

ENIGMA 2000 NEWSLETTER

Articles, news reports and Items of interest:

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Issue 4

Welcome to another info packed issue of the newsletter.

The 'hit' rate on our ENIGMA 2000 website and the Newsletter sites, Ary's N&O and the CVNI.net (HTML format version), continues to increase with a widening audience, indicating a growing population of "Numberists" or at least those having more than a casual passing interest in the subject.

The amount of direct requests for further information on specific stations, both Voice and CW, has also increased quite markedly, and we have some of the best (non-professional) monitors in the business to answer these queries.

However, the number of people submitting logs to us only shows a SLIGHT increase, and I've noticed the loggings to the major Numbers related internet lists is showing a drastic decrease, very difficult to rationalise.

We are all for giving as much help as we can both to newcomers and the more experienced, and committed to providing accurate information, but we cannot do this consistently without your input.

We do not invent stations/schedules/freqs just to produce a Newsletter, we react to and report what YOU the Numberist community TELL US so don't be shy send those logs in, better to have 10 reports of an event than none- it could be significant.

(Use e2k_news@hotmail.com or post to the address stated at the end of the newsletter).

Solar activity over the past 6 weeks or so has resulted in some very peculiar listening conditions which have, amongst other things, interrupted our investigations into the apparent changes (?) taking place with E15 & E25. We can confirm that the 'normal' time/freq/call pattern of E15 (published in ENIGMA 18, Jan 2000) is no longer fully applicable and there are possibly more variants to E25. We will update when investigations complete.

Another oddball during this time, at my QTH, was E5 booming in at S9 +10 against its usual S5-8 and similar reports for S17 from other monitors.

It will also be worth keeping a close eye on E10, E15 & E25 in the coming months following the increased tensions in the Mid East, 'unusual' TX's by E10 have already been reported.

The ENIGMA CONTROL LIST, issue 11, will be posted on the website during the first few days of May.

Bye, till next time, and good monitoring.

MORSE STATION NOTES

This column has been held over until Issue 5.

Enigma 2000 seeks your help in gathering information on the Morse stations.

Any logs or requests for information will be answered. Send to e2k_news@hotmail.com

SELECTED VOICE STATIONS

NORTH KOREA - North Korea has suspended shortwave broadcasts of coded numbers to South Korea as at the end of December according to the Asian Broadcasting Institute. North Korea has ceased numbers broadcasts in voice after five decades of operations. Numbers broadcasts operated by Pyongyang in A-3 mode have stopped by December after their activities gradually decreased following the first-ever inter-Korea summit meeting in June 2000 between South Korean president Kim Dae Jun and North Korean leader Kim Jon II. There were three kinds of outlets for numbers transmissions in voice before the halt of such transmissions.

The first one that opened with Red Flag Song over Radio Pyongyang at midnight local time almost daily was last heard on August 25. Another numbers station on 4770 kHz and 5870 kHz that opened with an interval signal arranged from Song of General Kim II Sung was last monitored on September 11 while the third outlet over Radio Pyongyang that opened with March of the Guerrilla Army was last intercepted December 8. Still,

North Korea continues number transmissions in Morse code. (ABI via Yamashita via Cumbre DX) British DX Club.

There have been two unidentified stations discovered.

The first is believed to be Chinese. It has been heard on 11433kHz at 1400Z on 06/03 & 08/03 [Tues & Thurs]. Much more info req'd please.

The second was noted on 21/03 at 2115Z on 10080kHz [tnx C] and consists of Arabic style male/female reading phrases and numbers between 1800 and 2130Z. [Jamming may continue as late as 2157Z].

This station operates on 8600,10080 and 12450kHz and is apparently hard to hear due to heavy jamming. The Male format is a continuous loop for 60s with a 20s break, phrases; whilst the Female format is similar with numbers. Best heard on 10080kHz. Clandestine Radio Watch has called the station 'Sedeye Mojahed' and says that it is broadcast from Iraq and jammed from Iran.

[Later info from a monitor: try 8600kHz – recently as good as 10080kHz].

This info recently received [04/04] addresses the second new station:

SEDEYE MOJAHED - This unusual station was first noted in mid March on 10080 kHz around 21.00 UTC, repeating sentences with a female announcer. Further investigation and information gleaned from Clandestine Radio Watch (CRW) indicates that it is believed to be a numbers "type" station, and not a clandestine broadcaster. It operates on 8600 10080 and 12450 kHz between 17.30 and 21.30 UTC.

Time lines are rather erratic due to the stations desire to avoid heavy jamming. The format consist of a mainly female announcer who repeats a message of approximately 1 to 2 minutes duration, long pause are not uncommon. This continues in 10 to 15 minute blocks followed by long pauses or breaks in transmission of up to 30 minutes when the whole cycle starts again.

Looking at the frequencies used by Iraqi and Kurdistan clandestines they do not venture much outside the 4 to 8 MHz range, however this station uses 10 & 12 MHz which may suggest the targets are further away.

CRW monitors suggest that the language is Farsi and the station is broadcast from Iraq and is jammed by Iran. On Fri March 30th following the 17.30 transmission 12450 remained on the air, a second format was then noted. Music (which was of typical Middle Eastern style) was played for 5 minutes and then interspersed with the female announcements, this cycle of music and announcements continued until 18.30. These Farsi language transmissions may be aimed at agents operating in Iran or Afghanistan, the use of phrases are not uncommon and were used during WWII and also by the Tyrolean Music Station (G1). It is also possible that this station may be a Western or US backed initiative. Any information about the station or Farsi translations would be most welcome. I am sure working at Sedeye Mojahed must be endless fun !

For reference Farsi numbers are as follows:

0 -SEFR, 1 - YEK, 2 - DOH, 3 - SEH, 4 - CHAHAR,
5 - PANJ, 6 - SHEESH, 7 - HAFT, 8 -HAST, 9 - NO.

My thanks to Dan Horn and Tom Brink at the "Digits Project" for information on Farsi numbers.

A forwarded e-mail, from Robert L Harwood, concerning this new station reads:

"There is a new channel for the presumed Farsi clandestine signal, which I have labelled as "ayom". This word or phrase is very often the first word in a sentence and must be a preposition or adjective.

Here is the log entry.

February 27 2130 12450 kHz DSB. "Ayom" heard but with moderate to severe bubble jammers. Female announcer reading sentences which are repeated. // 10080.

February 27 2040 10080 DSB "Ayom" is there but completely swamped by very wide bubble jammers in excess of 16 kHz. Earliest I have heard them here which is indicative that they must be on that channel for over 90 minutes.

8600 kHz also had bubble jammers present but no discernible modulation. A few days back there were intermittent snatches of audio so the sender may be experiencing modulation problems. It was also the weakest of the three.

From my monitoring, it is very difficult to determine whether it is a broadcast or a spy numbers station. Yesterday the station concluded with a music bridge yet "Cherry Ripe/ Lincolnshire Poacher" do likewise. The broadcaster that formerly was on 8850 kHz variable has not been heard lately. This did have speeches and rousing choruses and also suffered from identical jamming but were never as strong as "ayom" nor were they long on any given channel. I think we can deduce that the latter is definitely a different operation from "ayom".

From other observations, it is clear that 'ayom' is located in the Middle East possibly even Israel as 4XZ in Haifa is on 10045 at similar times.

It clearly is no shoestring outfit compared to the 8850 "Voice of the Mujahaddin" because to be on several frequencies with a stable carrier is indicative of being located at a major site. I am awaiting translation of their audio which may clarify things.

I am somewhat puzzled if it indeed is a spy station, why the presence of several bubble jammers spilling over. They too must be expending quite a bit of energy yet they are spasmodic. Some days they are absent particularly on Sundays (UTC). Anybody else hearing them? What times and/or channels?
Robin Harwood "Spotlight on SWLing" -Amateur Radio magazine."

At 0600Z on Thursday 22nd February it was rumoured that Israel placed its forces on a high state of readiness having been alerted of the movements of six Iraqi armoured divisions. It is thought that US Intelligence informed the Israelis after detecting the movements near to the Syrian border as well as picking up Iraqi preparations for a long-range missile attack. It is thought that this information was a result of surveillance by satellite.

A warning, it is reported, was also given to Iraqi Intelligence by a European government, rumoured to be Great Britain, that such an attack, or preparations for such an attack, would be pre-empted by Israel who would neutralise the Iraqi ground forces and missile positions.

Whilst it appears to be an incredulous story, there were US and Israeli alerts on Feb 22nd in response to received intelligence that the Iraqi forces had made ready missile launchers. This assessment resulted in the fielding of a theory that Iraq was testing the capabilities of the US and Israeli Intelligence agencies to detect such movements by Iraq.

With the above in question we ask monitors to look out for any changes of transmissions, messages or whatever of E10, E15 and E25.

We were contacted by ENIGMA member Takashi of Nagasaki who sent most useful and interesting information. For those able to hear them, Takashi informs us that:

"Korean female numbers have been divided into following four groups.

Group A 621, 657, 684, 702, 720, 855, 3250, 6400VkHz

Group AA 729, 801, 708, 3320, 6250VkHz

Group B 4770S, 5870SVkHz

Group C 4500, 4600, 4900, 4940, 5450, 5550, 5715, 5850, 6215, 6330, 6715kHz

V: QRH (drift) S: a lot of spurious

Group A, AA and B, V15, that were coming from North Korea went QRT last August, December and September.

Southern and Northern harmony?

621 and 3250kHz were famous R. Pyongyang frequency beamed to Japan.

Group C, without ENIGMA code, possibly coming from South Korea, is still on at H+00 or H+30 in East Asian midnight (1300-1700z), mainly using 6215kHz that is a famous worldwide maritime distress and safety channel."

Takashi also mentioned that in the last year he found E10 to be very active on a frequency of 23740kHz. On some transmissions he also found parallel frequencies of 21930kHz and on two occasions 19715kHz. He also found that the Russian weird Man numbers start at 1104Z every Thursday and not 1130Z mentioned

before. He asks if the signals are from the confirmed S21 but continues to say that another regular contributor says that it is a variant S06. [see S21 issue3]. Thanks Takashi.

ENIGMA 2000 would like to be contacted by the four interested parties residing in Argentina, Cyprus, Egypt and Tonga for help with the monitoring of three specific stations. 'Thanks in advance'.

Reports via the usual email address or pager please.

E03 Changes to the complex schedule have been noted [JM]. Sat 2200Z freqs are 6486//9251//11545kHz. However a report [09/03] states 5746//6959//9251kHz have also been used. During the 1900Z 14/03 transmission 6485//8464kHz were used as well as 6959kHz. At 1907Z this freq changed to the scheduled 5746kHz.

Interference to E03 - For several months now an out of band transmission from China Radio (CPBS 1) as appeared precariously close to LP's 9251 kHz outlet. The broadcast on 9255 kHz appears at 19.55 until 21.00 only each day. The 9255 kHz broadcast does not appear in CRI's schedule, indeed its purpose is possibly only to jam another station which cannot be heard here in the UK. CRI tunes up with two very out of character pop songs "Is anybody there" & "I will survive" clearly there is an hidden message ! No doubt Britain's MI6 will be unimpressed by this Communist intrusion.

9251kHz 2020Z 28/03 Slight interference from Radio China 9255kHz.

14487kHz 1317Z 03/04 Strong clear signal in progress. 15682//16084kHz

E03a Schedule: Sun to Fri, [0000Z transmission first, ends 2300Z]
Transmissions outside 1000 to 1300Z are not normally audible in Great Britain.

0000Z 18864//21866

0100Z 19884//21866

1000Z 20474//23461

1100Z 18864//23641

1200Z 18864//23461 [84692, 15/03] [1225Z awful signal in heavy static 03/04]
[23461 1227Z Better than 18M 03/04]

1300Z 18864//21866

2200Z 18864//24644

2300Z 18864//21866

E05 It has been noted that E05's schedule has remained fairly constant and unchanged for the last six months or so. It is unusual that there have been no change in frequencies in the moved from autumn to winter. The only apparent change seemed to be the disappearance of the long standing Saturday 1200Z transmissions on 14577//16198kHz, Wed and Sat 1800Z transmissions on 5175//8085kHz.

7620kHz 0300Z 03/03 [307count214] from S London

9205kHz 0300Z 03/03 [----ditto----]

9219kHz 2142Z 03/04

9223kHz 2000Z 02/04 [585]

10583kHz 2100Z 13/03 [67- 1, 5, 9 some static] Msg started at 2115Z, late.

11580kHz 2100Z 13/03 ----ditto---- // with 10583kHz

13555kHz 1400Z 11/03 [216 gc215=71065]

14739kHz 1309Z 31/03 [Heard Australia]

16198kHz 1304Z 31/03 [----ditto-----]

The 14448kHz transmission at 1700Z has apparently not been heard since mid-Feb. The 0900Z 11580//13444kHz has also disappeared 25/02. On 24/03 the long standing 1400Z 18617//19622kHz was also suspected as having vanished, the last recorded appearance being 03/03. This sig is a known weak signal so propagation may have had some effect.

Others not heard, possibly gone are:

Sun 1100Z 9274//12221kHz

[1400Z 13555//15737kHz, see above-apparent 11/03]

The data transmissions which are linked to E05 are still around, usually very strong carriers on quite some time before the data starts, with a background noise similar to E05. Two distinct types, a fast FSK type and one , pulse data [for want of a better name]. Like E05 often two frequencies in parallel. Logged by Peter of Saffron Walden as follows:

10643//12197kHz	Fri	1820Z	Jan01	Fast FSK
9205//11526kHz	Sat	1600Z	Jan01	Fast FSK
6880// 8116kHz	Fri	1920Z	Jan/Feb01	Fast FSK
8152kHz	Sun	1900Z	Feb01	Pulse data
8049//10191kHz	Sat	1920Z	Mar01	Fast FSK

E06 E06 enjoys a regular Saturday afternoon schedule at 1230Z and a repeat at 1330Z. In 10/00 the frequencies were 18750 and 15659kHz respectively. 11/00 saw 18230 and 14560kHz on 04/11 whilst a week later the repeat freq, at 1330Z was 17570kHz. 25/11 used those logged for 04/11. December 1230Z 17520kHz 1330Z 14380kHz. Variation occurred at 1330Z on 30/12 with the repeat freq being 10kHz higher. January 01, 14/01 1230Z 13380kHz [also used 1400Z 13/01] 1330Z 10660kHz and noted 20/01. 03/02 1230Z 16310kHz [a large noted shift from 01/01 freq]. 1330Z 13980kHz. This trend continued until 03/03 when the freqs were found to be: 18265kHz and 15640kHz. On 10/03 the 1230Z freq had increased by 5kHz to 18270kHz.

Expected freqs for 31/03 are 1230Z 18270kHz, 1330Z 15640kHz, 1400Z 13540kHz, 1500Z 11045kHz.

Saturday Sched [March]:

03/03	1238Z	18625kHz,	1337Z	15640kHz
10/03	1230Z	18270kHz,	1330Z	15640kHz, 1400Z 13540kHz, 1500Z 10620kHz

Other transmissions:

5197kHz	2136Z	02/03	[710/00000]
5460kHz	2000Z	14/03	[527/00000] 15/03
5770kHz	2125Z	26/02	[See X06 in 'Oddities']
6950kHz	2100Z	13/03	[null msg 471]
7649kHz	2205Z	02/03	
8080kHz	2133Z	05/03	[348/00000] also 2110Z 20/03 348-dk192 gc55=54820
8870kHz	2146Z	06/03	
9220kHz	2110Z	12/03	[531/00000] also 06/03
9225kHz	2110Z	05/03	[531 dk846 gc195=89258]
9250kHz	2103Z	02/03	[710/00000]
9235kHz	2110Z	19/03	[531 dk192 gc55 = 54820]
10200kHz	2000Z	19/03	
10630kHz	1400Z	24/03	[958-217/90 07976]
13545kHz	1400Z	24/03	[..... ditto]
13550kHz	1400Z	25/03	[..... ditto]

E07 6730kHz 2120Z 26/02 [Null Msg] Interrupts BC stn.
7918kHz 2100Z 26/02 [970/000]

Mondays and Wednesdays at 2100Z/7918kHz, 2120Z/6732kHz, 2140Z/5089kHz. H+20 and H+40 repeats of 2100Z broadcast.

New freqs heard for March:

6934kHz	0610Z	14/03	[null msg 913]
8185kHz	2120Z	21/03	[null msg 418]

Whilst these were heard in April:

- 12220kHz 2020Z 09/04
11030kHz 2040Z 09/04
- E10 EZI 11565 kHz - The 2000 – 2100Z transmissions from EZI are now suffering heavy interference from WYFR Family Radio on the same frequency with a programme in the French language. 11565kHz is listed as a Fixed Service allocation.
- E11 8033kHz 1300Z 27/02 [Null Msg 183]
10050kHz 0800Z 22/02 [Null Msg 232] 08/03, 15/03, 22/03, 29/03
- E15 The 1230Z 28/02 transmission sending OSS is an indication that E15 is changing. This signal has always been a 1730 or 2100Z call. Times and frequencies [tnx GD] as follows:
- | | | | | | |
|----------------|-----|----------------|---------------|---------------|-----|
| 1100Z 18000kHz | BEC | 1700Z 14000kHz | FYS | 2100Z 4130kHz | MSA |
| 1200Z 17503kHz | WSP | 1730Z | 5834kHz | MSA | |
| 1230Z 11170kHz | OSS | 1800Z | 5834kHz | WSP | |
| 1300Z 11000kHz | BEC | 1900Z | 4130kHz | PAR | |
| 1400Z 14000kHz | FYP | 2000Z | 5530kHz | NAS | |
| 1630Z 6715kHz | | NAS | 2030Z 5530kHz | BEC | |
- 4130kHz 2100Z 31/03 [MSA]
5530kHz 2000Z 06/04 [NAS] 06/04 Unreadable
11000kHz 1300Z 28/02 [BEC] 17/03, 18/03 (1105Z)
11170kHz 1230Z 28/02 [OSS] 18/03 poor sigs
14000kHz 1400Z 24/02 [FYP] 17/03
18000kHz 1100Z 02/03 [BEC] 17/03 22/03
- E17 5207kHz 0210Z 19/03 [00000]
5814kHz 0511Z 24/03 [592/143 00000] [0500Z 25/03 386/00000]
6865kHz 0428Z 26/02 [00000] Strong Sigs
9142kHz 0220Z 14/03 [00000] [0200Z 15/03]
10698kHz 0300Z 05/04 [876/00000]
11106kHz 0400Z 22/04 [397/00000]
- E17Z 6866kHz 0200Z 15/02 [00000]
11170kHz 0800Z 18/01 [null msg for 674]
- E18 This station appears not to have been heard since last December [12/00]
If you have been recently or are copying this station please let us know.
- E23 E23 is still on, but signal is not very strong. Best frequency is usually 8188. 4 weekly cycle starting on the first Monday of the Month.
Transmits Monday Wednesday and Thursday
Week 1 0957Z 6507kHz 1157Z 8188kHz 1257Z 5340kHz
Week 2 Was M4 but carrier only on frequency
0957Z 7250kHz 1157Z 8188kHz 1257Z 5748kHz
Week 3 0757Z 4832kHz 0957Z 6200kHz 1157Z 8188kHz 1257Z 6507kHz
Week 4 0757Z 5340kHz 0957Z 8188kHz 1157Z 7250kHz
All transmissions are in AM.
8188kHz 0957Z 26/02 V Weak sig, unintelligible.
- E25 Our monitors have noticed that two messages are being sent to one and two ID's. E25 is an interesting emergent station that is watched regularly by E2k. If you have information or logs concerning this station please contact E2k via the usual methods.
The signal is, to date, becoming more difficult to copy in GB, probably due to propagation changes; although one humorous comment was "probably read Issue 3!" This is shown in the reports that we are receiving for this station:
"E25 was on Saturday [03/03] at 1230 sending the same 2 messages as last Saturday, also at 1245 and 1330. Extremely poor signal."
"I too heard all the E25 transmissions on Saturday[10/03]. What an absolutely horrible signal. I believe the problem is propagational as the signal strength did [briefly]increase on the 1330Z tx to clearly

receive '905 29'. I also think I heard 005 22, 909 22 also but I am not totally sure." The 1230Z tx was the same as that on 25/02 whilst the 1245Z appeared to be 440 70 rptd n times." [440 was previously heard 1240 to 1256Z 20/01 with 905 at 1332Z although the actual traffic was 440 and 905 19] We would welcome logs from the Mediterranean and near East please.
9450kHz, 1230, 1245, 1330, 1345Z possibly daily and possibly two message formats.

Perusal of *Propagation Forecasts* [p60 SWM April 01] reveals that the lowest useable frequency for traffic to London from the Middle East between 1200 and 1400Z is around 11&12MHz whilst the optimum frequency would be circa 23/24MHz. Then again this message is definitely not destined for Great Britain.

Further monitoring produced this message on 20/03 and possibly confirms the propagation theory: "Can confirm E25 still on 9450. Heard it today at 1230 and 1245. Sent an 18 group message to either 742 or 744. Not a very good signal."
E25 was heard again on 21/03 at 1230Z [2 msgs], again at 1245Z [3 msgs and continued until 1303Z – unusual] and at 1330Z sent 1 msg.

G04 Heard on 4750//4850kHz 2105/2135Z early March, then:
5567kHz 2105Z 22/03 [06287 80543 12828, trans also heard on 4750kHz]
5783kHz 2135Z 22/03 [----- ditto -----]
5210kHz 2005Z 01/04
5310kHz 2035Z 01/04 [55750 25712 64532] 34 grps

G06 On 29/09 1930Z on 5442kHz it was noted that the familiar tones of the German YL had become the voice of the S06 male previously heard reading numbers in Russian. There has been an apparent change in its sending habits. In the period September 00 to end of October 00 a regular Sunday transmission at 0740Z on 10170kHz was seen . This was last heard on 29/10 and has not been monitored since. On 05/12 the Tuesday 1900Z 5930kHz was clashing with Radio Prague. The Friday 1930Z frequency of 4792kHz remained in use until 23/02. The March freqs heard are Monday 05/03 2000Z 7610kHz, whilst Fri [first] 09/03 1930Z 5444kHz. Assuming that this freq follows the usual schedule of alternate Fridays it should be seen on 23/03. [Problems were apparently experienced with the sending of this signal with it finishing at 1948Z]. Friday freq for 1900Z/1930Z Jan & Feb was 4792kHz first monitored 24/11. There may also be alternation with the Monday frequencies.

5442kHz 1930Z 17/03 [957& 618, 57] As heard 09/03&23/03. Alternate Fridays.
5444kHz 1930Z 09/03
7610kHz 2000Z 05/03
7770kHz 2127Z 17/03 [105/00000]
9150kHz 2000Z 02/04 [308/00000]

S04 3868kHz 2245Z 13/03 [342 nr210 gc066=51513]

S06 5350kHz 2100Z 13/03 [Start missed dk967 gc35]
5810kHz 0800Z 06/02 [00000] also 1500Z 15/02
6783kHz 1902Z 20/03 Strong sigs
6830kHz 2115Z 22/01 [00000]
7810kHz 2215Z 12/03 [null msg 386]
8150kHz 2120Z 05/03
8161kHz 2130Z 19/03 Rapid flutter QSB
9255kHz 0832Z 21/03 Fast message
9260kHz 0840Z 21/03 Strong sigs
10175kHz 2000Z 21/03 [00000] Message to 725.*
10180kHz 2010Z 14/03 [00000] heard S London 9+20dB, 65grps
10180kHz 2000Z 28/03 [825/00000] USB insertion, fair sig diminishing at 2007Z
14700kHz 0715Z 18/01 [00000]
15820kHz 1600Z 17/03 [724 x3 00000] also 1600Z 24/03

*[Note: 21/03 Tone at 1940Z on 10180, moved 5kHz lwr].

S06C	12132kHz	0736Z	18/01	[11054 rptd] ends 0739Z
	This transmission also heard on 13/06/00 on 13420kHz at 1920-1925Z and 1935-1939Z repeating '11872'.			
	13920kHz	0800Z	24/03	[439/67 00000]
	3825kHz	2207Z	14/03	[11921] Ended at 2211Z
S06E	4490kHz	1950Z?	05/02	[00000 two msg for 671]
	5870kHz	1130Z	07/02`	[00000 two msg, both to 124]
	6860kHz	2000Z	07/02	[00000 two msg, nr2 for 863]
	8115kHz	2100Z	21/03	[msg1: dk173 gc49 – msg2: 825-dk964 gc13=09456]
S07	5430kHz	2215Z	0801	[Nil Msg]
	9450kHz	1230Z	25/02	[275/275/475 followed by 4f x10 repeated]. Ended 1236Z
	9450kHz	1245Z	25/02	[445 99 1, 735 99 5, 745 99 1, 945 92 1] Ended 1249Z
S10E	10642kHz	1300Z	08/03	Good strong sigs into Central London
S17C	8190kHz	1250Z	Daily	generally produces a readable signal. Ends 1257Z

Nil Required Heard on 9385kHz; parallel frequency is now 6945kHz.

A weak CW station using barred letters has been heard around the time that S17C comes up on 8190. ENIGMA 2000 would be interested to hear further details and loggings of this stn.

The changing of the clocks to BST resulted in the loss of signals briefly on 28/03 on both frequencies. However on 29/03 the familiar 'yed, yed, yed' of S17C was heard again at 1250Z. The signal was barely audible on 6945 // 8190kHz. Thanks to those who contacted E2k with confirmations of reception.

V02	8097kHz	0638Z	08/03	also 24/03. Seems a regular slot.
	9024kHz	0200Z	28/02	
	9230kHz	0816Z	11/03	
	9268kHz	0644Z	14/03	ended with 'finale' x2
	9389kHz	0412Z	29/03	

V02a John Maky [US] wrote that new scheds for 0100Z Tuesdays were to be found on 3389 and 13436kHz

	3292kHz	0200Z	06/03	
	4035kHz	0200Z	06/03	
	5417kHz	0251Z	03/03	also heard at 0300Z
	12180kHz	0200Z	28/02	
	12215kHz	0200Z	06/03	

At 0149Z on 10/03 the first few phrases of the transmission came up, rather unexpectedly 'Attencion, Attencion 89172.' Interestingly the expected 0100Z 5135kHz tx did not appear but at 0120Z and 0140Z a CW sig sent V [x10] Q K imi [?]. At 0255Z 5417kHz again there was a short sample of the next transmission.

Both the scheduled 0200/5135kHz and 0300Z/5417kHz tx were good strength. A further change was noticed by JM on 14/03 re the 0300Z tx which appeared on 5117kHz instead of 4479kHz.

V06 See below? 9080kHz an error, should be V06?

V07	9080kHz	2200Z	02/03	[836/000 000]
	9283kHz	0710Z	15/02	[Null Msg for 234]

V08 6647kHz 1803Z 07/04 In progress, very good sigs

V13	8300kHz	1300Z	01/03	just audible, readable
	9275kHz	1200Z	05/03	Weak
	13750kHz	1200Z	05/03	Clear

15388kHz 1200Z 05/03 weak with b/c splatter (R.Dubai 15395?)

NEW STAR RADIO TRANSMITTER LOCATIONS (V13) I recently came across an interesting article in Clandestine Radio Watch. The feature is reproduced below. Transmitters in Republic of China. "Here's what we can learn from the CBS website: CBS programmes are broadcast via a transmission system connecting the north and south of Taiwan. There are nine transmitter sites in Taiwan: Lukang, Fang Liao, Chang Che, Tamsui, Paochung, Huwei, Tainan, Hu Kou and Ming Shiung subsidiary stations.

CBS has 15 MW transmitters (10 MW frequencies), 24 SW transmitters (45 SW frequencies) totalling 39 medium and shortwave transmitters and 55 medium and shortwave frequencies with a total power of 10.050 Kilowatts. The output capacity is 2.69 times as much as that of all public and private radio stations combined and the coverage areas include the middle and southern parts of Taiwan, mainland China and the whole world.

As regards to MW, it would seem that the transmitters at Fang Liao, Chang Che and Lukang each consist of two // units, as suggested by Kai for the first two sites.

The SW situation remains confused, but Kai's reference to an article saying that Tanshui has 3 x 300 kW agrees with the current listings in the WRTH international section.

Hans van den Boogert (formerly resided in Taipei) drove to the coastal region near Tanshui and a) saw many MW and SW antennas there, b) found that three of the New Star Radio clandestine transmitters (8300, 9725, 11430) which were heard on ground wave there. He also noted inter-modulation with other programmes.

I guess that the New Star Radio transmissions are using some of the 10 kW transmitters that appear to have been delivered to Tanshui. This is also one of the old listings of the BCC, as the new transmitters primarily replaced old ones. On the other hand, it appears that Tanshui does not have MW transmitters, so in this respect van den Boogert's assumptions seem to be incorrect."

V21 6529kHz 0025Z 06/03 om/ss Unusually high amount of traffic [05/03 JM].
2255Z 23/03

X06 5235kHz 2100Z 07/02 [6 tones]
5770kHz 2135Z 26/02 Interrupts E06 transmission.
7583kHz 2100Z 02/04
8081kHz 1800Z 13/03

XPH Issue 2 carried a report of XPn being heard in November, on Tuesdays at 2100 and 2300Z on 6865kHz. That was reported by 'Rob of Essex'. Now ENIGMA 2000 has received a report, from 'Peter of Saffron Walden', that he monitored an XPH transmission on Friday 01/12 2244Z on 6788kHz. He later discovered on Friday 08/12 that such signals appeared to be scheduled for: 2220Z 8188kHz, 2240Z 6788kHz 2300Z 5388kHz.

All signal strengths were reported as being strong.

Peter continued to monitor these signals through December on Tuesday 12/12 and 26/12. However the 2220Z transmission was weak, whilst the 2240 and 2300Z offerings were found to be of good strength. This transmission was the last time that Peter monitored this transmission on those frequencies.

Peter went on to write that there was a different kind of tone transmission on Saturdays at 1230Z throughout 12/00 and 01/01, on 18942kHz. This was in some ways similar to XPH, but the tones were higher in pitch. His log reflects:

09/12 1231Z first time heard, high pitched tones, stopped with a long single fixed tone just after 1232Z and went QRT.

16/12 1231Z same as 09/12.

23/12 1231Z high pitched tones as above but at 1232Z tones changed to a much faster rate, still high pitched, for about a minute, then slow tones again for a few seconds, then QRT.

30/12 1230Z started exactly on the half hour, format as of 23/12.

06/01	continues in the New Year, still on 18942kHz, slow tones for two minutes, a few seconds of one steady tone, then off.
13/01	format as 06/01
20/01	carrier was on just after 1220Z but tones did not start until 25 seconds after the half hour! Two minutes of slow tones, faster tones until after 1234Z then a few seconds of slower tones and QRT.
27/01	Strongest signal ever for this one, two minutes slow tones, a few seconds of steady tone, then QRT.

This was the last time that this signal was heard on 18942kHz. The station was Nil Required Heard on 03/02. Since that date an early evening polytone transmission has been received three days in a row as:

Mon 26/03 1720Z 10589kHz. The carrier was noted a few minutes earlier. Full message format with total transmission lasting six minutes, almost to the second.

Tues	27/03	1705Z	12217kHz	last mins, full msg ending 1706Z
		1720Z	10589kHz	As 26/03 transmission.
		1741Z	9344kHz	Third sending in progress

Wed	28/03	1700Z	12217kHz	
		1720Z	10589kHz	[This transmission missed!]
		1740Z	9344kHz	

On each day the transmission lasted six minutes in total with carrier QRT as soon as tones had stopped. Does this monitored train of transmissions suggest a regular daily schedule?

ENIGMA 2000 wants to know more about this signal, its new frequencies [if any] and any thoughts on the reason for its transmission on the dates and times mentioned above.

Feb freqs Tuesday and Fridays :

14890kHz	0700Z
15790kHz	0720Z
16290kHz	0740Z

7970kHz	2100Z
6745kHz	2120Z
5395kHz	2140Z

March freqs Tuesdays and Fridays:

13410kHz	0700Z
14910kHz	0720Z
16110kHz	0740Z

9450kHz	2100Z	[9+20dB, 13/03] Note freq in BC Band.[Also occupied by E25].
7962kHz	2120Z	
4582kHz	2140Z	

<u>XPL</u>	10369kHz	2221Z	27/02
	9169kHz	2241Z	27/02

Thanks to AK, C, Cap'n Davros, 'D', D of Kent, GD, Eddy of Australia, Gert of Holland, HFD, J of Aylesbury, JM, JMM, K of Kent, MG, ML, Peter of Saffron Walden, R anon, Rob of Essex, Spy Numbers Robot, Takashi of Nagasaki and all others for their contributions to the Morse, Voice and Oddities columns.

Please send your voice logs to e2k_news@hotmail.com

We finish the 'Selected Voice Stations' section with an interesting and different look at the now inactive V01,

the Romanian Skylark:

I have read some recent suggestions over the Internet that this station was broadcasting 'to' Romania and not from that country. These suggestions are based on speculation that the Romanian speaking announcers had Western or America accents. It should be remembered that during the Cold War many Radio Moscow and Radio Station Peace & Progress (a station whose slogan was "The Voice of Soviet Public Opinion" - a title which must make the list of 100 most ridiculous statements in history) were trained and had lived in the United States and Western Europe. This was also no doubt the case with other East European announcers, hence they had rather peculiar accents and an even more elongated pronunciation style.

The information I have about "The Skylark" was first brought to my attention in a letter I received in 1993. This stated that the "Gypsy music station" came from Branesti in Romania, the source suggested that DF fixes had been taken on the station, interestingly this information was also repeated in 1994 when the book Intercepting Numbers Stations by Langley Pierce was published. In his book he indicates "Departamentul de Informatii Externe (DIE numbers transmissions are made in Romanian by live male operators at an average of 15 groups per minute and are thought to emanate from the large DIE transmitter complex at Branesti, which lies to the east of the capital Bucharest. This particular site formerly covertly housed the Romanian National Jamming Centre". Any information on the current status of Branesti would be welcome along with comments about V1 .

[Thanks C, for an interesting view].

ODDITIES

The Sudden Ionospheric Disturbance [SID] experienced around 30/03 to 02/04 was of sufficient magnitude to blank out the signals from the buzzer S28 on 4625kHz. Other frequencies were likewise affected severely attenuating, or preventing, the propagation of signals throughout the HF spectrum. Perusal of a Spectrum Analyser in South London showed a general depression in sigs from 1.8 to 30MHz. The buzzer, usually an extremely loud signal was totally inaudible along with a few BC stations as well.

A nasty buzzsaw signal is still heard around 5250kHz and nearby frequencies. Its twin, as reported by D of Kent has again resurfaced around 7019kHz.

A rapid blip is appearing on 5412.27 kHz and has been reported by Eddy of Australia. We have not heard this signal which Eddy reported as 'strongest about 1000Z, seems to fade a little around 1200Z and progressively weaken.' Eddy then reported later that it had also been heard in Chita, Ru. and is 'particularly strong.' Subsequent monitoring in GB has resulted in a constant carrier on one occasion although Eddy has contacted us to say that he has heard some pips, the signal now remains silent.

We would be glad to be informed of all anomalies heard and we thank Eddy of Australia for his particular assistance here.

ALARM

We have not seen any reports of this emergent oddity. Has this been heard since its last appearance? Last heard on 5600kHz 1920Z 14/02. Prev freq was 9364.2kHz.

FADERS (XF)

Found in exactly 7.5second bursts at 7.5, 15, 22.5, 30, 37.5, 45, 52.5 and 00 seconds. These can vary from single 7.5 burst to a transmission lasting anything up to 15 minutes, the 'Fading' element can occur at any 7.5 second point with the signal varying from a high to a low or going off air only to return without warning. (It is interesting to note that transmissions always follow precise 'clock-time' e.g. any given 7.5 segment is always correctly positioned within the clock minute). Frequencies used are 3215, 4477, 4496, 4560, 5146 (new), 5092, 5311, 5328, 5787, 6824, 6875, 7658, 9244, 10139, 10478, 11100, 11515, 13431, 20850 (new). Many other frequencies are also known. Full list available on request.

FSK BURSTS

Previously discussed in Issue 2, this particular station operates on 5435 kHz (approx) and can be heard along with E10's transmission.

If you know anything about this station, its purpose and transmitter location(s) or can decode its messages, please contact ENIGMA 2000.

GRASSHOPPER

This rapidly ticking signal, sounding similar to a grasshopper is no longer a mystery or an oddity.

The sound has been confirmed to be that of the Super Dual Auroral Radar Network [SuperDARN]. Brian of Sussex e-mailed SuperDARN'S software engineer who stated "The answer is yes-it does sound like the SuperDARN radars. The radars run with a 7 second sampling period that consists of two parts....." He then described the attributes of the signal. More can be found on Brian's excellent site, always shown at the end of this column; from the SuperDARN website or that of The University of Leicester Radio and SpacePhysics Group website. If you have never heard this signal it can be found around the following frequencies: 9428kHz, 10444 to 10514kHz and 12411kHz , from around 1900Z. [It can be heard during daylight on occasion as well].

JET

2170kHz is the start frequency for this interesting sound. This is true mystery of the Short Wave. What kind of message this is capable of sending is anyone's guess. For a decent evenings listening follow it up the band to see where its coverage finally ends. Best heard after 1800Z and before 0600Z.

J of Aylesbury reported "Received 21:00 - 21:20 07/03/01

Freqs. 2170 2193 2381 2580 2592 2613 2656 2680 4206 4224 4229 4256 4266 4300 4565," and further stated. "Seems more like a fast running diesel, similar to some of the older jammers. Does not appear to be blocking any broadcasts however."

To prove this station is a world wide concern Eddy of Australia heard and identified JET on 16354kHz at 0700Z also sending a .wav file to prove it. His log goes on to show these frequencies:

4249kHz	1152Z	03/04
8220kHz	1234Z	03/04
16354kHz	0700Z	10/03
22617kHz	0435Z	27/03

Comments on this interesting oddity gratefully received.

LINK 11

Since the recent bombing raids on Iraq by British and U.S. planes activity from LINK-11 seems to have increased sharply. All the following frequencies have been noted in use in February and March. 16625 16077 14000 11015 9280 9199 8030 7910 7833 7680 6881 5728 5420 5340 5210 5071 4782 4020. The WYFR transmission heard in the European afternoon period on 9280 in Chinese which suffers severe LINK-11 interference is broadcast via a relay transmitter in Taiwan.

PIP(S30)

Still pipping away on 3757kHz

RAPID PIP

7505kHz	2013Z	29/03
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SLOT-MACHINE (XSL)

Takashi of Nagasaki states that, "the slot machine, XSL, is heard on 4233, 4292, 6419, 6466, 8589 and 8704.5kHz. Last evening [0930Z 26/03] 4233kHz was RS56, and others were RS59. Vy powerful."

Still being heard in US, Oceania and like areas.

8588.0kHz	1630Z	23/02
8703.5kHz	1630Z	23/02

XSL general transmission times [freqs of 8588.0//8703.5]

Sun 1600Z

Mon 1700Z 2215Z
Tue 1510Z 1530Z 1600Z
Wed 1500Z 1545Z
Thu 1600Z
Fri 1600Z [Heard by C, UK at 1844Z as well as on 6417/6445kHz 05/01]
Sat 1600Z 1700Z

Times and frequencies taken from entries by JM [US]

This following observation was made by John of Aylesbury:

8588.0kHz 1650Z 25/03
8703.5kHz 1653Z 25/03
6417.0kHz 1655Z 25/03

whilst the following observations were made by Eddy of Australia:

4233.0kHz 0923Z 16/03 Weak signal here.
4293.0kHz 1006Z 16/03 poor signal but audible.
6417.0kHz 1124Z 22/03 good clear signal, especially as darkness falls.
6445.0kHz 0935Z 22/03 good clear signal.
8588.0kHz 1123Z 18/03 always strong, always clear
8703.5kHz 1212Z 03/04 always strong, always clear

Eddy writes the most valid comment:

“Without a doubt, the 8 MHz signals are always the best received here [Australia]. They are also the first ones I noticed, at least 18 months ago, when I was looking for the Panama Radio station marker on 8589 kHz. This signal has always been the strongest. The 8703.5 kHz signal is almost always as strong as 8588.0kHz”

Further observations will be made to receive this oddity and ENIGMA 2000 would like to hear from anyone, Europe/ Aus or NZ / Stateside etc, willing/able to make observations, or offer constructive thought on this interesting unknown.

TELEPRINTER

This station is still active on 4710//6702//9000kHz.

SQUEAKY WHEEL

Previously reported on 3815kHz 2243Z 11/12 es 0014Z 21/01 es 2305Z 31/01, now reported by R as:

3756kHz 1832Z 01/02 Both transmissions continuous.
3815kHz 0201Z 25/02

MP3 file available on Ary's N&O site.

WHALES (XM Backwards Music Station)

As before, For Europe try these historical frequencies: 5094, 6422, 6695, 8460, 10225 and 10513kHz. For the US: 4155, 5399, 6817, 9285, 10225 and 11209kHz

ZEBEDEE

Last heard on 3070kHz 1803Z 01/02/01 [using LSB]. Please report to ENIGMA 2000

More Info on 'oddities' can be found on Brian of Sussex excellent web pages:

<http://dspace.dial.pipex.com/brogers/page2.html>

ENIGMA 2000 ARTICLE

An excellent article from 'C' that will provoke thoughts about your immediate surroundings. [Those who have been to my house now know why I have ferrites on all my telephone cables]!

WHO IS WATCHING 'YOU'?

There is no hiding place! Staying in? Your landline can be activated even with the receiver on the hook and used to record conversations in the room. Go to the bathroom and run the taps (like an old black & white spy film), have all secret conversations in the bathroom. Going out? That Mobile phone can pinpoint you to within about 7 Metres, indeed the next stage in mobile advertising will send text to your phone while you are outside a particular store to tell you about their special offers, and don't forget all those security cameras in the high streets, stores, petrol stations and even lifts!

The G8 group of countries are looking to introduce a mandatory system for all telecommunication providers to maintain records on the data of every phone call (land & mobile), every e-mail sent and received and every web site visited - for 7 years! The STASI would be proud of us!

Going for a drive, surely that must be safe? No, enter a rather innocent looking system with potential sting in the tail (or should I say number plate). Although everything I have so far described may be used against criminals, intelligence agents and subversive's it can also be used against YOU.

We are going to take a quick look at one of those systems which has slowly crept across Britain, rather like RIMnet the Radiation Information Monitoring System (remember how we were told these were weather stations), well now comes Trafficmaster, a system used to monitor the flow of traffic across Britain.

Let me say at the outset that Trafficmaster is a reputable company with lots of open information about its operations, indeed it does have a nice Web Site! But, just what is it capable of? The system is land based, the most obvious signs of its operation are the "cobalt blue" painted roadside monitors, and associated two aerials, these consist of two 'camera like' infra-red eyes which point towards and away from the traffic flow, single 'eyes' are also positioned on motorway bridges.

Trafficmaster covers 8,000 miles of motorway and trunk roads across Britain and is expanding into Scotland and Wales, it is also expanding rapidly in Germany and as ambitions on France, Italy and the United States. In Britain 7,000 (yes) roadside/motorway bridge units gather information, these are placed approximately 2 miles apart, these detect when traffic slows below 30 mph. This data is sent via the Voda groups PacNet network to the Trafficmaster National Data Centre at Milton Keynes.

The processed information is then sent back to the roadside units which re transmit the data to subscriber vehicles on a frequency of 153.2750 MHz (FSK). Information can also be sent via mobile phones. Subscribers display the information on a screen which offers three levels of zoom, this allows the traveller to see when traffic problems occur when one of the grid cells on the screen flashes. In a nutshell you can then try to avoid the problem of jams or slow moving traffic. More detailed numbered pages are sent to show news of delays etc.

So far so good, so how does it gather the information and what could be done with it? The company has developed its own unique system for monitoring the journey times of cars across Britain. The patented system, called Passive Target Flow Measurement (PTFM), the roadside monitors capture the electronic pattern of number plates of passing vehicles. The computer on site converts this to a "tag" and every four minutes a transmission is made sending the "tags" and the time that each vehicle passed the site, to the central computer in Milton Keynes. By matching the sighting's (I like that phrase) of vehicle "tags" across the network, the computer quickly averages the journey time between each link across the country. The system operates 24 hours a day.

Why is this of any great interest to us? It all sounds pretty innocent, doesn't it? There are conflicting reports of as to how much of a number plate is "read" to be time stamped into a "tag" varying from 4 to 6 central digits. Can the system cope with the new "ABC 12 DE" type plates due to come in to force in 2001? What about short "vanity plates"? (I did read that the letter/number size is to be increased slightly on new style plates, I also read that this system does not like the Euro symbol very much - the blue disc with stars which prefixes some plates).

Is there a one to one mapping between a number plate and the "tag"? The company claims that the number plate cannot be converted back from the "tag" but they have not yet published what cryptographic algorithm if any is used to achieve this. Although some idea of the system of "tags" can be gleaned from their patent.

Are these "tags" easily converted into real number plates simply by cross referencing with a few existing police Number Plate Recognition systems. e.g. City of London (Ring of Steel), channel Ports, M25 variable speed limit zone etc. or with visual observations?

How secure is the central database in Milton Keynes? Can these radio communications links be tapped centrally

? Can the Trafficmaster 'eyes' be put into "engineering test mode" and be made to transmit full number plate details.

What safeguards are there that the company will not divulge the movement patterns of its "tags" to the police etc? Will it sell this information to commercial organisations?

Trafficmaster is not registered with the Data Protection Registrar.

It seems almost inconceivable in this electronic age that the likes of MI5 & GCHQ would not be interested in having a window to this system, its ability to operate as a surveillance system seems just too good to be true. It cannot only track the 100,000 or so Trafficmaster customers but also the other 25 million road users, it could act as a safeguard to protect VIP's, military, police and high value freight as well as tracking the enemies of the State, terrorists, criminals and intelligence agents? It could even be used to track YOU.

BOOK REVIEW

Spy Flights of the Cold War

Paul Lashmar

Sutton Publishing Limited

ISBN 0 7509 1970 1

£12.99

I borrowed this book from the local library, read it and promptly went out and purchased a personal copy.

Two hundred and forty four pages of absolute outstanding detail take the reader from the earliest introduction of the subject, in 1783 to later events in 1995.

The author, Paul Lashmar, has researched the subject matter with those who actually flew secret missions in the Cold War.

A selection of photographs show the various aircraft, personnel and aerial photographs along with some maps are useful to the reader.

The specific missions of the RAF and USAF are recounted and, surprisingly, the Soviet response to these most secretive missions. The Russian attempt to detect the flights and to harass and sometimes destroy the aircraft that were part of the necessary incursion is also covered in more than adequate detail.

ELINT is covered and there are explanations about the methods used and of the aircraft used as the mobile ELINT platforms. The ability to be able to distinguish between height or tracking radar is explained along with a necessary explanation of the use of the SHF bands used.

“Traffic on the frequency bands to be searched during operational missions varied considerably. Therefore inexperienced personnel were initially allocated to the reasonably quiet L-Band from which they progressed to C-Band, X-Band and ultimately the busy S-Band. The twelve special operators in the pre-Breton days comprised one each on (VHF radar and voice) L- and C-Bands; two each for the S- and X0- Bands; two supervisors and three linguists working fighter control frequencies on the A-Band, there being no Soviet UHF voice transmission until the 1960's.

By the mid-1950's the Russians had stopped copying Western equipment and become adept at designing ever more sophisticated radar and radio. They also became much cleverer at disguising and coding signals. The West tried to keep one step ahead with flights constantly monitoring the communist capabilities. In Europe the USAF and RAF monitored Soviet air defences.”

Nineteen chapters describe the Spy Flights, Operations and so on. A table of abbreviations used and a Glossary provide the non-technical reader with explanations of the terms used.

Whilst a percentage of the book appears to be dedicated to the 'America' curtain, a very interesting chapter, 'The U2 - British Story' related the flying of U2 aircraft by RAF crew.

There is also mention of the Canberra and of some of the missions that it flew.

The author details a very disturbing plan, by the USAF, to use spy flights in an attempt to start World War 3, with the intention of nuclear intervention, to remove the Soviet Union and China as nations.

The Soviets have contributed to this book and detail the tension caused by the flights of the spy planes,

documenting the downing of Western aircraft.

The secrecy that has surrounded this subject matter has been by-passed to produce an excellent book that should grace the bookshelves of anyone even remotely interested in all matters espionage.

NEWS & ITEMS of INTEREST

At 1815Z on 03/03 BBC2 TV broadcast a television programme in its 'Correspondent' series entitled 'Saddam's Weapons of Mass Destruction' and covered allegations that Iraq had actually tested a Nuclear device prior to the Gulf War.

Any one who found this programme interesting might like to refer to a copy of Frederick Forsyth's book 'The Fist of God.' The book, which has a like theme, was first published in 1994.

It is difficult to assess if Forsyth's book is pure fiction or what is now loosely termed 'faction'.

Some of the characters within the book were also named in the BBC2 program.

[Thanks to D of Kent for this interesting comparison].

'Dayton's Code Breakers' can be found on 'www.antioffline.com' [See relevant web sites] and attempts to recount the making of the US Bombes which were used to tackle the enigma codes.

The article adequately covers the masterpiece of design by the late Joe Desch of the devices made by NCR.

These machines were known to be faster than the British Bombes and whilst in the design stage were negatively commented on by Alan Turing. Unfortunately the piece appears to inflate or exaggerate the actual worth of the US Bombe's in the code war against the Nazi enigma machine and one could be led to believe that the Bletchley effort was only a shadow compared with that of the Americans. The subtitle for Part One 'How Joe Desch, based in Dayton, beat the Nazi code and helped win the war' promotes this.

However the article itself does correctly state [part 5, para 7]: "In the end the NCR Bombe was too late to be the only decisive factor in the Battle of the Atlantic...."

The history of Hut 8 in Bletchley Park, NARA RG457 HCC NR 4685 Box 950 in the National Archive, Washington, USA documents the British side to OP-20G co-operation on the Bombes.

According to that held in the Washington National Archive the first break using a US Bombe occurred on 25th July 1943.

The History Channel on Good Friday [13/04] screened a documentary entitled 'The Secrets of U-110' and documented the true exploits of a Royal Navy Sub-Lt David Balme. He removed an Enigma machine and other code related items from U-110, a disabled U-Boat in the Atlantic. The submarine was forced to the surface by HMS Bulldog on 9th May 1941. This may have been the basis of the Hollywood film 'U-571', which brought strong criticism from British historians. The real U-571 commanded by Kapitanleutnant Helmut Mohlmann was responsible for a number of successful attacks in US Coastal waters. [Another German vessel, U-175, was actually boarded (May 1943) by Lt Ross-Bullard from the US Coast Guard cutter, who intended to toss a grenade down the conning tower. However the boat was already sinking and there was nothing he could do to save the craft]. The code war was well underway by 7th December, 1941, a turning point, when America entered the war, after the bombing of Pearl Harbor. The Enigma code originally having been broken by a Polish Mathematics Graduate, Marian Rejewski, and in its more difficult military useage, by Alan Turing and others at Bletchley Park..

'Thirteen days: The real story', can be found on www.troikamagazine.com. Written by William Reed it outlines the true story of the Cuban Submarine Crisis. This is good factual stuff and is of worth to anyone with an interest in intelligence and radio. This covers a programme that was classified Top Secret and referred to by the codeword 'BORESIGHT'. It covers the events from 1956 to 1964 and answers a few questions that British monitors may be asking. Worthwhile reading.

Spy released from Gaol.

Mr Geoffrey Prime, 62, was released from Rochester Prison, Kent, on 13th March at 0700 after serving 19 years of a 38 year prison sentence. Before his release he was apparently taken to an unknown address at 0600 a few days prior and debriefed by MI5 officers. He was then returned late at night after lights out and under the cover of darkness.

Mr Prime had worked for the RAF on intelligence duties in West Berlin and also for GCHQ as a linguist. He was sentenced at the Old Bailey in 1982 for 14 years of treachery during which time he passed photographs of hundreds of documents to his Russian handlers. His code name was 'Rowlands'. He was a section head and

translator at GCHQ and involved in some of its most sensitive operations. One such operation was Project Argus, a very sensitive secret of GCHQ and NSA. The satellites that formed part of the project had the capability to listen in on the microwave links used in Russia's phone network. It is believed that this project was made worthless thanks to the information passed by Mr Prime. It was reported that Mr Prime was granted parole and it was originally planned that he would move to a flat, apparently selected by Special Branch, but was moved to another location as details were leaked to the news media. It is also reported that Mr Prime may also be given a new identity, to protect him from 'illegal' recompense for his other offences, involving three girls aged 11 to 14, which led to his downfall as a spy. A further report states that 'spymasters' are worried that he may attempt to blow the whistle on Britain's espionage failings during the last war.

The ENIGMA 2000 article in Issue 5 will be 'Geoffrey Prime, Radio Operator, Linguist, Spy!'

Wanted: secret agents

NEW Zealand's spy agency, the Secret Intelligence Service, is advertising for secret agents. Seen in Vacs columns the advertisement states the job "requires people who are mature and have excellent communication and interpersonal skills, flexibility, good judgement, initiative, strong analytical skills and the ability to work in and lead teams".

Tetra Radio System interferes

The proposed new national radio system for Police forces in Great Britain may cause vital electronic equipment to malfunction. As a result users of this technology will be told to turn their personal radios off when in hospitals or when they are involved with speed traps or electronic breath screening.

The new system is called Airwave and is expected to be complete by 2004. The system is also called the Public Safety Radio Communications Project.

This problem was discovered by the Jersey Police who are already using tetra when it interfered with their speed measuring and drink drive equipment.

'Fifth Man' named yet again.

Sir Roger Hollis has been named, yet again as the fifth man in the spy ring that included Burgess, Maclean, Philby and Blunt.

The spy ring existed in the 1960's and various accusations have been previously made, most notably by Peter Wright, in his book Spycatcher.

This time the accusation has been made by Miss Christine Keeler [57] who was the centre of a scandal in 1963 causing the Minister for War, Mr Jack Profumo, to resign and the eventual fall of the Macmillan government. A book detailing her life contains the details. A recent ITV production followed the book in detail and included interviews with Miss Keeler and others. Mr Profumo was notable by his absence.

Protest at Spy Base.

An annual protest at Waihopai spy base near Blenheim NZ once again took place in January this year. Much like the events chronicled at Menwith Hill persons made their protest at the function of the station and also that serves American interests. About 50 persons turned up to hear speeches made outside the base gates. It is believed that the two satellite dishes at the base intercept emails, telexes, faxes, phone and mobile phone calls.

Miniature Spy Plane being developed by British.

Dr Rafat Zbikowski of Cranwell University (Royal Military College of Science, Shrivenham, Wiltshire) described a miniature aircraft weighing only 100grams (about 3.5oz) which was 150mm (6 inches) long as having 125mm (5 inches) long flapping wings. The device, the "flapping-wing micro air vehicle" is capable of carrying miniature cameras into hostile areas or other places of some interest. The design is based on the hover fly well known for its feats of fluttering over flowers as it draws nectar.

The device's ability to mimic insect flight was essential to the design as it would need to fly at "low speed, hover for precise observation and have high agility."

The inspiration was apparently due to difficulties experienced by our troops in Sarajevo where Serbs used the cover of flats as cover to shoot their targets. Satellites and Observation flights were of no use and such a device as this could be seen to reduce the risk to civilians should bombing be necessary.

The Metropolitan Police Service has shown interest in this device.

British Protester at Menwith Hill charged with racist abuse.

After dragging the American flag along the ground outside the gates of the US Base RAF Menwith Hill in North Yorkshire Ms Lindis Percy was accused of being motivated by racist hatred of the American people.

Apparently the flag emblazoned with 'Stop Star Wars' was dragged across the road at the gates to the US base and then driven over by a member of the American Legion. [Patriotic ex-serviceman's Association based at Menwith]. In America ex-serviceman's groups along with politicians have campaigned for the desecration of the flag to be a federal offence.

Although originally charged with obstruction of the highway the Crown Prosecution Service are pressing for this matter of 'racist hatred of the American people' to proceed.

The flag in question was never confiscated and preserved as evidence, although CCTV evidence is known to exist.

This action, by a 59 year old British woman, is said to have caused 'harassment, alarm and distress' to US personnel driving out of the base. This is the first time that the new anti-racism powers introduced under the Crime and Disorder Act 1998 have been used. If she is found guilty she can apparently expect a huge £2500 fine as punishment for dragging the flag on a North Yorkshire road.

Iraqi Agents Arrested

Two Iraqis, suspected of working for the Mukhabarat were arrested in Heidelberg. Situated there are the Headquarters of the US Army's 5th Corps.

It is known that the BND has also been actively obtaining detailed intelligence on Iraqi missile sites.

The two unnamed agents were arrested, on orders from Germany's chief prosecutor, because they were suspected of carrying out missions for an intelligence service in a number of German towns since the beginning of 2001.

It has been rumoured that preparations have been intensified for terrorist actions; and well know that there have been Iraqi threats of retaliation for the British and American air raids on Iraqi defence targets during the week 10th to 17th Feb 2001.

Given also the apparent military movements by Iraq [see Voice Stations column] and the probable effects on US and Israeli intelligence agencies the reasons for these arrests can be seen.

It has been mentioned that there is a group of Mukhabarat agents actually working in Germany, although the chances of success are limited by the previous defection to the west of Jaber Salim, the head of its operations in Eastern Europe.

British Intelligence agencies foil terrorists in Kuwait

Three Arab men were arrested in Kuwait and 300lbs of high explosives recovered after the Kuwaiti police were tipped off after an operation said to involve both MI5 and MI6.

It is believed that the terrorists were going to target Camp Doha, situated north of Kuwait City.

The camp contains heavy weapons and American servicemen. It is also thought that another phase of the attack would have targeted British and American officers.

An American source in Washington praised the efforts of the British agencies, brought about by a security review after the murder of the British Military attaché in Athens.

CIA embarrassed by secret chatroom

Around 160 employees of the CIA are reported to have been involved in a 'by- invitation-only' chatroom that existed in the classified computer system. All sections of the agency are affected by staff who were members, but to date up to 10 employees were suspended for the duration of the inquiry.

The chatroom was not used for the exchange of pornography but went undetected until it was discovered during routine security checks. It is believed to have existed for five to ten years.

Some of the members were employed in jobs directly involved in the running and maintaining of the agency's computer system.

As a result of a seven month in depth investigations the CIA sacked four employees and suspended at least 10

others. Security clearances of nine private contractors were also withdrawn. The CIA made a public statement to the effect that there had been no unauthorised disclosure of classified information
CIA Shuts Chat Room, Fires 4, Suspends 10

Spy Hawk captured in India.

A spokesman for the Indian Border Security Force spokesman said that a falcon fitted with a transmitter which Indians suspect of being used on cross-border spying missions had been captured in Jaiselmer, in the Indian state of Rajasthan.
Two similar birds had been previously caught, the spokesman confirmed; but agreed that the radio sender could well be a location device fitted to a hunting bird.

Sakhalin Island hit by Earthquake

Sakhalin Island, where Russia carries out secret weapons research has been reported as being hit by an earthquake with a magnitude of 5 on the Richter Scale.
There were no apparent casualties and damage appears to have been limited to cracked walls and windows.

To finish this issue's 'News and Items of Interest' an interesting extra article from 'C':

HOW MI6 WAS TOLD OF STASI SPY WHO SOLD TIMER

[The Herald Reporting: This article, part of the extensive coverage of the Lockerbie bomb trial verdict, was published in the Scottish newspaper The Herald on 1 February 2001].

'The problem with the Lockerbie trial has been the man who supplied the timer for the bomb which brought down the aircraft was never put on trial. Western intelligence agencies knew of the activities of Edwin Bollier as far back as 1971. The envelope which should have brought Edwin Bollier's career to an end - he was then an agent for the Stasi East German intelligence - was handed to MI6 in the summer of 1971.

I know because I handed the envelope containing the evidence to "W" my MI6 controller, retired Perth Detective Superintendent, in an office in Guild Street, Aberdeen. In the harsh reality of the cold war unscrupulous businessmen like Bollier, operating out of neutral Switzerland and with Swiss passports could operate internationally with virtual impunity.

Bollier and his partner Erwin Meister were then in their early thirties and termed themselves "radio engineers". Their partnership gave birth to the Zurich company Mebo Telecommunications AG, registered on March 24, 1971, which operates to this day and which was named in the Lockerbie warrant issued by the Lord advocate in November 1991.

In 1970 they launched a pirate radio ship on to international waters off the Dutch coast. How the Zurich radio repairmen who had a line in "spy bug" transmitters came by the cash to float a sophisticated pirate radio ship was a mystery. Radio North Sea International was bigger, better and flashier than any other pirate. It came on air on January 23 1970. Its conventional Medium wave transmitter was more powerful than any other pirate radio ship, and most European national radio stations. Surprisingly it also broadcast on two shortwave bands and on VHF. It was difficult to discern any commercial rationale behind the operation.

Its role in the 1970 general election was extraordinary. It mounted a campaign against the Labour government, which lost the election, and was, in turn, jammed by the post office and the military.

As a journalist and worker with another pirate radio ship, Capital Radio, anchored just a few miles away, I was able to infiltrate the Mebo office operation which was located in a sea view suite in the Grand Hotel in Scheveningen on the Dutch coast. Bollier, with his psychedelic kipper ties and expensive Italian suits, was clearly the dominant partner although he left Meister to do most of the talking with people like me.

I became aware of shipments of radio transmitter parts in East Germany and discovered in that outgoing mail copies of air freight waybills addressed to the "Insitutit für Technische Untersuchungen" in East Berlin. This equipment of US origin was being shipped by Mebo Telecommunications (then un-registered) of Zurich to East Berlin, via Amsterdam's Schiphol airport.

I spirited away the mail that looked interesting, steamed it open using a technique learned from the Eagle annual, photocopied it, popped it back in the post and laid the copies aside for my next trip back to the UK.

Back then, usually in Aberdeen, I would be contacted by a Special Branch officer who would set up my meeting with "W", the man from MI6. From the extensive questioning and discussions it became quite clear that "W" was particularly interested in the East German connection and the interference by the radio ship in the general election.

I was never paid a penny for my minuscule part in winning the cold war. Tony Henn - then postmaster general - had sworn a warrant for my arrest under the marine broadcasting offences act for my part in setting up Capital Radio. I was simply granted immunity from prosecution. However, evidence soon emerged that the activities of European and American intelligence had borne fruit. On July 8 1971 the Dutch newspaper De Telegraaf published a leaked report from the CIA. It revealed that 10 pirate radio ships based on the North Sea operation, were under construction in the Polish port of Gdansk. The programme was under the direction of the Insititut für Technische Untersuchungen. This was believed to be a cold war riposte to the US based operation Radio Free Europe and Radio Liberty. It was also likely that such vessels would also incorporate a SIGINT capability, which was also clearly a feature of the North Sea operation. Publication of the report compromised the operation and work on the ships ceased.

In May 1971, Radio North Sea was sabotaged by frogmen who attached plastic explosives to the hull in a botched job by the BVD Dutch secret service. In January 1977 it sailed from Rotterdam to Libya. As the ship sailed, a photograph of Bollier's new patron Colonel Gaddafi was pasted up in the studio. The ship was sold to Gaddafi and used to broadcast the Koran. When Gaddafi tired of his toy he had his air force jets bomb it and send it to the bottom of the Mediterranean.

However, the relationship between Gaddafi and his Swiss friends was one which would flourish for 10 years right up to the night of December 21, 1998 when Flight 103 crashed on to the town of Lockerbie. That may not have been predictable. But preventable it certainly was. The world's intelligence community knew all about Edwin Bollier. The enduring question must be why his activities were tolerated.'

Paul Harris writes for Jane's Intelligence Review.

"The Offshore Radio Guide wrote the following critical comment on the piece:

Critical comment by Hans Knot: I wanted to know what "Ome" Bull Verwey will think about the story of the Dutch secret service being responsible for the fire bomb on the Mebo II. So he must have spent one year in prison as an innocent man ?

I did speak to Bull of course and read him the whole article. His first reaction was: "I remember very clearly, I first met Meister and Bollier in Zurich. They told me that they could deliver to anyone interested very sophisticated equipment which could help in espionage." They told Bull: "Wo Krieg sind wir" (that means: "Where ever there is war - we are there")- of course to earn a lot of money. Their involvement in Biafra is known, too. Regarding the sentence on the bomb attack Bull quoted: "the biggest nonsense I've ever heard. We, and not anyone else, were responsible." I do recall that during the last day of prosecution the Judge told that a letter with a request had arrived from Meister and Bollier asking the judge not to prosecute Verwey. Of course this didn't work. So as in the seventies I have my own thoughts on Paul's stories. A part may be true but he overwalks himself again.

*PLEASE SEND NEWS ITEMS OF INTEREST, STATING SOURCE AND DATE TO:

e2k_news@hotmail.com

Thanks to the contributors, C, 'D', D of Kent, JMM and all others.

RELEVANT WEB SITES

<http://thebigbreach.com/download/bbtxt.zip> [load a blank 1.44M disk in your 'A' drive for this one].

<http://www.ratical.com/ratville/JFK/ST/ST.html> [another blank 1.44M and a lot of time to d/load as ascii]

<http://www.troikamagazine.com/network/13days.html>

<http://www2.epic.org/reports/crypto2000/countries.html>

<http://www.antioffline.com/codebreakers.html> [comments on this one please]

<http://dspace.dial.pipex.com/brogers/page2.html>

REQUESTS

Please make your requests via e2k_news@hotmail.com or 076 2 627 6417 pager.

Hallicrafters SX 28. Does any reader have a model that they would like to donate to an elderly British Listener whose own set has finally given up the ghost? Please contact ENIGMA 2000 if you can help, via the pager number or the address shown at the bottom of this newsletter.

G3KLF. [Douglas Britten] Does anyone know what happened to the holder of this call sign. Is he still in prison or has he since been released with a new identity?

ENIGMA 2000 would like to hear from any British servicemen who felt 'harassment, alarm and distress' as a Union Jack was burnt, dragged or whatever in front of them whilst serving in another country.

Do you have any Embassy buildings or other buildings sporting large antenna arrays in your everyday surroundings? If you do you might like to pen an article about the building and its possible use.

ENIGMA 2000 would be most interested to hear from anyone who lives or has travelled overseas with their radio to monitor number stations.

STOP PRESS

ENIGMA, whose column 'Attention 123' can be read in the Short Wave Magazine, is kindly allowing ENIGMA 2000 to use their Bradford address for incoming mail. That address is stated at the end of this newsletter and in the Short Wave Magazine.

The following text was received from Igor, via Spooks :

"13010 0700Z 16/04 792: Unid, possible Russian Intel CW 000 format:

792 792 792 000 000 (repeated in 8 minutes)
callsign repeat various time, "000" always 2 times.
"0" - 5 dashes."

Igor asks if anyone has any ideas about this signal.

Msg: 'D' Tnx for info/logs. Please continue to send

CONTRIBUTION DEADLINES FOR 2001 ARE AS FOLLOWS:

Issue 5 Jun27
Issue 6 Aug27
Issue 7 Oct26
Issue 8 Dec17

<p>Please note that all items intended for publication in the next ENIGMA 2000 newsletter should be received in good time. Please send your articles, news items and requests via the above e-mail address. Please indicate if you wish to be contacted direct. If you wish to be credited with your article please indicate, otherwise all work will be treated as 'Anon'.</p>
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ENIGMA 2000 CAN BE PAGED VIA: 076 2627 6417

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