about hear "731" and "000" a few times.
Whatever was going on in the month of April to require the extremely long messages which were a feature of this E07 schedule has come to an end, evidently.

9-May-18, Wednesday:- 1700 UTC, 14763 kHz, "731 731 731 000", not too strong but with reasonable audio.
1720 UTC, 13363 kHz, second sending, again not strong but no problem to copy.

13-May-18, Sunday:- 1700 UTC, 14763 kHz, back in "full message" mode, "731 731 731 1", DK/GC "263 129" x 2, which would at one time be considered to be a long message but not when compared with the activity from this schedule in April. Total transmission time a bit over fifteen minutes, S9 with better than usual audio.
1720 UTC, 13363 kHz, S8 with good audio.
1740 UTC, 12163 kHz, also S8 with good audio.

16-May-18, Wednesday:- 1700 UTC, 14763 kHz, "731" and "263 129" again, weak signal at first but rapidly improved, S9 by 1704 UTC.
1720 UTC, 13363 kHz, and 1740 UTC, 12163 kHz, both around S9.

20-May-18, Sunday:- 1720 UTC, 13363 kHz, "731 731 731 1", DK/GC "265 134" x 2, over S9 with good audio. 1700z sending on 14763 was too weak to copy.
1740 UTC, 12163 kHz, very strong signal.

3-June-18, Sunday:- 1700 UTC, 14842 kHz, weak signal, unreadable.
1720 UTC, 13442 kHz, second sending much stronger with good audio, "841 841 841 1", DK/GC "6487 94" x 2.
1740 UTC, 12142 kHz, peaking over S9 with good audio.

6-June-18, Wednesday:- 1720 UTC, 13442 kHz, "841" and "6487 94" again, S9 with QSB, good audio.
1740 UTC, 12142 kHz, third sending, very strong "XJT" on the HF side, not noticed on Sunday.

10-June-18, Sunday:- 1700 UTC, 14842 kHz, S9 for a change, "841 841 841 1", DK/GC "319 137" x 2.
1720 UTC, 13442 kHz, S9.
1740 UTC, 12142 kHz, over S9 with QSB, the S9+ "XJT" still on the HF side.

20-June-18, Wednesday:- 1700 UTC, 14842 kHz, 841 841 841 1", DK/GC "450 122" x 2, peaking S9 with QSB, good audio.
1720 UTC, 13442 kHz, S9, good audio.
1740 UTC, 12142 kHz, over S9, the "XJT" still a very strong signal on the HF side.

Thursday Schedule, 2010 UTC Start:-
10-May-18:- 2010 UTC, 11539 kHz, "553 553 553 1", DK/GC "8779 61" x 2, over S9 with QSB, reasonable audio.
2030 UTC, 10547 kHz, again S9 with QSB, reasonable audio.
2050 UTC, 9388 kHz, third sending difficult copy due to a strong broadcast station on 9390.

17-May-18:- 2010 UTC, 11539 kHz, "553 553 553 000", peaking over S9 with good audio.
2030 UTC, 10547 kHz, second sending, slightly weaker signal.

31-May-18:- 2010 UTC, 11539 kHz, "553 553 553 1", DK/GC "1082 49" x 2, strong signal, reasonable audio, slight background hum.
2030 UTC, 10547 kHz, also strong.
2050 UTC, 9388 kHz, over S9, no sign of the broadcast station which made copy difficult on 10-May.

7-June-18:- 2010 UTC, 12213 kHz, "273 273 273 000", peaking S9 with reasonable audio.
2030 UTC, 10714 kHz, second sending, also S9.

14-June-18:- 2010 UTC, 12213 kHz, "273 273 273 1" for a full message, DK/GC "358 51"
x 2, over a "9" on the S-meter with unusually good audio for this schedule.
2030 UTC, 10714 UTC, also S9, weaker FSK signal on a close frequency.
2050 UTC, 9347 kHz, also S9 with good audio.

21-June-18:- 2010 UTC, 12213 kHz, and 2030 UTC, 10714 kHz, both strong signals with good audio, "273 273 273 000".

Monday + Wednesday SSB Schedule, 1900 UTC Start:-
9-May-18, Wednesday:- 1900 UTC, 17472 kHz, "483 483 483 000", weak but clear.
1920 UTC, 15872 kHz, second sending, slightly stronger signal.

14-May-18, Monday:- 1900 UTC, 17472 kHz, "483 483 483 1" for a "full message".
Weak signal, just about readable, DK/GC "351 130" x 2.
1920 UTC, 15872 kHz, much stronger signal, indicating S9 at times.
1940 UTC, 14372 kHz, third sending, back down to S5 to S6.

16-May-18, Wednesday:- 1900 UTC, 17472 kHz, "483" and "351 130" again, very weak.
1920 UTC, 15872 kHz, also very weak.
1940 UTC, 14372 kHz, strongest of the three transmissions although only S5 at best.
21-May-18, Monday:- 1911 UTC, 17472 kHz, first sending in progress, missed the start, weak signal, ended "000 000" 1914:40s UTC.
1920 UTC, 15872 kHz, "483 483 483 1", DK/GC "888 122" x 2, S4 to S5.
1940 UTC, 14372 kHz, slightly stronger signal.

23-May-18, Wednesday:- 1900 UTC, 17472 kHz, “483” and “888 122” again, weak signal.
1920 UTC, 15872 kHz, S4, and 1940 UTC, 14372 kHz, peaking S7, the repeats.

30-May-18, Wednesday:- 1900 UTC, 17472 kHz, “483” and still “888 122”, weak signal.
1920 UTC, 15872 kHz, and 1940 UTC 14372 kHz, repeats both peaking S8.

4-June-18, Monday:- 1900 UTC, 16328 kHz, “384 384 384 000”, peaking S8.
1920 UTC, 14828 kHz, second sending, also S8.

6-June-18, Wednesday:- 1900 UTC, 16328 kHz, “384 384 384 000”, weak.
1920 UTC, 1920 UTC, 14828 kHz, much stronger, peaking over S9.

11-June-18, Monday:- 1900 UTC, 16328 kHz, and 1920 UTC, 14828 kHz, both S8 to S9, “384 384 384 000”.

20-June-18, Wednesday:- 1900 UTC, 16328 kHz, strong signal, and 1920 UTC, 14828 kHz, slightly weaker, “384 384 384 000”.

Saturday + Sunday SSB Schedule, 0600 UTC Start:-
12-May-18, Saturday:- 0600 UTC, 9064 kHz, “024 024 024 000”, strong signal, over S9.
0620 UTC, 10264 kHz, second sending, also over S9.

13-May-18, Sunday:- 0600 UTC, 9064 kHz, and 0620 UTC, 10264 kHz, both over S9, “024 024 024 000”.

19-May-18, Saturday:- 0600 UTC, 9064 kHz, “024 024 024 000”.
0620 UTC, 10264 kHz, second sending, both indicating S8 to S9.

26-May-18, Saturday:- 0600 UTC, 9064 kHz, “024 024 024 000”.

2-June-18, Saturday:- 0620 UTC, 10264 kHz, “024 024 024 000”, very strong STANAG “XJT” noise-maker on frequency, E07 up and down in strength.

3-June-18, Sunday:- 0600 UTC, 9064 kHz, “024 024 024 000”, weak signal, only just readable.
0620 UTC, 10264 kHz, strong “XJT” in residence again, E07 unreadable except for a few seconds just before 0622z when it became a bit stronger.

10-June-18, Sunday:- 0600 UTC, 9064 kHz, “024 024 024 000”, strong signal.
0620 UTC, 10264 kHz, no sign of the “XJT” noise-maker this morning.

16-June-18, Saturday:- 0600 UTC, 9064 kHz, “024 024 024 000”.
0620 UTC, 10264 kHz, no “XJT” to spoil things although it was sitting on this frequency when checked around 0805z.

17-June-18, Sunday:- 0600 UTC, 9064 kHz, and 0620 UTC, 10264 kHz, both strong signals on clear frequencies, “024 024 024 000”.

23-June-18, Saturday:- 0605 UTC, 9064 kHz, transmission in progress, “full message”, not many of those in recent weeks, weak signal, ended after 0609 UTC.
0620 UTC, 10264 kHz, “024 024 024 1”, DK/GC “231 68” x 2, weak signal.
0640 UTC, 11464 kHz, third sending, up to S8, strongest sending of the three.

24-June-18, Sunday:- 0600 UTC, 9064 kHz, “024” and “231 68” again, weak signal.
0620 UTC, 10264 kHz, weak, and 0640 UTC, 11464 kHz, peaking S8, the repeats.

Others’ logs, with repetition:

Sunday/Wednesday

May 2018

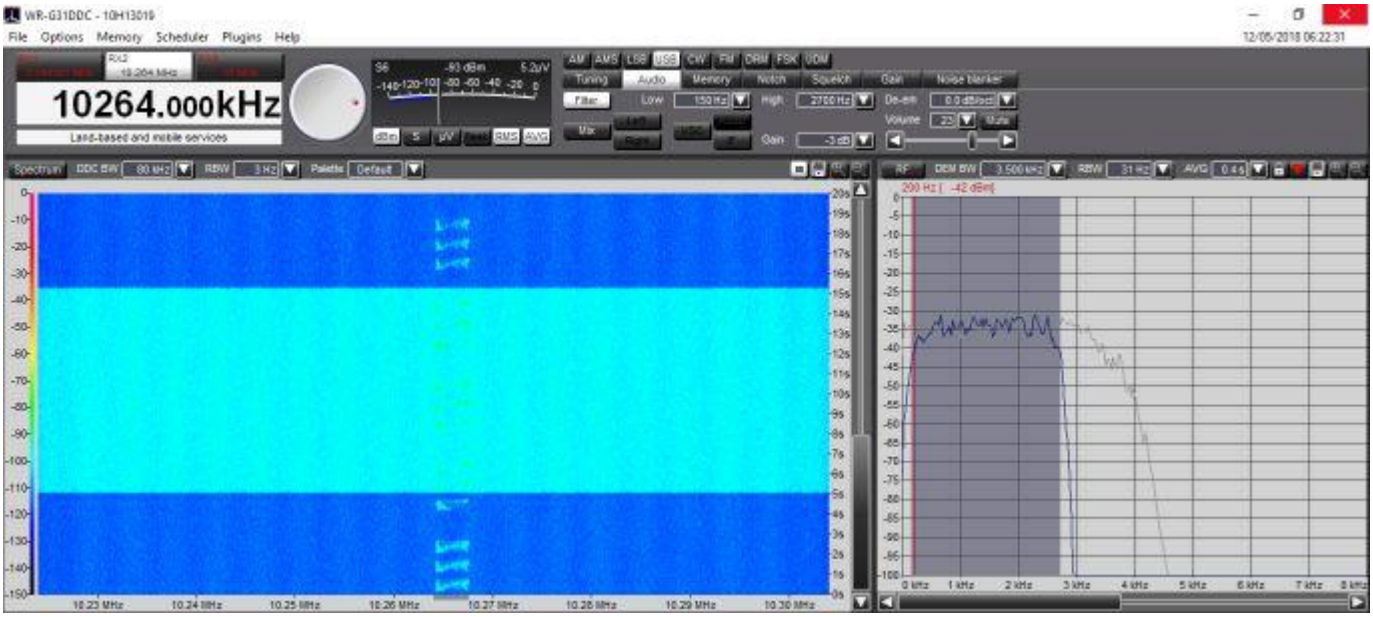
1700z	**14763kHz**	**1720z**	**13363kHz**	**1740z**	**12163kHz**	
02/05	731 1 110 168 47387 ... 69944 000 000				[1720z Strong]	Fair
06/05	731 000					Weak
09/05	731 000				*DutchSDR*	Weak
13/05	731 1 263 129 33486 ... 31259 000 000					Fair
16/05	731 1 263 129 33486 ... 31259 000 000				[1740z Strong]	Weak
20/05	731 1 265 134 60972 ... 43610 000 000				[1700z Unworkable]	Fair
23/05	731 1 265 134 60972 ... 43610 000 000				[1700z Weak]	Strong
30/05	731 1 8978 59 48115 ... 91360 000 000					Strong

June 2018

1700z	**14842kHz**	**1720z**	**13442kHz**	**1740z**	**12142kHz**		
03/06	841 1 6487 94 72119 ... 97442 000 000					[1700z Weak]	Strong
10/06	841 1 319 137 01692 ... 66781 000 000						Strong
13/06	841 1 319 137 01692 ... 66781 000 000						Strong
17/06	841 000						Very strong
20/06	841 1 450 122 17786 ... 28950 000 000					[1700z Weak]	Strong
24/06	841 1 5987 136 52488 … 92273 000 000						Fair
27/06	841 1 5987 136 52488 … 92273 000 000					[1700z NRH]	Strong

Sunday/Saturday

May 2018



Unwanted S9 QRM [VDSL distribution] and its removal using the phase noise technique, as used by some monitors

0600z	**9064kHz**	**0620z**	**10264kHz**	**0640z**	**11464kHz**		
05/05	024 000						Weak
06/05	024 000						Weak
12/05	024 000						Fair
13/05	024 000						Strong
19/05	024 000						Strong
20/05	024 000						Fair
26/05	024 000						Fair
27/05	024 000						Fair

June 2018

02/06	024 000						Weak
03/06	024 000					[0620z XJTQRM3]	Weak
09/06	024 000						Fair
10/06	024 000						Very strong

16/06	024 000		Fair
17/06	024 000		Very strong
23/06	024 1 231 68 97300 ... 03128 000 000		Weak
24/06	024 1 231 68 97300 ... 03128 000 000		Weak

024 1 231 68
97300 65359 01885 04417 09071 79125 30022 55602 52948 11103
71032 42745 56504 36244 65843 66616 72292 41280 60389 11118
36695 90237 05223 22528 41328 54357 87677 38331 06386 01698
74642 14704 78974 44025 79720 31747 36909 23357 91615 29954
91304 08012 77471 28321 00930 29226 18842 86460 94325 14442
09573 75048 53557 98751 69172 32137 88736 83885 87761 91166
70453 03825 16639 90087 46487 75234 23799 03128 000 000
Courtesy Ary

30/06	024 000	[0620z XJTQRM4]	Strong

Monday/Wednesday

May 2018

1900z	**17472kHz**	**1920z**	**15872kHz**	**1940z**	**13372kHz**		
02/05	483 000					[Dutch SDR]	Weak
07/05	483 000						Weak
09/05	483 000					[DutchSDR]	Weak
14/05	483 1 351 130 39226 ... 54322 000 000					[1940z NRH]	Fair
16/05	483 1 351 130 39226 ... 54322 000 000					[1940z Fair]	Weak
21/05	483 1 888 122 00774 ... 58117 000 000					[1900z Dutch SDR]	Weak

483 483 483 1 888 122 888 122
00774 83915 83219 55622 90458 74950 41877 36865 87391 00889
18635 56208 86011 23526 17265 72219 85479 91015 84786 26215
37298 52951 48017 47305 53215 08628 07668 54564 53653 51864
91146 14606 02646 21344 40800 78416 59117 76818 29715 74013
31473 29643 50097 07428 20302 20804 65716 26011 89470 89435
02936 48393 19535 39662 04634 60643 14622 92022 80065 15591
21140 90093 69744 41211 32453 45924 59140 77516 42740 35795
52527 72565 56331 72494 79918 11417 63223 55864 42776 25336
11765 27325 31436 62060 71143 91200 17263 42845 87793 63185
71468 84768 88693 08549 11403 82241 96388 30237 46169 39730
21678 52710 03023 07981 36526 18423 28995 00829 94633 56934
73222 84512 73165 54381 54234 86603 57282 59737 96719 35540
62417 58117 000 000 *Courtesy Ary*

23/05	483 1 888 122 00774 ... 58117 000 000		Weak
28/05	483 1 888 122 00774 ... 58117 000 000	[1900zWeak]	Strong
30/05	483 1 888 122 00774 ... 58117 000 000		Strong

June 2018

1900z	**16328kHz**	**1920z**	**14828kHz**	**1940z**	**13428kHz**		
04/06	384 000					[1920z Echo]	Strong
06/06	384 000					[1900z NRH]	Strong
11/06	384 000						Very strong
13/06	384 000						Very strong
18/06	384 000						1900z Weak,1920z Fair
20/06	384 000						Fair
25/06	384 000						Very strong
27/06	384 000						Very strong

Tuesday/Friday

May 2018

1100z	**19659kHz**	**1120z**	**17449kHz**	**1140z**	**16159kHz**		
01/05	641 1 127 109 39899 ... 59613 000 000					[1100z NRH]	Weak

04/05	641 1 127 109 39899 ... 59613 000 000		Weak
08/05	641 000		Weak
11/05	641 000	[1100z NRH]	Weak
15/05	641 000	[1100z NRH]	Weak
18/05	641 000		Weak
22/05	641 1 282 125 36648 ... 14604 000 000	[1100z Unworkable]	Weak

641 641 641 1 282 125 282 125
36648 58911 84150 40482 05186 56725 30593 32094 15908 75269
05423 26859 02642 22153 03712 13077 66625 54558 27478 46324
20834 98749 29698 63571 47695 41441 61734 55362 49295 16110
63369 94892 31103 40527 76858 97390 21902 97248 11904 28832
10959 35908 12513 65410 83142 89321 18009 34163 35094 20461
17361 08778 45113 28136 70961 39980 17121 66505 83258 11800
77886 85890 51390 90869 04868 22528 02977 67736 32101 57150
99070 80133 40696 82169 28202 87118 94812 38387 85842 77728
63423 17639 97699 07814 04497 42309 98797 79840 80272 42202
10832 19262 74329 36732 36219 38136 09339 53615 24875 66410
58570 72874 42303 97801 37492 81366 06276 51859 72151 84602
76418 48556 84609 58077 90118 87192 42687 59165 60873 58080
21638 79475 46812 73611 14604 000 000 *Courtesy Ary*

25/05	641 1 282 125 36648 ... 14604 000 000	[1100z NRH]	Weak
29/05	641 000	[1100z NRH]	Weak

June 2018

1100z	**18637kHz**	**1120z**	**17437kHz**	**1140z**	**15827kHz**

19/06	648 1 6660 171 68181 ... 83155 000 000	Weak
22/06	648 1 6660 171 68181 ... 83155 000 000	Weak

Thursday

May 2018

2010z	**11539kHz**	**2030z**	**10547kHz**	**2050z**	**9388kHz**

03/05	553 000	Weak
10/05	553 1 8779 61 29922 ... 97395 000 000	Weak
17/05	553 000	Weak
24/05	553 000	Very strong
31/05	553 1 1082 49 93732 ... 36399 000 000	Strong

June 2018

2010z	**12213kHz**	**2030z**	**10714kHz**	**2050z**	**9347kHz**

07/06	273 000	Fair
21/06	273 000	Strong

E07a

Wednesday

May 2018

2000z	**12166kHz**	**2020z**	**10766kHz**	**2040z**	**9266kHz**

02/05	172 1 31905 6143 57 52230 ... 09247 000 000		Very strong
09/05	172 000		Very strong
16/05	172 000	[2020z Noise]	Very strong
23/05	172 000		Very strong
30/05	172 1 12612 8508 73 27897 ... 67386 000 000		Very strong

June 2018

06/06	172 1 12612 8508 73 27897 ... 67386 000 000		Very strong
13/06	172 000		Very strong
20/06	172 000		Strong
27/06	172 1 69198 230 67 47656 ... 82425 000 000		Very strong

Thursday

May 2018

0430z	**7933kHz**	**0450z**	**9133kHz**	**0510z**	**10233kHz**		
03/05	912 1 31905 6143 57 52230 ... 09247 000 000						Very weak, noisy
10/05	912 000						0430z Strong, 0450z Weak
17/05	912 000					[0450z Fair,Noise]	Strong
24/05	912 000					[0450z Weak]	Strong
31/05	912 1 12612 8508 73 27897 ... 67386 000 000						Very strong

9133kHz 0450z 21/06 912 912 912 000

June 2018

07/06	912 1 12612 8508 73 27897 ... 67386 000 000		Very strong
14/06	912 000		Very strong
21/06	912 000		Very strong
28/06	912 1 69198 230 67 47656 ... 82425 000 000	[0510z Weak, noisy]	Very strong

Friday

May 2018

1510z	**12182kHz**	**1530z**	**11082kHz**	**1550z**	**10182kHz**	
04/05	101 000					Weak
11/05	101 000					Weak
18/05	101 000					Weak

June 2018

1510z	**12182kHz**	**1530z**	**11082kHz**	**1550z**	**10182kHz**	
01/08	101 000					Fair
15/06	101 000					Weak
22/06	101 000					Fair

Saturday

May 2018

0800z	**12177kHz**	**0820z**	**13477kHz**	**0840z**	**14877kHz**	
05/05	148 000					Fair
12/05	148 000					Weak

19/05	148 000					Weak
26/05	148 000					Fair

June 2018

0800z	**13373kHz**	**0820z**	**14373kHz**	**0840z**	**14873kHz**	
02/06	338 000					Weak, QSB2
09/06	338 000					Fair
16/06	338 000					Fair
23/06	338 000					Weak

PoSW's logs, with analysis, with repetition

Wednesday Schedule, 2000 UTC Start:-
9-May-18:- 2000 UTC, 12166 kHz, "172 172 172 000", over S9.
2020 UTC, 10766 kHz, also over S9.

16-May-18:- 2000 UTC, 12166 kHz, and 2020 UTC, 10766 kHz, both S9+, "172 172 172 000".

23-May-18:- 2000 UTC, 12166 kHz, "172 172 172 000", S9+.
2020 UTC, 10766 kHz, somewhat weaker signal.

30-May-18:- 2000 UTC, 12166 kHz, "172 172 172 1 12612" for a full message, DK/GC "8508 73" x 2, S9+ signal.
2020 UTC, 10766 kHz, and 2040 UTC, 9266 kHz, the repeats, both S9+.

6-June-18:- 2000 UTC, 12166 kHz, "172 1 12612" and "8508 73" again.
2020 UTC, 10766 kHz, and 2040 UTC, 9266 kHz, repeats.

13-June-18:- 2000 UTC, 12166 kHz, and 2020 UTC, 10766 kHz, both very strong, "172 172 172 000".

20-June-18:- 2000 UTC, 12166 kHz, and 2020 UTC, 10766 kHz, again both very strong signals, "172 172 172 000".

Saturday Schedule, 0800 UTC Start:-
12-May-18:- 0800 UTC, 12177 kHz, "148 148 148 000", strength S6.
0820 UTC, 13477 kHz, also around an S6.

19-May-18:- 0800 UTC, 12177 kHz, and 0820 UTC, 13477 kHz, "148 148 148 000", both S5 to S6.

2-June-18:- 0800 UTC, 13373 kHz, "338 338 338 000".
0820 UTC, 14373 kHz, second sending, both S6 to S7.

9-June-18:- 0800 UTC, 13373 kHz, and 0820 UTC, 14373 kHz, both S4 to S5, "338 338 338 000".

16-June-18:- 0800 UTC, 13373 kHz, and 0820 UTC, 14373 kHz, "338 338 338 000".

23-June-18:- 0800 UTC, 13373 kHz, peaking around S9, and 0820 UTC, 14373 kHz, weaker,
"338 338 338 000".

Friday Schedule, 1510 UTC Start:-
11-May-18:- 1510 UTC, 12182 kHz, "101 101 101 000", weak signal.
1530 UTC, 11082 kHz, very weak, only just readable.

18-May-18:- 1510 UTC, 12182 kHz, "101 101 101 000", S6.
1530 UTC, 11082 kHz, slightly stronger signal.

25-May-18:- 1510 UTC, 12182 kHz, and 1530 UTC, 11082 kHz, "101 101 101 000".

1-June-18:- 1510 UTC, 12182 kHz, "101 101 101 000".
1530 UTC, 11082 kHz, second sending, no change of frequencies in June.

8-June-18:- 1510 UTC, 12182 kHz, and 1530 UTC, 11082 kHz, both weak, "101 101 101 000".

15-June-18:- 1530 UTC, 11082 kHz, weak signal, "101 101 101 000".

E11 log May/June

4783kHz	1605z	01/05 [237/00] Out 1608z S2		Malc	TUE
	1605z	06/05 [235/00] Out 1608z S2		Malc	SUN
	1605z	08/05 [238/00] Out 1608z S4	(Dutch SDR)	Malc	TUE
	1605z	13/05 [235/00] Out 1608z S2		Malc	SUN
	1605z	22/05 [238/00] Out 1708z S2		Malc	TUE
	1605z	29/05 [238/00] Out 1608z S2		Malc	TUE
	1605z	10/06 [233/00] Out 1608z S9	(Dutch SDR)	Malc	SUN
	1605z	19/06 [238/00] Out 1608z S2		Malc	TUE
5082kHz	0820z	21/06 [432/00] Out 0823z S3		Malc, RNGB	THU
	0820z	25/06 [432/00] Out 0823z S3	(Dutch SDR)	Malc	MON
5149khz	0455z	04/05 [320/00]		Ary	FRI
6304kHz	1205z	01/05 [461/00] Out 1208z S2		Malc	TUE
	0930z	02/05 [273/00] Out 0933z S2		Malc	WED
	1205z	02/05 [465/001 Out 1208z S2		Malc	WED
	0930z	03/05 [278/00] Out 0933z S2		Malc, RNGB	THU
	0930z	10/05 [278/00] Out 0933z S2		Malc	THU
	1205z	15/05 [463/001 Out 1208z S2		Malc	TUE
	0930z	16/05 [271/00] Out 0933z S1		Malc	WED
	1205z	16/05 [464/00] Out 1208z S3	(Dutch SDR)	Malc	WED
	0930z	17/05 [275/00] Out 0933z S2		Malc	THU
	1205z	22/05 [463/00] Out 1208z S2		Malc	TUE
	1205z	23/05 [466/00] Out 1208z S2		Malc	WED
	0930z	30/05 [279/00] Out 0933z S2		Malc	WED
	1205z	30/05 [465/00] Out 1208z S2		Malc	WED
	0930z	31/05 [276/00] Out 0933z S2		Malc	THU
	1205z	19/06 [462/00] Out 1208z S3	(Dutch SDR)	Malc	TUE
	1205z	20/06 [469/00] Out 1208z S2		Malc	WED
	0930z	21/06 [270/00]		RNGB	THU
6480kHz	0710z	05/05 [490/00] Out 0713z S2 QRM		Malc	SAT
	0710z	06/05 [492/00] Out 0713z S2		Malc	SUN
	0710z	13/05 [495/00] Out 0713z S3		Malc	SUN
	0710z	19/05 [496/00] Out 0713z S2		Malc	SAT
	0710z	02/06 [496/00] Out 0713z S2		Malc	SAT
	0710z	23/06 [495/00]		Ary	SAT
	0710z	24/06 [497/00] Out 0713z S3		Malc	MON
6849kHz	0700z	08/05 [574/00] Out 0703z S2		Malc	TUE
	0700z	11/05 [573/00] Out 0703z S2		Malc, Ary	FRI
	0700z	15/05 [573/00] Out 0703z S4		Malc	TUE
	0700z	18/05 [579/00] Out 0703z S2		Malc, RNGB	FRI
	0700z	22/05 [575/00] Good		RNGB	TUE
	0700z	25/05 [571/00] Out 0703z S2		Malc	FRI
	0700z	29/05 [573/00] Out 0703z S2		Malc, RNGB	TUE
	0700z	01/06 [571/00] Out 0703z S2		Malc, RNGB	FRI
	0700z	19/06 [575/00] Out 0803z S2		Malc, RNGB	TUE
	0700z	22/06 [574/00] Out 0703z S3		Malc	FRI
	0700z	29/06 [576/00] Fair		RNGB	FRI
7469kHz	0450z	18/06 [412/00]		Ary	MON
7600kHz	1900z	03/05 [649/00] Out 1903z S5		Malc	THU
	1900z	07/05 [643/001 Out 1903z S7		Malc	MON
	1900z	10/05 [648/00]		Ary	THU
	1900z	14/05 [649/00] Out 1903z S5	(Dutch SDR)	Malc	MON
	1900z	17/05 [640/00] Out 1903z S9		Malc	THU
	1900z	21/05 [648/00] Out 1903z S4		Malc	MON
	1900z	24/05 [643/00] Out 1903z S5		Malc	THU
	1900z	18/06 [646/00] Out 1903z S4		Malc, RNGB	MON
	1900z	25/06 [646/00]		Gary H, Malc	MON
7984kHz	1730z	09/05 [400/00] Out 1733z S9		Malc, Gary H	WED
	1730z	12/05 [402/00] Out 1733z S9		Malc	SAT
	1730z	16/05 [408/00] Out 1733z S6		Malc	WED
	1730z	19/05 [409/00] Out 1733z S6		Malc	SAT
	1730z	23/05 [400/00] Out 1633z S9		Malc	WED

	1730z	26/05 [409/00] Out 1733z S9		Malc	SAT
	1730z	30/05 [406/00] Out 1733z S6		Malc	WED
	1730z	02/06 [404/00] Out 1733z S4		Malc	SAT
	1730z	27/06 [403/00] Good		RNGB	WED
8088kHz	1730z	03/05 [414/00] Out 1733z S6		Malc	THU
	1730z	10/05 [412/00] Out 1733z S7		Malc, Ary	THU
	1730z	17/05 [416/00]		Gary H, Malc	THU
	1730z	31/05 [413/00] Out 1733z S2		Malc	THU
	1730z	21/06 [422/00] Out 1733z S2		Malc	THU
8545kHz	1045z	07/05 [694/00] Out 1048z S2		Malc	MON
	1045z	23/05 [697/00] Out 0848z S2		Malc	WED
	1045z	28/05 [691/00] Out 1048z S9	(Dutch SDR)	Malc	MON
	1045z	30/05 [692/00] Out 1048z S3		Malc	WED
	1045z	18/06 [694/00] Out 1048z S3		Malc	MON
9079kHz	0805z	12/05 [315/00] Out 0808z S5		Malc	SAT
	0805z	13/05 [314/00] Out 0808z S2		Malc	SUN
	0805z	20/05 [314/00] Out 0808z S2		Malc	SUN
	0805z	26/05 [311/00] Out 0908z S6		Malc	SAT
	0805z	27/05 [315/00] Good		RNGB	SUN
	0800z	27/05 [315/00] Out 0808z S3		Malc	SUN
	0805z	02/06 [316/00] Out 0808z S3		Malc	SAT
	0805z	10/06 [316/00] Fair		RNGB	SUN
	0805z	16/06 [314/00] Good		RNGB	SAT
9130kHz	2005z	06/05 [365/00] Out 2008z S9		Malc	SUN
	2005z	19/05 [360/00] Out 2008z S7		Malc	SAT
	2005z	20/50 [369/00] Out 2008z S9		Malc	SUN
	2005z	26/05 [365/00] Out 2008z S9		Malc	SAT
	2005z	27/05 [365/00] Out 2008z S3		Malc	SUN
	2005z	16/06 [635/002 Out 2008z S3		Malc	SAT
	2000z	17/06 [369/00] Out 2003z S2		Malc, RNGB	SUN
	2005z	24/06 [366/00] Out 2008z S3		Malc	SUN
9610kHz	1910z	11/05 [611/00] Out 1913z S4		Malc, Ary	FRI
	1910z	13/05 [611/00] Out 1913z S3		Malc	SUN
	0745z	14/05 [267/00] Out 0748z S2		Malc	MON
	0745z	21/05 [266/00] Out 0748z S3		Malc	MON
	1910z	25/05 [614/00] Out 1913z S4		Malc	FRI
	1910z	27/05 [611/00] Out 1913z S2		Malc	SUN
	0745z	28/05 [260/00] Out 0748z S2		Malc	MON
	1910z	10/06 [617/00] Out 1913 S9	(Dutch SDR)	Malc	SUN
	1910z	15/06 [618/00] Good		RNGB, Malc	FRI
	1910z	17/06 [614/00] Out 1913z S3		Malc, RNGB	SUN
	0745z	25/06 [269/00] Out 0748z S4		Malc	MON
10356kHz	1530z	03/05 [268/00] Out 1533z S8		Malc	THU
	1530z	17/05 [260/00] Out 1533z S9		Malc	THU
	1530z	31/05 [580/00] Out 1533z S4		Malc	THU
10429kHz	0715z	01/05 [635/00] Out 0718z S2		Malc, RNGB	TUE
	0715z	04/05 [634/00] Out 0718z S2		Malc	FRI
	0715z	15/05 [639/00] Out 0718z S2		Malc, RNGB	TUE
	0715z	18/05 [633/00] Out 0718z S4		Malc	FRI
	0715z	22/05 [636/00] Fair		RNGB	TUE
	0715z	25/05 [634/00] Out 0718z S2		Malc	FRI
	0715z	29/05 [631/00] Out 0718z S2		Malc, RNGB	TUE
	0715z	01/06 [631/00] Out 0718z S3		Malc	FRI
	0715z	12/06 [634/00] Good		RNGB	TUE
	0715z	26/06 [639/00] Fair		RNGB	TUE
11581kHz	1925z	01/05 [558/00] Out 1928z S2		Malc	TUE
	1925z	03/05 [556/00] Out 1928z S3		Malc	THU
	1300z	10/05 [583/00] Out 1303z S3		Malc	THU
	1300z	12/05 [581/00] Out 1303z S3		Malc	SAT
	1925z	15/05 [558/00] Out 1928z S2		Malc	TUE
	1300z	17/05 [587/00] Out 1303z S5		Malc	THU
	1925z	17/05 [556/00] Out 1928z S7		Malc	THU
	1925z	22/05 [553/00] Out 1928z S9		Malc	TUE
	1300z	24/05 [583/00] Out 1303z S3		Malc	THU

	1925z	24/05 [643/00] Out 1928z S8	Malc, RNGB	THU
	1925z	29/05 [553/00] Out 1928z S2	Malc	TUE
	1300z	31/05 [580/00] Out 1303z S3	Malc	THU
	1925z	31/05 [553/00] Out 1928z S7	Malc	THU
	1300z	14/06 [581/00] Out 1303z S9	Malc	THU
	1925z	15/06 [556/00] Out 1928z S7 (Dutch SDR)	Malc	THU
	1300z	16/06 [580/00] Out 1303z S4	Malc, RNGB	SAT
	1925z	19/06 [557/00] Out 1938z S7	Malc	TUE
	1300z	21/06 [583/00] Out 1303z S5	Malc	THU
12202kHz	0845z	01/05 [150/00] Out 0848z S4	Malc	TUE
	0845z	03/05 [152/00] Out 0848z S5	Malc, RNGB	THU
	0845z	15/05 [152/00] Out 0848z S3	Malc	TUE
	0845z	17/05 [151/00] Out 0848z S3	Malc	THU
	0845z	22/05 [154/00] Out 0848z S6	Malc	TUE
	0845z	24/05 [156/00]	RNGB	THU
	0845z	29/05 [155/00] Out 0848z S3	Malc	TUE
	0845z	31/05 [155/00] Out 0848z S2	Malc	THU
	0845z	19/06 [151/00] Out 0848z S2	Malc	TUE
	0845z	21/06 [150/00] Out 0848z S3	Malc	THU
12397kHz	1000z	01/05 [307/00] Out 1003z S8	Malc, RNGB	TUE
	1000z	04/05 [305/00] Out 1003z S2	Malc	FRI
	1000z	08/05 [308/00] Out 1003z S3	Malc	TUE
	1000z	11/05 [302/00] Out 1003z S5	Malc	FRI
	1000z	15/05 [306/00] Out 1003z S2	Malc, RNGB	TUE
	1000z	18/05 [306/00] Out 1003z S5	Malc	FRI
	1000z	29/05 [306/00] Out 1010z S4	Malc	TUE
	1000z	01/06 [309/00] Out 1003z S5	Malc, RNGB	FRI
	1000z	19/06 [300/00] Out 1003z S6	Malc, RNGB	TUE
	1000z	22/06 [309/00] Out 1005z S5	Malc	FRI
	1000z	29/06 [306/00]	RNGB	FRI
13424kHz	0645z	08/05 [514/00] Out 0648z S2 (Dutch SDR)	Malc	TUE
	0645z	10/05 [514/00] Out 0648z S5	Malc, Ary	THU
	0645z	15/05 [519/00] Out 0648z S4	Malc, RNGB	TUE
	0645z	17/05 [518/00] Out 0648z S4	Malc	THU
	0645z	22/05 [517/00] Out 0648z S5 (Dutch SDR)	Malc	TUE
	0645z	29/05 [515/00] Out 0648z S3	Malc, RNGB	TUE
	0645z	31/05 [518/00] Out 0648z S3	Malc	THU
	0645z	12/06 [312/00] Fair	RNGB	TUE
	0645z	14/06 [512/00] Good	RNGB	THU
	0645z	19/06 [519/00] Out 0648z S2	Malc, RNGB	TUE
	0645z	21/06 [514/00] Out 0648z S2	Malc	THU
	0645z	28/06 [514/00] Fair	RNGB	THU
13427khz	0900z	02/05 [535/00] Out 0903z S3	Malc	WED
	0900z	14/05 [536/00] Out 0900z S3	Malc	MON
	0900z	16/05 [537/00] Out 0903z S3	Malc	WED
	0900z	21/05 [532/00] Out 0903z S3	Malc	MON
	0900z	23/05 [533/05] Out 0903z S2	Malc	WED
	0900z	28/05 [537/00] Out 0903z S3	Malc	MON
	0900z	30/05 [533/00] Out 0903z S4	Malc	WED
	0900z	18/06 [536/00] Out 0903z S5	Malc	MON
	0900z	20/06 [534/00] Out 0903z S2	Malc	WED
13537kHz	1225z	04/05 [525/00] Out 1228z S3	Malc	FRI
	1225z	07/05 [521/00] Out 1228z S4	Malc	MON
	1225z	11/05 [528/00] Out 1228z S3	Malc, Ary	FRI
	1225z	14/05 [528/00] Out 1228z S5	Malc	MON
	1225z	28/05 [521/001 Out 1228z S3	Malc	MON
	1225z	15/06 [525/00] Out 1228z S4	Malc	FRI
	1225z	18/06 [521/00] Out 1228z S3	Malc	MON
	1225z	25/06 [528/00] Out 1228z S3	Malc	MON
13911kHz	0820z	01/05 [132/00] Out 0823z S3	Malc, RNGB	TUE
	0820z	02/05 [132/00] Out 0823z S5	Malc	WED
	0820z	08/05 [135/00] Out 0823z S3	Malc	TUE
	0820z	22/05 [136/00] Good	RNGB	TUE
	0820z	23/05 [132/00] Out 0823z S5	Malc	WED
	0820z	29/05 [130/00] Out 0823z S4	Malc	TUE
	0820z	30/05 [136/00] Out 0823z S5 with QRM	Malc, RNGB	WED

	0820z	19/06 [135/00] Out 0823z S8		Malc, RNGB	TUE
	0820z	20/06 [131/00] Out 0823z S4		Malc	WED
14410kHz	1745z	07/05 [244/00] Out 1748z S2		Malc	MON
	1745z	13/05 [249/00] Out 1748z S3	(Dutch SDR)	Malc	SUN
	1745z	21/05 [244/00] Out 1748z S2		Malc	MON
	1745z	27/05 [242/00] Out 1748z S4		Malc	SUN
	1745z	28/05 [244/00] Out 1748z S7		Malc	MON
	1745z	03/06 [242/00]		HfD	SUN
	1745z	24/06 [242/001 Out 748z S4		Malc	SUN
	1745z	25/06 [246/00] Out 1748z S3		Malc	MON
14575kHz	1645z	01/05 [330/00] Out 1648z S3	(Dutch SDR)	Malc	TUE
	1645z	03/05 [332/00] Out 1648z S6		Malc	THU
	1645z	08/05 [338/00] Out 1648z S3		Malc	TUE
	1645z	22/05 [330/00] Out 1648z S2		Malc	TUE
	1645z	24/05 [334/00] Out 1648z S2	(Dutch SDR)	Malc	THU
	1645z	29/05 [330/00] Out 1648z S3		Malc	TUE
	1645z	31/05 [332/00] Out 1648z S2		Malc	THU
	1645z	14/06 [331/00] Out 1648z S5	(Dutch SDR)	Malc	THU
	1645z	19/06 [337/00] Out 1648z S2		Malc, RNGB	TUE
	1645z	21/06 [331/00] Out 1648z S2	(Dutch SDR)	Malc	THU
14865kHz	1705z	05/05 [394/00] Out 1708z S5		Malc	SAT
	1705z	09/05 [392/00] Out 1708z S9		Malc	WED
	1705z	12/05 [391/001 Out 1708z S9		Malc	SAT
	1705z	16/05 [396/00] Out 1708z S2		Malc	WED
	1705z	19/05 [393/00]		Gary H	SAT
	1705z	30/05 [391/00] Out 1708z S5		Malc	WED
	1705z	16/06 [390/00] Out 1708z S4		Malc	SAT
	1705z	20/06 [399/00] Out 1708z S9		Malc, RNGB	WED
14940kHz	1650z	04/05 [924/00] Out 1653z S7		Malc	FRI
	1650z	06/05 [921/00] Out 1653z S2	(Dutch SDR)	Malc	SUN
	1650z	11/05 [922/00]		Ary	FRI
	1650z	13/05 [920/00] Out 1653z S3		Malc	SUN
	1650z	25/05 [924/00] Out 1653z S3		Mal, RNGB	FRI
	1650z	27/05 [927/00] Out 1653z S3		Malc	SUN
	1650z	01/06 [924/00] Out 1653z S7		Malc	FRI
	1650z	03/06 [929/00] Out 1653z S5		Malc	SUN
	1650z	24/06 [921/00] Out 1653z S9		Malc	SUN
15720kHz	0745z	02/05 [340/00] Weak		RNGB	WED
	0745z	16/05 [346/00] Very weak		RNGB	WED
	0745z	18/05 [342/00] Fair		RNGB	FRI
	0745z	01/06 [343/00] Out 0748z S3		Malc	FRI
	0745z	13/06 [347/00] Good		RNGB	WED
15795kHz	1625z	02/05 [976/00] Out 1628z S2	(Dutch SDR)	Malc	WED
	1625z	06/05 [978/00] Out 1628z S2	(Dutch SDR)	Malc	SUN
	1625z	16/05 [975/00] Out 1628z S6	(Dutch SDR)	Malc	WED
	1625z	20/05 [976/00] Out 1628z S2		Malc	SUN
	1625z	23/05 [978/00] Out 1628z S2		Malc	WED
	1625z	30/05 [976/00] Out 1628z S2		Malc	WED
	1625z	03/06 [975/00] Out 1628z S3		Malc	SUN
	1625z	10/06 [974/00] Out 1628z S9	(Dutch SDR)	Malc	SUN
15800kHz	0640z	02/05 [944/00] Out 0648z S2	(Dutch SDR)	Malc	WED
	0600z	04/05 [183/00]		Ary	FRI
	0600z	11/05 [180/00]		Ary	FRI
	0640z	16/05 [944/00] Very weak		RNGB	WED
	0640z	21/05 [949/00] Out 0643z S2		Malc	MON
	0640z	28/05 [941/00] Out 0643z S3		Malc	MON
	0640z	30/05 [941/00] Out 0643z S3		Malc, RNGB	WED
	0640z	18/06 [940/00] Out 0643z S6		Malc, RNGB	MON
	0640z	20/06 [945/00] Good with some QSB		RNGB	WED
	0600z	22/06 [181/00] Good		RNGB	FRI
	0640z	25/06 [941/00] Out 0643z S4		Malc	MON
15825kHz	1345z	15/05 [919/00] Out 1348z S2		Malc	TUE
	1345z	19/05 [912/00] Out 1348z S2		Malc	SAT
	1345z	22/05 [919/00] Out 1348z S8		Malc	TUE
	1345z	19/06 [915/00] Out 1348z S3	(Dutch SDR)	Malc	TUE

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4783kHz	1605z	15/05 [273/33 07531.....55121] Out 1615z S3	Malc	TUE
	1605z	20/05 [237/33 07531……etc] Repeat of Tuesday	Malc	SUN
	1605z	12/06 [233/38 54484 96435 03465 28936 85821 76327 13676 18032……76409 52103]	Ary, Andre	TUE
	1605z	17/06 [233/38 54484…….52103] (No ATTENTION!]	Malc	SUN
5082kHz	0700z	13/03 [573/37 95379 97003 70495 71410 97909 74402 03572 95279……10481 86448]	RNGB	TUE
6304kHz	1205z	08/05 [461/36 45355……19223] Out 1208z S3 (Dutch SDR)	Malc	TUE
	1205z	09/05 [461/36 45355……etc] Repeat of Tuesday	Malc	WED
	0930z	23/05 [278/35 16956 99598 35184 99593 36270 80680 67105……89226 73372]	Ary, Malc	WED
6480kHz	0710z	26/05 [497/39 13890…….23288] Out 0721z S2	Malc	SAT
	0710z	27/05 [497/39 13890 12809 87100 65825 50494 25557 50372 02302……26589 23288] Fair	RNGB	SUN
	0710z	16/06 [491/36 02321 61979 42556 12528 18735 75491 62197……41924 34993] NO "attention"	RNGB	SAT
6849kHz	0700z	04/05 [570/32 40678……80055] Out 0710z S3	Malc	FRI
	0700z	15/06 [579/32 90112 31452 34124 10969 15527 40614 25119 32293……11945 76331]	RNGB	FRI
7600kHz	1900z	28/05 [643/36 03177……76962] Out 1910z S7	Malc	MON
	1900z	31/05 [643/36 03177 33557 22460 59339 32069 53619 92802……etc] Repeat of Monday	RNGB, Malc	THU
7984kHz	1730z	02/05 [408/34 86010……69055] Out 1739z S5	Malc	WED
	1730z	05/05 [408/34 86010……etc] Repeat of Wednesday	Malc	SAT
	1730z	20/06 [402/37 46692……95962] Out 1740z S5 (No Attention)	Malc	WED
8088kHz	1730z	24/05 [414/33 29779……..94428] Out 1740z S3	Malc	THU
8545kHz	1045z	14/05 [698/24 51612.....26287] Out 1053z S2	Malc	MON
	1045z	16/05 [698/24 51612……etc] S4 Repeat of Monday	Malc	WED
	1045z	20/06 [699/49 56264……94058] Out 1058z S3	Malc	WED
	1045z	25/06 [699/49 56264 87092 79882 35052 92361 23947 87637 97929……82882 94058]	Ary, Malc	MON
9079kHz	0805z	05/05 [314/39 89976……06244] Out 0816z S3	Malc	SAT
	0805z	06/05 [314/39 89976……etc] Repeat of Saturday	Malc	SUN
	0805z	24/06 [319/35 03978 88920 41875 81170 97867 78160 81439 37638……24463 23844] 0815z S5	Malc	SUN
9130kHz	2005z	13/05 [364/32 70273……87414] Out 2015z S4	Malc	SUN
9610kHz	1910z	04/05 [618/36 59219 41157 79396 67820 36400 79655 90670 06545……63849 54671] Good	RNGB	FRI
	1910z	06/05 [618/36 59219……54671] Out 1921z S9	Malc	SUN
	0745z	07/05 [264/34 05563……15652] Out 0748z S3	Malc	MON
	1910z	01/06 [610/31 60751 72695 79485 49926 91409 50730 57902 19252……41044 77762]	RNGB	FRI
	1910z	03/06 [610/31 60751…….77762] Out 1913z S4	Malc	SUN
	1910z	22/06 [614/37 26287…… 00619] Out 1920z S4 (No ATTENTION)	Malc	FRI
	1910z	24/06 [614/37 26287 38015 71168 76316 70988 91969 36315 91868……15179 00619] Out 1920z	Malc	SUN
10356kHz	1530z	10/05 [264/34 05563……15652] Out 1540z S8	Malc	THU
10429kHz	0715z	08/05 [639/36 17276……17253] Out 0725z S4	Malc	TUE
	0715z	11/05 [639/36 17276 46772 08363 ... 97885 23578……etc] repeat of Tuesday	Ary, Malc	FRI
	0715z	19/06 [635/39 52737 85254 08928 78784 24133 97962 27068 14988……56677 54516]	RNGB	TUE
	0715z	22/06 [635/39 52737……..54516] Out 0726z S2	Malc	FRI
11581kHz	1300z	03/05 [585/33 28209……..36434] Out 1310z S5	Malc	THU
	1300z	05/05 [585/33 28209……etc] Repeat of Thursday	Malc	SAT
	1925z	10/05 [551/36 54726 26800 25456.....13663 80687 03054]	Ary	THU
12202kHz	0845z	08/05 [151/35 95194……16091] Out 0855z S3	Malc	TUE
	0845z	10/05 [151/35 95194 39655 37485 ... …etc] Repeat of Tuesday	Ary. Malc	THU
12397kHz	1000z	22/05 [306/25 07181……..71703] Out 1008z S7	Malc	TUE
	1000z	25/05 [306/25 07181……etc] Repeat of Tuesday	Malc	FRI
13424kHz	0645z	01/05 [518/40 50109 33196 11679 60063 84912 49352 38644……71946 37517] Out 0656z S2	RNGB, Malc	TUE
	0645z	03/05 [518/40 50109……etc] Repeat of Tuesday	Malc	THU
13427kHz	0900z	07/05 [538/36 66778…….53696] Out 0910z S4	Malc	MON
	0900z	25/06 [536/40 71364 33599 25739 02841 62330 23448 31098……06338 06306]	Ary	MON

13537kHz	1225z	21/05 [521/33 15588 96570 56487 62360 70310 76564 00918…..69104 98622] Out 1234z S3	Malc	MON
	1225z	25/05 [521/31 15588…..etc] Repeat of Monday	Gary H	FRI
13911kHz	0820z	15/05 [138/33 85356.....55100] Out 0830z S3	Malc	TUE
	0820z	16/05 [138/33 85356 49093 89527 74003 35995 07770 50271 17937……88995 55100]	RNGB	WED
14410kHz	1745z	14/05 [249/35 86891.....] Out 1755z S5	Malc	MON
	1745z	20/05 [249/35 86891……etc] repeat of Monday	Malc	SUN
	1745z	17/06 [249/00] Out 1748z S5	Malc	SUN
14575kHz	1645z	15/05 [334/36 48360.....30514] Out 1656z S3	Malc	TUE
	1645z	17/05 [334/36 48360……etc] Repeat of Tuesday	Malc	THU
14865kHz	1705z	23/05 [393/33 59401…….05789] Out 1714z S2	Malc	WED
	1705z	26/05 [393/33 59401……etc] Repeat of Wednesday	Malc	SAT
14940kHz	1650z	18/05 [929/31 70263…….05240] Out 1700z S3	Malc	FRI
15720kHz	0745z	23/05 [342/33 66033 66988 88023 62878 28322 45633 10558……40987 62077]	Ary	WED
	0745z	20/06 [347/38 24489 03637 70932 50256 47824 58527 71954 17335……42551 27854] Good	RNGB	WED
	0745z	22/06 [347/38 24489…….27854] Out 0755z S3 (No ATTENTION)	Malc	FRI
15795kHz	1625z	20/06 [978/34 52964…….08532] Out 1635z S3 (No Attention)	Malc	WED
	1625z	24/06 [978/34 52964 16187 71396 21755 15827 97334 59570……49984 08532] Out 1635z S7	Malc	SUN
15800kHz	0600z	15/06 [182/32 29778 54408 91369 19117 02879 78014 91921 04871……88795 29190] Good	RNGB	FRI

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Thursday

May 2018

0800z	**16780kHz**	**0810z**	**12850kHz**		
03/05	674 813 5 56574 41833 97733 35063 69831 813 5 00000				0800z Weak, 0810z Fair
10/05	674 812 5 56574 41823 97733 35063 69831 812 5 00000			[Compare gc with 03/05]	Weak
17/05	674 931 5 43997 84116 53718 78937 34694 931 5 00000				Weak
24/05	674 921 5 43997 84116 53718 78937 34694 921 5 00000				Weak
31/05	674 00000				Weak[DuthSDR]

June 2018

21/06	674 891 5 30309 39342 35474 35494 30766 891 5 00000	Weak (Dutch SDR)

E25

Nil Reports

G06

PoSW's logs:

Second + Fourth Thursdays in the Month 1830 UTC Schedule:-
10-May-18:- 6887 kHz, calling "842", DK/GC "273 273 62 62", same message heard in April. Peaking S9, lots of static crashes this evening, thunderstorms over the continent.

14-June-18:- 6887 kHz, "842" and "273 273 62 62" again.

Friday 1930 UTC Schedule Following Second + Fourth Thursdays:-
11-May-18:- 5935 kHz, start-up times purely nominal with these Thursday and Friday schedules, call "218" in progress when tuned in just before the half-hour, "273 273 62 62"
as per yesterday's 1830 UTC transmission. S9 signal inside the 49 metre broadcast band, no stations on close frequencies strong enough to cause problems in copying.

25-May-18:- 5953 kHz, on a frequency somewhat higher than expected, not found until a couple of minutes in, on the HF side of several strong broadcast stations. “271” and “273 273 62 62” again.

15-June-18:- 5930 kHz, “218” and “273 273 62 62”, signal weaker than is usual for this one.

First + Second Mondays in the Month 1700 + 1800 UTC Schedule:-
14-May-18:- 1700 UTC, 5287 kHz, “938 938 938 00000”, S5 to S6.
1800 UTC, 4935 kHz, weak signal, strong “XJT” on LF side, both transmissions found at about two minutes in.

4-June-18:- 1658:30s UTC, approx, 5287 kHz, “938 938 938 00000”, suffering from local interference.
Post-transmission computer shut down sounds heard at around 1702:45s UTC.
1758:50s, 4935 kHz, weak signal.

Others’ logs [thanks Malc]

Monday

May 2018

0759z 7320kHz

07/05	329 000	Weak
21/05	329 000	Weak

June 2018

18/06	329 00000	Weak

1700z 5287kHz 1800z 4935kHz

07/05	938 00000	No sig report
14/05	928 00000	Fair

Wednesday

June 2018

1259z 5890kHz

21/06	329 00000	Weak

Thursday

May 2018

1830z 6887kHz

10/05	842 273 62 64537 ... 76491 273 62 00000	Weak
24/05	842 273 62 64537 ... 76491 273 62 00000	Weak

Friday

May 2018

1900z 5935kHz

11/05	218 273 62 64537 ... 76491 273 62 00000	Fair

June 2018

15/06	218 273 62 64537 ... 76491 273 62 00000	Weak

S06

S06 log May 2018

Daily Mon- Fri 0400z 15721kHz - No reports

Thursdays (Repeats following day) 0830z 17475kHz 0930z 14736kHz

03/05 ‘842’ 103 49 57828 93185 44042 14309 98698 76671 25410 82131 49271 19554 53491 08747 02761 35831 1§2900 65352 30744 36288 98081 99236 20044 82166 22895 00482 99941 88989 88508 60152 26917 19992 89274 18441 19088 26574 61280 26180 57546 23843 03272 68177 96777 11450 24614 21804 51351 75783 00001 49275 51061 103 49 00000

10/05 ‘842’ 679 50 79767 84520 28427 72425 58535 63534 05142 43047 40915 92003 81408 49349 74123 50806 60613 78269 17771 37874 06801 96950 17465 04952 72233 09379 81246 08523 95743 66824 26040 10827 51590 30876 86316 91911 53469 12285 02151 58666 43410 34152 28856 61750 20203 92851 35390 56385 87078 15158 83724 67923 679 50 00000] 0942z

17/05 ‘842’ 571 30 53954 78691 23590 10320 61037 54373 16892 19142 56075 80976 90870 13293 45274 05043 30754 56481 10049 22974 40210 50324 49860 63985 99862 45665 32577 10657 13791 93840 44542 18016 571 30 00000

24/05 ‘842’ 605 31 ……77604 ??50432 646.. 68420 17290 78790 76779 67709 95094 59678 65820 62376 48058 84258 95645 86669 47981 89347 14388 76435 25054 55660 49411 62525 78616 605 31 00000 (very weak)

31/05 ‘842’ 179 32 07874 16125 68961 23400 33624 33607 96417 42859 51476 74000 95735 34695 29373 69465 64995 50710 08330 10123 54963 20597 91082 56006 72630 88357 17931 85060 64916 49603 46984 63101 12244 38170 179 32 00000

Fridays (1st & 3rd) 2000z 9492khz 2100z 7528kHz (frequencies may vary slightly)
No reports

Saturdays (1st/3rd) 1900z 6773kHz 2000z 5773kHz (frequencies may vary slightly)
05/05 ‘263’ 00000
19/05 ‘263’ 00000

Other transmissions:
21/05 **9300kHz** 1457z {i.p., ending 222 222 5 5 00000] 1458z Thomas MON
25/05 **10423/8167kHz** 1800/1830z
‘058’ 172 50 35081 99871 46548 82053 37676 68812 27235 46159 65392 62376 65166 62434 60240 05814 37637 47602 32075 54639 28352 25821 04889 19798 21997 45304 18655 70665 87976 40744 60183 83058 89243 21216 21412 24464 77166 88266 08588 93652 58370 13862 50740 56880 44485 32882 80952 47859 20742 29863 88770 23682 172 50 00000] Malc FRI

29/05 ‘058’ 943 50 63899 15011 00033 51198 55995 43202 12257 32240 78662 33197 92309 16777 92158 01885 77638 32067 07836 56400 30747 99782 54839 21338 44021 03903 38295 23491 32158 96593 87459 26288 73122 46755 17226 31134 83581 60945 51465 87828 39748 31341 81612 81250 79576 90449 58942 86508 47229 77236 43983 09726 943 50 00000] 1813z

S06c - No reports

S06s May log:

Monday			
7th/14th	0830/0840z	8221/9353	‘371’ 504 6 72558 59575 25225 85342 51116 64485
21st/28th			‘371’ 428 5 84035 62317 83422 84537 04538
7th/14th	0900/0910z	16380/14835	‘872’ 546 9 32441 35786 83110 38611 33218 45503 44449 37631 37158
21st/28th			‘872’ 469 5 39394 35083 42571 32785 37331
7th/14th	1200/1210z	10230/12165	‘831’ 906 5 58202 44206 39565 25473 03882
21st/28th			‘831’ 420 5 36806 37188 48254 44053 33023
Tuesday			
1st/8th	0600/0610z	15945/16945	‘438’ 90? 5 40244 360?2 38323 47552 43630
15th/22nd			‘438’ 259 6 46062 68672 97478 39585 30485 96632
1st/8th	0700/0715z	5430/6780	‘374’ 821 5 36444 37144 96123 84434 39808
15th/22nd			‘374’ 582 6 17111 58346 70728 32160 63522 08288
1st/8th	0730/0740z	7365/11655	‘427’ 985 6 33699 39998 30667 35947 83964 40774
15th/22nd			‘427’ 851 6 10996 38829 06674 12532 79501 04475
1st/8th	0800/0810z	14373/12397	‘352’ 470 6 31315 36194 36194 37650 43773 46793
15th/22nd			‘352’ 417 6 60956 01745 63302 01371 45588 82045
1st/8th	1000/1010z	4820/5660	‘893’ 416 5 40385 33596 46625 40431 41933
15th/22nd			‘893’ 517 6 28263 22321 21223 22690 85428 21987
1st/8th	1100/1110z	6810/7560	‘754’ 830 6 43079 36914 46467 36973 37977 89762
15th/22nd			‘754’ 236 8 87378 20647 21464 30750 42433 25620 27292 36923
1st/8th	1500/1510z	6766/7744	‘537’ 410 6 83030 32030 34002 36870 39553 35530
15th/22nd			‘537’ 206 8 35944 64372 13078 10915 84613 17148 25162 33425
Wednesday			
2nd/9th	0730/0740z	12110/14977	‘745’ 210 6 83208 37829 47458 42867 39654 42387
16th/23rd			‘745’ 902 6 07931 98755 84638 45752 54544 53202
2nd/9th	0820/0830z	9485/11085	‘471’ 826 5 45032 39366 87471 31487 30130
16th/23rd			‘471’ 536 8 07628 61154 97511 24047 58195 66625 48646 32977
2nd/9th	0830/0840z	11565/12560	‘464’ 827 5 67453 12317 89564 34265 67534
16th/23rd			‘464’ 982 5 30309 39342 35474 35493 30766
2nd/9th	1000/1010z	14580/16020	‘729’ 401 5 57423 13217 89645 45328 08431
16th/23rd			‘729’ 580 6 33445 69424 38167 05423 76458 59421

Thursday

3rd/10th (E17z)	0800/0810z	16780/12850	'674' 812 5 56574 41823 97733 35063 69831
17th/24th			'674' 921 5 43997 84116 53718 78937 34694
3rd/10th	0930/0940z	9255/10325	'314' 920 5 86513 64963 32793 29373 03653
17th/24th			'314' 268 5 81413 94073 83531 94063 63156
3rd/10th	1200/1210z	13145/14535	'425' 987 6 71737 12852 52422 36152 84167 21648
17th/24th			'425' 837 6 62314 52745 52894 03527 82419 73429

Friday

4th/11th	0900/0910z	6844/7161	'624' 970 5 36461 36956 35478 36583 36053
18th/25th			'624' 837 5 88620 58069 61732 74537 57440
4th/11th	0930/0940z	10290/9655	'516' 934 7 34203 80585 85362 02507 34465 29833 44420
18th/25th			'516' 298 7 01405 15003 24357 60583 54545 84116 53718

Saturday

5th	0800/0810z	12460/10250	'254' 930 6 15009 34140 78386 91497 82963 24162

Sunday

6th/13th	0630/0640z		'524' NRH
20th/27th			

With thanks to Daniel, Gary H, RNGB, Malc, Ary

S06 log June 2018

Daily Mon- Fri 0400z 15721kHz

Thursdays (Repeats following day) 0830z 16022kHz 0930z 13925kHz

14/06 '842' 971 34 25421 56406 32070 92333 19596 91828 88465 53441 34361 79644 36871 38873 62447 44137 76803 11725 21847 62834 08770 13858 93521 73827 64605 86352 67422 24590 45330 27559 76485 60746 58724 49683 23318 78209 971 34 00000

21/06 '842' 601 35 79342 84566 63693 94797 04838 38485 03301 31859 30085 88565 93500 84891 20544 43026 55060 31042 03527 21318 74649 25810 42241 43073 43387 64513 86886 02328 21656 75104 82480 25419 22367 03276 38120 36020 29880 601 35 00000] 0840z

28/06 '842' 610 2 11111 00060 610 2 00000 (All groups repeated) An S06b !

Fridays (1st & 3rd) 2000z 9492khz 2100z 7528kHz (frequencies may vary slightly)

01/06 '483' 00000

15/06 '483' 612 95 89951 48801 78830 95080 84918 71159 68123 87108 54131 34561 42783 43398 64856 14597 38266 24915 75572 86162 89168 66977 95812 78500 37446 94236 97733 70880 23184 77330 56610 08792 76466 26378 20653 81059 84754 13764 04162 66443 60321 38776 73866 52455 47004 60773 36254 83652 43746 74100 44626 73793 14201 14435 26041 51442 85045 97200 26558 23283 57649 37984 22675 80330 15849 11424 45905 43749 96714 05564 57680 22023 84420 14052 43685 78126 09460 89561 49527 85157 76705 42702 04266 61251 04794 90523 33709 88848 58777 79899 77862 21980 79964 50020 96245 77132 75835 612 95 00000

Saturdays (1st/3rd) 1900z 6773kHz 2000z 5773kHz (frequencies may vary slightly)

02/06 '263' 00000

16/06 '263' 00000

Other transmissions: 1800z 10423kHz 1830z 8167kHz

01/06 '058' 263 50 65785 44372 61486 56666 49085 61275 34404 96373 88735 92649 95314 12018 77007 57194 98715 56144 51894 96172 82641 52490 74939 06539 53030 11588 77970 18299 89286 52309 39604 20802 94470 46565 77476 67634 38550 29334 67135 14830 68164 41207 23525 72052 81323 95643 06015 71467 90486 88123 32888 83968 263 50 00000

09/06 '058' 471 50 35801.....21326 471 50 00000] 1813z

1700z 9946kHz 1730z 8095kHz

09/06 '343' 129 50 35801.....21326 129 50 00000] 1713z

S06c - No reports

S06s June log:

Monday

4th/11th	0830/0840z	8221/9353	'371' 529 6 38163 33231 31323 32680 85418 31896
18th/25th			'371' 920 5 33584 40385 46170 43306 37796
4th/11th	0900/0910z	16380/14835	'872' 560 9 90406 36113 31107 37806 37137 31406 46464 33690 39883
18th/25th			'872' 469 5 45504 44439 37361 37158 89898
4th/11th	1200/1210z	10230/12165	'831' 904 5 33699 39998 30667 35947 82964
18th/25th			'831' 972 5 46280 83060 43879 40606 38366

Tuesday

5th/12th	0600/0610z	15945/16945	'438' 257 6 43334 20147 20494 42014 82061 35544
19th/26th			'438' 957 6 42990 33000 32968 35332 36880 33582
5th/12th	0700/0715z	5430/6780	'374' 895 6 35944 31323 32680 85418 31896 47565
19th/26th			'374' 219 5 33640 38293 43330 32403 85334
5th/12th	0730/0740z	7365/11655	'427' 935 6 31568 87378 30674 31464 40750 42069
19th/26th			'427' 806 5 46062 68672 97478 39685 30485
5th/12th	0800/0810z	14373/12397	'352' 947 6 32805 37450 46501 31053 44246 31824

19th/26th			'352' 418 6 96632 52537 53317 06675 41736 21767
5th/12th	1000/1010z	4820/5660	'893' 501 6 31405 46464 33690 39882 23537 47956
19th/26th			'893' 204 5 52401 63919 92699 14600 74248
5th/12th	1100/1110z	6810/7560	'754' 908 6 83208 38729 47458 42867 39674 42387
19th/26th			'754' 923 6 33796 13577 74526 46647 79302 53516
5th/12th	1500/1510z	6766/7744	'537' No reports
19th/26th			'537' 842 6 88620 58069 61732 74537 57440 20597

Wednesday

6th/13th	0730/0740z	12110/14977	'745' 803 6 39818 38792 30187 30568 32154 47965
20th/27th			'745' 263 8 07931 98755 84636 45752 64655 58202 44206 29464
6th/13th	0820/0830z	9485/11085	'471' 903 5 31405 46464 33690 39883 32537
20th/27th			'471' 865 9 88443 36772 98493 36340 32048 34338 30085 40901 34341
6th/13th	0830/0840z	11565/12560	'464' 937 5 28571 15277 59881 64604 49656
20th/27th			'464' 257 8 00364 16074 00633 06044 28533 08863 23353 86923
6th/13th	1000/1010z	14580/16020	'729' 451 6 39654 42387 44142 30698 33104 31985
20th/27th			'729' 458 6 96873 07565 76264 33183 56656 27569

Thursday

7th/14th (E17z)	0800/0810z	16780/12850	'674' 920 5 01482 56400 11935 77810 55770
21st/28th			'674' 891 5 30309 39342 35474 35494 30766
7th/14th	0930/0940z	9255/10325	'314' No reports
21st/28th			'314' 908 5 93099 36580 48096 43306 37796
7th/14th	1200/1210z	13145/14535	'425' 891 6 74893 55627 01994 67744 98735 55711
21st/28th			'425' 897 6 31502 33886 33334 32917 37524 36615

Friday

1st/8th	0900/0910z	6844/7161	'624' 937 5 33796 13577 74525 46647 79302
15th/22nd			'624' 871 5 46062 68672 97478 39685 30485
1st/8th	0930/0940z	10290/9655	'516' 830 7 39534 17228 15636 47891 23247 17099 94961
15th/22nd			'516' 243 7 52401 63919 92699 14600 74248 49754 65125

Saturday

2nd	0800/0810z	12460/10250	'254' 937 6 01405 15003 24357 60583 54545 50128

With thanks to Daniel, Gary H, RNGB, Malc, Ary

PoSW's logs and analysis across S06 and S06 a transmissions :

S06 OM Voice:-

First + Third Fridays in the Month 1900 + 2000 UTC Schedule:-
18-May-18:- 1900 UTC, 9492 kHz, very weak signal, found about two minutes into the transmission, could just hear, "483 483 483 00000".
2000 UTC, 7528 kHz, second sending much stronger, peaking S8.

As was expected, this schedule moved by one hour in June:-
1-June-18:- 2000 UTC, 9492 kHz, "483 483 483 00000", indicating around S7.
2100 UTC, 7528 kHz, also S7.

15-June-18:- 2000 UTC, 9492 kHz, a "full message" this evening, unusual enough to be worthy of a comment, "483", DK/GC "612 612 95 95". Signal up and down, never what one might call "strong". Started to malfunction around 2016 UTC, voice stopped for a short while, started again with "483" call for a short while then picked up the thread again at 5F group No. 53, "26041". Ended in the usual manner at 2027 UTC approx.
2100 UTC, 7528 kHz, second sending, much stronger signal, it being past ten of the clock I did not stay with it to see how it progressed.
This schedule does not often appear in "full message" mode; although not every transmission has been monitored, a quick look back through the log suggests the last one was on 6-Oct-2017, which also had a group count of 95.

First + Third Saturdays in the Month, 1900 + 2000 UTC Schedule:-
19-May-18:- 1900 UTC, 6773 kHz, "263 263 263 00000", S9 with QSB, no problem to find, carrier with tone noted about thirteen minutes before the hour followed by a single spoken "263".
2000 UTC, 5773 kHz, the second sending exactly one MHz lower in frequency, somewhat unusual. Very strong signal indicating S9+.

1-June-18:- 1900 UTC, 6773 kHz, "263 263 263 00000", S9 with rapid QSB.
2000 UTC, 5763 kHz, "ten lower" than expected, second sending, well over S9.

Other S06:-
An S06 schedule found by chance in the second week of May; monitoring throughout the rest of the month revealed that it started at 1830 UTC, the call was "058", appeared on alternate days and always consisted of fifty 5F groups. A training exercise rather than an actual message? This gives a total transmission time of a bit over twelve-and-a-half minutes.

11-May-18, Friday:- 1836 UTC, 8167 kHz, S06 in progress, ended after 1842:30s UTC with,
"617 617 50 50 00000".

13-May-18, Sunday:- 1830 UTC, 8167 kHz, calling "058", DK/GC "913 913 50 50", peaking S9.
Not found on Monday 14-May.

15-May-18, Tuesday:- 1830 UTC, 8167 kHz, "058", DK/GC "329 329 50 50".
No sign on of this one on Wednesday 16-May, looks like a "one day on, one day off" schedule.

17-May-18, Thursday:- 1830 UTC, 8167 kHz, “058” DK/GC “473 473 50 50”. Carrier was up on 8167 around 1814z, carrier with tone at 1820 followed by single spoken “058” at 1821, the usual S06 pre-transmission warm-up routine.

19-May-18, Saturday:- 1830 UTC, 8167 kHz, DK/GC “734 734 50 50”, not too strong this evening.

21-May-18, Monday:- 1830 UTC, 8167 kHz, DK/GC “691 691 50 50”, S5 at first but came up to S9 by the end at around 1842:30s.

23-May-18, Wednesday:- 1830 UTC, 8167 kHz, DK/GC “324 324 50 50”.

25-May-18, Friday:- 1830 UTC, 8167 kHz, DK/GC “172 172 50 50”, peaking over S9.

Searches had been made both at 1930 and 1730 UTC looking for a possible second/first
sending but nothing found – because this 1830z transmission is the second sending of a schedule that first goes out at 1800:-

29-May-18, Tuesday:- 1800 UTC, 10423 kHz, turns out this is the first sending, “058” call,
DK/GC “943 943 50 50”, weak signal compared with the 1830z heard over the last couple of weeks, easy to miss, found about two minutes into the call-up.
1830 UTC, 8167 kHz, second sending, much stronger, peaking over S9.

No sign of this one on the next day it was expected, Thursday 31- May, or if it was there it must have been an extremely weak signal. It was assumed that it had ceased with the end of this month, but it showed up again in June:-

3-June-18, Sunday:- 1830 UTC, 8167 kHz, just caught the end off the call-up of “058”, DK/GC “621 621 50 50”, good signal.

5-June-18, Tuesday:- 1800 UTC, 10423 kHz, weak signal, difficult copy.
1830 UTC, 8167 kHz, second sending much stronger, “058”, DK/GC “376 376 50 50”.

7-June-18, Thursday:- 1800 UTC, 10423 kHz, “058”, DK/GC “426 426 50 50”, up to a “7”
on the S-meter.
1830 UTC, 8167 kHz, second sending peaking over S9.

No sign of this one on Monday 11-June or on any of the following days so this schedule has come to an end.

S06a, YL Voice:-
A selection of some of the stronger signals received from S06s, all in the UK daytime and suffering from the indifferent propagation conditions of the last couple of months;-

Monday 0830 + 0840 UTC Schedule, Call “371”:-
14-May-18:- 0830 UTC, 8221 kHz, DK/GC “504 504 6 6”, “72558 59575 25225 85342 51116 64485”.
Fairly sure there was an error here, 5F group No. 4 “85342” spoken as “58342” the second time. Got ready to confirm with the second sending, 0840z on 9353 kHz, but was far too weak to copy.

11-June-18:- 0830 UTC, 8221 kHz, DK/GC “529 529 6 6”, “38163 33231 31323 32680 85418 31896”
0840 UTC, 9353 kHz, much weaker signal.

25-June-18:- 0830 UTC, frequency appeared to be closer to 8222 rather than the usual 8221,
DK/GC “920 920 5 5”, good signal, “33584 40385 46170 43306 37796”.
0840 UTC, 9353 kHz, weak signal down in the noise.

Tuesday 0730 + 0740 UTC Schedule, Call “427”:-
8-May-18:- 0730 UTC, 7365 kHz, DK/GC “985 985 6 6”, weak signal, “33699 39998 30667 35947 83964 40774”.
0740 UTC, 11655 kHz, second sending, much stronger.

22-May-18:- 0730 UTC, 7365 kHz, DK/GC “851 851 6 6”, 10996 38829 06674 12532 79501 04475”, weaker broadcast station on the same frequency.
0740 UTC, 11655 kHz, peaking S9 with QSB.

12-June-18:- 0730 UTC, 7365 kHz, over-riding the weaker German language station, DK/GC “935 935 6 6”, “31568 87378 30674 31464 40750 42069”.
0740 UTC, 11655 kHz, strong signal.

Wednesday 0730 + 0740 UTC Schedule, Call “745”:-
9-May-18:- 0730 UTC, 12110 kHz, DK/GC “210 210 6 6”, strong signal, “83208 37829 47458 42867 39654 42387”.
0740 UTC, 14977 kHz, weaker signal.

30-May-18:- 0730 UTC, 12110 kHz, “745 745 745 00000”, the “no message” routine used at the end of the month when there are five of any particular day.
0739 UTC, 14977 kHz, second sending, starting about a minute early, seems to be standard procedure for a “no message”.

6-June-18:- 0730 UTC, 12110 kHz, DK/GC “805 805 6 6”, “39818 38792 30187 30568 32154 47965”, peaking S9.
0740 UTC, 14977 kHz, also S9.

Friday 0930 + 0940 UTC Schedule, Call “516”:-
1-June-18:- 0930 UTC, 10290 kHz, DK/GC “830 830 7 7”, “39534 17228 15636 47891 23247 17099 94961”, S9 with QSB.
0940 UTC, 9655 kHz, second sending, weaker signal.

8-June-18:- 0930 UTC, 10290 kHz, “830 830 7 7” and 5Fs as on the 1st.
0940 UTC, 9655 kHz, second sending.

15-June-18:- 0930 UTC, 10290 kHz, DK/GC “243 243 7 7”, signal up and down, “52401 63919 92699 14600 74248 49754 65125”.
0940 UTC, 9655 kHz, weak signal.

First Saturday in the Month 0800 + 0810 UTC Schedule, Call “254”:-
5-May-18:- 0800 UTC, 12460 kHz, DK/GC “930 930 6 6”, “15009 34140 78386 91497 82963 24162”.
Second sending at 0810 UTC on 10250 kHz very weak, unreadable.

S11a log May/June

4870kHz	1955z	02/05 [370/00] Konyetz 1958z S9	Malc	WED
	1955z	04/05 [376/00] Konyetz 1958z S9	Malc	FRI
	1955z	09/05 [378/00] Konyetz 1958z S9	Malc	WED
	1955z	11/05 [370/00] Konyetz 1958z S9	Malc	FRI
	1955z	16/05 [378/35 23474 94723 28328 28602 72960 72906 55216……36052 80068] Konyetz 2006z	RNGB, Malc	WED
	1955z	18/05 [378/35 23474…..etc] Repeat of Wednesday	Malc	FRI
	1955z	23/05 [371/00]	RNGB	TUE
	1955z	25/05 [370/00] Konyetz 1958z S9	Malc	FRI
	1955z	30/05 [377/00] Konyetz 1958z S9	Malc	WED
	1955z	01/06 [373/00] Konyetz 1958z S9	Malc	FRI
	1955z	13/06 [379/00] Strong	RNGB	WED
	1955z	15/06 [379/00] Out 1958z S9	Malc	FRI
	1955z	20/06 [377/32 91023……05765] Konyetz 2005z S9 (No Vnimanie)	Malc	WED
	1955z	22/06 [377/32 91023…..etc] Repeat of Wednesday	Malc	FRI
	1955z	27/06 [377/00] Konyetz 1958z S9	RNGB, Malc	WED
5149kHz	0455z	22/05 [322/00]	Ary	TUE
5737kHz	2050z	02/05 [483/00] Strong	RNGB	WED
	2050z	06/05 [483/00] Konyetz 2053z S9	Malc	SUN
	2050z	09/05 [484/00] Konyetz 2053z S5	Malc	WED
	2050z	13/05 [482/00] Konyetz 2253z S7	Malc	SUN
	2050z	16/05 [486/00] Konyetz 2058z S6 QRM	Malc	WED
	2050z	20/50 [483/00] Konyetz 2053z S5	Malc	SUN
	2050z	23/05 [486/40 91458 23709 53102 33634 90623 80169 92361 40504.....25526 67782] Out 2102z	Malc	WED
	2050z	27/05 [486/40 91458…….60782] Konyetz 2102z S7	Malc	SUN
	2050z	30/05 [483/002 Konyetz 2053z S9	Malc	WED
	2050z	03/06 [481/00] Konyetz 2053z S5	Malc	SUN
	2050z	17/06 [481/00] Konyetz 2053z S2	Malc	SUN
	2050z	20/06 [486/33 37254…….00409] Konyetz 2101z S9 (No Vnimanie)	Malc	WED
	2050z	24/06 [486/33 37254 13605 26157 38506 63855 50187 30930……32467 00409] Konyetz 2101z S4	Malc	SUN
	2050	27/06 [485/00] Konyetz 2053z S9 (Dutch SDR)	Malc	WED
8800kHz	1020z	01/05 [426/00] Konyetz 1023z S4	Malc, RNGB	TUE
	1020z	04/05 [421/00] Konyetz 1023z S3	Malc	FRI
	1020z	08/05 [421/00] Konyetz 1023z S3	Malc	TUE
	1020z	11/05 [421/00] Konyetz 1023z S2	Malc, Ary	FRI
	1020z	15/05 [427/00] Konyetz 1023z S2	Malc, RNGB	TUE
	1020z	18/05 [420/00] Konyetz 1023z S2	Malc	FRI
	1020z	22/05 [427/37 00568…….38523] Konyetz 1032z S3	Malc	TUE
	1020z	25/05 [427/37 00568……etc] Repeat of Tuesday	Malc	FRI
	1020z	29/05 [425/001 Konyetz 023z S3	Malc	TUE
	1020z	01/06 [422/00] Konyetz 1023z S3	Malc	FRI
	1020z	19/06 [422/00] Good	RNGB	TUE
	1020z	22/06 [429/00] Konyetz 1023z S4	Malc	FRI
	1020z	29/06 [421/00] Good	RNGB	FRI
10210kHz	1015z	10/05 [476/00] Konyetz 1018z S2	Malc, Ary	THU
	1015z	14/05 [476/00] Konyetz 1018z S2	Malc	MON
	1015z	17/05 [476/00] Konyetz 1018z S4	Malc, RNGB	THU
	1015z	21/05 [471/38 00193 86200 70834 98064 50057 20524 44143 76455…….41684 37870]	RNGB	MON
	1015z	24/05 [471/38 00193……etc] Repeat of Monday	Malc	THU
	1015z	31/05 [478/00] Konyetz 1018z S3	Malc	THU
	1015z	11/06 [471/30 99194 20008 32691 08597 20796 52350 15227……16918 44984] Fair	RNGB	MON
	1015z	18/06 [479/00] Konyetz 1018z S2	Malc	MON
	1015z	21/06 [472/00] Konyetz 1018z S2	Malc	THU
	1015z	25/06 [479/00] Konyetz 1023z S2	Malc	MON

11092kHz	1540z	02/05 [569/35 54740……43850] Konyetz 1551z S4	Malc	WED
	1540z	09/05 [569/00] Konyetz 1543z S2	Malc	WED
	1540z	16/05 [561/00] Konyetz 1543z S2	Malc	WED
	1540z	19/05 [564/00] Konyetz 1543z S3	Malc	SAT
	1540z	23/05 [567/00] Konyetz 1543z S3	Malc	WED
	1540z	30/05 [569/00] Konyetz 1543z S5	Malc	WED
	1540z	16/06 [565/00] Strong	RNGB	SAT
	1540z	20/06 [567/00] Konyetz 1543z S2	Malc	WED
	1540z	27/06 [565/00] Konyetz 1543z S9 (Dutch SDR)	Malc	WED
12457kHz	1850z	02/05 [287/00] Konyetz 1853z S2	Malc	WED
	1850z	05/05 [287/00]	RNGB	SAT
	1850z	16/05 [280/00] Konyetz 1853z S4	Malc	WED
	1850z	19/05 [286/00] Konyetz 1853z S2	Malc	SAT
	1850z	23/05 [286/38 40452……62947] Konyetz 1901z S3	Malc	WED
	1850z	26/05 [286/38 40452……] Repeat of Wednesday	Malc	SAT
	1850z	30/05 [282/00] Konyetz 1853z S7	Malc	WED
	1850z	02/06 [284/00] Konyetz 1853z S2	Malc	SAT
	1850z	16/06 [282/00] Konyetz 1958z S6	Malc	SAT
	1850z	20/06 [286/00] Konyetz 1853z S4	Malc	WED
	1850z	23/06 [285/00]	RNGB	SAT
17378kHz	0735z	03/05 [383/00] Weak	RNGB	THU
	0735z	08/05 [383/00] Konyetz 0738z S2	Malc	TUE
	0735z	10/05 [384/00]	Ary	THU
	0735z	17/05 [384/33 85363 72287 92984 92235 43206 40537…… 66800 67853] Russian SDR	RNGB	THU
	0735z	22/05 [381/00] Konyetz 0738z S2	Malc	TUE
	0735z	29/05 [382/00] Konyetz 0738z S3	Malc, RNGB	TUE
	0735z	31/05 [380/00] Konyetz 0738z S2	Malc	THU
	0735z	12/06 [380/00] Good	RNGB	TUE
	0735z	14/06 [380/00] Fair	RNGB	THU
	0735z	19/06 [380/00] Fair	RNGB	TUE
	0735z	21/06 [385/00] Konyetz 0738z S2	Malc	THU
	0735z	26/06 [385/34 70142 57031 81416 30586 23560 76149 03140……62651 12524] No Viymanie	RNGB	TUE

V02 a

Not heard.

V07

Sunday

May2018

0500z	**14482kHz**	**0520z**	**13382kHz**	**0540z**	**11582kHz**	
06/05	435 1 378 61 86864 ... 24552 000 000					Weak

435 1 378 61

86864 14077 21540 89726 88059
37644 49085 666?7 75957 08700
16336 31978 54322 85832 74908
07347 92586 33375 28966 ?9482
00821 48974 30214 78961 75061
70293 33377 64482 66676 62791
41105 76158 65737 70638 53246
3?510 06397 41717 69853 91852
85514 25807 58377 64243 51009
58333 24732 88722 89965 18574
14373 74459 32248 66771 26083
93567 03929 02990 21745 03347
24552 000 000 Courtesy DanAr

20/05	435 1 331 57	[T]
27/05	435 000	Very strong [T! California]

June 2018

0700z	**13563kHz**	**0720z**	**12163kHz**	**0740z**	**10263kHz**		
10/06	NRH						
17/06	NRH						
24/06	112 000					[0700z NRH]	Weak

V21

From the US, " I heard a very brief weak voice in one of my recordings on 5637kHz, totally unintelligible but from all my listenings the cadence sounded very much like the Babbler so I am hopeful he is still out there.

I've had a few tries on 6529kHz at the expected time but nothing so far unfortunately.

Thanks MaleAnon

V15 North Korean Intelligence via Radio Pyongyang

V24

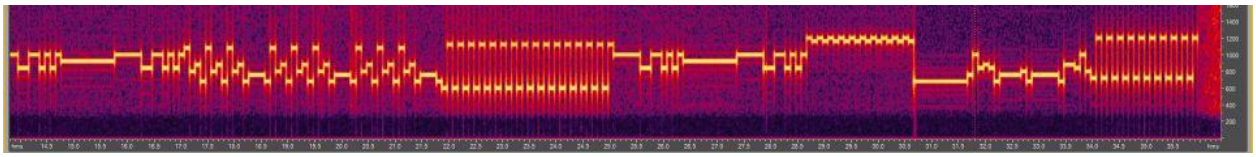
5900kHz1600z	22/05	AM	Pop music followed by a message in Korean	AB-J	TUE

V26

4243kHz1216z	03/05/18[(From M95 sked - USB - Chinese - Female - // 9054) (Remote tuner China)]	JPL	THU
4243kHz1212z	10/05/18[(From M95 sked - USB - Chinese - Female - // N/H) (Remote tuner China)]	JPL	THU
9054kHz1216z	03/05/18[(From M95 sked - USB - Chinese - Female - // 4243) (Remote tuner China)]	JPL	THU

Polytones

XPA c



XPA c 0700z 14/05 813 000 06232 00001 00000 ... 33261

Monday/Wednesday

May 2018

0600z	**10868kHz**	**0620z**	**12168kHz**	**0640z**	**13368kHz**		
02/05		813 000 08854 00001 00000 ... 37265					Fair
07/05		813 1 00464 00073 41560 ... 07564				[0600z Weak]	Fair

813 813 813 1 813 813 813 1 813 813 813 1

00464 00073 41560 91491 23193 25542 67353 06031 06959 56076
38228 64410 99976 12170 23037 60343 17114 77206 07579 02922
32163 45766 04368 30592 29607 01499 41544 57924 57929 84752
91642 50391 88778 10029 45717 90469 77600 74286 06412 18990
02164 03104 35589 91724 82221 74393 97659 45268 69093 93323
12837 82666 59706 44538 21639 60957 73899 15058 86002 72363
60626 85933 13203 29629

46478 93390 16771 91492 04457 18002 10171 73705 45664 70165
18687 07564 *Courtesy PLdn*

09/05	813 1 00464 00073 41560 ... 07564		Fair
14/05	813 000 06232 00001 00000 ... 33261		Fair
16/05	813 000 04664 00001 00000 ... 36262	[0600z QSB4]	Weak
21/05	813 1 09930 00059 25670 ... 52544		Fair

813 813 813 1 813 813 813 1 813 813 813 1

09930 00059 25670 80582 61613 65837 06394 03388 95681 39116
93561 71047 65756 55817 12891 55458 94146 87078 64010 40878
60643 60014 87371 86269 15294 89396 68013 16937 81754 89801
77194 05196 86306 44826 05050 57689 03401 87357 98754 26492
12091 43347 34025 60306 80164 36778 75175 64910 15226 94330
76201 97559 40042 11197 24876 42300 76303 87294 84808 94771
82107 52544 *Courtesy PLdn*

23/05	813 1 09930 00059 25670 ... 52544		Fair
28/05	813 000 09628 00001 00000 ... 40263		Very strong
30/05	813 000 03274 00001 00000 ... 34262	[0600z Weak]	Strong

June 2018

0600z 11409kHz 0620z 13509kHz 0640z 14609kHz

04/06	456 1 00138 00071 68994 ... 15322		Strong, QSB2

456 456 456 1 456 456 456 1 456 456 456 1

00138 00071 68994 45311 10660 75819 09216 18389 09949 90171
09047 98163 46996 74635 85646 48398 27175 68993 78487 78695
84784 32851 21452 35105 87924 92431 44606 93069 22592 35796
98091 60622 26884 08118 36559 98624 29565 46846 17784 94047
36269 87330 46286 60333 13101 54764 57755 93918 86814 49560
44786 74450 89253 23541 05037 31341 20322 62134 08423 19789
74388 89218 70576 25076

33048 73409 18252 51694 04182 95088 84396 63460 69114 15322
Courtesy PLdn

06/06	456 1 00138 00071 68994 ... 15322		Fair
11/06	456 000 08786 00001 00000 ... 37670		Strong
13/06	456 000 01427 00001 00000 ... 36653		Very strong
18/06	456 1 02113 00059 19505 … 72455		Weak, QSB2
20/06	456 1 02113 00059 19505 ... 72455		Very strong
25/06	Very weak, unworkable [auto copy]		
27/06	456 000 08514 00001 00000 ... 35661	[0600z Weak, noisy]	Fair

XPA2 m

Sunday/Tuesday

May 2018

2000z 14538kHz 2020z 13538kHz 2040z 12138kHz

01/05	08953 00095 81062 ... 40745	[2000/2020z NRH in UK]	Weak, DanAr

08953 00095 81062 82053 05910 26680 49348 31665 56602 00314
05924 21823 14224 90910 66895 75461 55060 37674 64172 77567
30761 92735 34055 86511 55492 21231 18521 78143 41420 99007
21417 95046 78244 92689 69909 99773 92291 89581 70902 39209
12110 50284 47324 75897 13632 44979 34080 70658 62433 76956
29453 59302 29064 02590 75141 82351 61665 70087 65571 50450
84464 31108 52008 89321 22686 19521 75382 50969 60411 76106
78785 78792 07979 21138 54779 92376 58036 02156 98951 57848
97844 94048 42851 15309 93516 60915 77252 56447 94967 72800
45934 11319 96809 86504 31405 50870 30424 40745
Courtesy DanAr

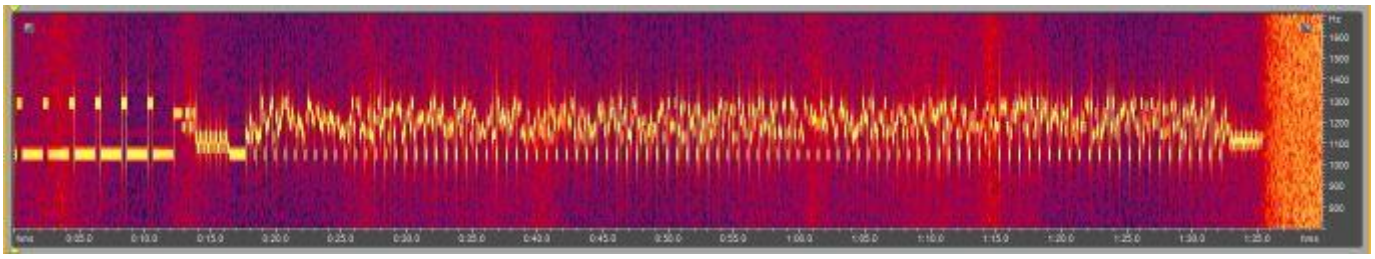
06/05	Unworkable		
08/05	Unworkable, Null message 2m11s lg		
13/05	03194 00001 00000 … 33664		Weak Argentine, Very strong UK
15/05	08758 00113 13910 ... 17046		Weak Argentine, Very strong UK
20/05	08778 00113 13910 ... 17046	[2000z Weak, QRN3]	Weak Argentine, Fair UK

08778 00113 13910 59975 45144 08146 45297 97672 11275 99549
35981 31630 53853 36156 86400 92382 97774 82878 07960 88674
29051 00366 01985 95832 72645 35422 20213 61869 74539 57245
63925 59033 49522 39137 27986 40894 66510 44956 37814 23188
31231 53813 78858 18149 08632 27060 45498 97526 25881 97138
80271 73252 20250 62857 67580 19542 65470 06585 67101 16592
80709 83454 60367 60952 57098 65373 59131 77963 31546 91815
17749 68229 56124 54255 48178 78932 66833 37216 93710 92198
43311 28167 05502 74506 60183 32151 56254 12043 15674 43022
70464 20823 84460 78828 86206 57872 56035 52510 08318 27678
45287 16275 67540 30565 35005 55804 76396 61059 51477 84831
71021 13197 46132 21788 31668 17046 *Courtesy PLdn/DanAr*

22/05	09964 00057 90619 ... 72504		Weak Argentine, Very strong UK
27/05	09964 00057 90619 ... 72504		Very strong
29/05	07415 00001 00000 ... 33660	[2040z Weak]	Strong

June 2018

2100z	**14738kHz**	**2120z**	**13438kHz**	**2140z**	**12138kHz**	
03/06		07713 00001 00000 ... 36260				Very strong
05/06		00442 00095 23799 ... 33621				Very strong
10/06		00442 00095 23799 ... 33621				Very strong



05/06 and 10/06 00442 00095 23799 ... 33621

00442 00095 24799 51479 96464 14311 59854 76325 42542 43010
22492 97021 06005 49146 66680 88661 67290 45451 46849 56471
13129 56189 68856 20110344770 6445451269 78010 50113 11210
17764 34747 44980 30663 41112 76861 26964 29946 00497 33244
14421 57884 92329 17788 74417 77333 50514 79058 37777 94740
77736 91823 18508 10890 19806 02297 47453 38352 79401 68615
24401 24954 90820 54190 15524 75040 71640 54711 95646 78883
28690 07466 25292 13668 37032 79782 05858 98281 96039 59682
36574 27516 91333 25298 88061 02649 29304 67825 86931 99482
93638 07071 82824 06675 79503 60395 89920 33621

Courtesy PLdn

12/06	03629 00001 00000 ... 40655	Strong
17/06	08959 00001 00000 ... 42265	Very strong
19/06	07820 00089 30926 ... 63207	Very strong
24/06	07820 00089 30926 ... 63207	Very strong
26/06	Unworkable, poor condx	2m11s lg, believed null msg

XPA2 p

Under investigation

Copied by PLdn 06/06 0700/0720/0740z 10324/11524/13524kHz	Fair, QSB3 [Last freq best].

00549 00195 87359 68861 73196 31598 72357 21148 19287 50950
08467 82304 29293 92769 30793 86053 14451 55943 00731 99331
61283 61485 64467 71287 70249 69054 11008 03666 45099 78684
03429 11341 25166 96624 47754 70352 66649 80118 30969 91566
93346 79559 75273 40401 54155 51788 42066 00224 26556 85633
28819 02164 16271 43811 82456 56510 59166 16329 94740 49848
84879 76929 32318 58756 98218 43677 90159 85342 61022 73694
89220 53702 53024 66246 10227 02352 56943 05212 70201 75607
52032 38833 02625 36761 77861 68873 35484 33956 58746 76587
04016 44421 35596 31746 45826 36315 13633 88486 41553 92924
08219 86899 44094 29525 26757 54873 87561 37340 24658 67468
33012 26472 00607 59311 49921 52968 88395 87961 54076 75431
76191 73134 00157 56259 82100 51479 21470 31916 22089 36202
97329 47059 23638 07072 82111 43783 94379 69498 06033 43977
13377 44528 60101 87797 08760 30712 16214 46745 16611 77142
89145 65192 91512 60787 88801 00815 71510 36773 11308 96659
11469 32770 81305 50986 55770 42425 46638 88239 51566 48918
78468 84789 83457 14785 10817 87119 67924 83732 28154 85970
54190 24843 09622 75725 75977 45968 85892 75430 22311 19841
10396 08052 35538 48551 47121 85150 17709 45605

Courtesy PLdn

XPA2 r

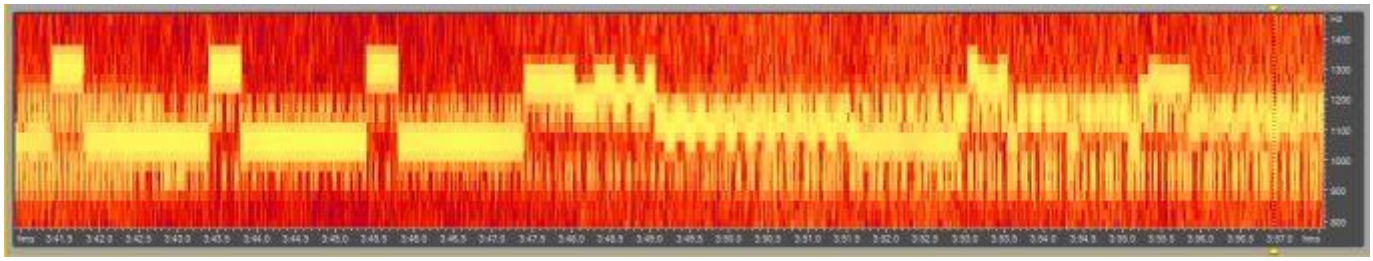
Friday/Saturday

May 2018

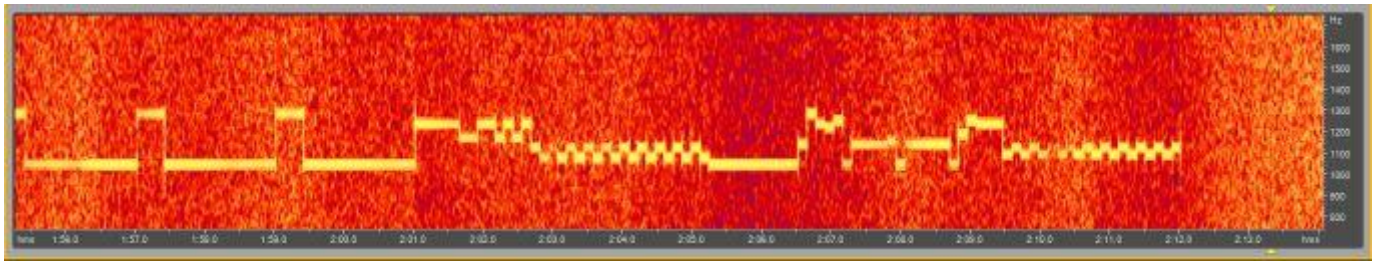
1900z	**17462kHz**	**1920z**	**16114kHz**	**1940z**	**14828kHz**		
04/05		00244 00075 65823 ... 51637			[1900z Weak]		Fair
05/05		00244 00075 65823 ... 51637					Very strong

00244 00075 65823 51432 52842 30530 79328 85188 44946 07143
49689 59454 02676 45598 41072 18629 65441 11340 11622 61268
78091 88779 69165 26611 28849 24409 88140 72748 03766 94511
01068 40029 64125 71664 13884 06607 17663 18268 78964 70604
99270 17822 93317 34452 45142 58301 24811 47633 07520 00698
04321 31349 73536 46703 37440 16188 76023 72178 90686 99898
99270 16025 29183 64115 18365 40408 62231 41035 96376 79526
21333 48974 62498 72352 06211 75283 35190 51637
Courtesy PLdn

11/05	05395 00001 00000 ... 35266		Weak Argentine, Fair UK
12/05	01674 00001 00000 ... 36260	[1900z Unworkable]	1920z Weak, 1940z Fair.
18/05	00511 00121 34757 ... 21525		Weak [Argentine]
19/05	00511 00121 34757 ... 21525		Weak
25/05	07478 00001 00000 … 37266		Weak [Argentine]
26/05	04681 00001 00000 ... 34664		Very strong



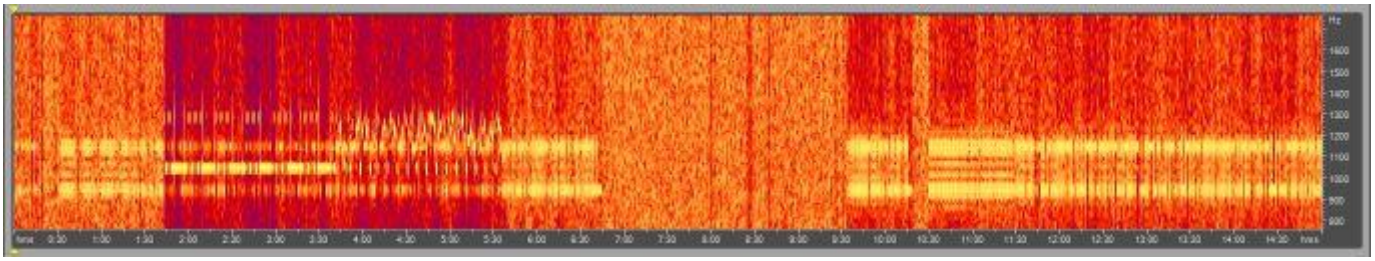
08/06 2120z data QRM3 09657 00001 00000 ... 37666



08/06 2140z 09657 00001 00000 ... 37666 Fair transmission

June 2018

2100z	**16167kHz**	**2120z**	**14663kHz**	**2140z**	**13923kHz**		
01/06		06072 00107 33669 ... 55065			[2100z Fair]	Strong	
02/06		06072 00107 33669 ... 55065			[2100z PLTQRM2]	Fair	
08/06		09657 00001 00000 ... 37666			[2100z PLTQRM3, 2120z dataQRM3]	Fair	*See above*
09/06		05334 00001 00000 ... 34666				Very strong	
15/06		00441 00137 96833 ... 04533			[2120z TTYQRM4]	Very strong	



16/06	00441 00137 96833 ... 04533	[2120z TTYQRM4 *see above*]	Fair
22/06	03264 00001 00000 ... 34261	[2120z TTYQRM3]	Very strong
23/06	09873 00001 00000 ... 36670		Weak DanAr, NRH UK
29/06	00276 00091 69943 ... 75702	[2120z TTYQRM4]	Very strong

XPA2 t

Tuesday/Friday

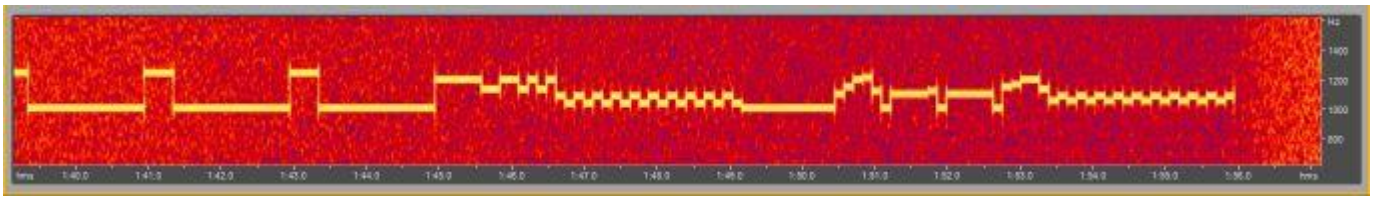
May 2018

0700z 19667kHz 0720z 18767kHz 0740z 17467kHz

01/05	05702 00001 00000 ... 35655	[0700/0720z NRH]	Weak, QSB3
04/05	05457 00001 00000 ... 36662	[0700z NRH]	Fair
08/05	00149 00137 66835 ... 02717	[0700/0720z Unworkable]	Weak

00149 00137 66835 65065 67097 61394 39998 14610 49175 75509
64290 07113 57986 04393 39518 76336 68099 17018 30921 21925
99151 74450 61621 69492 26902 34918 98345 15944 95199 04849
11318 99179 58801 17455 46161 32060 72432 89862 20177 55606
85799 11953 33446 70920 29531 08894 18660 40760 26691 40420
49320 67984 89883 78262 86869 66499 26645 68323 04499 46889
96907 44747 88401 80813 10880 27868 90133 18019 90029 43194
71446 51708 21189 01377 51374 70926 17418 06260 14544 77911
80420 85492 85118 38789 16659 74777 64671 86019 64870 77102
51520 32593 00779 43713 95361 41817 66996 84179 41520 33220
83874 98967 43215 74068 82395 11882 11348 68848 53011 87834
27273 18367 28562 35567 99390 13055 41317 33003 21383 02914
92496 80838 13377 80929 59360 06056 59264 70372 56385 91698
96435 58013 29978 94205 21925 65825 11740 43156 78091 02717
Courtesy PLdn

11/05	00149 00137 66235 ... 02717	[0700z Unworkable]	Weak, QSB3



15/05	03671 00001 00000 ... 34662	*seen above*	Weak
18/05	04562 00001 00000 ... 34662	[0700z NRH]	Weak
22/05	08524 00129 73211 ... 65177	[0700z Unworkable, Msg]	Weak

08524 00129 73211 29482 39084 12397 75598 84341 28069 07999
41453 20866 32071 22677 61405 76955 30342 59999 65703 56155
50010 21848 33527 83799 26293 87334 50737 93455 93519 30630
42070 53277 14741 61034 52014 66298 92296 60624 48876 97797
19943 56152 09983 45994 61154 54986 43010 78744 03026 22061
07019 40729 71576 80447 97853 61496 76653 83792 10183 29051
69548 94017 26474 24796 74815 18337 23137 83518 99140 80973
25495 71673 80264 15472 58747 47917 97108 29137 91759 52968
62213 21542 23483 11647 99536 94330 12142 01192 49728 14936
06204 40383 34159 44945 04697 64856 71809 91051 16693 76700
13255 84177 83686 36678 18208 87066 74549 82679 62926 83107
03266 64119 80586 19427 31680 40419 55663 60709 47401 86551
09322 46117 39929 77025 76636 08575 41378 07006 14706 06129
77368 65177 *Courtesy Ary*

25/05	08524 00129 73211 ... 65177	[Not hrd UK]	Fair [Twente]
29/05	05362 00001 00000 ... 33663	[Not hrd UK]	Fair [Twente]

June 2018

0700z	**19514kHz**	**0720z**	**18214kHz**	**0740z**	**16314kHz**		
01/06		03239 00001 00000 ... 36656				[0700z Weak]	Fair
05/06		08559 00147 60091 ... 27207				[0700z Weak, QSB2, 0740z QRM3]	Fair
08/06		08559 00147 60091 ... 27207				[1700z Unworkable]	Fair, QSB2
12/06		NRH, extremely poor conditions					
19/06		NRH, extremely poor conditions					
22/66		NRH					
26/06		NRH					
29/06		NRH					

Tones, Hybrids and FSK

X06 Mazielka (1c) logs section

X06 Mazielka (1c) logs section

Date	Day	UTC	Freq	Scale	Monitor	Comments
20180505	Sat	1428	15828	256134	Philby/US	Alert 7 (G397)
20180505	Sat	1430	12055	256134	Philby	7.2
20180505	Sat	1435	12055	256134	Philby	7.3
20180505	Sat	1448	12463	256134	Philby	7.4
20180505	Sat	1457	11093	256134	Philby	7.5
20180505	Sat	1502	11093	256134	Philby	7.6
20180505	Sat	1510	15828	256134	Philby	7.7
20180507	Mon	1316-1318	17451	6-----	Ary/NL	X06b single tone variant before M12
20180507	Mon	1746-1825	5474	116---	Ary	X06b
20180508	Tue	0758	17139	6--1--	Sylvain/US	X06b
20180511	Fri	1006-1007	12213	615243	PoSW	S9, G127
20180511	Fri	1750	17462	1--6--	LU5EMM	Fair X06b before XPA2r
20180515	Tue	1851	14538	1-6-1-	LU5EMM	Fair X06b before XPA2m
20180520	Sun	1907	14538	1--6--	LU5EMM	Fair X06b before XPA2m
20180520	Sun	1913	14538	251-6-	LU5EMM	Fair X06b before XPA2m
20180521	Mon	0741-0744	12152	432516	PoSW	Peaking S9, G341
20180522	Tue	1901/1918	13538	1--6--	LU5EMM	X06b before XPA2m
20180522	Tue	1903/1919	14538	1--6--	LU5EMM	X06b before XPA2m
20180525	Fri	1830/1832	17462	1--6--	LU5EMM	Fair X06b before XPA2r
20180528	Mon	0911	13460	1--6--	PoSW	X06b with S9, gone after 1000(1)
20180601	Fri	0827-0833	14570	324615	Danix/PL	G52
20180604	Mon	0736-0805	18750	641523	Danix	Alert 2 (G5) 1
20180604	Mon	0805-0819	20675	641523	Danix	2.2
20180605	Tue	0758-0759	13524	125643	Edd Smith	I. p., G317
20180606	Wed	0651	14405	256341	F5JBR	G311
20180606	Wed	1130-1148	14650	215346	Danix	G25
20180607	Thu	0642-0658	17468	436512	Danix	G44
20180608	Fri	0731-0734	15463	1--6--	PoSW	X06b with S4-5(2)
20180608	Fri	0801-0816	15561	1--6--	PoSW	X06b with break at 0813(3)
20180608	Fri	1948	16167	1--6--	LU5EMM	X06b before XPA2r
20180608	Fri	1950	14663	1--6--	LU5EMM	X06b before XPA2r
20180608	Fri	1951	14663	6161--	LU5EMM	X06b with diff. scale before XPA2r
20180608	Fri	1952	16167	6161--	LU5EMM	X06b with diff. scale before XPA2r
20180613	Wed	0759-0805	14655	164253	Danix	Alert 2 (G395) 1
20180613	Wed	0805-0816	12120	164253	Danix	2.2
20180613	Wed	0809	11153	465132	Danix	I. p., G100
20180613	Wed	1035-1053	15879	621543	Danix	Alert 3 (G102) 1 (-200 Hz off freq)
20180613	Wed	1053-1058	11126	621543	Danix	3.2 (-200 Hz off freq)
20180613	Wed	1058-1104	18660	621543	Danix	3.3 (error now fixed)
20180614	Thu	0942-0952	13506	164532	Danix	G106
20180614	Thu	1410-1418	13441	164253	Danix	Alert 2 (G418, new group) 1
20180614	Thu	1418-1422	10214	164253	Danix	2.2
20180616	Sat	0829	13627	1--6--	Ary	X06b before XPA2

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20180617 Sun 1959      14738 1--6-- LU5EMM      Fair X06b before XPA2m
20180617 Sun 2006      14738 6--1-- LU5EMM      Weak X06b before XPA2m
20180619 Tue 0753-0759 14615 125643 Danix       G383
20180619 Tue 0834-0853 13401 154263 Danix       G148
20180619 Tue 0958-1004 12094 324615 Danix       R
20180622 Fri 0834-0845 12177 356412 Danix       G271
20180623 Sat 1924-1927 14663 1--6-- LU5EMM      X06b before XPA2r with S9
20180623 Sat 1929/1930 16167 1--6-- LU5EMM      Fair X06b before XPA2r
20180625 Mon 1336      16117        Ary         X06b single tone (USB) before M12
20180627 Wed 1034-1055 18660 621543 Danix       G248(4)
20180628 Thu 0757-0810 12126 521634 Danix       Alert 2 (G261) 1
20180628 Thu 0810-0816 14419 521634 Danix       2.2
20180628 Thu 1849-1851  9374 1--6-- Schorschi   X06b with s9
20180628 Thu 1900-1902  9374 1--6-- Schorschi   X06b with S9
20180629 Fri 0744-1030 12320 1--6-- Edd         X06b i. p., very long
20180629 Fri 0942-0958 11462 165423 Danix       R
20180629 Fri 1001-1003 12213 615243 Danix       G305
20180630 Sat 2044      14663 1--6-- LU5EMM      Fair X06b before XPA2r
20180630 Sat 2045      16167 1--6-- LU5EMM      Fair X06b before XPA2r
20180630 Sat 2047      14663 1--6-- LU5EMM      X06b again before XPA2r
20180630 Sat 2052/2054 16167 1--6-- LU5EMM      X06b again before XPA2r

   1)  Sideband QRM from a BC station on 10635 kHz

   2)  Close to BC station on 15464 kHz

   3)  Close to BC station on 15560 kHz

   4) 1057: 3000Bd PSK-8 calling + 45Bd MFSK-66 data system
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Thanks Jochen and contributors

HM01

From US with analysis

HM01 unlike its M08a counterpart has continued transmissions mostly uninterrupted during May and June. Only a couple of anomalies were noted. On 3/5, 23/5 and 10/6 at 1600z on 11435kHz a broadcast station was heard before the numbers started.
On 27/6 at 1600z the transmitter came up late. A windows XP USB drive insertion sound was heard an a while later two copies of the Same HM01 callups started out of sync with each other.
Three files were sent with extensions not ending in TXT, these were 50304580.F1C, 50171107.F1C, 50455843.F1C, 50421306.F1C, 36738758.F1G, 50304580.F1C. As always file names beginning 50 end in F1C and 36 end in F1G.

Logs

HM01 11435kHz 1600z 1/5 [84871 64914 32032 11348 03537 43008] TUE
HM01 11435kHz 1600z 2/5 [84872 64915 32033 11349 03538 43009] WED
HM01 11435kHz 1600z 3/5 [84873 64916 32034 46331 03539 60521] New callups positions 4 and 6, 46331 = 36444633.F1G, 60521 = 36336052.F1G THU
HM01 11435kHz 1600z 4/5 [84874 64917 32035 46331 03361 60521] New callup position 5, 03361 = FRI
HM01 11435kHz 1600z 5/5 [84875 64918 32036 46332 03361 60522] SAT
HM01 11435kHz 1600z 6/5 [84876 64919 32037 46333 03362 60523] SUN
HM01 11435kHz 1600z 7/5 [84877 75571 32038 46334 03363 60524] New callup position 2, 75571 = MON
HM01 11435kHz 1600z 8/5 [84878 75571 15431 46335 03364 60525] New callup position 3, 15431 = TUE
HM01 11435kHz 1600z 9/5 [84879 75572 15431 46336 03365 60526] WED
HM01 11435kHz 1600z 10/5 [07221 75573 15432 46337 03366 60527] New callup position 1, 07721 = THU
HM01 11435kHz 1600z 11/5 [07221 75574 15433 46338 03367 60528] FRI
HM01 11435kHz 1600z 12/5 [07222 75575 15434 43621 03368 60529] New callup position 4, 43621 = 30514362.TXT SAT
HM01 11435kHz 1600z 13/5 [07223 75576 15435 43621 03369 85741] New callup position 6, 85741 = 24368574.TXT SUN
HM01 11435kHz 1600z 14/5 [07224 75576 15436 43622 37621 85741] New callup position 5, 37621 = 48013762.TXT. MON
HM01 11435kHz 1600z 15/5 [07225 38351 15437 43623 37621 85742] New callup position 2, 38351 = 80783835.TXT. TUE
HM01 11435kHz 1600z 16/5 [07226 38351 15438 43624 37622 85743] WED
HM01 11435kHz 1600z 17/5 [07227 38352 58431 43625 37623 85744] New callup position 3, 58431 = 50455843.F1C. THU
HM01 11435kHz 1600z 18/5 [31031 38353 58431 43626 37624 85745] New callup position 1, 31031 = 38463103.TXT. FRI
HM01 11435kHz 1600z 19/5 [31031 38354 58432 43626 37624 85745]
HM01 11435kHz 1600z 20/5 [31032 38355 58433 04061 37626 85747] New callup position 4, 04061 = 60230406.TXT
HM01 11435kHz 1600z 21/5 [31032 38355 58433 04061 37626 85747]
HM01 11435kHz 1600z 23/5 [31035 94632 58436 04063 37629 22182] New callups positinos 2 and 6, 94632 = 85769463.TXT, 22182 = 15132218.TXT
HM01 11435kHz 1600z 24/5 [31036 94633 58437 04064 32811 22183] New callup position 5, 32811 = 12163281.TXT THU
HM01 11435kHz 1600z 25/5 [31037 94634 58438 04065 32811 22184] FRI
HM01 11435kHz 1600z 26/5 [31038 94635 58439 04066 32812 22185] SAT
HM01 11435kHz 1600z 27/5 [74051 94636 08681 04067 32813 22186] New callups positions 1 and 3, 74051 = 31247405.TXT, 08681 = 81530868.TXT SUN
HM01 11435kHz 1600z 28/5 [74051 94637 08681 04068 32814 22187] MON
HM01 11435kHz 1600z 29/5 [74052 13061 08682 87581 32816 57441] New callups positions 2, 4 and 6, 13061 = 50421306.F1C, 87581 = 36738758.F1G, 57441 = 24405744.TXT. TUE
HM01 11435kHz 1600z 31/5 [74054 13062 08684 87582 32817 57442] THU
HM01 11435kHz 1600z 1/6 [74055 13063 08685 87583 32818 57443] FRI

HM01 11635kHz 1800z 2/6 [74056 13064 08686 87584 32819 57444] SAT
HM01 11435kHz 1600z 3/6 [74057 13065 08687 87585 53811 57445] New callup position 5, 53811 = 83225381.TXT. SUN
HM01 11435kHz 1600z 4/6 [74058 13066 08688 87586 53811 57446] MON
HM01 11435kHz 1600z 5/6 [40061 13067 08689 87587 53812 57447] New callup position 1, 40061 = 64124006.TXT. TUE
HM01 11435kHz 1600z 6/6 [40061 18251 06251 87588 53813 57448] New callups positions 2 and 3, 18251 = 86021825.TXT, 06251 = 08030625.TXT. WED
HM01 11435kHz 1600z 7/6 [40062 18251 06251 87589 53814 14401] New callup position 6, 14401 = 83841440.TXT. THU
HM01 11435kHz 1600z 8/6 [40063 18252 06252 14811 53815 14401] New callup position 4, 14811 = 04541481.TXT. FRI
HM01 11435kHz 1600z 9/6 [40064 18253 06253 14811 53816 14402] SAT
HM01 11435kHz 1600z 10/6[40065 18254 06254 14812 53817 14403] SUN
HM01 11435kHz 1600z 11/6[40066 18255 06255 14813 53818 14404] MON
HM01 11435kHz 1600z 12/6[40067 18256 06256 14814 45801 14405] New callup position 5, 45801 = 50304580.F1C. TUE
HM01 11435kHz 1600z 13/6[40068 18257 06257 14815 45801 14406] WED
HM01 11435kHz 1600z 14/6[40069 24281 06257 14816 45802 14407] New callup position 2, 24281 = 02842428.TXT. THU
HM01 11435kHz 1600z 15/6[11071 24281 56011 14817 45803 23561] New callups positions 1,3 and 6, 11071 = 50171107.F1C, 56011 = 23561 = FRI
HM01 11435kHz 1600z 16/6[11071 24282 56011 64531 45804 23561] New callup position 4, 64531 = 20186453.TXT. SAT
HM01 11435kHz 1600z 17/6[11072 24283 56012 64531 45805 23562] SUN
HM01 11435kHz 1600z 18/6[11073 24284 56013 64532 45806 23563] MON
HM01 11435kHz 1600z 19/6[11074 24285 56014 64533 45807 23564] TUE
HM01 11435kHz 1600z 20/6[11075 24286 56015 64534 45808 23565] WED
HM01 11435kHz 1600z 21/6[11076 24287 56016 64535 81131 23566] New callup position 5, 81131 = 85138113.TXT. THU
HM01 11435kHz 1600z 22/6[11077 18141 56017 64536 81131 23567] New callup position 2, 18141 = 31331814.TXT. FRI
HM01 11435kHz 1600z 23/6[03261 18141 56018 64537 81132 45851] New callups positions 1 and 6, 03261 = 20070326.TXT, 45851 = 41554585.TXT. SAT
HM01 11435kHz 1600z 24/6[03261 18142 10701 64538 81132 45851] New callup position 3, 10701 = 78201070.TXT. SUN
HM01 11435kHz 1600z 25/6[03262 18143 10701 36361 81133 45852] New callup position 4, 36361 = 34203636.TXT. MON
HM01 11435kHz 1600z 26/6[????? ????? ????? ????? ????? ?????] Transmitter up at 1600 and 1800 on 11635kHz but no numbers. TUE
HM01 11435kHz 1600z 27/6[03264 18145 10703 36363 81135 45854] Windows USB drive insertion sound then two copies of the callups together out of sync. WED
HM01 11435kHz 1600z 28/6[03265 18146 10704 36364 81136 45855]
HM01 11435kHz 1600z 30/6[03267 18148 10706 36365 17001 45857] New callup position 5, 17001 = 15621700.TXT. SAT

Thanks MaleAnon

From Argentine

13435kHz0711z 09/06 QRM on freq

17480kHz2200z 05/05 (84875 64918 32036 46332 03361 60522) QSA2 DanAR SAT

From PoSW in Britain, with analysis:

Signals from the Cuban Mixed Mode station were weak throughout most of the month of May, just about able to tell there was something there but not strong enough to copy.

18-May-18, Wednesday:- 0736 UTC, 9330 kHz, transmission in progress, weak signal, sounded like, “85744 07227 38352 58431 43625 37623”.

26-May-18, Saturday:- 1026 UTC, 12180 kHz, weak signal but it is unusual to hear anything at all on the days when this frequency is used, 5Fs “31037 94634 58438 04065 32811 22184” - all “query”. Starting up after the break, data sounds at 1027:44s UTC.

27-May-18, Sunday:- 0656 UTC, 9330 kHz, S9 with QSB, best signal from HM01 for a while, 5Fs “31038 94635 58439 04066 32812 22185”, data at 0657:45s. Vanished off air around 0658:40s, was back on when checked a couple of minutes later.

28-May-18, Monday:- 0642 UTC, 10345 kHz, transmission in progress, last few minutes, S9 with deep QSB, heard 5Fs, “74051 94636 08681 04067 32813 22186”, stopped at 0647:24s
UTC, carrier QRT 0651:50s.
0655 UTC, 9330 kHz, starting up, S9 with QSB, 5Fs as earlier.

1-June-18, Friday:- 0825 UTC, 9065 kHz, weak signal, difficult copy, read as, “74054 13062 08684 87582 32817 57442”, data at 0827:40s UTC.

3-June-18, Sunday:- 0658 UTC, 10345 kHz, starting up on the wrong frequency, 10345 would have been used for the previous hour's transmission, was already in data mode when tuned in. Someone realised their mistake just after 0701z, reappeared on the correct frequency, 9330 kHz, shortly after. 5Fs, “74056 13064 08686 87584 32819 57444”

4-June-18, Monday:- 0732 UTC, 9330 kHz, transmission in progress, S8 with the usual QSB, “74057 13065 08687 87585 53811 57445”, signal becoming weaker by 0738z.

6-June-18, Wednesday:- 0725 UTC approx, 9330 kHz, starting up after the break, “40061 13067 08689 87587 53812 57447”, S8 with deep QSB.

12-June-18, Tuesday:- 0809 UTC, 11635 kHz, S5 to S6, strong for this frequency, heard 5Fs, “40066 18255 06255 14813 53818 14404”. Stopped for the break around 0816z, was a much weaker signal when starting up again at 0824:25s.

13-June-18, Wednesday:- 0607 UTC, 10345 kHz, transmission in progress, S9 with the usual fading, 5Fs “40067 18256 06256 14814 45801 14405”.

17-June-18, Sunday:- 0554:10s UTC, 10345 kHz, starting up with, “11071 24282 56011 64531 45804 23561”, S7 with QSB, audio modulation seemed to be somewhat deeper than usual. Data sounds just before 0557:30s UTC.
0654:10s UTC, 9330 kHz, 5Fs as earlier, S7 with the usual up and down fading, good audio.

20-June-18, Wednesday:- 0608 UTC, 10345 kHz, transmission in progress, heard 5Fs, “11074 24285 56014 64533 45807 23564”.

22-June-18, Friday:- 0706 UTC, 9330 kHz, transmission in progress, S8 with the usual deep fading up and down, "11076 24287 56016 64535 81131 23566". Stopped for the break around 0719 UTC.

24-June-18, Sunday:- 0656 UTC, 9330 kHz, start-up routine in progress when tuned in, not too strong, the usual fading not helpful, sounded like, "03261 18141 56018 64537 81132 45851".

25-June-18, Monday:- 0555 UTC, 10345 kHz, "03261 18142 10701 64538 81133 45851", peaking S9 with good audio, data at 0557:20s UTC.

FSK: F01, F06 and F11

F01 [Ia]

Monday	**0025/0035/0125/0135z**	**14941/12221kHz**	**Link ID 00117**
07/05	No reports		
14/05	No reports		
21/05	No reports		
28/05	No reports		
	0025/0035/0125/0135z	**16218/13949kHz**	
04/06	No reports		
11/06	No reports		
18/06	No reports		
25/06	No reports		
1st Wednesday	**1840/1850/1900z**	**14363/12189/10346kHz**	
02/05	Null message		
	1840/1850/1900z	**14621/12206/10465kHz**	
06/06	Null message		
Friday	**2230/2240/2330/2340z**	**20206/18031kHz**	**Link ID 00116**
04/05	No reports		
11/05	**11177 00116 62801 11023 01659** 53918 87052 79196 36846 67274 10064 43734 72179 56895 52159 91621 05321 … 23163 00000		
18/05	No reports		
25/05	No reports		
	2230/2240/2330/2340z	**19224/17491kHz**	
01/06	No reports		
08/06	No reports		
15/06	No reports		
22/06	No reports		
29/06	No reports		

F06 [Ia]

Sunday	**1530/1540/1550z**	**19323/17536/14356kHz**	**Link ID 10053**
06/05	Null message		
13/05	Null message		
20/05	**11166 10053 36987 16063 01609** 72742 93842 29400 54585 52566 41528 71295 28521 89282 70007 31166 32671 … 63158 00000 (usual yearly May activity, see also Tuesday 1650z)		
27/05	Null message		
	1530/1540/1550z	**19838/16238/13546kHz**	
03/06	Null message		
10/06	Null message		
17/06	Null message		
24/06	Null message		
1st/3rd Monday	**0400/0410/0420z**	**11414/10169/8169kHz**	**Link ID 70059**
07/05	Null message		
21/05	Null message		
	0400/0410/0420z	**12064/10926/9049kHz**	
04/06	Null message		
18/06	Null message		

Tuesday	**0030/0040/0050z**	**10548/9144/7978kHz**	**Link ID 60070**
01/05	Null message		
08/05	Null message		
15/05	Null message		
22/05	Null message		
29/05	Null message		
	0030/0040/0050z	**12149/10237/8193kHz**	
05/06	Null message		
12/06	Null message		
19/06	Null message		
26/06	Null message		
Tuesday	**1500/1510/1520z**	**17488/15623/12226kHz**	**Link ID 00052**
01/05	Null message		
08/05	Null message		
15/05	Null message		
22/05	Null message		
29/05	Null message		
	1500/1510/1520z	**16266/14453/12075kHz**	
05/06	Null message		
12/06	Null message		
19/06	Null message		
26/06	Null message		
Tuesday	**1650/1700/1710z**	**19214/17419/14443kHz**	**Link ID 10053**
01/05	Null message		
08/05	Null message		
15/05	**11166 10053 96725 15067 01749** 94446 64599 32365 47395 49637 32979 10463 22879 23559 92912 13202 72504 … 67172 00000 (usual yearly May activity, see also Sunday 1530z)		
22/05	Null message		
29/05	Null message		
	1650/1700/1710z	**19936/16354/13955kHz**	
05/06	Null message		
12/06	Null message		
19/06	Null message		
26/06	Null message		
Wednesday	**0600/0610/0620z**	**17420/15673/13361kHz**	**Link ID 40122**
02/05	**11166 40122 64821 28071 03359** 44961 37594 36315 09389 05527 32177 80779 53427 54117 16228 02142 43791 … 71333 00000		
09/05	**11166 40122 75391 05072 03039** 55422 90884 89634 19983 26815 21904 54352 88445 77376 35395 22379 17296 … 72301 00000 **11166 40122 30784 05073 02359** 27144 57574 58655 68771 68326 63036 06658 27012 24390 36334 81296 57257 … 73233 00000 (301+2 groups in the first message instead of expected 300+2)		
16/05	Null message		
23/05	**11166 40122 75392 19074 03799** 60740 46393 93690 82502 98945 21897 59524 82826 04289 07005 75732 10873 … 74377 00000		
30/05	No reports		
	0600/0610/0620z	**17512/15930/13503kHz**	
06/06	No reports		
13/06	No reports		
20/06	Null message		
27/06	No reports		
Wednesday	**0800/0810/0820z**	**14694/12223/10163kHz**	**Link ID 70048**
02/05	Null message		
09/05	Null message		
16/05	Null message		
23/05	Null message		
30/05	Null message		
	0800/0810/0820z	**14368/12204/10309kHz**	
06/06	Null message		
13/06	Null message		
20/06	Null message		
27/06	Null message		

2nd/4th Wednesday **0800/0810/0820z** **17488/15823/13459kHz** **Link ID 00052**

09/05 & 23/05 **11166 00052 17543 08028 01889** 18900 06118 46866 22078 29627 64803 60404 40426 41009 56285 05392 97356 … 28186 00000

0800/0810/0820z **19138/17545/15626kHz**

13/06 & 27/06 **11166 00052 84271 08029 01609** 58440 26118 47869 22078 69167 84803 61407 40426 81549 76285 06395 97356 … 29158 00000

2nd/4th Wednesday **1015/1025/1035z** **14638/12156/10164kHz** **Link ID 10031**

09/05 Null message
23/05 Null message

0915/0925/0935z **15629/13376/11544kHz**

13/06 Null message
27/06 Null message

Thursday **1330/1340/1350z** **16328/14358/11146kHz** **Link ID 80214**

03/05 Null message
10/05 Null message
17/05 Null message
24/05 Null message
31/05 Null message

1330/1340/1350z **14565/12169/9981kHz**

07/06 Null message
14/06 Null message
21/06 Null message
28/06 Null message

2nd/4th Saturday **0800/0810/0820z** **11645/9464/7655kHz** **Link ID 70147**

12/05 **11166 70147 76513 11081 00829** 64665 43197 97688 58128 40231 23974 80480 94306 56025 17305 85744 84902 … 81080 00000
26/05 **11166 70147 92573 24082 00789** 52705 03100 97687 58128 38371 83987 80489 94306 44165 77318 85743 84902 … 82076 00000

0800/0810/0820z **12054/10158/8144kHz**

09/06 **11166 70147 42590 08083 00609** 87655 33184 98688 58128 63221 13961 81480 94306 79015 07392 86744 84902 … 83058 00000
23/06 **11166 70147 75189 22084 01789** 56305 33108 98688 58128 32971 13985 81480 94306 48765 07316 86744 84902 … 84176 00000

2nd/4th Saturday **0900/0910/0920z** **17426/15818/13396kHz** **Link ID 70004**

12/05 & 26/05 **11166 70004 39875 11007 00679** 73581 74653 49627 66810 50582 38493 18134 38242 12634 93454 43115 26487 … 07065 00000

0900/0910/0920z **16314/14569/12191kHz**

09/06 & 23/06 **11166 70004 36207 08008 01589** 48590 33471 66887 55055 50885 38870 03319 63384 94020 77882 54926 51377 … 08156 00000

Saturday **1100/1110/1120z** **13598/11524/9479kHz** **Link ID 50046**

05/05 **11166 50046 36987 04037 00789** 38939 49071 92913 40530 95006 33686 57106 63673 33154 90167 70912 82228 … 37076 00000
12/05 **11166 50046 91732 11038 01029** 17839 99088 92913 40530 74906 83693 57106 63673 12054 40174 70912 82228 … 38100 00000
19/05 **11166 50046 42791 18039 01249** 51079 79085 92913 40530 18146 63690 57106 63673 56294 20171 70912 82228 … 39122 00000
26/05 **11166 50046 39275 24040 01309** 17839 59091 92912 40530 74906 43606 57105 63673 12054 00187 70911 82228 … 40128 00000

1100/1110/1120z **13366/11438/9308kHz**

02/06 **11166 50046 38124 01041 00749** 47997 21159 13224 34085 84369 14379 66689 54737 23463 10347 61317 67760 … 41072 00000
(new triple timestamp key – on this link, it changes every 21 whole months; the old key was in use since September 1, 2016)
09/06 **11166 50046 21765 08042 00569** 19217 01156 13224 34085 56689 94376 66689 54737 95783 90344 61317 67760 … 42054 00000
16/06 **11166 50046 48753 15043 00609** 56107 11163 13224 34085 93579 04383 66689 54737 32673 00351 61317 67760 … 43058 00000
23/06 **11166 50046 34518 22044 01789** 41957 01170 13224 34085 88329 94390 66689 54737 27423 90368 61317 67760 … 44176 00000
30/06 *Replaced by E06 ID 832 (832 791 40)*

Saturday **2100/2110/2120z** **18751/16174/14563kHz** **Link ID 40133**

05/05 Null message
12/05 Null message
19/05 Null message
26/05 Null message

2100/2110/2120z **18323/15886/13581kHz**

02/06 Null message
09/06 Null message
16/06 Null message
23/06 Null message
30/06 Null message

F11 [III]

Monday/Wednesday 0845/0850z 13424kHz ID 0353

*30/0*4 & 02/05	Null message
07/05 & 09/05	**88888 88888** 66778 95637 09299 40806 05063 39197 60257 68759 08994 75899 28837 07526 06909 91285 08432 89070 95959 21292 22935 30720 85381 51152 52678 92327 06907 88066 76257 98820 31058 06303 99201 75992 31264 96198 47146 52646 **88888 88888 00040 00040**
14/05 & 16/05	Null message
21/05 & 23/05	Null message
28/05 & 30/05	Null message
04/06 & 06/06	Null message
11/06 & 13/06	Null message
18/06 & 20/06	Null message
25/06 & 27/06	**88888 88888** 71364 33599 25739 02841 62330 23448 31098 15503 92738 67299 94194 21912 11015 22384 23318 60735 49388 66457 66871 12624 78133 27159 19870 75078 41646 13546 24853 06184 96351 71648 38303 28058 46475 75587 91414 53613 10847 07558 06338 06306 **88888 88888 00044 00044**

Tuesday/Wednesday 1150/1155z 6280kHz ID 0325

01/05 & 02/05	Null message
08/05 & 09/05	**88888 88888** 45355 57487 02587 53387 56846 56205 74790 45091 80608 61852 73102 96120 56121 48161 39628 08254 48570 77311 07947 88302 04418 65983 27281 70516 37353 12757 98542 09165 80011 72282 69162 71804 44567 24242 36169 19223 **88888 88888 00040 00040**
15/05 & 16/05	Null message
22/05 & 23/05	Null message
29/05 & 30/05	Null message
05/06 & 06/06	Null message
12/06 & 13/06	Null message
19/06 & 20/06	Null message
26/06 & 27/06	**88888 88888** 81669 29149 81152 99102 77188 01302 06775 38276 89228 54924 74470 35128 93829 62288 16825 98465 10582 72687 83254 31015 25684 45933 11488 04695 90424 46134 89859 29570 64152 91511 53526 12107 95511 **88888 88888 00037 00037**

Logs sent by: Ary, Danix

[*Thanks Danix*]

Gladio By Keith of Kent

Here is an interesting recount from E2k Member, the late Keith of Kent, who was part of the 'Gladio Organisation.'
[For the uninitiated a Gladio is a double-edged sword, as used by gladiators, more correctly Gladius/Gladii].

My introduction to what I now know was called the Gladio organisation was in the early 1950's.

With a short break, I had served since 1943 with the Radio Security Service and subsequently GCHQ in an operational capacity. My body clock never became used to the constant changes of shift times ie. two evenings, two mornings, two nights and two days off and my doctor suggested that I sought alternative employment

In retrospect, I should have requested a transfer to Cheltenham. which I had at one time been offered but had settled at Lydd, with a new wife and home. and did not fancy any upheaval .

Shortly after 1 had resigned I was most surprised to receive a letter from my ex-CO at Forfar asking me to contact him as a matter of urgency.

On the telephone he informed me that a special reserve unit of ex-Special Communication Operators was being formed and if I were interested he would pass mv name along to a retired Colonel at Hanslope Park.
This gentleman duly contacted me with the information that the unit was officially part of the Army Emergency Reserve, which entailed attending four long weekend training camps and an annual two week course to be held at unspecified places in the UK or possibly abroad. At least we were to be well paid with expenses!
Trying to get all the volunteers together at a mutuallv convenient time proved extremely difficult and just as difficult was the formation of an effective operational unit out of [persons] of very different capabilities.

I recall some men could just manage 5 wpm in Morse.

We attended various training camps at Brecon. Hereford, Grendon Underwood and St David's Bay in Wales where some operators were sent out into the surrounding countryside in Land Rovers and attempted to make radio contact with 'base' The results were. to say the least, lamentable; it became obvious that a more permanent base was required.

Major Robertson asked me if I would be interested in travelling up to Forfar and investigating the possibility of reopening the old RSS station at Mountreathrnount Moor.

I always understood that the site was demolished when the station was closed in 1947 but nothing had been changed and it was quite an odd sensation to back in the old place again.
I discovered that the Main Set-Room had been fitted out as a transmitter hall with some extremely powerful CW gear and fresh rhombic antennae installed. The plan was that during the two week training camps parties of operators would be sent abroad and communication links established.

Volunteers were flown to : Malta, Gibraltar and Germany and an attempt made to link up with Forfar using the standard *censored* 2 *words/* CW procedure of *censored 4 words]* and laborious one-time pads transforming messages into five letter code.

Apart from the excellent transmitters the reception side was handled by some ancient Eddystone receivers which I believe were GCHQ rejects but I cannot recall what equipment the overseas people were using.
The whole operation dissolved into farce as we could hardly hear our colleagues' abroad and when the transmitters were used the incoming signals were drowned by key-clicks. In addition one over enthusiastic Royal Signals Second Lieutenant had a brilliant idea! The outstation would transmit its call sign five times and then stop. Immediately base would reply and contact thus established without any further procedure
being required.
The idiot didn't realise that the outstations couldn't hear each other and when the base replied they thought it was replying to them!

An analysis after the operation discovered that in addition to the key-click problems the aerials were cut to the wrong frequencies and incorrect impedance coaxial cable used.

During WW2 the Forfar site was used solely for reception purposes and although SCC1 used transmitters they were located at Kirriernuir, roughly ten miles away.

"Robbie" (GM6RI) scoured the countryside and located an old Italian Prisoner-of-War camp at Laurencekirk, which we then turned into the receiving site.
I pressed strongly for the roles to be reversed as the Forfar site is excellent for reception being all peat and heather and unhindered by any man made interference but realistically I agreed that Laurencekirk was not large enough for any powerful transmitters.
Business restrictions forced me to leave the unit in 1967 but I believe the organisation was wound down shortly afterwards when it became clear that the reason for its initial introduction, being the Government fear of the Communists taking over in France or ltaly, had evaporated .

Apart from maintaining contact with partisan groups on the continent the unit would have assisted with *censored [3 letters]* communication links which they would not have wished put out over their own transmitters.

In later years I have come to realise how difficult it is to instil anv sense of urgency or devotion to duty in times of peace. For most of our men it is sad the whole operation was a paid holiday .

To my great regret "Robbie" died about two years ago and left very little in the way of personal records. I know he shared my frustration at being unable to instil any real sense of purpose in his men or getting more support from the government of the day
Angus County Council will confirm that the station is still there as a "Type of Radio Station".

It is interesting to note that Keith contributed much to ENIGMA as well as ENIGMA2000. He was a licensed radio amateur and as you have probably and correctly assumed, a special operator [Wireless]. His Morse skills were legendary and he sent in whatever Morse he managed to receive on his valved Eddystone receiver.
Sadly Keith passed away some years ago and I found this account in a letter to me from Keith, who I used to meet in the ENIGMA 2000 meetings. The document was subjected to OCR and checked; I apologise now for any errors that may have crept in and remain, as yet, unnoticed .

Gizza Job ……

MI6 launches first TV ad to recruit new spies in its 110-year history

Martin Bentham
https://www.standard.co.uk/news/crime/mi6-launches-first-tv-ad-to-recruit-new-spies-in-its-110year-history-a3847581.html

MI6 will screen its first TV advert today [24/05] as part of a major campaign to attract ethnic minority recruits and widen the pool of talent that it deploys against terrorists and hostile states.

The unprecedented effort, which also includes a drive to hire more women and parents, was announced by the spy agency's chief Alex Younger as he appealed to the "best people" from all parts of society to consider a career in espionage.

It has been prompted by concern that some Britons, including those from ethnic minority backgrounds, may be put off from applying because of the James Bond image of the service, left, and a misconception that MI6 only wants applicants from traditional backgrounds.
MI6 said it is determined not to miss out on talent as the population becomes more diverse and that it is important too for its "public legitimacy" that its ranks reflect the people it serves.

The campaign comes as the agency seeks to recruit an extra 800 spies by 2021. The TV advert, which is the first by MI6, will be the centrepiece of the drive. It will be broadcast this evening on Channel 4 before being shown on digital channels and Spotify, the music streaming service.

TV campaign: images of the MI6 advert show a mother and her son watching sharks to show that it was recruiting people who were "very clearly not James Bond"

It depicts an ethnic minority mother and her young child watching a shark in an aquarium. It ends with the strapline, "Secretly, we're just like you", suggesting that the woman is a spy. The phrase will also be used as a hashtag on social media. MI6 said the 14-second film is a deliberate attempt to flip the service's James Bond image.

Mr Younger, who is known as C, said that diversity in MI6 would increase the agency's effectiveness and urged ethnic minority Londoners and mothers to consider applying to become a spy.

"I want people who have never thought of joining MI6 to join MI6," he said. "My message is simple: there is no standard MI6 officer; if you have what it takes then apply to join us. Our work is exciting, intellectually challenging, and it matters. Regardless of background, if you have the skills we need and share our values, I want you to consider a career in intelligence, in a service that reflects today's society."

The TV campaign comes as the agency seeks to recruit an extra 800 spies

He added: “I want to dispel the myths that still too often see potential candidates rule themselves out. MI6 needs the best people that this country has to offer.” Mr Younger’s appeal came as MI6 revealed that it has seen a surge in applications since the poisoning of former Russian spy Sergei Skripal and his daughter Yulia in March.

The agency has already been listed in employment league tables as one of the country’s top 100 race employers and in the top 50 for female staff. However, MI6’s head of recruitment, known only as Emily, who is a mother of two, said the agency remained concerned that ethnic minority Britons were still under-represented in its ranks.

She said those hired as a result of the advert would become intelligence officers and perform three roles. These were “targeter”, identifying people with access to secret information who might be willing to work as an agent for MI6; “case officer”, building and managing relationships with such recruits; and “requirements or ‘R’ officer”, responsible for evaluating and validating the information obtained.

She said that the roles required skills including emotional intelligence, mental sharpness, curiosity and integrity, and that recruits from different backgrounds who could “challenge group think” were essential.

She said her 20-year experience of MI6 was that it was a flexible employer and that it was possible for those with families or from different backgrounds to have successful careers.

https://www.standard.co.uk/news/crime/mi6-launches-first-tv-ad-to-recruit-new-spies-in-its-110year-history-a3847581.html

One must wonder if the previous attempt to attract minority candidates was less than successful, much like the Metropolitan Police attempts from the mid 80’s to recruit more black and other minority officers. That drive had been a failure although more minority officers can now be seen nearly 40 years on.

The previous attempt by SIS to attract other minority officers was seen 3rd March, 2017 that video attempt also made available via the Evening Standard, and can be seen here:
https://www.standard.co.uk/news/uk/mi6-to-bring-back-tap-on-the-shoulder-recruitment-method-in-diversity-drive-a3480586.html

Personally, I find it rather disturbing that in its original innovation the law of this country [UK] applies equally to all; but sadly that now seems not to be true. Stop and Search is just one example. It seems if one minority makes more noise than another not only do they see less stops but a simple two minute to fill in Stop slip [and then entry in the Book 90 pre-PACE] becomes a veritable tome taking many minutes to complete and the possibility of a complaint of ‘racial harassment’ to boot for the officer doing his duty.
That was something I once suffered and I let the senior officers play their stupid games and didn’t mention that my wife is an ‘ethnic minority’ herself. Sadly, someone tipped off the investigating officer and the matter dropped without apology.

Then there’s the recruitment where someone from the ‘minorities’ is sought. Nothing wrong with that but there’s a whole host of ‘discrimination’ viz race, sex, disability, age and equality and so on that has to be met, or used against you ‘Not black? Well give him an application form to keep him sweet but I suspect he’ll not be up to the interview.’

I wouldn’t mind a job with 5, 6 or Cheltenham, but will I get one on application? Of course not, at 68 I’ll doubtless fail the pathetic online tests ;-)

The next day 25th March, 2018 MI5 offer ‘We only recruit one type of person’:

Ethic recruiting drive that produces these responses in the popular free newspaper found everywhere:

AND ANOTHER TH1NG... [Metro Page15 29/05]

• So MI6 is trying to cast off its macho James Bond image and bring
in more women and ethnic minority recruits.
Has this wonderful opportunity come too late for me at
the age of 53?
As a young black woman ofwest African parents, I used to dream of working for MI6
or even better for the 'Unit' [intelligence force in Doctor Who]. *See below:*
If not too old, I will apply!
Diana Hughes, South London

Brigadier Lethbridge-Stewart and Sgt Benton [UNIT Personnel]

But, fantasy aside, the best concerning all this and I question Parag's 'MI6' in favour of MI5; well done Parag!

• Regarding MI6, get real!
I am an Indian. You don't need to cram anything and everything with ethnic
people, women, disabled and gay people in the name of diversity and equality.
That is really patronising, fake and disrespectful!
Parag, West Yorkshire

They didn't mention ageist though ;-)

…… *and it's all PC bollocks from my point of view*

Just to rub salt into the wound here's a real missed opportunity for some:

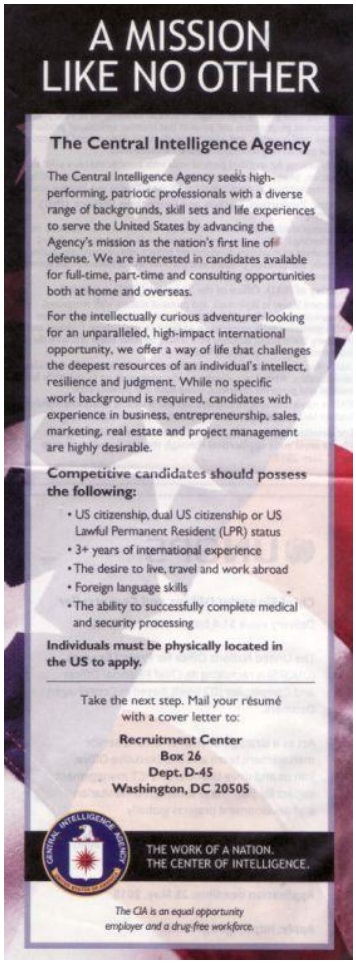
Radio Frequency Acquisition - Collector/Analyst Ref. 1441

As a trainee Radio Frequency Acquisition Analyst, you will play a vital role in monitoring a variety of communications, providing intelligence in support of UK foreign and defence policies. You should have a keen interest in RF communications and a curiosity into how signals are transmitted and received within the electromagnetic spectrum from 10KHz through to 3GHz. You would undergo a comprehensive training package, attaining the skills to allow you to identify and analyse modern communication technologies down to underlying payload for exploitation and capability development

While the role is challenging, our flexible working policy ensure a healthy work-life balance. Wherever possible, we accommodate reduced hours or job share options, balanced against business needs.

Gone are the days of DWS in far flung outposts, so how is it done nowadays? Answers on a postcard, please!

From 'E' we received these:



PoSW's Items of Interest in the Media:-

Ireland geared up to fight terrorism – or perhaps not. We do not automatically think of the Irish Republic in connection with modern day terrorism, but it seems as if they have some concerns over this issue and the *Garda Siochana*, the name given to the police in Ireland, are in some doubt as to how they would deal with such a situation.

The *Irish Independent* newspaper of 29-May, purchased just for a change from the usual British papers, contained an article by Tom Brady with the headline, "Gardai 'not adequately trained' for terror strike", which says, "Gardai have accused senior management of failing to train them adequately in how to deal with a terrorist incident.

Strong criticism of the 'deficit' in training for incidents involving terrorism or tactics in confronting an armed suspect was levelled at the top ranks by the Garda Representative Association (GRA) at its annual conference in Co Wexford last night.

GRA vice-president Jim Mulligan said they were seriously concerned that rank and file colleagues, including those likely to be first on the scene of an incident, had not been adequately prepared to respond.

Major exercises last year had demonstrated the level of training given to the national units. But the rest of the force had been given little or no training.

Gardai said their training on firearms consisted of being taught 'how to shoot a gun, hold a gun and handle a gun, but not any of the tactics around it'.

Mr Mulligan said that in the UK, tactical training was given to all officers and not restricted to those who were armed.

The behaviour of unarmed officers in reacting to some of the recent incidents in the UK was a result of that, he added.

He said his association wanted tactical training.

Mr Mulligan said there had been two weeks of tactics included in training at the Garda College in Templemore, but that had been dropped from the agenda.

Interim deputy general secretary Robbie Peelo said he had more than 20 years service in the force, but had attended only three courses in continued professional development. Association president Ciaran O'Neill said many of the 12 injuries sustained by on-duty gardai every week would be eliminated if Tasers were made available to all members of the force, rather than confining them to the Special Branch, Emergency Response Unit and Armed Support Units.
The introduction of body cameras would also lead to a reduction in the number of assaults as well as providing good quality evidence in court. The conference will today support an occupational health survey of members to determine the extent of measures necessary to support their mental well-being.
A report from Dr Finian Fallon, a clinical psychologist with City Colleges Dublin, will present fresh evidence of the mental issues confronting gardai on the ground.
According to a 2016 survey for the Police Federation in England and Wales, 80pc of police who responded said they had experienced feelings of stress, low mood, anxiety and other mental health symptoms.
Mr O'Neill said anecdotal evidence would indicate that similar issues affected gardai on the front-line.
He said there was no comparable occupation where employees were likely to suffer such a debilitating range of injuries and subsequent illnesses.

British spooks getting it right; it was said a few years ago that British intelligence agencies were having great difficulty in adapting to the new threat of Islamic terrorism. MI5 had been so used to infiltrating and spying on left-wing organisations and in particular the Unions - there was at one time much speculation as to how many of the Trade Union "barons" that were always in the news were actually MI5 operatives. However, they appear to have been busy in another direction, as reported on the front page of *The Times* of 5-June. "Isis plotters caught in undercover sting – First all-female jihadist gang convicted", is the headline of a story by Fiona Hamilton,
Crime and Security Editor, Katie Gibbons and Duncan Gardham, which says:- MI5 officers posed as Islamic State fighters in an undercover operation to thwart Britain's first all-female terrorist plot, it can be revealed.
Operatives pretended to be jihadists to trick a notorious British Isis fighter in Syria into outlining his plans to use the women to attack targets including Buckingham Palace and the Palace of Westminster.
When the fighter was killed by a US drone strike, believed to have been carried out with British intelligence, the officers then posed as his commander and as an Isis widow in Syria to talk to Safaa Boular, who was then 17.
Safaa, from Vauxhall, south London, unwittingly discussed with the agents the obtaining of weapons to attack tourists at the British Museum.
Yesterday she became the country's youngest woman to be convicted of plotting a terror attack.
Safaa, now 18, was found guilty at the Old Bailey of plotting an atrocity with her mother, Mina Dich, 44. Her sister, Rizlaine, 22, had pleaded guilty. The trio called their plan the 'Mad Hatter's Tea Party', using terms from *Alice in Wonderland* as code when discussing the plot.
The unprecedented case showed the tactics being used by MI5 and police to overcome modern obstacles such as encrypted social media applications, which are routinely employed by terrorists.
MI5 officers had first posed as eastern European converts to speak online to Naweed Hussain, an Isis recruiter who had married Safaa in an online ceremony when she was 16.
He instructed the officers to blow up targets including Buckingham Palace and parliament, and revealed that he had two more recruits who would join them on the day of the attack.
The operatives joined the dots with Safaa and Rizlaine, who were already on the radar of security services because of their plans to travel to Syria.
Safaa had originally planned to join Hussain in Raqqa, the former Isis stronghold in the country. But her passport was seized by the authorities and she was encouraged by Hussein to carry out a gun, grenade or car attack at the British Museum.
Safaa was charged over her plans to travel to Syria and remanded in custody, but used a prison phone to encourage Rizlaine to carry out a knife attack at Westminster.
The material gleaned by MI5 from Hussain and Safaa led to a bugging operation at the Boular familiar home in Vauxhall over several months.
Rizlaine was overheard by a police device using a knife to practise her attack and was shot when she charged at officers during her arrest on April 27 last year.
Sources said that MI5 and the police have hired specialists adept at talking in Isis patois
to go undercover online because of the group's propaganda push and its encouragement of online recruits to commit attacks at home..... Deputy Assistant Commissioner Dean Haydon, head of counter terrorism at Scotland Yard, said that the investigation had involved
a 'family with murderous intent' but it was not possible to pinpoint the controlling mind:
'The family unit was pretty dysfunctional and they had accessed a vast amount of extremist material.'
The jury was not swayed by Safaa's defence that she was groomed by Hussain and did not intend to carry out an attack. She had developed an Isis network of up to 400 contacts before she started speaking to him online.
Sentencing in the Boular case has been delayed for six weeks. Rizlaine's friend, Khawla Barghouthi, who was recorded discussing the attack, also pleaded guilty to having information about acts of terrorism."

Point to ponder:- "To be honest, as this world goes, is to be one man pick'd out of ten thousand." From *Hamlet, Prince of Denmark* by William Shakespeare.
"00000"
"Peter of Saffron Walden"

Thanks PoSW!

Now interesting news pieces sent in:

Caversham Park: End of an era for BBC listening station

By Alex Regan BBC News
http://www.bbc.co.uk/news/uk-england-berkshire-36712152

7 July 2016

Image caption BBC Monitoring began in 1939 as an operation to allow the British government to access foreign media and propaganda during World War Two

For nearly 75 years BBC staff at a sprawling stately home on the outskirts of Reading have been listening in to some of the world's most seismic events, from Nazi Germany's occupation of Europe to the death of Stalin and the Cuban Missile Crisis.

Since 1943 Caversham Park has been the home of BBC Monitoring, whose offices still summarise news from 150 countries in 100 different languages for the BBC.

But after a £4m funding cut, the remaining journalists, academics and translators are to leave the country estate for new offices in London.

As the international newsgathering service enters a new chapter of its life, BBC News examines how Caversham Park shaped the news agenda in the mid-20th Century.

World War Two

The monitoring service began at the outbreak of war with Germany in 1939, with its primary purpose to inform the War Office of propaganda by Nazi-controlled media outlets and the broadcasts of other Axis Powers.
Image caption At its inception in 1939, BBC Monitoring was based in a set of shacks in Wood Norton, Worcestershire, but by 1943 it had commandeered Caversham Park, which was being used as a hospital at the time
Image caption Transmissions from the Axis Powers began being recorded on phonograph cylinders in 1941

It initially set up camp in shacks around Wood Norton, Worcestershire, but by 1943 the service had commandeered Caversham Park, which was at the time being used as a hospital.

The recorded history of the site goes back to the Domesday Book, when it was inhabited by relations of William the Conqueror, but by the 20th Century it was being used by the Catholic Oratorians as school. By 1941, the premises had been transferred to the BBC.
Image caption Caversham Park was procured by the BBC in 1941 and has remained under its ownership, but for many years its purpose was kept secret due to the work it did for the UK government

Monitoring staff at Caversham would transcribe and summarise 240 broadcasts into an 80,000-word document called the Daily Digest. This was swiftly delivered to London by war despatch drivers.

BBC Monitoring played a key role in tapping communications made by Hellschreiber (a kind of teleprinter) from Nazi Germany's propaganda minister Joseph Goebbels to newspaper and radio networks. A site outside London was chosen in part because it was less likely to suffer bomb damage.

By the end of the war 1,000 people worked at Caversham Park helping to provide the War Office and BBC journalists with up-to-date information from Axis Power news agencies.
Image caption The Daily Digest was transported from Berkshire to London for distribution each day at 10:15

People of many nationalities worked at the monitoring station, including German-Jewish refugee Karl Lehmann, whose family fled Nazi rule.

He said: "It was a very sociable place to work, in fact staff would often come in on their off days and eat in the canteen, which greatly eased the effects of rationing.

"There was a library in the building, and the park - so a pleasant place to spend a day off. In fact the building was almost like a club and the service was like one big family - even though there were nearly 1,000 of us here in total, from monitors to engineers and editors.

"We were all totally united in the one aim of winning the war."

The Cold War

Shortly after the end of Word War Two the service halved to about 500 members of staff, and attentions were turned to the burgeoning threat of the Soviet Union. The service covered the Soviets' invasion of Hungary in 1956 and the building of the Berlin Wall in 1961.

It played a key role in the Cold War, monitoring the events of the Cuban Missile Crisis as the USA and Soviet Union came close to nuclear conflict.
Image caption By the 1960s, Monitoring's attention had moved towards the Soviet Bloc, and about 500 members in Caversham monitored the propaganda from the Soviet Union

In 1962 President John F Kennedy told Soviet Premier Nikita Khrushchev to dismantle Russian missile sites in Cuba or "face the consequences".

BBC Monitoring listened in to Khrushchev's response, which was broadcast on Moscow radio.

He said: "The Soviet government has ordered the dismantling of the bases and the despatch of the equipment to the USSR. I appreciate your assurance that the United States will not invade Cuba."

Monitoring contacted the White House through its US counterpart before Kennedy received Khrushchev's official response.

Author and journalist Michael Smith worked at Caversham Park initially as an engineer, and then as a journalist in the 1980s until 1990. He said: "I'm sure [BBC Monitoring] were part of it and important. At that stage their ability to know what was coming from Russia was tremendous."
Image caption When in the UK, Warsaw Correspondent Kevin Ruane would visit BBC Monitoring and make broadcasts from the transmissions received by operatives at Caversham Park

He added: "We were able to report on global news without being on the front line; it really crossed the divide between news and intelligence-gathering.

"I remember being the duty editor and news of the fatwa on Salman Rushdie came through from [Iranian] radio. At that time no-one in England knew what a fatwa was."

The service today

BBC Monitoring still listens in on radio transmissions from around the world, as well as translating and analysing print journalism in 100 different languages, but the journalists and academics now have the added task of scouring the internet for news.

In 1991 the Berkshire-based listening post heard a live broadcast of Somali rebels taking over a government-run radio station in Mogadishu at the outbreak of the country's civil war.

Monitoring also analysed the fall of Gaddafi during the Libyan Civil War by listening to medium-wave radio signals and using satellites to watch TV broadcasters in the country.

Throughout World War Two and the Cold War, little was known of BBC Monitoring and it was heavily financed by the Ministry of Defence and Foreign Office, as well as the World Service.

But in 2010 during licence fee negotiations, it was decided that BBC Monitoring would be funded by licence fee-payers. Currently it employs 320 staff in all corners of the globe, but the one constant that has remained for nearly 75 years is its base in Reading.

For more than half of the 20th Century, staff at the idyllic country house eavesdropped on the world, but shortly that will be no more.

Mr Smith said: "It's a tremendous shame that we're getting rid of it."

http://www.bbc.co.uk/news/uk-england-berkshire-36712152

It is worth opening the URL to see the interesting images; *an excellent article – thanks for posting J-PL*

Irish News
In pictures: Inside Ireland's secret VIP nuclear bunker

Fresh tensions between North Korea and the US have put nuclear conflict back in the spotlight - but at the height of the Cold War the Irish government considered the threat so real that it built a bomb shelter to be home for the Taoiseach if Doomsday came. Our reporter goes inside Ireland's secret nuclear bunker

Monday 11 June 2018

https://m.independent.ie/irish-news/in-pictures-inside-irelands-secret-vip-nuclear-bunker-36285102.html?utm_content=bufferf8b90&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer

In the 1960s, the Irish government was so concerned about a nuclear attack that it urged householders to stock up on groceries for 14 days - just in case it happened.
Bás Beatha, a guide to surviving a nuclear war, was distributed to every home, telling the public what to do when Doomsday came and the country was hit by a nuclear blast.
And the government itself, including the Taoiseach, was all set to find refuge in their own special VIP bunker in Athlone.
The Irish people were advised to avoid going out, if at all possible, in the event of a nuclear attack, for fear of being scattered with radioactive dust.
If they had to go out, they were advised to wear a scarf and a pair of gloves, and bring a flask of tea.
The recommended nuclear holocaust diet included tinned meat, tinned fruit, tinned vegetables and biscuits. Homeowners were told to have a stock of these provisions in their cupboards in preparation for a thermo-nuclear explosion.
The first sentence of the booklet spelled out the danger: "Nuclear weapons have added a new and deadly peril to modern war - RADIOACTIVE FALL-OUT. It can affect every home and farm in the country."
It is comforting to note that the powers-that-be were taking measures to protect us, in terms that were occasionally alarmist. In case anyone was in any doubt, the booklet, which was to be kept handy in every home, warned that "in a nuclear war, thousands of our people could die".
The authorities did not just have the general population's interests at heart. They also made plans to try to ensure that they themselves would survive Doomsday intact.
At the height of the Cold War, in the years after the Cuban Missile Crisis, the government ordered the construction of the nuclear bunker in Athlone.
For decades, there was a plan that the midlands town by the banks of the Shannon would become the effective capital of Ireland in a nuclear-war scenario.
Former soldier Sgt Henry Brady, a local historian and tour guide, says: "Athlone was picked because it was right in the centre of Ireland, and it had good radio communications."

Mysterious underworld

With nuclear flashes in the sky pending, threatening to lay waste to our our fragrant green fields, the Taoiseach, his ministers and top civil servants were to decamp to Athlone, and live underground until the radioactive dust had settled.
I had long heard of this mysterious, subterranean underworld in the midlands, and was determined to visit it. Tracking down the elite nuclear shelter and obtaining special permission to descend into the network of corridors 40ft underground at Custume Barracks required weeks of planning.
After exhaustive enquiries, involving civil servants and the Defence Forces, I turned up at the entrance on the appointed day, and was taken by escort to an army accommodation block.
Sgt Ozzie Hackett, the man in charge of the block, took me into a hall and down stairs, switching on a light that illuminated a secret underworld.
I stepped into the bunker where our Taoiseach would have walked to take control as nuclear clouds swept across the country.
Sgt Hackett remembers being in the bunker as a young soldier back in the 1980s when it was still fully operational.
He shows me the long, dark corridor where the survival of the country was to be carefully plotted with maps, ancient fax machines, and the type of bulky black phones that would not look out of place in the Hitchcock film Dial M for Murder.
Sadly, this antediluvian infrastructure has been removed since the bunker was decommissioned. Leo probably has another secret bolthole somewhere closer to Dublin with more luxurious amenities.
In the event of a nuclear attack, hordes of volunteer telephonists were supposed to be in this base monitoring how the rest of the population above ground were doing (probably not that well, if we had not already been vaporised). Readings were to be taken by wardens across the country, and then phoned into Athlone.
The bunker also housed a conference room with maps and a broadcast studio where RTÉ would issue bulletins. From here, the Taoiseach would give an address on the state of the nation (or what remained of it). According to some accounts, the bunker even had a special closed telephone line to Number 10 Downing Street in London.
The Athlone bunker was designed so that even if the building above it collapsed, its reinforced concrete ceiling could withstand the force.
A cabinet cannot be expected to get through Doomsday on an empty stomach.
So I was glad to discover that, our senior politicians would not have gone hungry in their midlands lair.

Hidden enclave

As he showed me through the hidden enclave of dark corridors and side rooms, Sgt Hackett recalls: "What I remember most was that when you came in at the entrance, there were shelves full of tins of food, and cookers."
A government memo from the 1960s outlined survival plans for a nuclear war. It was envisaged that ministers, civil servants and military advisers would have cooking facilities sufficient for a period of up to 30 days.
The plan even included instructions about the flushing of toilets: "In order to conserve water, the flushing of the WCs will not be permitted in wartime. Chemical closets should therefore be provided."
The facilities in the bunker would not be considered five-star when compared to the style that Leo Varadkar is accustomed to now in Merrion Street. It was believed that the shelter was to accommodate up to 100 people - but there were just two washrooms, with basins rather than showers.
Sgt Henry Brady, who served in the barracks, remembers that there were only a few beds set up in the underground complex, while others were stored against a wall for many years.
Although the Athlone bunker was to be the nerve centre and home for political VIPs amid the radioactive fall-out, it is not clear how the cabinet was supposed to get there. Some suggested that they go by boat along the Royal Canal and then transfer on to the Shannon; another proposal was that they travel by helicopter, but would that be safe during a radioactive plume?
In the 1990s, there was much discussion about how feasible this operation would be if a missile struck in Ireland's vicinity. There was speculation that the local minister and TD Mary O'Rourke would have to take control of the country.
She told Review: "I remember joking at the time that I would be the only member of the Cabinet who could get there in a nuclear war, because it is just up the road from me."

Despite the potential scale of a nuclear catastrophe, it was not always evident that the public, the media, or even politicians themselves ever took our planned response to Armageddon all that seriously.
There were several dress rehearsals for the nuclear emergency plan in the 1980s, including Network 84 in 1984, when the country's public-warning system was tested out at the bunker.
Charts were plotted for fall-out plumes being carried westward over Ireland after simulated nuclear strikes in Britain.
According to one press report, the atmosphere in the bunker for the nigh-time dress rehearsal was cheerful, but it was also a little unreal.
Many volunteers holed up in the bunker for the night were reported to have taken more interest in a raffle than the progress of the simulated nuclear dust cloud threatening an apocalypse.
Even the Minister of Defence of the time, Patrick Cooney, seemed to take the prospect of thermal warfare a little lightly. Asked in 1984 where he would most like to be when nuclear war broke out, he replied: "In the officers' mess at Custume Barracks."
So what would the rest of us do as the radioactive fall-out spread?
It was time to reach for our Bás Beatha nuclear survival booklet.
The leaflet came with a hole punched through one of the corners, so you could hang it from a nail next to the dresser in the kitchen. Many homes probably still have it in a drawer under the sticky tape, old string and scissors.
There are plenty of useful tips on what to do at home to while away those Armageddon hours.
Turn your back to the flash
In the leaflet, mammy is pictured in an apron in the kitchen sorting out the food, while a somewhat perplexed looking daddy appear to be trying to do something manly with a water tank.
The booklet has handy tips for what to do if Nagasaki ever came to Knocknagoshel.
The advice to those finding themselves close to a nuclear explosion was simple: "Turn your back to the flash." Then we were advised to throw ourselves face first on to the ground with an overcoat over our heads.
It would almost make you feel envious of the Taoiseach sitting in his cosy bunker in Athlone.
'Biggest fear is another disaster like Chernobyl'
The threat of nuclear fall-out is back in the news with the stand-off between US President Donald Trump and North Korea's Kim Jong-un.
Since the Chernobyl disaster in 1986 and the end of the Cold War, the Government has concentrated on the possible fall-out of an accident at a nuclear plant rather than a nuclear attack.
Security analyst Declan Power says an accident in Eastern Europe, similar to the incident at Chernobyl, is more likely than an incident at one of the British plants such as Sellafield.
If there was an incident, the response would be led by the Department of Housing in conjunction with other agencies including the Office of Radiological Protection.
The principal fear is that a nuclear accident in the UK or Europe could release a radioactive plume into the atmosphere. Depending on the wind speed and direction, it could eventually reach Ireland.
According to the Environmental Protection Agency, due to Ireland's distance from any nuclear facility, it is unlikely that anyone in Ireland would need to stay indoors. However, in a serious case, the authorities could issue its warning to the public to "go in, stay in, tune in".
***** Go in: Going indoors to your home, workplace or another indoor location could protect you from exposure to radiation and reduce your long-term cancer risk.
***** Stay in: You should remain indoors until advised by the authorities that the radioactive plume has moved on. This may take a few hours, depending on the nature of the accident, and the weather.
***** Tune in: TV and radio stations - both state and commercial - will be kept fully briefed about the emergency. You will be kept updated with the latest news and advice, and informed if any actions such as remaining indoors are necessary. Information will also be made available on the internet and social media.
In 2002, Irish households were issued with iodine tablets for use in a nuclear emergency. Stable iodine helps to counteract radioactive iodine, but because of the changing nature of more modern nuclear plants, these pills are now considered unnecessary and redundant.
@KimBielenberg
https://m.independent.ie/irish-news/in-pictures-inside-irelands-secret-vip-nuclear-bunker-36285102.html?utm_content=bufferf8b90&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer

Titanic search was US 'front for Cold War mission'
17 June 2018

https://www.bbc.co.uk/news/uk-northern-ireland-44511930

The search which uncovered the wreckage of the Titanic was a front for a secret US mission to recover two Cold War submarines.

The expedition in 1985 was led by a former US naval intelligence officer, Dr Robert Ballard.

He said he had been tasked by President Ronald Reagan to carry out the search for the two lost submarines.

Dr Ballard said that "conveniently between the two (submarines) was the wreckage of the Titanic."

The exploration in September 1985 found the ship lying at a depth of 2.5 miles.

It was discovered some 370 miles off the coast of Newfoundland in Canada.

Speaking to National Geographic, he said: "Most of the Cold War was fought underwater and most of it was never known to the American people.

"President Reagan wanted me to carry out a mission to recover two Cold War submarines...conveniently between the two was the the wreckage of the Titanic.
Image caption Former US President Ronald Reagan ordered the top secret mission to recover two lost submarines

"I only had 12 days left on the mission when I found it," added Dr Ballard.

At the time, the research team released photos of the wreckage, but said they had no plans to salvage the ship or explore its contents.

The following year Dr Ballard returned to the site and made eleven dives to the scene in a three man submarine.

The Titanic, the world's largest passenger ship when it entered service, was built in Belfast.

It sank on its maiden voyage in 1912 with the loss of more than 1,500 lives.

https://www.bbc.co.uk/news/uk-northern-ireland-44511930

Thanks RC

Ex-Rolls-Royce scientist arrested 'for leaking jet secrets to China'
Mark Bentham
Thursday 14 June 2018 12:22

https://www.standard.co.uk/news/uk/exrollsroyce-scientist-arrested-for-leaking-jet-secrets-to-china-a3863041.html

Bryn Jones, arrested on suspicion of passing secrets to China about F-35 stealth fighters

A former Rolls-Royce scientist has been arrested by counter-terrorism police on suspicion of passing secrets to China on Britain's new fighter jets.

Bryn Jones, the company's former chief combustion technologist, was detained on Tuesday afternoon after MI5 warned that classified defence information might have been leaked to China.

The 73-year-old was taken to a police station in Derbyshire for questioning and later released under investigation. Scotland Yard confirmed that a man in his seventies "who worked within private industry" had been arrested in Derbyshire "as part of an investigation under the Official Secrets Act. It added: "Police officers executed a search warrant at an address in the West Midlands, which is now complete. A search at an address in Derbyshire is ongoing. We are not prepared to discuss further at this stage given the nature of the investigation."

Rolls-Royce is one of several UK companies involved in the construction of Britain's new multi-million-pound F-35 stealth fighter jets.

Four of the warplanes, which have been described as "the future of our air power for decades to come" by the Chief of the Air Staff, Air Chief Marshal Sir Stephen Hillier, landed at RAF Marham in Norfolk last week. Mr Jones, a married father of five who describes himself as a "visiting professor" in "gas turbine combustion" at the Aeronautical University of Xian in central China, is understood to deny any wrongdoing.

He worked at Rolls-Royce for nearly 30 years before leaving to start a consultancy firm, but is believed to have maintained his connections with his former employer.

One of the properties searched by police were offices at a West Midlands firm linked to him, and police were also seen removing boxes of documents from his four-bedroom home, 20 minutes' drive from Rolls-Royce's Derbyshire headquarters.

A Rolls-Royce spokesman said the firm could not comment on the arrest while the investigation was ongoing.

The F-35 fighter is built in America by the US company Lockheed Martin. It has a top speed of 1,200mph, a 300-mile range and can dodge enemy radar.

Several British firms, including Rolls-Royce, which has provided its "lift system" hover technology, have been involved in its production. The Government has committed to spending £9.1 billion on 48 of the aircraft by 2025.

A Home Office spokesman said it would not comment on an ongoing investigation

https://www.standard.co.uk/news/uk/exrollsroyce-scientist-arrested-for-leaking-jet-secrets-to-china-a3863041.html [Thanks E]

The Spectre's News articles

The Intercept https://theintercept.com/2018/05/19/japan-dfs-surveillance-agency/

THE UNTOLD STORY OF JAPAN'S SECRET SPY AGENCY

EVERY WEEK IN Tokyo's Ichigaya district, about three miles northeast of the bright neon lights and swarming crowds in the heart of Shibuya, a driver quietly parks a black sedan-style car outside a gray office building. Before setting off on a short, 10-minute drive south, he picks up a passenger who is carrying an important package: top-secret intelligence reports, destined for the desks of the prime minister's closest advisers.

Known only as "C1," the office building is located inside a high-security compound that houses Japan's Ministry of Defense. But it is not an ordinary military facility – it is a secret spy agency headquarters for the Directorate for Signals Intelligence, Japan's version of the National Security Agency.

The directorate has a history that dates back to the 1950s; its role is to eavesdrop on communications. But its operations remain so highly classified that the Japanese government has disclosed little about its work – even the location of its headquarters. Most Japanese officials, except for a select few of the prime minister's inner circle, are kept in the dark about the directorate's activities, which are regulated by a limited legal framework and not subject to any independent oversight.

Now, a new investigation by the Japanese broadcaster NHK — produced in collaboration with The Intercept — reveals, for the first time, details about the inner workings of Japan's opaque spy community. Based on classified documents and interviews with current and former officials familiar with the agency's intelligence work, the investigation shines light on a previously undisclosed internet surveillance program and a spy hub in the south of Japan that is used to monitor phone calls and emails passing across communications satellites.

According to the current and former officials, the Directorate for Signals Intelligence, or DFS, employs about 1,700 people and has at least six surveillance facilities that eavesdrop around the clock on phone calls, emails, and other communications. (The NSA, in comparison, has said it has a workforce of more than 30,000 and Britain's signals intelligence agency claims more than 6,000 staff.) The communications collected at the spy facilities are sent back to analysts who work inside the C1 building, which has four underground floors and eight above ground.

"Very few people know what the DFS is doing and can enter the building," according to an active-duty official with knowledge of the directorate's operations, who spoke on condition of anonymity because they were not authorized to talk to the media. The official agreed to share details about the directorate after The Intercept and NHK last year revealed that the spy agency had obtained a mass surveillance system called XKEYSCORE, which is used to sift through copies of people's emails, online chats, internet browsing histories, and information about social media activity. The official said that they believed the directorate's use of XKEYSCORE was "not permissible" under the Japanese Constitution, which protects people's right to privacy.

The directorate – known in Japanese as the "Denpa-Bu," meaning "electromagnetic wave section" – currently has 11 different departments, each focused on a different subject, such as information analysis, public safety and security, and cryptography. However, the departments are kept separate from each other and there is limited communication between them, the active-duty official said.

Each department in the C1 building has a different lock installed on the rooms it uses, and these can only be accessed by a select group of people who have the appropriate security clearance, access codes, and identification. The directorate operates as the largest arm of Japan's Defense Intelligence Agency, which has other divisions focused on, for example, analyzing satellite imagery, sources said.

Atsushi Miyata, who between 1987 and 2005 worked with the directorate and the Ministry of Defense, said that his work for the spy agency had involved monitoring neighboring countries, such as North Korea, and their military activities. But the agency's culture of intense secrecy meant that it was reluctant to share information it collected with other elements of the Japanese government. "They did not share the data inside of [the] Defense Ministry properly," said Miyata. "Even inside of the Defense Ministry, the report was not put on the table. So the people did not understand what we were doing."

The directorate is accomplished at conducting surveillance, but has a tendency to be excessively secretive about its work, according to classified documents The Intercept disclosed last year. A 2008 NSA memo described its Japanese counterparts as being "still caught in a Cold War way of doing business" and "rather stove-piped." The U.S. continues to work closely with Japan's intelligence community, however, and collaborates with the country to monitor the communications of countries across Asia.

ABOUT 700 MILES southwest of Tokyo, there are two small towns called Tachiarai and Chikuzen, which have a combined population of about 44,000 people. Japan's military, known as the Self-Defense Forces, has a base situated on a patch of grassy farmland in between the towns. But the base is not used to train soldiers. It is one of the country's most important spy hubs.

For years, the large antennae inside the secure compound, which are concealed underneath what look like giant golf balls, attracted concerns from local residents who were worried that the powerful radio waves they emitted might damage their health or interfere with their televisions. The Japanese government sent senior officials to reassure the locals that there would be no problems, and the government began paying the Chikuzen council an annual fee of about $100,000 as compensation for the disturbance caused by the base. But the function of the antennae was never revealed.

A top-secret document from the directorate offers unprecedented insight into some of the Tachiarai base's activities. The document – an English-language PowerPoint presentation – appears to have been shared with the NSA during a meeting in February 2013, at which the Japanese spy agency's then-deputy director was scheduled to discuss intelligence-gathering issues with his American counterparts. The presentation was contained in the archive of classified files provided to The Intercept by Edward Snowden. No internal documents from Japan's surveillance agency have ever been publicly disclosed before.

According to the presentation, Japan has used Tachiarai for a covert internet surveillance program code-named MALLARD. As of mid-2012, the base was using its antennae to monitor communications passing across satellites. Each week, it collected records about some 200,000 internet sessions, which were then being stored and analyzed for a period of two months. Between December 2012 and January 2013, Tachiarai began using the surveillance technology to collect information about potential cyberattacks. As a result, its data collection rapidly increased, and it began sweeping up information about 500,000 internet sessions every hour – 12 million every day. Despite this, the directorate indicated that it was only able to detect a single email that was linked to an apparent cyberattack. It struggled to cope with the amount of data it was harvesting and asked the NSA for help. "We would like to see processing procedure which the U.S. side employs in order not to affect traditional SIGINT collection," the directorate told the NSA, "and would appreciate your technical assistance."

Chris Augustine, a spokesperson for the NSA, declined to answer questions about the agency's cooperation with Japan, saying in a statement that he would "neither confirm nor deny information concerning potential relationships with foreign intelligence services." He added: "Any cooperation among intelligence services is conducted lawfully, in a manner that mutually strengthens national security."

The directorate's work at Tachiarai appears to focus on monitoring the activities of foreign countries in the region. It is unclear whether it collects Japanese citizens' communications, either deliberately or incidentally, through dragnet programs like MALLARD. The law in Japan prohibits wiretapping landlines without a court order, but monitoring communications as they are being transmitted wirelessly across satellites is a gray area, Japanese legal experts say, because there are no legal precedents in the country that place limitations upon that kind of surveillance, though there is a general right to privacy outlined in the constitution.

According to Richard Tanter, a professor at the University of Melbourne who specializes in researching government surveillance capabilities, more than 200 satellites are "visible" from Tachiarai, meaning the base can intercept communications and data passing between them using its surveillance systems. Of the 200-plus satellites, said Tanter, at least 30 are Chinese and potential targets for ongoing surveillance. Moreover, he added, "satellites owned or operated by Russia, South Korea, Taiwan, and even the United States or European states may be targeted" by the Tachiarai facility.

Snowden, who worked at a U.S. military base in Japan as an NSA contractor between 2009 and 2012, told The Intercept that Japanese spies appeared to have targeted "entire internet service providers, not just any one customer." Referencing the MALLARD program, he said that there were not "500,000 terrorist communications happening in one year, much less one hour. … Is this authorized in law in a way that's well-understood, that's well-regulated, to make sure they are only targeting bad guys and not simply everything that they see?"

A spokesperson for Japan's Ministry of Defense refused to discuss MALLARD, but said that the country's "information-gathering activities" are necessary for national security and "done in compliance with laws and regulations." The spokesperson acknowledged that Japan has "offices throughout the country" that are intercepting communications; however, he insisted that the surveillance is focused on military activities and "cyberthreats" and is "not collecting the general public's information." When pressed to explain how the country's spy systems distinguish ordinary people's communications from those related to threats, the spokesperson would not provide details on the grounds that doing so "may be a hindrance to effective future information activities."

IN OCTOBER 2013, the Directorate for Signals Intelligence was planning to launch an operation aimed at what it described as the "Anonymous internet," according to the 2013 presentation. This suggests that the directorate wanted to collect data about people's usage of privacy tools such as Tor, which allows people to mask their computer's IP address while they browse the internet. Tor is often used by journalists and dissidents to evade government surveillance; however, it is also used by child abusers and other criminals to plan or carry out illegal acts. In April 2013, it was reported that Japanese police were urging internet service providers to find ways to block people who were using Tor to commit crimes. In 2012, the country's police investigators were repeatedly thwarted by a hacker known as the "Demon Killer," who posted a series of death threats online. The hacker used Tor to successfully evade detection for seven months, which was a major source of embarrassment for Japanese police — and likely fueled demand for new surveillance capabilities.

The directorate's activities at Tachiarai and elsewhere are aided by an organization called J6, which is a specialist technical unit connected to Japan's Ministry of Defense, according to sources familiar with its operations. However, the cooperation between the directorate and J6 has been inhibited by the extreme secrecy that is pervasive within the Japanese government, with each agency apparently reluctant to open up to the other about its respective capabilities. In the 2013 presentation, Japanese officials from the directorate described J6's role to the NSA, but admitted that they had relied on "assumptions" to do so, because "J6 function is not disclosed to us."

According to the presentation, the directorate's role is to carry out surveillance and analyze intelligence. The role of J6 includes analyzing malware and developing countermeasures – such as firewalls – to prevent hacks of Japanese computer systems. A third organization, called the Cabinet Intelligence and Research Organization, or CIRO, is the ultimate beneficiary of intelligence that is collected. Headed by a powerful figure named Shigeru Kitamura, it oversees the work of both the directorate and J6 and is connected to the prime minister's office, based out of a building known as "H20," a short walk from the prime minister's official residence in Tokyo's Chiyoda district.

Between 2000 and 2005, prior to development of the MALLARD internet surveillance program, expansion work took place at the Tachiarai facility. At that time, the then-town council chair, Hitoshi Miyahara, was shown a map of the construction plans, which revealed that a tunnel was being built below the base.

Miyahara was allowed to visit the construction site, he said, but was prevented from entering the underground area. The current town council chair, Tsutomu Yano, had a similar experience. He visited the facility about four years ago and was shown around a gymnasium, a cafeteria, and a conference room. He was prevented from accessing the underground tunnel and a space he was told was used for "communications." Yano said he repeatedly questioned the Self-Defense Forces about the Tachiarai facility's function. But he never received any answers.

05/06/2018 https://www.bbc.co.uk/news/world-us-canada-44364437

Ron Rockwell Hansen: US arrests man for trying to spy for China

A former US intelligence officer has appeared in court in Seattle charged with attempting to spy for China.

Ron Rockwell Hansen, 58, was arrested by the FBI on Saturday on his way to a Seattle airport for a flight to China.

The justice department says Mr Hansen attempted to pass on information and received at least $800,000 (£600,000) for acting as a Chinese agent.

He agreed in a brief court appearance to be returned to his home state of Utah to face charges.

Mr Hansen, who lives in Syracuse, Utah, was charged with attempting to gather or deliver national defence information to aid a foreign government.

Other charges - there are 15 in total - include acting as an unregistered foreign agent for China, bulk cash smuggling, structuring monetary transactions and smuggling goods from the US.

If convicted of attempted espionage, Mr Hansen faces a maximum penalty of life in prison.

Assistant Attorney General John Demers called Mr Hansen's alleged actions "a betrayal of our nation's security" and an "affront to his former intelligence community colleagues".

John Huber, US attorney for the state of Utah, called the allegations "very troubling".

Who is Ron Hansen?
According to court documents cited by the justice department, Mr Hansen served in the US Army as a warrant officer with a background in signals intelligence and human intelligence, before being recruited by the DIA as a civilian intelligence case officer in 2006.

The justice department says Mr Hansen, who is fluent in Mandarin and Russian, held top secret clearance "for many years" and travelled regularly between the US and China in 2013-17.

He is alleged to have attempted repeatedly to regain access to classified information after he stopped working for the US government, thereby alerting authorities to his actions.

What is the DIA?
The Defense Intelligence Agency is a branch of the Department of Defense, responsible for analysing and disseminating military intelligence.

The agency's primary responsibility is providing foreign military intelligence for US combat missions. It was established in 1961 and now has about 17,000 employees.

How are US-China relations?
The arrest comes at a challenging time for relations between the two countries. On Saturday, US Defence Secretary James Mattis accused China of attempting to intimidate its neighbours by deploying missiles to disputed islands in the South China Sea.

A Chinese military official dismissed the comments as "irresponsible".

Trade talks currently taking place between the two countries in Beijing have been overshadowed by a looming start date for US tariffs on Chinese goods.

Late last month, the White House announced plans to place a 25% tariffs on $50bn (£37bn) worth of Chinese imports, a significant escalation in a trade war between the two countries.

06/06/2018 UK Business Insider http://uk.businessinsider.com/us-diplomats-in-china-brain-injuries-sonic-attack-2018-6

More US diplomats have fallen ill in China with brain injuries like those linked to mysterious 'sonic attacks' in Cuba

Several US embassy workers in Guangzhou, China, have been diagnosed with brain injuries after hearing mysterious sounds.
Previously, 24 US diplomats and their family members were diagnosed with similar injuries after hearing similar sounds in Cuba, which prompted speculation that they were being attacked with some kind of "sonic weapon."
But so far, there's no evidence that a weapon of this kind exists, and the cause of the injuries remains unknown.
The US State Department announced the formation of a task force to investigate the incidents.

No one knows exactly what caused 24 US diplomats and their families in Cuba to fall ill and in many cases show signs of brain injuries after they reported hearing strange noises.

But whatever is causing these mysterious illnesses, it seems to now be happening in China too.

On May 23, the US State Department announced that one embassy worker in Guangzhou experienced "subtle and vague, but abnormal, sensations of sound and pressure" before being diagnosed with symptoms similar to those found in the diplomatic personnel that were in Cuba, including mild traumatic brain injury.

The New York Times reported Wednesday that at least two more Americans in Guangzhou have experienced similar phenomena and also fallen ill. One of those embassy workers told the Times that he and his wife had heard mysterious sounds and experienced strange headaches and sleeplessness while in their apartment.

After the evacuation of the first diplomatic employee from Guangzhou was announced, the State Department issued a health alert via the US Consulate in Guangzhou telling people that "if you experience any unusual acute auditory or sensory phenomena accompanied by unusual sounds or piercing noises, do not attempt to locate their source. Instead, move to a location where the sounds are not present."

On June 5, the office of US Secretary of State Mike Pompeo announced the establishment of a task force meant to respond to these mysterious incidents, which some have called "sonic attacks."

"U.S. government personnel and family members at affected locations have been directed to alert their mission's medical unit if they note new onset of symptoms that may have begun in association with experiencing unidentified auditory sensations," the State Department announcement said. "Reported symptoms have included dizziness, headaches, tinnitus, fatigue, cognitive issues, visual problems, ear complaints and hearing loss, and difficulty sleeping."

A mysterious problem that began in Cuba

The saga began in late 2016, when American diplomatic staff (and some Canadians) that had been in Cuba began to report odd physical and mental symptoms. Some individuals could no longer remember words, while others had hearing loss, speech problems, balance issues, nervous-system damage, headaches, ringing in the ears, and nausea.

Some even showed signs of brain swelling or concussions — mild traumatic brain injuries.

A study of those victims suggested a disconcerting possibility: some unknown force projected in the direction of the patients could have somehow injured their brains.

"The unique circumstances of these patients and the consistency of the clinical manifestations raised concern for a novel mechanism of a possible acquired brain injury," the study's authors wrote.

Many of the victims remembered strange occurrences before the symptoms appeared, though others didn't hear or feel anything. One diplomat reported hearing a "blaring, grinding noise" that woke him from his bed in a Havana hotel, according to the Associated Press. The AP also reported that some heard a "loud ringing or a high-pitch chirping similar to crickets or cicadas" in short bursts at night, while others said they could walk "in" and "out" of blaring noises that were audible only in certain spots.

The US State Department eventually determined that the incidents were "specific attacks" and moved to cut its Cuban embassy staff by 60%.

The recent State Department announcement said there have been at least 24 victims of these attacks. Of those, 21 were studied by a team of researchers from the University of Pennsylvania's Center for Brain Injury and Repair. More than 80% reported hearing a sound that had a "directional" source — it seemed to come from somewhere.

After three months, 81% still had cognitive issues, 71% had balance problems, 86% had vision issues, and about 70% still reported hearing problems and headaches.

The fact that a number of these symptoms could be subjective has raised questions about the possibility that this group of people is suffering from some sort of collective delusion, according to the study authors. But they say that mass delusion is unlikely, since affected individuals were all highly motivated and of a broad age distribution, factors that don't normally correspond with mass psychogenic illness. Plus, objective tests of ears and eye motion all revealed real clinical abnormalities.

The symptoms seem consistent with some form of mild brain trauma, according to the researchers. But these symptoms persisted far longer than most concussion symptoms do, and were not associated with blunt head trauma.

"These individuals appeared to have sustained injury to widespread brain networks without an associated history of head trauma," the study authors wrote.

An unknown cause

Despite having identified common symptoms and clinical evidence of some sort of injury, researchers are still at a loss about what happened to these diplomats.

If there is some kind of weapon involved, no one knows what kind it was or who would have used it. The Cuban government denied any connection and investigators hadn't found a link to Russia, which intelligence analysts have speculated might have the means and motivation to carry out such an attack.

Now that there are cases in China, the mystery is even deeper.

The reported presence of strange audio and of the feeling of changes in air pressure have led to speculation about some kind of sonic or audio-based weapon. But although sonic weapons exist, they're very visible and easy to avoid, according to Seth Horowitz, a neuroscientist who wrote the book "The Universal Sense: How Hearing Shapes the Mind. Plus, the specific symptoms make a sonic weapon unlikely.

"There isn't an acoustic phenomenon in the world that would cause those type of symptoms," Horowitz said.

He speculated that perhaps some sort of mysterious pathogen or other phenomenon could have caused the symptoms, but the authors of the study on the victims from Cuba reported found no signs of infection (like fever). They determined that it was unlikely a chemical agent caused these effects, since it would have damaged other organs, too.

In an editorial published alongside that study, two doctors wrote that without more information and more data on the patients before they reported feeling ill, they couldn't definitively figure out what went wrong.

"At this point, a unifying explanation for the symptoms experienced by the US government officials described in this case series remains elusive and the effect of possible exposure to audible phenomena is unclear," the editorial's authors wrote. "Going forward, it would be helpful for government employees traveling to Cuba to undergo baseline testing prior to deployment to allow for a more informed interpretation of abnormalities that might later be detected after a potential exposure."

Now, employees headed to China may have to consider similar testing.

09/06/2018 The Japan Times https://www.japantimes.co.jp/news/2018/06/09/world/crime-legal-world/ex-cia-officer-convicted-selling-secrets-china/#.Wzkob9JKjIU

Ex-CIA officer convicted for selling secrets to China

ALEXANDRIA, VIRGINIA – A former CIA officer was convicted Friday on charges he spied for China by providing top-secret information in exchange for $25,000.

Kevin Mallory, 61, of Leesburg, Virginia, faces up to life in prison, although federal sentences are often less than the maximum. A sentencing hearing is scheduled for Sept. 21.

Mallory was charged under the Espionage Act last year after he was discovered with more than $16,000 in undeclared cash on a return flight from Shanghai. Prosecutors said he was desperate for cash and transmitted classified information to a Chinese handler.

His acts were far from isolated, federal prosecutors said immediately after his espionage conviction, as China tries to gather classified U.S. information.

"The People's Republic of China has made a sophisticated and concerted effort to steal our nation's secrets," Assistant Attorney General Demers said. "Today's conviction demonstrates that we remain vigilant against this threat and hold accountable all those who put the United States at risk through espionage."

Public defender Geremy Kamens, an attorney for Mallory, declined to comment.

Mallory's trial at the federal courthouse in Alexandria, Virginia, offered a rare glimpse into the world of espionage. Most cases end in plea deals because the government is concerned about exposing secrets and defendants are worried about potentially stiff sentences.

Defense lawyers said Mallory provided no information of consequence. They said he pursued legitimate work as a consultant and reported his suspicions that the Chinese were trying to solicit secrets to his old contacts at the CIA.

The spycraft, as laid out by prosecutors, was hardly reminiscent of James Bond. The Chinese gave Mallory a Samsung cellphone for covert communication that was activated with the password "password."

The phone, with a variation of an app called WeChat, was supposed to delete text conversations Mallory had with his Chinese handler. But when Mallory gave the phone to FBI agents investigating his conduct, the phone mistakenly provided long histories of text chats.

In one text, Mallory wrote, "Your object is to gain information, and my object is to be paid."

The Chinese handler responded, "My current object is to make sure your security and to try to reimburse you."

In other texts, the Chinese handler complained that the information Mallory provides was vague. Eventually, the handler became concerned that his contacts with Mallory might be exposed, and he told Mallory to stop sending documents and texts.

Exactly what Mallory may have provided remains unclear. Prosecutors said they are certain Mallory used the phone to send two documents, and he may have sent more or handed off more in person during two trips to China.

The information he did provide was top-secret and touched on human assets, prosecutors said.

But defense lawyers said that nothing Mallory provided is the kind of sensitive information that relates to the national defense to trigger a violation of the espionage law. The bulk of it, they argued, was publicly available information.

During the trial, lawyers referred to the documents in generic terms, and portions of documents were redacted. Jurors were given more detailed information.

In all, prosecutors said Mallory received $25,000. By comparison, former U.S. intelligence officer Ron Hansen is facing charges in Washington state that allege Chinese intelligence paid him up to $800,000.

Mallory's trial occurred in the U.S. court's Eastern District of Virginia, which is home to the CIA and Pentagon and often plays host to national security and espionage cases.

The last espionage-related trial in the Alexandria came in 2009. Pentagon official James Fondren was convicted and sentenced to three years in prison for charges involving espionage and making false statements to the FBI.

15/06/2018 The Japan Times https://www.japantimes.co.jp/news/2018/06/15/world/british-jet-expert-arrested-apparently-chinese-plot-get-secrets-stealth-fighters/#.WzknmdJKjIU

British jet expert arrested, apparently over Chinese plot to get secrets of stealth fighters

LONDON – British police confirmed Thursday they had arrested a man under the Official Secrets Act amid reports of a feared Chinese plot against F-35B stealth fighter jets.

Bryn Jones, 73, a former Rolls-Royce chief combustion technologist, was arrested after the security services received intelligence that classified information may have been passed to Beijing, The Sun newspaper reported.

British plane engines manufacturer Rolls-Royce, based in Derby, central England, carried out top-secret work on the take-off and vertical landing system for the F-35B Lightning II supersonic jet, being built by U.S. defense firm Lockheed Martin.

A spokeswoman for London's Metropolitan Police told AFP that they had made an arrest in Derbyshire on Tuesday as part of an investigation under the Official Secrets Act.

British police do not confirm the identity of suspects who have not been charged with an offense.

"The man, who is in his 70s and worked within private industry, was taken to a police station in Derbyshire," the spokeswoman said.

"He was released under investigation later that evening.

“Police officers executed a search warrant at an address in the West Midlands, which is now complete. A search at an address in Derbyshire is ongoing.

“We are not prepared to discuss further at this stage given the nature of the investigation.”

Jones lists himself on the LinkedIn professional social network as a visiting professor at the Aeronautical University of Xian in central China.

His page says he worked for Rolls-Royce from 1968 to 2003.

The Sun pictured plainclothes officers at his home near Derby and said police removed boxes.

Jones declined to comment when contacted at his home by the Press Association news agency.

Contacted by AFP, Rolls-Royce said they could not comment on an ongoing police investigation.

Proponents of the F-35 tout its speed, close air-support capabilities, airborne agility and a massive array of sensors giving pilots unparalleled access to information.

Nine international partners including Britain, Canada and Turkey are helping pay for the jet’s development and are buying hundreds more of the planes.

The F35-B has short take-off and vertical landing capabilities, and Britain received delivery of its first four jets last week.

A replacement for the Harrier G9 and the Tornado GR4, it is intended to be Britain’s primary strike attack aircraft over the next three decades.

29/06/2018 The Telegraph https://www.telegraph.co.uk/news/2018/06/29/german-spy-agency-acknowledges-employing-himmlers-daughter-1960s/

German spy agency acknowledges employing Himmler's daughter in the 1960s

The daughter of Heinrich Himmler was employed by Germany’s intelligence service in the 1960s, despite remaining a fervent Nazi until her last breath, it has been revealed.

Gudrun Burwitz, known by some as the “Nazi Princess”, and who died at the age of 88 last month in Munich, had worked for Germany’s BND spy agency as a secretary from 1961 to 1963, Germany’s Bild newspaper reported on Friday.

"The BND confirms that Ms. Burwitz was a member for a few years until 1963 under an assumed name," Bodo Hechelhammer, the head of the BND's history department, confirmed on Friday.

"The timing of her departure coincided with the onset of a change in the understanding and the handling of employees who were involved with the Nazis," he said.

Up until now, the BND has been unable to speak about the role Ms Burwitz played, due to its policy of not commenting on active or former employees, Mr Hechelhammer added.

Himmler is regarded by historians as one of the most powerful Nazis. Second to Hitler, he commanded the SS and was the sinister chief architect of the Holocaust, during which six million Jews were murdered.

Ms Burwitz, who was active in far-right extremism and who attended and spoke at Nazi marches, was one of the few “Nazikinder” to remain fiercely loyal to her father throughout her life.

Ms Burwitz, Himmler's only legitimate child, was 16 when her father killed himself with a cyanide pill to evade capture and execution by British forces.

At just 12 years old, Ms Burwitz visited Dachau concentration camp with her father. While there she allegedly wrote in her diary: “Today we went to the SS concentration camp at Dachau. We saw everything we could … We saw all the pictures painted by the prisoners. Marvellous. And afterwards we had a lot to eat. It was very nice.”

In recent years, Ms Burwitz was heavily involved with Stille Hilfe (Silent Help), an organisation that supported arrested, condemned and fugitive SS members. Her time in this organisation was what led her to be named by some as the “princess of Nazism”.

Germany has come under criticism in recent years for its lenient treatment of far-right extremists after the second world war, with some historians suggesting that many retained positions of power and authority in the security services of West Germany.

The BND security service was founded in 1956 by Reinhard Gehlen, a former Nazi military intelligence commander, who led it until 1968.

It has been suggested that under his influence, employees may have used their power to protect far-right sympathisers such as Ms Burwitz.

In recent years Germany has been attempting to come to terms with its Nazi past and with the postwar treatment of former Nazis. In 2013, the trial of the far-right National Socialist Underground group, which killed ten people between 2000 and 2007, uncovered lingering racist attitudes within the country's domestic spy agency, and prompted reforms.

Earlier this week, a German court in Detmold sentenced 89-year-old Ursula Haverbeck, dubbed the “Nazi Grandma” by German media, to 14 months in prison for denying the Holocaust.

Under German law, denying the Holocaust constitutes incitement of racial hatred and can now carry a prison sentence of up to five years.

Chart Section Index

July 2018

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...
		x	x				0315		E11	03	8565 25#	8565 25#
x	x	x	x	x	x	x	0400		V13	0	search (15388?)	search (15388?)
x	x	x	x	x			0400		S06	01A	15721 480	15721 480
			x				0430/0450/0510		E07A	01B	7933/ 9133/10233 741	7933/ 9133/10233 741
x	x	x	x	x	x	x	0440 (var)		HM02	01C	4761	4761
x							0450		E11	03	7469 41#	7469 41#
	x			x			0455		S11A	03	5149 32#	5149 32#
x	x	x	x	x	x	x	0500		V13	0	11430	11430
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	x		x		x		0500		HM01	18	11462	11462
x	x	x	x	x			0500		M14	01A	18041 952	18041 952
					x		0500/0520/0540		M12	01B	9217/10617/12217 262	9167/10267/11567 125
			x	x			0500/0600	1/3	E06	01A	13825/15615 679	13540/16115 210
	x						0530		M01A	14	9441 751	9441 751
		x					0530		M01A	14	9129 498	9129 498
			x				0540		M01A	14	7692 536	7692 536
x	x	x	x	x	x	x	0600		V13	0	11430	11430
x				x			0600		E11	03	15800 18#	15800 18#
x		x		x		x	0600		HM01	18	10345	10345
	x		x		x		0600		HM01	18	14375	14375
	x						0600/0610		S06S	01A	15945/16945 438	15945/16945 438
					x	x	0600/0620/0640		E07	01B	9064/10264/11464 024	9064/10264/11464 024
x		x					0600/0620/0640		XPAc	01B	11409/13509/14609	10868/12168/13368
						x	0600/0700		M14	01A	7590/ 8162 382	7590/ 8162 382
	x			x			0620		M01A	14	10233 354/458	10233 354/458
		x					0620		M01A	14	9421 135	9421 135
	x			x			0630		M01A	14	9447 143/792	9447 143/792
			x				0630		M01A	14	8111 902	8111 902
						x	0630/0640		S06S	01A	16320/14875 524	16320/14875 524
x		x					0640		E11	03	15800 94#	15800 94#
	x		x				0645		E11	03	13424 51#	13424 51#
x		x		x		x	0657		HM01	18	9330	9330

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...
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						x	0700		M01	01B	6780 025	6780 025
	x						0700/0710(15)		S06S	01A	5430/ 6780 374	5430/ 6780 374
						x	0700/0720/0740		V07	01B	13563/12163/10263 512	13563/12163/10263 512
x		x					0700/0720/0740		XPA2	01B	search	search
	x			x			0700/0720/0740		XPA2t	01B	20173/18673/17473	20049/18549/17449
					x	x	0710		E11	03	**6480** **49#**	**6480** **49#**
	x			x			0710		M01A	14	10651 297	10651 297
		x					0710		M01A	14	9175 146	9175 146
	x			x			**0715**		E11	03	10429 63#	10429 63#
	x						0720		M01A	14	9151 728	9151 728
	x						0730/0740		S06S	01A	7245/12080 7365/11655 427	7245/12080 7365/11655 427
		x					0730/0740		S06S	01A	12110/14977 745	12110/14977 745
	x		x				0735		S11A	03	17378 38#	17378 38#
x							0745		E11	03	9610 26#	9610 26#
		x		x			0745		E11	03	15720 34#	15720 34#
x		x		x		x	0757		HM01	18	9065	9065
	x		x		x		0757		HM01	18	11365	11365
x	x	x	x	x	x	x	0800		V13	0	15388	15388
x							0800	1/3	G06	01A	7320 329	7320 329
			x				0800/0810		E17Z	01A	16780/12850/ 674	16780/12850/ 674
	x						0800/0810		S06S	01A	14373/12935 352	14373/12935 352
					x		0800/0810	1	S06S	01A	12460/10250 254	12460/10250 254
					x		0800/0820/0840		E07A	01B	12173/13973/14873 198	12177/13477/14877 148
					x	x	0805		E11	03	9079 31#	9079 31#
x			x				0820		E11	03	5082 43#	5082 43#
	x	x					0820		E11	03	13911 13#	13911 13#
		x					0820/0830		S06S	01A	9485/11085 471	9485/11085 471
x							0830/0840		S06S	01A	8221/ 9353 371	8221/ 9353 371

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	x		x				0845		E11	03	12202 15#	12202 15#
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	x		x		x		0857		HM01	18	11462	11462
x		x					0900		E11	03	13427 53#	13427 53#
x							0900/0910		S06S	01A	16380/14835 872	16380/14835 872
				x			0900/0910		S06S	01A	6844/ 7161 624	6844/ 7161 624
x	x	x	x	x	x	x	0930		M14	01A	x16347 search 617, only 10.,	x16347 search 617, only 10.,
		x	x				0930		E11	03	6304 27#	6304 27#
			x				0930/0940		S06S	01A	9255/10325 314	9255/10325 314
				x			0930/0940		S06S	01A	10290/ 9655 516	10290/ 9655 516
x		x		x		x	0957		HM01	18	5855/ 9155	5855/ 9155
	x		x		x		0957		HM01	18	12180	12180
	x			x			1000		E11	03	12397 30#	12397 30#
	x						1000/1010		S06S	01A	4820/ 5660 893	4820/ 5660 893
		x					1000/1010		S06S	01A	14580/16020 729	14580/16020 729
x			x				1015		S11A	03	10210 47#	10210 47#
	x			x			1020		S11A	03	8800 42#	8800 42#
x		x					1045		E11	03	8545 69#, 96#	8545 69#, 96#
	x						1100/1110		S06S	01A	6810/ 7560 754	6810/ 7560 754
	x			x			1100/1120/1140		E07	01B	19252/17452/16252 242	20146/18246/16346 123
x	x	x	x	x	x	x	1200		V13	0	9725	9725
		x					1200/1300		G06	01A	6972, 7422 938	6972, 7422 938
x							1200/1210		S06S	01A	10230/12165 831	10230/12165 831
			x				1200/1210		S06S	01A	13145/14535 425	13145/14535 425
	x	x					1205		E11	03	6304 46#	6304 46#
x				x			1225		E11	03	13537 52#	13537 52#
x	x	x	x	x	x	x	1300		V13	0	9725	9725
			x				1300	1/3	G06	01A	5890 329	5890 329

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...
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	x				x		1345		E11	03	15825 91#	15825 91#
x	x	x	x	x	**x**	x	1400		M08A	18	8096	8096
x		x					1400/1420/1440		M12	01B	15821/13921/12221 174	15983/14683/13383 963
					x		1500		M01	14	6435 025	6435 025
	x						1500/1510		S06S	01A	6766/ 7744 537	6766/ 7744 537
				x			1510/1530/1550		E07A	01B	12213/11413/10113 241	12213/11413/10113 241
			x				1530		E11	03	10356 26#	10356 26#
		x			x		1540		S11A	03	11092 56#	11092 56#
x	x	x	x	x	x	**x**	1557		HM01	18	11435	11435
	x	x					1600	1/3	M14		6948 725	6948 725
	x					x	1605		E11	03	4783 23#	4783 23#
		x				x	1625		E11	03	15795 97#	15795 97#
	x		**x**				1645		E11	03	14575 33#	14575 33#
				x		x	1650		E11	03	14940 92#	14940 92#
x							1700/1800	1/2	G06	01A	5287, 4945 938	5287, 4945 938
x	x	x	x	x	x	**x**	1657		HM01	18	11530	11530
		x				x	1700/1720/1740		E07	01B	13898/12198/10798 817	13881/12181/10881 818
			x				1700/1720/1740		M12	01B	14377/13461/12114 317	14377/13461/12114 317
				x			1700/1800	1/3	M14	01A	7485/ 6891 382	7485/ 6891 382
		x			x		1705		E11	03	14865 39#	14865 39#
		x			x		1730		E11	03	7984 40#	7984 40#
			x				1730		E11	03	8088 41#	8088 41#
x						**x**	**1745**		**E11**	**03**	**14410 24#**	**14410 24#**
	x		x				1800		M01	14	5280 025	5280 025
x	x	x	x	x	x	**x**	1757		HM01	18	11635	11635
		x					1800/1820/1840		M12	01B	9176/ 7931/ 6904 257	9176/ 7931/ 6904 257
x							1810		M01B	14	5125, 5735 364	5125, 5735 364
	x						1820	2/4	M14	01A	6856 163	6856 163

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...
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			x				1832		M01B	14	5095, 5760 815	5095, 5760 815
	x			x			1840/1850/1900	1	F01	01A	14829/12214/10932	15854/13543/11126
		x			x		1850		S11A	03	12457 28#	12457 28#
x			x				**1900**		E11	03	7600 64#	7600 64#
x		x					1900/1920/1940		E07	01B	16263/14763/13363 273	16147/14647/13447 164
		x					1900/1920/1940		M12	01B	8047/ 6802/ 5788 463	8047/ 6802/ 5788 463
			x				1900/1920/1940		M12	01B	10343/ 9264/ 8116 463	10343/ 9264/ 8116 463
				x	x		1900/1920/1940		XPA2r	01B		16167/14663/13923
				x			1900/2000	1/3	S06	01A		9492/ 7528 483
					x		1900/2000	1/3	S06	01A	6773/ 5773 263	6773/ 5773 263
				x			1902		M01B	14	5075, 5465 336	5075, 5465 336
				x		x	1910		E11	03	9510 61#	9510 61#
x							1910/1930/1950		M12	01B	11435/10598/ 9327 938	11435/10598/ 9327 938
x							1915		M01B	14	5150, 5475 858	5150, 5475 858
		x					1920	2/4	M14	01A	5938 417	5938 417
	x		x				1925		E11	03	11581 55#	11581 55#
				x			1930	2/4	G06	01A	5935 218	5935 218
			x				1942		M01B	14	5065, 5805 936	5065, 5805 936
		x		x			1950/2010/2030		M12	01B	16323/14923/13523 395	16148/14748/13448 174
		x		x			1955		S11A	03	4870 37#	4870 37#
	x		x				2000		M01	14	4905 025	4905 025
x	x	x	x	x	x	x	2000		M08A/ V02A	18	7554	7554
x							2000/2020/2040		M12	01B	10343/ 9264/ 8116 463	10343/ 9264/ 8116 463
		x					2000/2020/2040		E07A	01A	12166/10766/ 9266 172	12166/10766/ 9266 172
	x					x	2000/2020/2040		XPA2m	01B		14738/13438/12138
				x			2000/2100	1/3	S06	01A	9492/ 7528 483	
					x	x	2005		E11	03	9130 36#	9130 36#
				x			2010		M01B	14	4895, 5340 467	4895, 5340 467

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	Jul kHz, ID, ...	Aug kHz, ID, ...
			x				2010/2030/2050		E07	01B	11539/10547/ 9388 553	10752/ 9147/ 7637 716
			x				2030	1/3	E06	01A	5948 724	5948 724
		x				x	2050		S11A	03	5737 48#	5737 48#

M01 FREQUENCY LIST

Frequencies may vary by a few kHz

JAN FEB NOV DEC M01/1 197

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

MAR APRIL SEPT OCT M01/2 463

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

MAY JUNE JULY AUG M01/3 025

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

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...	Jul kHz, ID, ...	Aug kHz, ID, ...	Remarks
		x	x				0315		E11	03	8565 25#	8565 25#	8565 25#	8565 25#	since 01/14, last log 06/17
x							0450		E11	03	7469 41#	7469 41#	7469 41#	7469 41#	since 02/10, last log 06/18 2nd transmission Thu 1730z
	x			x			0455		S11A	03	5149 32#	5149 32#	5149 32#	5149 32#	since 09/14, last lof 05/18
x				x			0600		E11	03	**15800** 18#	15800 18#	15800 18#	15800 18#	since 07/15, last log 06/18
x		x					0640		E11	03	15800 94#	15800 94#	15800 94#	15800 94#	since 07/17, last log 06/18
	x		x				0645		E11	03	13424 51#	13424 51#	13424 51#	13424 51#	since 07/09, last log 06/18
	x			**x**			**0700**		E11	03	**6849** 57#	6849 57#	6849 57#	6849 57#	since 01/12, last log 06/18 until 01/18 Tue 1045z
					x	x	0710		E11	03	6480 49#	6480 49#	**6480** **49#**	**6480** **49#**	since 08/17, last log 06/18 07/15-04/17 Thu/Sat
	x			x			**0715**		E11	03	10429 63#	10429 63#	10429 63#	10429 63#	since 02/11, last log 06/18 until 12/17 0710z
	x		x				0735		S11A	03	**17378** 38#	17378 38#	17378 38#	17378 38#	since 01/18, last log 06/18 until 04/17 mon/wed at 0715z
x							0745		E11	03	9610 26#	9610 26#	9610 26#	9610 26#	since 03/14, last log 06/18 2nd transmission Thu 1530z
		x		x			0745		E11	03	15720 34#	15720 34#	15720 34#	15720 34#	since 06/17, last log 06/18
					x	x	0805		E11	03	9079 31#	9079 31#	9079 31#	9079 31#	since 07/14, last log 06/18
x			x				0820		E11	03	**5082** 43#	5082 43#	5082 43#	5082 43#	since 10/09, last log 06/18
	x	x					0820		E11	03	13911 13#	13911 13#	13911 13#	13911 13#	since 08/13, last log 06/18
	x		x				0845		E11	03	12202 15#	12202 15#	12202 15#	12202 15#	since 07/17, last log 06/18
x		x					0900		E11	03	13427 53#	13427 53#	13427 53#	13427 53#	since 10/05, last log 06/18
		x	x				0930		E11	03	6304 27#	6304 27#	6304 27#	6304 27#	since 02/14, last log 06/18
	x			x			1000		E11	03	12397 30#	12397 30#	12397 30#	12397 30#	since 11/16, last log 06/18
x			x				1015		S11A	03	10210 47#	10210 47#	10210 47#	10210 47#	since 04/10, last log 06/18
	x			x			1020		S11A	03	8800 42#	8800 42#	8800 42#	8800 42#	since 02/10, last log 06/18
x		x					1045		E11	03	**8545** 69#	8545 69#	8545 69#, 96#	8545 69#, 96#	since 03/18, last log 06/18
	x	x					1205		E11	03	6304 46#	6304 46#	6304 46#	6304 46#	since 03/10, last log 06/18 2nd transmission Mon 0450z
x				x			1225		E11	03	13537 52#	13537 52#	13537 52#	13537 52#	since 05/15, last log 06/18
			x		x		1300		E11	03	11581 58#	11581 58#	11581 58#	11581 58#	since 02/16, last log 06/18
	x				x		1345		E11	03	15825 91#	15825 91#	15825 91#	15825 91#	since 10/15, last log 06/18
			x				1530		E11	03	10356 26#	10356 26#	10356 26#	10356 26#	since 06/14, last log 06/18 2nd transmission Mon 0745z
		x			x		1540		S11A	03	11092 56#	11092 56#	11092 56#	11092 56#	since 03/16, last log 06/18
	x					x	1605		E11	03	4783 23#	4783 23#	4783 23#	4783 23#	since 11/15, last log 06/18
		x				x	1625		E11	03	15795 97#	15795 97#	15795 97#	15795 97#	since 02/15, last log 06/18
	x		**x**				1645		E11	03	14575 33#	14575 33#	14575 33#	14575 33#	since 06/17, last log 06/18
				x		x	1650		E11	03	14940 92#	14940 92#	14940 92#	14940 92#	since 05/16, last log 06/18
		x			x		1705		E11	03	14865 39#	14865 39#	14865 39#	14865 39#	since 02/14, last log 06/18
		x			x		1730		E11	03	7984 40#	7984 40#	7984 40#	7984 40#	since 06/16, last log 06/18
			x				1730		E11	03	8088 41#	8088 41#	8088 41#	8088 41#	since 03/10, last log 06/18 2nd transmission Mon 0450z
x						**x**	**1745**		**E11**	**03**	**14410** **24#**	**14410** **24#**	**14410** **24#**	**14410** **24#**	**since 04/18, last log 06/18**
		x			x		1850		S11A	03	12457 28#	12457 28#	12457 28#	12457 28#	since 06/17, last log 06/18
x			x				**1900**		E11	03	7600 64#	7600 64#	7600 64#	7600 64#	since 05/16, last log 06/18 until 10/17 mon/thu 0530z
				x		x	1910		E11	03	9510 61#	9510 61#	9510 61#	9510 61#	since 04/17, last log 06/18
	x		x				1925		E11	03	11581 55#	11581 55#	11581 55#	11581 55#	since 07/15, last log 06/18
		x		x			1955		S11A	03	4870 37#	4870 37#	4870 37#	4870 37#	since 02/14, last log 06/18
					x	x	2005		E11	03	9130 36#	9130 36#	9130 36#	9130 36#	since 03/14, last log 06/18 2nd transmission Thu 1530z
		x				x	2050		S11A	03	**5737** 48#	5737 48#	5737 48#	5737 48#	since 01/10, last log 06/18 until 12/17 tue/fri 0915z

Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC	wk	Stn	Fam	May kHz, ID, ...	Jun kHz, ID, ...	Jul kHz, ID, ...	Aug kHz, ID, ...	Remarks
x							0800	1/3	G06	01A	7320 329	7320 329	7320 329	7320 329	since 07/10, last log 06/18 repeat at Thu 1300Z
		x					1200/1300		G06	01A	**6972, 7422** 938	6972, 7422 938	6972, 7422 938	6972, 7422 938	since 10/14, last log 05/18 yearly changing frequencies + id
			x				1300	1/3	G06	01A	5890 329	5890 329	5890 329	5890 329	since 09/11, last log 06/18 repeat from Mon 0800Z
x							1700/1800	1/2	G06	01A	**5287, 4945** 938	5287, 4945 938	5287, 4945 938	5287, 4945 938	since 04/10, last log 05/18 yearly changing frequencies + id
			x				1830	2/4	G06	01A	6887 842	6887 842	6887 842	6887 842	since 05/01, last log 06/18 repeat at Fri 1930Z
				x			1930	2/4	G06	01A	5935 218	5935 218	5935 218	5935 218	since 04/01, last log 06/18 repeat from Thu 1830Z

F06 Schedules (July 6, 2018) Yellow schedules indicate message-only repeats of other schedules, not always present.

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Mon - Fri	**02:00**	16321												60146
		03:00	14881												
New message every day, no repeats the following days. Parallels F01 at 0000/0100z, S06 at 0400z, and M14 at 0500z.															

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
1st, 3rd	Monday	**04:00**				10686	11414	12064	11049	10748	9437	9354			70059
		04:10				8184	10169	10926	9126	9139	7923	7956			
		04:20				6773	8169	9049	8137	7424	6776	6774			
		05:00	6926	7328	10249								7658	6788	
		05:10	5945	6778	8137								6778	5384	
		05:20	4816	5126	5948								5361	4454	
Repeats messages the following Wednesday at 21:00 or 22:00 instead of the following day.															

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Tuesday	**00:30**	?	9058	9068	9216	10548	12149	?	?	?	?	?	?	60070
		00:40	?	8176	7844	7948	9144	10237	?	?	?	?	?	?	
		00:50	?	6773	6939	6833	7978	8193	7939	?	?	?	?	?	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Tuesday	**16:50**	10383	13374	16359	18726	19214	19936	19535	17534	14828	12215	10536	9313	10053
		17:00	9046	11165	13986	16238	17419	16354	16348	15613	12214	10814	8174	7928	
		17:10	7313	9219	11523	13378	14443	13955	13588	12215	10536	9046	7318	6783	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Wednes.	**06:00**	20154	20072	18189	16325	17420	17512	17419	16346	15930	19268	20082	20157	40122
		06:10	18304	18291	16046	14724	15673	15930	15707	14847	13503	17548	18207	18241	
		06:20	16156	16071	14459	12172	13361	13503	13446	12223	11109	15779	16141	16204	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Wednes.	**08:00**	18334	18923	18038	16064	14694	14368	13994	14976	16023	19448	19104	18039	70048
		08:10	16346	17414	16344	14367	12223	12204	12058	13373	14378	17503	17428	16204	
		08:20	14418	14949	14563	12208	10163	10309	10174	11168	12158	15619	15603	14363	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Wednes.	**08:00**				19138	17488	16330	15795	16319	18178	20018			00052
		08:10				17545	15823	14367	13428	14378	15613	18325			
		08:20				15626	13459	12141	11060	11636	13459	16248			
		09:00	20735	20916	20386								20476	20875	
		09:10	18037	18730	18215								18915	18747	
		09:20	16250	16165	16061								16328	16316	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Wednes.	**09:15**				17538	14638	15629	14948	17434	16146	19476			10031
		09:25				14576	12156	13376	12176	14369	13385	17458			
		09:35				11639	10164	11544	10177	11163	11434	15884			
		10:15	19433	20639	20138								20349	18046	
		10:25	16048	17539	17428								18573	16326	
		10:35	14976	15644	14983								16245	14944	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Follows 1st, 3rd Mon,	Wednes.	**21:00**				10636	?	12218	?	13548	?	9948			70059
		21:10				8163	?	11164	?	11516	10161	8115			
		21:20				6854	?	9418	?	8145	8184	6826			
		22:00	6828	?	10164								?	?	
		22:10	5129	5938	8076								?	?	
		22:20	4534	4989	6769								?	?	
Message-only repeat slot of 1st & 3rd Monday 04:00 or 05:00.															

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Thursday	**13:30**	12186	14983	16054	16351	16328	14565	13814	14978	15709	15607	11162	10968	80214
		13:40	10243	12196	13471	14367	14358	12169	11643	12216	13541	13376	9915	9354	
		13:50	8175	9917	11062	11483	11146	9981	9925	10164	10529	11108	8187	7963	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Saturday	**08:00**				12168	11645	12054	?	?	?	?			70147
		08:10				10186	9494	10158	?	?	?	?			
		08:20				8193	7655	8144	?	?	?	?			
		09:00	13805	13979	14354								?	?	
		09:10	11644	11649	12206								?	?	
		09:20	9474	9499	10293								?	?	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Saturday	**09:00**				17481	17426	16314	16089	16186	16341	18919			70004
		09:10				15946	15818	14569	14384	14571	14706	16268			
		09:20				13543	13396	12191	12173	12195	12217	14486			
		10:00	20973	20894	18948								20868	20951	
		10:10	18736	18429	16223								18259	18643	
		10:20	16328	16153	14639								16113	16314	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Saturday	**11:00**	16356	17434	17414	14986	13598	13366	?	?	?	?	?	?	50046
		11:10	14359	15625	15605	13366	11524	11438	?	?	?	?	?	?	
		11:20	12079	13496	13444	11050	9479	9308	?	?	?	?	?	?	

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Saturday	**15:00**	20564	22878	22913							22963	22871	20648	40133
		15:10	18471	20216	20374							20461	20629	18483	
		15:20	16308	18253	18406							18356	18553	16196	
		21:00				20386	18751	18323	17436	16289	15928				
		21:10				18509	16174	15886	15789	14461	13396				
		21:20				16231	14563	13581	13473	12176	11143				

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
2nd, 4th	Saturday	**15:30**	20868	22986	22874							20806	22984	20741	40133
		15:40	18689	20363	20634							18441	20719	18368	
		15:50	16156	18669	18751							17463	18348	16343	
		21:30				20589	18663	18521	18246	17429	?				
		21:40				18371	16344	16256	16149	15861	13498				
		21:50				16108	14869	14641	14474	13486	11054				

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Sunday	**15:30**	10378	13464	16245	18626	19323	19838	19466	17428	14455	12189	10644	9416	10053
		15:40	9169	11548	14356	16325	17536	16238	16189	15786	12065	10734	8159	7836	
		15:50	7419	9323	12138	13458	14356	13546	13576	12228	10164	9129	7438	6785	

F01 Schedules (May 5, 2018)

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Every	Mon - Fri	**00:00**	17471											
		01:00	14421											
New message every day. Parallels F06 at 0200/0300z, S06 at 0400z, and M14 at 0500z.														

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Every	Monday	**00:25** **01:25**	13452	15803	16023	15820	14941	16218	14878	16023	15672	14434	12101	10884
		00:35 **01:35**	11106	12195	13555	13405	12221	13949	12185	14373	13892	11439	9215	8157
Doesn’t repeat the following days.														

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1st	Wednesday	**18:40**				12194	14363	14621	14829	15854	13467	11136		
		18:50				10581	12189	12206	12214	13543	11084	9074		
		19:00				8112	10346	10465	10932	11126	9052	7723		
		19:40	7629	8156	10467								8172	7684
		19:50	6783	6844	8094								6791	5326
		20:00	4034	4527	6779								4546	4029
Repeats messages the following Friday (same times and frequencies) instead of the following day.														

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Every	Friday	**22:30** **23:30**	17411	20741	20700	22953	20206	19224	18562	20823	20618	20966	20741	18169
		22:40 **23:40**	15956	18401	18726	19405	18031	17491	16218	18397	18048	18954	18702	15765
Doesn’t repeat the following days.														

F11 Schedules (March 3, 2018)

Week	Day	UTC	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	ID
Every	Monday Wednes.	**08:45** **08:50**	9370		9339		13424				9339		9370		0353
Every	Tuesday Wednes.	**11:50** **11:55**	6807		7670		6280				7670		6807		0325

XPA[Sched c] and XPA2[Sched m, r & t] Russian Intelligence Multitone Systems [Radiogramma] Transmission Schedules

Zulu > / Month v	0600/0700 Sched c Monday/Wednesday USB 10baud			XPA2 Sched m Various Sun/Tue H 00 H+20 H+40 1300,1500,1800,2000,2100			XPA2 Sched r Various Fri/Sat H 00 H+20 H+40 1400, 1900, 2100			XPA2 Sched t Tuesday/Friday H 00 H+20 H+40 0700		
Jan	9108	10908	12208	16138	14438	13438	16167	14663	13923	13472	14772	16272
Feb	11409	13509	14609	16338	14538	13538	18667	17419	16212	14558	15958	17458
Mar	11409	13509	14609	16138	14438	13438	18667	17419	16212	13431	14631	15931
Apr	10359	11559	13559	14538	13538	12138	17462	16114	14828	16347	17447	18747
May	10868	12168	13368	14538	13538	12138	17462	16114	14828	19667	18767	17467
June	11409	13509	14609	14738	13438	12138	16167	14663	13923	19514	18214	16314
July	11409	13509	14609	14538	13538	12138	15967	13884	12217	20173	18673	17473
Aug	10868	12168	13368	14738	13438	12138	16167	14663	13923	20049	18549	17449
Sept	10359	11559	13559	14538	13538	12138	16167	14663	13923	17429	18629	20129
Oct	10868	12168	13368	16338	14538	13538	17462	16114	14828	16284	18184	19584
Nov	11409	13509	14609	18238	16238	14438	17462	16114	14828	14517	16017	17417
Dec	7756	9056	10656	14538	13538	12138	15967	13884	12217	13393	14493	16293

Notes:

XPA c 0600/0700z schedule appears to be robust with reasonably strong signals into UK. Day changed, Sat to Wed 02/082017
XPA2 m Repetitive frequency triplets, appears robust, generally strong into UK
XPA2 r Schedule appears robust; generally very strong signals to UK
XPA2 t Weak in UK

XPA2 p Under investigation …. Believed new frequencies but times still followed

Null Messaage: Long tones used in place of repeat character [15Hz below 0] whilst ending of 10140 is now variable.

Updated 01/03/2018

SPECIAL MATTERS

Thanks to all our contributors:
Ary, BR, CC, CQ, Danix, DanAr, DoK, E, F5, HH, HJH, JkC, Jochen, KW, Malc, MaleAnon, PoSW, QSP55, PLdn, RC, RNGB, Spectre, T!, ZD85

Operation Jallaa: Nil Return. **Contact from members on fate of the results of this Op please.**

MESSAGES:

E: All's well thanks, hope you fine too?

499: ٤٩٩ صدي قي يالك شكرا

RELEVANT WEBSITES

ENIGMA 2000 Website:	http://www.enigma2000.org.uk
Frequency Details can be downloaded from:	http://www.cvni.net/radio/
More Info on 'oddities' can be found on Brian of Sussex' excellent web pages:	http://www.brogers.dsl.pipex.com/page2.html
Time zone information:	http://www.timeanddate.com/library/abbreviations/timezones/
Encyclopedia of Espionage, Intelligence, and Security	http://www.espionageinfo.com/
EyeSpyMag!	http://www.eyespymag.com