Numbers & Oddities

a.k.a. The Spooks Newsletter

Edition #186, March 2013

Editor: Ary Boender   email: ary@luna.nl

Check for previous newsletters, info, sound samples and databases also:

NUMBERS & ODDITIES http://www.numbersoddities.nl

SPY NUMBERS ONLINE DATABASE http://www.spynumbers.com/numbersDB

UTILITY DXERS FORUM (UDXF) http://www.udxf.nl

START PAGE http://home.luna.nl/~ary

Ron reports that there's a TV series running in the USA called "The Americans". It takes place in Washington DC in the early 80-s during the Reagan presidency. The story line is two deep cover KGB spies (husband and wife) carry out their spy missions here in the US. In a couple of episodes they huddle around a shortwave radio copying down a YL reading 5-figure groups, then look up the meaning of the groups in their handy dandy notebook.

The Conet project will be re-issued with an extra (5th) CD: http://www.irdial.com/conet.htm

Lots of Russian military activity was noted on the 28th due to an unexpected exercise announced by mr Putin on the 28th at 0400 hrs. 36 vessels based at Black Sea bases in Sevastopol and Novorossiisk and ca 250 combat armored vehicles would be used in the drill, plus several aircraft.

VOICE STATIONS

E06

13890 kHz, 08-03, 0600 UTC:

```
864 153 101
88603 87228 12214 05631 86462 38619 65497 32937 73192 03813
99098 38615 37494 92695 69356 63928 58312 88640 11364 00534
49849 67319 01805 98421 69957 32420 06260 96218 40347 10438
21928 78520 52048 71739 51689 89981 54568 70081 70457 10814
52170 17778 69757 23412 55728 38694 91451 24772 63572 66266
86580 64398 69792 78721 60224 12393 23405 88699 88342 87401
86845 29447 17525 99108 67212 04795 83591 84980 18704 95075
09970 45924 39678 36204 71804 10565 12788 14073 36719 82822
61612 41478 18184 52477 22235 09749 02409 73411 53197 32271
34717 39209 32271 22093 76327 10819 13480 70804 67479 75940
42823
00000
```

E07

9273/7873/6873 kHz, 04-03, 2000/2020/2040 UTC:	288 288 288 1 864 50
	58706 07673 35044 04952 84144 41542 95611 63875 03814 77757 51797 61069 96960 97890 88048 26506 23301 81314 76572 41740 88983 71155 88827 74457 97500 61840 49547 21945 43921 33427 65231 75853 49008 72562 53651 26315 05115 45398 20104 70228 84886 02156 47990 31005 86484 47951 67739 07962 63351 03955
	000 000
5864/5164/4564 kHz, 27-03, 2100/2120/2140 UTC:	815 815 815 1 14834 (R) 7337 54 7337 54
	85606 84250 02974 45679 21100 08901 59688 87926 48228 35841 73312 73385 70029 28944 69085 72616 98722 30111 08483 01358 57145 75980 33913 79146 39366 29891 81610 66281 70834 98064 23386 18147 71986 58491 52763 96964 11584 67904 08824 28299 04207 09646 78613 57347 62924 87068 82575 82160 60283 46219 64901 46060 15925 64128
	000 000
12133/13433 kHz, 30-03, 0920/0940 UTC:	114 114 114 1 19187 (R) 537 83 537 83
	43229 48273 47808 11360 97065 74159 25523 86202 98820 52872 19167 61962 67743 28761 74915 15102 26848 85732 59084 81134 92745 05590 93261 35019 26449 60191 04329 27571 14977 71162 44188 33791

52599 90100 59819 18829 67969 15015 87026 16834 94341 07446 69351 62525 26857 32237 57106 17148 85938 04349 76211 53039 99742 86548 23818 62769 34693 77359 88192 55436 88183 21630 31513 60612 18441 41551 62997 19865 13385 31353 32154 07579 11927 83746 49273 12654 76606 23669 15909 95159 78846 62397 37332
000 000

5146/5846/6846 kHz, 28-03, 0530/0550/0610 UTC:

188 1 14834 7337 54
85606 84250 02974 45679 21100 08901 59688 87926 48228 35841 73312 73385 70029 28944 69085 72616 98722 30111 08483 01358 57145 75980 33913 79146 39366 29891 81610 66281 70834 98064 23386 18147 71986 58491 52763 96964 11584 67904 08824 28299 04207 09646 78613 57347 62924 87066 82575 82160 60283 46219 64901 46060 15925 64128
000 000

E11/ E11a

10221 kHz, 08-03, 0710 UTC:

631/36 Attention
83269 16192 27054 35605 89009 77686 82651 81093 05026 15878 63696 82308 60445 95021 85599 03525 60089 38938 40296 62835 93389 16238 05261 63707 00659 03708 06161 57949 59853 83548 50746 09507 41486 20491 50324 99903
Attention, rpt msg, out

5194 kHz, 08-03, 1710 UTC:

953/21 Attention
88993 50085 42880 94409 77644 59007 41556 19540 94219 38518 14371 33283 41192 40168 68819 66322 91105 10419 26485 46922 51414
Attention, rpt msg, out

6814 kHz, 11-03, 0820 UTC:

432/33 Attention
49911 82811 35543 73058 43614 01369 09111 52665 44084 83069 15392 13949 13404 29469 09173 97567 39599 23599 87381 33793 49172 08959 83747 77686 06119 97221 21547 06579 83546 97820 08012 22629 13030
Attention, rpt msg, out

5371 kHz, 22-03, 2002 UTC:

569/38 Attention
56194 79659 05499 38048 44233 52749 45341 62230 57781 24553 32338 69680 15076 41317 98677 58074 15975 27505 57192 05045 75666 11628 65686 11725 97935 50861 63536 09715 76573 23047 76680 43436 09178 01162 22150 10414 18605 26757
Attention, rpt msg, out

4909 kHz, 06-03, 1445 UTC:

282/38 Attention
26659 37708 62510 89784 30897 19395 37489 25609 58930 37446 99961 28630 59456 85719 61682 19084 44577 73890 73016 92237 34690 71006 66614 16725 22605 34494 05172 00581 56621 36458 31991 87299 79261 47941 12471 62442 82260 30725
Attention, rpt msg, out

6814 kHz, 14-03, 0820 UTC:

435/32 Attention
38133 71473 47714 64670 05187 86885 06279 94798 79211 05982 70704 48682 51222 53788 11472 04068 96625 66025 57427 60425 62994 10619 62515 99886 77634 47641 49115 50215 37178 34061 45924 00356
Attention, rpt msg, out

15915 kHz, 07-03, 1155 UTC:

711/38 Attention
70316 83487 45248 74519 87497 09662 53656 88281 64345 64889 67684 54442 10315 01256 42080 39345 97544 82439 19142 12430 88852 70140 07237 36470 66196 79507 43723 46006 42504 83328 76999 41239 30481 95327 29701 52706 51732 09233
Attention, rpt msg, out

E25

6140 kHz, 27-02, 1052 UTC:	**YL. 8 128 128 128 128 128 128 128 128 128 128 128 128 128 128 MESSAGE MESSAGE MESSAGE 1656 1021 0140 0648 8774 5493 7852 9614 9699 8782 9482 0140 REBEAT REBEAT REBEAT 1656 1021 0140 0648 8774 5493 7852 9614 9699 8782 9482 0140 END OF MESSAGE**
6140 kHz, 28-02, 0730 UTC:	**Muazzin – Muslim praying**
6140 kHz, 03-02, 0754 UTC:	**YL. 116 116 116 116 116 116 116 116 116 116 116 116 116 116 116 116 MESSAGE MESSAGE MESSAGE 1011 1033 5990 9446 9321 7822 2761 4375 2824 4496 7431 REBEAT REBEAT REBEAT 1011 1033 5990 9446 9321 7822 2761 4375 2824 4496 7431 END OF MESSAGE END OF TRANSMISSION**
6140 kHz, 10-03, 1110 UTC:	**YL. 15 315 315 315 315 315 315 315 315 315 315 315 315 315 315 MESSAGE MESSAGE MESSAGE 1088 4590 1090 9142 2065 6520 6481 4590 2743 REBEAT REBEAT REBEAT 1088 4590 1090 9142 2065 6520 6481 4590 2743 OF MESSAGE END OF TRANSMISSION**
6140 kHz, 12-03, 0737 UTC:	**YL. 0 360 360 360 360 360 360 360 360 360 360 360 360 360 360 MESSAGE MESSAGE MESSAGE 1001 8240 8671 9910 0357 3240 6742 1049 8240 1020 REBEAT REBEAT REBEAT 1001 8240 8671 9910 0357 3240 6742 1049 8240 1020 END OF MESSAGE** **360 360 360 360 360 360 360 360 360 360 360 360 360 360 360 MESSAGE MESSAGE MESSAGE 1001 8240 8671 991... 1... 15... 4... (numbers start to get cut-off mid speach) 6 3 3**
6140 kHz, 12-03, 1054 UTC:	**YL. 6 1 126 1 126 1 126 1 126 1 126 1 126 1 126 1 126 1 126 1 126 1 126 1 126 1 126 1 MESSAGE MESSAGE MESSAGE REBEAT REBEAT REBEAT END OF MESSAGE**
9450 kHz, 14-03, 1213 UTC:	**Music: Enta Omri. YL. 830 9 830 9 830 9 830 9 830 9 830 9 830 9 830 9 830 9 830 9 830 9 830 9 830 9 830 9 END OF MESSAGE END OF TRANSMISSION**
6140 kHz, 16-03, 0914 UTC:	**YL. 9 0 950 950 950 950 950 950 950 950 950 950 950 950 950 950 MESSAGE MESSAGE MESSAGE 3090 1059 8020 0729 1845 5078 2179 3406 8020 REBEAT REBEAT REBEAT 3090 1059 8020 0729 1845 5078 2179 340(WINDOWS "BOINK") END OF TRANSMISSION 95(DISTORTED)** **REBEAT REBEAT REBEAT 30(WINDOWS "BOINK")**
6140 kHz, 1703, 0902 UTC:	**YL. 111 111 111 111 111 111 111 111 111 1(XMTR OFF THEN ON AGAIN @ 0903z) 11 111 111 MESSAGE MESSAGE MESSAGE 1053 4170 4031 5158 4991 2458 4529 6905 6255(XMTR OFF/ON) 028 4211 7770 4170 REBEAT REBEAT REBEAT 1053 4170 4031 5158 4991 2458 4529 6905 6255 6028 4211 7770 4170 END OF MESSAGE END OF TRANSMISSION**
6140 kHz, 17-03, 0949 UTC:	**Music: Entra Omri. YL. 33 350 350 (XMSN/RECORDING PROBLEMS) 350 350 350 350 MESSAGE MESSAGE MESSAGE 1052 1052 3320 3011 5458 5399 8709 7078 6196 5136 8199 3320 REBEAT REBEAT REBEAT 1052 3320 3011 5458 5399 8709 7078 6196 5136 8199 3320 END OF MESSAGE END OF TRANSMISSION**
9450 kHz, 17-03, 1215 UTC:	**Music: Entra Omri. YL. 35 830 10 835 830 10 835 830 10 835 830 10 835 830 10 835 830 10 835 830 10 835 830 10 835 830 10 835 830 10 83 83 83 83 83 MESSAGE MESSAGE MESSAGE 5555 5555 5555 5555 5555 5555 5555 5555 5555 5555 REBEAT REBEAT REBEAT 5555 5555 5555 5555 5555 5555 5555 5555 5555 5555 END OF MESSAGE**
6140 kHz, 30-03, -741 UTC:	**Carrier with music in USB**

G06

6774 kHz, 11-03, 0712 UTC: M14 in progress "0126" for 2 minutes then off. Carrier on until 0800 then into

6774 kHz, 11-03, 0800 UTC: M14 "215" instead of G06. Switched to G06 after 2 minutes

6774 kHz, 11-03, 0802 UTC: G06 "215 215 215 00000" in German for 2 minutes

5442 kHz, 29-03, 1930 UTC:

```
947 (R) 647 647 15 15
37264 37264 38594 38594 71835 71835 04729 04729 47244 47244
36218 36218 47309 47309 12736 12736 26354 26354 26374 26374
19284 19284 56302 56302 00305 00305 28492 28492 17362 17362
647 647 15 15 00000
```

G11

5815 kHz, 03-03, 1755 UTC:	272/36 Achtung 23501 16909 32784 50091 46349 46341 05277 72894 13638 84002 06771 20371 99108 96841 18321 15769 98106 30714 22093 52804 50547 41123 57306 09228 72155 78536 92386 47335 89989 86586 36463 49842 68341 36596 98727 54234 Achtung, rpt msg, Ende
6433 kHz, 10-03, 2000 UTC:	264/34 Achtung 90548 36299 23656 72864 95850 26023 58015 04039 85329 79056 66686 81218 18306 46892 70659 18388 91655 18519 13823 00348 49322 54105 91570 46487 11466 18912 71359 89098 03421 42982 17749 46939 19409 83773 Achtung, rpt msg, Ende
6433 kHz, 31-03, 2000 UTC:	261/33 (R) Achtung 96009 08096 11524 33945 58860 26023 11773 40970 18650 30891 26979 52861 36145 79813 86097 40120 06911 57863 45833 08675 49357 91933 41641 52160 81641 71384 71306 58529 30372 18096 10443 52865 76449 Achtung, rpt msg, Ende
5815 kHz, 08-03, 1325 UTC: 5815 kHz, 09-03, 1325 UTC:	296/37 Achtung 73101 63280 40461 42748 41184 57142 78747 77296 04618 13650 17503 22841 50451 83250 38812 79126 66298 15004 09893 22445 05319 26230 83512 22612 55004 04229 63233 55997 07852 09771 98644 75429 91587 91041 61313 11247 33282 Achtung, rpt msg, Ende
5815 kHz, 15-03, 1325 UTC: 5815 kHz, 16-03, 1325 UTC:	294/37 Achtung 16997 08489 07264 09739 77673 05766 71743 16719 03663 68279 62893 42288 06618 91790 82451 62532 27372 08886 84652 49877 99947 02653 86301 41960 08861 56025 66202 33735 26084 41288 14367 21155 63367 07179 35942 62063 87949 Achtung, rpt msg, Ende

S06

9225 kHz, 21-03, 0830 UTC:

480 925 44
73201 71458 72797 15128 28810 62853 29344 45434 04714 58814
78430 31192 49124 23068 95405 58261 82515 27048 56151 54890
39941 74423 34229 30007 61753 67546 19795 69197 29868 40529
18027 92425 68208 21206 48133 98220 41359 58310 86475 50996
36804 26660 57159 43347
925 44 00000

S11a

5815 kHz, 23-03, 1020 UTC: 330/37 Vnimanje

01262 66032 81818 31906 10373 03971 17206 36702 38932 82292 79037 30026 87022 90213 98331 32282
98206 63372 20723 60823 09316 23797 03186 60823 17689 93261 83960 36732 17933 32927
61381 93162 37383 82223 69373 66691 13261
Vnimanje, msg rpt, kanyets

5815 kHz, 13-03, 1020 UTC:

227/31 Vnimanje
06441 84743 29641 96492 22920 01627 93061 54764 90290 98293 36963 08708 86299 81554 86474 01873
91627 40003 63643 98904 85843 48947 81508 43373 56596 95449 68704 29024 66303 49286
39368
Vnimanje, msg rpt, kanyets

7317 kHz, 12-03, 0915 UTC:

483/31 Vnimanje
37624 48883 95768 15176 91634 27211 07549 87441 31389 86335 16926 55032 44127 36911 73299 84709
76417 08903 34909 11605 32612 75352 26951 81559 04747 77015 38116 54260 68637 24012
74376
Vnimanje, msg rpt, kanyets

9960 kHz, 15-03, 1020 UTC:

422/33 Vnimanje
27209 62139 83977 04523 45615 17109 06205 41646 74635 56303 68666 91881 01066 07641 96112 55701
44234 64182 09265 90917 67217 62628 03079 11383 14727 24006 81057 13789 00991 86340
67156 42910 38547
Vnimanje, msg rpt, kanyets

16112 kHz, 14-03, 1015 UTC:

471/37 Vnimanje
18249 32312 53195 95165 21690 73619 93198 41432 64955 98726 76186 80230 24650 13217 78356 72771
04069 24356 11795 02831 14900 32728 22702 95343 86820 37171 08899 00711 83771 87098
01766 51827 57806 81604 56108 42479 88623
Vnimanje, msg rpt, kanyets

_S21_

4454//4854 kHz, 12-03, 1842 UTC:

454 (R) 231 231 30 30
92524 92524 36375 36375 64209 64209 88899 88899 41067 41067
50153 50153 54178 54178 99633 99633 46058 46058 80600 80600
14853 14853 56158 56158 10089 10089 51730 51730 26489 26489
07892 07892 08961 08961 14451 14451 37258 37258 63492 63492
49428 49428 63608 63608 40725 40725 74393 74393 80015 80015
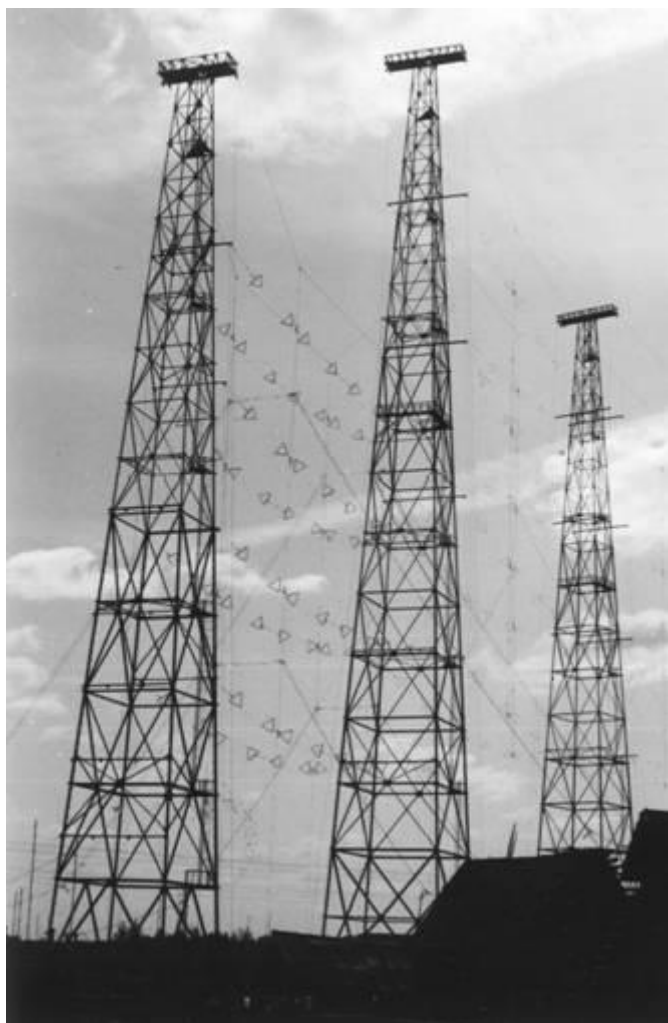21284 21284 99796 99796 89886 89886 49860 49860 82183 82183
231 231 30 30 000

S28 - The Buzzer

Mode: USB
Frequency: 4625 kHz

|	
07-03, 0900 UTC:	MDZhB 13 658 GEGEChKORETs 55 41 19 07
07-03, 1016 UTC:	MDZhB 34 895 MEGALOZAVR 26 91 91 38
07-03, 1017 UTC:	MDZhB 57 187 REVMANOL 48 60 30 05
11-03, 0326 UTC:	MDZhB 98 83 FENTOFOS
11-03, 0356 UTC:	MDZhB 61 51 TsINTIM
11-03, 0555 UTC:	MDZhB 69 37 BENZOKSI
11-03, 1432 UTC:	MDZhB 15 105 NEVZRAChNYJ 29 04 38 17
11-03, 1550 UTC:	MDZhB 17 542 TEVERON 37 99 98 13
11-03, 1553 UTC:	MDZhB 59 67 FENTAZIN

14-03, 0833 UTC:	MDZhB 03 556 FEBRIDOL 50 49 53 83
14-03, 0834 UTC:	MDZhB 50 282 ZEAZIN 42 86 01 31
14-03, 0835 UTC:	MDZhB 67 934 ADOPTATsIJA 07 11 64 84
14-03, 0903 UTC:	MDZhB 89 978 UDOBNY stopped and restarted much weaker at 0904 UTC
14-03, 0904 UTC:	MDZhB 89 978 UDOBNYJ 04 52 16 01
14-03, 0905 UTC:	MDZhB 24 048 ODKORA 97 20 79 15
18-03, 1520 UTC:	Buzzer on 5240 kHz till at least 2100 UTC
21-03, 1450 UTC:	MDZhB 68 498 DVUKRAN 97 01 22 39
28-03, 0829 UTC:	MDZhB 04 231 AVTOKAD 35 17 87 98
28-03, 0837 UTC:	MDZhB 02 586 EVTINIYa 70 62 42 28
28-03, 0842 UTC:	MDZhB 06 197 DVOROVYJ 76 77 13 16
28-03, 1020 UTC:	MDZhB 89 739 SOLONINA 68 33 37 61
28-03, 1021 UTC:	MDZhB 23 690 NABEGLYJ 81 64 38 51 Repeat: MDZhB 83 690 NABEGLYJ 81 64 38 51
28-03, 1024 UTC:	MDZhB 17 705 YaVLENIE 76 65 56 15
28-03, 1025 UTC:	MDZhB 80 091 SVITKA 46 27 65 97
28-03, 1048 UTC:	MDZhB 09 443 28 723 34 592 SKLEENNYJ 08 84 59 24
28-03, 1051 UTC:	MDZhB 31 164 KVINOKAIN 44 01 27 62
28-03, 1128 UTC:	MDZhB 39 345 TVIN 38 55 97 74
28-03, 1219 UTC:	MDZhB 36 795 UVIDENNYJ 06 91 80 31
28-03, 1240 UTC:	MDZhB 59 168 NAMOLVKA 81 30 73 20
28-03, 1242 UTC:	MDZhB 10 752 KVIVET 50 69 45 28
28-03, 1312 UTC:	MDZhB 82 064 VALCOVKA 83 39 62 76
28-03, 1325 UTC:	MDZhB 14 200 AVIAZ'YeSKA 88 97 72 83
28-03, 1326 UTC:	MDZhB 33 317 SVETLYJ 19 38 90 78

The pictures on the left and below were taken from Rimantas Pleikys' excellent book *"JAMMING"*   http://www.radiojamming.info

Vertical curtain array SW antennas for the long-distance sky wave jamming
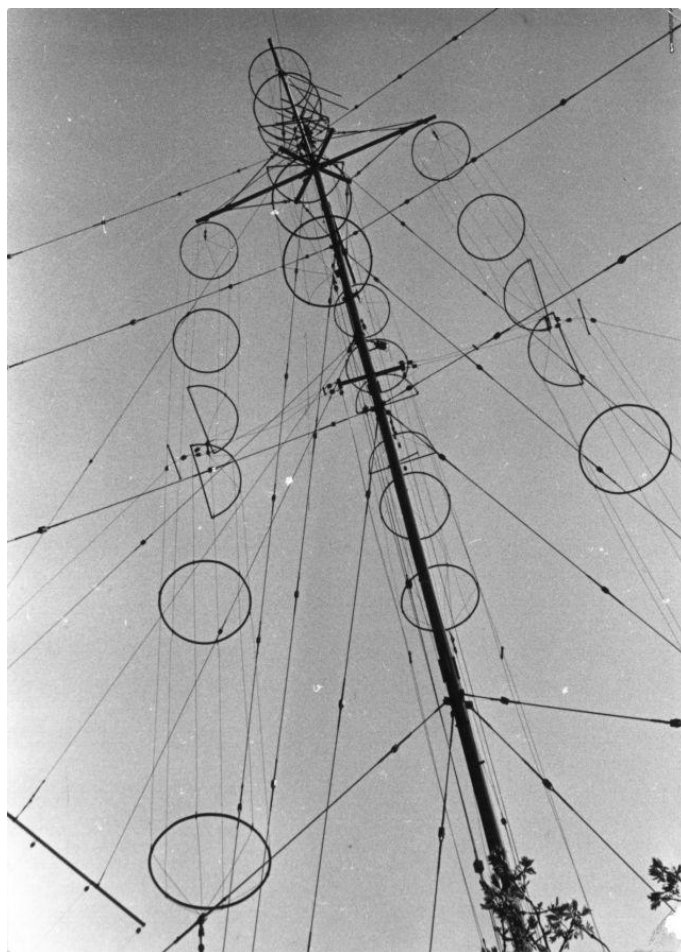
Jamming Object No 61, Klaipeda. Vertical "VGDSh" dipoles

S32 - Squeaky *Wheel*

Mode: USB
Frequencies: 3838 kHz (night), 5473 kHz (day)

5473 kHz, 14-03, 0952 UTC: Al'fa-45 98 266 UVORKA 37 86 48 78

RMv/RNv/RNAv/RAv
Russian military stations
Frequency: various
Mode: USB / voice

Russian Air Force (RAv)

Freq.	Date	UTC	Remarks
5833	6-3-2013	1849	Acft 56??1 clg Sporoh/Scoroh and Novor/Nobor w/no responses.
5833	26-3-2013	1302	Nabor w/88604 (not heard) w/radio checks
5833	26-3-2013	2048	Nabor (Y/L Russian) w/88604 (weak unreadable) w/encrypted msg ???/920/663/902/011/085
5833	26-3-2013	2056	Acft 96?59 calling Nabor w/no response
6685	2-3-2013	1444	Korsar (Russian AF Pskov) w/82032 (weak) ETA at Tver & fuel 78 tons
6685	2-3-2013	1450	Korsar w/82014 (weak unreadable) reporting depature from Kapa (sounds like) at 1419 MSK and landing at Aybaktum (sounds like) at 1700 MSK fuel 61 tons
6685	2-3-2013	1505	Korsar w/78842 reporting deparute from Kipelovo at 1855 MSK.
6685	3-3-2013	1428	Korsar (Russian AF, Pskov) w/82039 (AN-22 not heard) who reports departure from Kabul, Afghanistan at 1236 MSK. Also mention of aerodrom Al Batrov (??)
6685	3-3-2013	1428	Korsar (Russian AF, Pskov) w/82039 (AN-124 not heard) who reports departure from Kabul, Afghanistan at 1236 MSK. Also mention of aerodrom Al Batrov (??)
6685	4-3-2013	1247	78778 calling Proselok (Russian AF, Bryansk) w/no response. Klaranetist answers & 78778 reports ETA at ???-East (Vostochnij) at 1741 MSK & fuel 47 tons.
6685	4-3-2013	1620	Korsar w/82032 who reports working at "the point" according to the flt plan at alt 1000 Mtrs
6685	4-3-2013	1658	Korsar w/76741 reporting landing at (?Ryzan?) at 2050 MSK
6685	4-3-2013	1748	56776 calling Korsar w/no response. Klaranetist(Russian AF, Tver) responds & 56776 reports ETA at (?Krasoch-ka?) at 2130 MSK.
6685	7-3-2013	1805	Davlenie (Russian AF Taganrog) radio checks w/Proselok (Russian AF Bryansk), & Korsar (Russian AF Pskov)
6685	7-3-2013	1823	Korsar w/86496 (Russian AF IL-62) w/departure from Mozdok 0037 MSK and ETA (missed) 0430 MSK
6685	14-3-2013	1343	Korsar (Russian AF Pskov) w/82040 (AN-124) reporting departure for Kabul w/fuel 180 tons. At 1523 82040 reports passing (?BUDOP/BUTOP?) enroute to Kabul.
6685	14-3-2013	1401	Korsar w/78834 (prob IL-76) reporting departure from Chkalov (then rest fades out).
6685	14-3-2013	1453	Acft 78834 clg Davlenie w/no response. Korsar responds and 78834 reports passing w/fuel 58 tons. Asks Korsar to relay info to Davlenie (Russian AF Taganrog).
6685	14-3-2013	1630	Davelenie w/78834 (prob IL-76) reporting landing at Sochi w/fuel 80 tons.
6685	14-3-2013	1917	Korsar w/78834 reporting passing Makhachkala next will be the border (Granitsa) w/fuel 38 tons.)
6685	14-3-2013	1952	Korsar w/78834 reporting landing at Gabala, Azerbaijan at 2345 MSK.
6685	15-3-2013	1155	Korsar (Russian AF, Pskov) w/76746 (AN-72) caught at sign off.
6685	26-3-2013	2023	Korsar w/82014 (prob AN-124) reporting departure from Koltsovo and ETA (missed) for landing at Minsk. Fuel 128 tons
6685	28-3-2013	1749	Aircraft 78834 calling Davlenie (Russian AF Taganrog) w/no response. Korsar responds and 78834 reports departure from Anapa)
6685	28-3-2013	1754	Korsar w/75516 (unid) reporting work complete and RTB Anapa at 2115 MSK
6685	28-3-2013	1805	Korsar w/76726 (prob IL-76) reporting passing ?TUDEC? w/fuel 29 tons. At 1715 reports landing at Yerevan at 2115 MSK w/fuel 15 tons
6685	28-3-2013	1812	Korsar w/76612 (IK-76) reporting departure from Anapa at 08 past the hour w/fuel 30 tons
6685	28-3-2013	1828	Korsar w/78712 (unid). Korsar has trouble receiving him so another acft relays information that 78712 departed Karakniy (sounds like) at 2110 MSK w/fuel 43 tons
6685	28-3-2013	1921	Korsar w/7834 reporting departure from Anapa w/control ?RIBLA? at alt 1500 mtrs

Freq.	Date	UTC	Remarks
6685	28-3-2013	1936	Aircraft 76741 (AN-72) calling Polis (Russian AF Orenburg) w/no response
6685	28-3-2013	1939	Korsar w/76741 (AN-72) reporting departure from Pskov and ETA at Kubinka w/fuel 54 tons
6885	4-3-2013	0500	Korsar (Russian AF Pskov) w/78838 (IL-76MD) w/radio checks
6885	25-3-2013	1315	Kasar (Russian Air Force, Pskov): w/76786 flt status report. Only caught fuel remainder of 48 tons.
8090	6-3-2013	1501	Sporoh/Scoroh (sounds like) clg 56756 w/no response.
8090	6-3-2013	1502	Sporoh/Scoroh w/56759
8090	6-3-2013	1505	Sporoh/Scoroh w/76562
8090	6-3-2013	1515	Sporoh/Scoroh w/56756 w/3-figure group encrypted msgs.
8090	21-3-2013	1448	Russian Air Force "Nabor" (Y/L Russian) working with acft ??157 (first 2 digits missed--weak unreadable) who passes encpted msg 693/313/940/085
8090	21-3-2013	2102	Russian Air Force. NABOR clg aircraft 57832, xx252 ...
11354	28-3-2013	1600	Priboy (Air Transports Central Sector, Moscow) w/26947 (Russian Navy AN-26) reporting departure from Kacha and landing at Anapa at 1555 MSK w/fuel 5300 kgs. Flight info also QSL'ed by Novator (Air Transports Northern Sector, Murmansk)
11360	26-3-2013	1302	Proselok calling Korsar & Davelnie w/no response.
11360	26-3-2013	1302	Korsar (Russian AF Pskov) w/Davlenie (Russian AF Taganrog), Klaranetist (Russian AF Tver) & Proselok (Russian AF Bryansk) w/radio checks.
11360	26-3-2013	1312	Korsar w/86870 (IL-76M--not heard) confirming 1 hour flt w/fuel 63 tons. At 1413 Karsar confirms 2 hr flt w/fuel 50 tons. At 1544 86870 reports landing at Quadrille w/fuel 49 tons.
11360	26-3-2013	1420	Davlenie w/unheard acft confirming it was a flt of 3 acft enroute to Quadrille (unid).
11360	26-3-2013	1441	Korsar w/78809
11360	26-3-2013	1616	Korsar w/78794 reporting landing at Ivanova at 1950 MSK
11360	26-3-2013	1619	Dozor (unid Russian AF) w/uheard acft confirming fuel remainder of 48 tons
11360	28-3-2013	1157	Korsar (Russian AF Pskov) w/76740 (AN-72--not heard) confirming landing at Anapa w/fuel 43 tons.
11360	28-3-2013	1302	Korsar calling 76612 (IL-76) w/no response. Tries again at 1335 still w/no response.
11360	28-3-2013	1335	Aircraft 76?35 calling Pskov w/no response.
11360	28-3-2013	1409	Korsar calling 78835 (IL-76) who reports 1 hour flt time remaining at alt 3100 mtrs w/fuel 61 tons.
11360	28-3-2013	1648	Korsar w/78835 who reports work completed at 2039 MSK & will return to Murmansk. Korniti (sounds like---unid) w/Korsar QSL'ing for 78835 flt info

Russian Military (RMv)

Freq.	Date	UTC	Remarks
4357	5-3-2013	1320	Russian Mil. "Privkus30 Privkus30 80414 IYeRARHIYa 7282 2452 4668"

Russian Naval Air Transport (RNAv)

Freq.	Date	UTC	Remarks
11354	4-3-2013	1151	Priboy (Air Transports Central Sector,Moscow) w/52436 (Russian Navy AN-26) reporting departure from Anapa at 1135 MSK and ETA Kacha of 1945 MSK.
11354	4-3-2013	1152	Kacha w/Priboy confirmation flt info for 52436.
11354	4-3-2013	1233	Priboy w/26910 (Navy AN-26) w/report: 6222N/3300E at 1332 MSK alt 5200 Mtrs & fuel 4200 KG. Novator (Air Transports Northern Sector,Murmansk) asks Priboy for flt info confirmation.
11354	6-3-2013	1135	Priboy w/26901 who report landing at Levashevo
11354	14-3-2013	1106	Priboy (Air Transports Central Sector, Moscow) & Novator (Air Transports Northern Sector,Murmansk) w/26901 (Russian Navy AN-26) passing position (missed) at altitude 5800 mtrs fuel 4200 kgs and ETA at (missed) 1155 MSK.
11354	14-3-2013	1220	Priboy w/26947 (Russian Navy AN-26) reporting depature from Anapa at 1205 MSK w/ETA at Rostov of 1325 MSK w/fuel 5800 kgs. 26947 requests that info be relayed to Kraket (Air Transports Western Sector,Kaliningrad). Kraket w/Priboy QSL'ing for flt info.
11354	25-3-2013	1530	in progress
11354	26-3-2013	1433	Priboy (Air Transports Central Sector, Moscow) USB w/75095 (unid) reporting passing point (missed) at 1329 MSK at alt 7,300 mtrs w/fuel 11,000 kgs. Priboy then relays information to Novator (Air Transports Northern Sector, Murmansk)
11354	26-3-2013	1435	Acft 26909 (Russian Navy AN-26) calling Priboy w/no response. Novator responds and 26909 relays flt info (too weak to copy). At 1547 26909 reports passing point (missed) at alt 6,000 mtrs w/fuel 4000 kgs

V13 - New Star Broadcasting Station

星星廣播電台 Xīngxīng guǎngbò diàntái

Station #3: 7688 kHz, 0500 and 0600 UTC.

Station #4: 7654 kHz, 0700 and 0800 UTC en 7688 kHz, 1200 and 1300 UTC.

V24

Token was so kind to post an update for V24 and M95. Much appreciated, Token!!

Hello all,

It has been a while since I have reported anything. I have, however, been doing some recording and working on a new V24 and M94 schedule.

V24 is still active with its "new", deeper sounding, voice (started last year). It appears to have a very slightly reduced number of transmissions each month. I have been looking to see if it has shifted some traffic to new frequencies but so far have not located any, they still appear to be using the same four frequencies they down-sized to last year (4900, 5115, 6215, and 6310 kHz).

The 5115 kHz frequency is often slightly QRMed by Chinese OTHR. However, the signal is generally so strong that the QRM is hardly noticeable. The 4900 kHz frequency can be QRMed (in the western US) by the USCG transmissions on 4905 kHz, in California a good filter is required.

V24 in the past has habitually, most of the time, started on exactly the right time. XX00 and XX30 almost to the second. Over the last year I have noticed a tendency to start the music early and the message starts at about XX00 and XX30. It does not do this all the time, but frequently enough to be noticed.

M94 is still, surprisingly, on the air with 4 transmissions, 2 messages repeated for 2 days, each month. The only ID observed this month was 935. I believe I have not logged anything but 935 for several months.

The new V24 / M94 schedule (see below) can be found as a JPG at the same URL as it has been in the past:
http://token_radio.home.mchsi.com/V24_M94_latest_sched.JPG

It can be found as a Word doc at:
http://token_radio.home.mchsi.com/V24_M94_sched_1Q_2013.doc

That is all for V24 and M94 as seen here this past month.

T!

You can find Token's logs in the LOGS SECTION.

Day	1240	1300	1330	1400	1430	1500	1530	1600	1630
1		5115				5115	4900 ?	6215	
2		5115				6215	5115 **	6215	
3		5115	6310			6215	5115 **	6215 *	
4		5115	6310			4900		6215 *	
5				5115	6310	4900	6310 *		6310
6		6310		5115	6310		6310 *		6310
7		6310							
8									
9			6310						
10			6310	5115	5115				
11				5115	5115				
12									5115
13							6310 *		5115
14		6310 **					6310 *		
15		6310 **			6310		4900		
16			6310 ?		6310	4900	4900		
17						4900	5115	6215 *	
18		5115	6310			6215	5115	6310	
19		5115	6310			6215		6215	
20			6310 ?	5115	5115	5115		6215 *	6310 ?
21				5115	5115	5115	6310 *		
22		6310 **					6310 *		
23		6310 **	6310						
24		5115	6310						
25		5115							
26				5115			6310 *		
27		6310		5115			6310 *		5115 ?
28		6310				5115 !!	6310 !!		
29						5115 !!	6310 !!		
30						5115 !!	6310 !!		
31						5115 !!	6310 !!		

M94 is still active, but only 2 messages, 4 transmissions, per month. All messages are addressed to "935".
M94 is indicated on the chart with light blue background: [5115   ]

Notes and special conditions:
!! = only seen when this is the last day of the month only
? = only seen one time, possible error transmission
* = seen only on alternate months, odd months
** = seen only on alternate months, even months

V26

Although we see not many logs here, V26 seems to be very much alive. *T* sent us the following report on March 16th.

V26 currently (and for the last couple of years) uses two "sets" of frequencies that I am aware of. Set A is 9153, 7553, and 4283 kHz. Set B is 9054, 7345, and 4243 kHz. It is fairly common that one frequency is missing from a set during a transmission cycle, most often the 7 MHz frequency. I have not been able to determine a cycle or predictability to this missing frequency. Mode used by V26 for all frequencies is USB, except when there is an error. Mode errors are not common, but I note them a few times a year, one time I noted each of the three frequencies on a different mode, USB, LSB, and AM.

V26 is preceded on frequency by 2 other signals, all of variable length. First up on the frequency is a Chinese 4+4 modem in LSB. After the 4+4 completes a CW signal is heard, carrying the designation M95. This signal used to be most frequently seen on

one of the frequencies listed above, now it tend so to be 1 kHz lower, possibly as a result of the transmitter being left in LSB after completing the 4+4 modem. After M95 completes V26 comes up in USB.

V26 and friends does not keep a hard fixed schedule. Start tames are "about" so that if you hear them today on a frequency at a specific time you will probably hear them tomorrow at about the same time and on the same frequency. The 4+4 modem seems to start about the same time each day (+/- 10 minutes), but, since the other signals follow each other, the length of each segment determines when the next will start resulting in pretty wide variations by the time they get to V26. So a long message on the 4+4 means M95 will shift its starting time later with V26 starting even later yet.

These signals are on multiple times a day. It is not uncommon to hear set B used and then set A starting 10 or 20 minutes later. At this particular time, for example, there appears to be at least two transmissions sets a day, set B seems to be starting about 0900 and set A starting about 1000, and then later set B starts about 1200 and set A starts about 1300. There may be other times each day as well. In the past I have heard as many as 4 cycles per day, meaning each frequency set used 4 times in 24 hours, or 8 scheduled times in 24 hours.

T! from Mojave Desert, California, USA

VC01 - Chinese Robot
Chinese Air Defense

Modes: USB and LSB

The station changes its frequencies frequently. Known frequencies:
3036, 3749, 3837, 4075, 4258, 4343, 4410, 4422, 4427, 4480, 4530, 4580, 5195, 5232, 5288, 5303, 5328, 5330, 5393, 5442, 5592, 5700, 5742, 5764, 5802, 5832, 6209, 6479, 6771, 6840, 6858, 6860, 6949, 6960, 7090, 7351, 7608, 7684, 7726, 7739, 7744, 7756, 7770, 7792, 7864, 7865, 7880, 7890, 7904, 7924, 7938, 8000, 8025, 8170, 9000, 9169, 9192, 9290, 9340, 10508 kHz.

5442 kHz, 19-03, 1750 UTC
7904 kHz, 23-03, 0614 UTC
7904 kHz, 24-03, 0725 UTC
5442 kHz, 24-03, 1342 UTC

MORSE STATIONS

MX
Russian Military beacons

Current cluster frequencies: 3594, 4558, 5154, 7039, 8495, 10872, 13528, 16332, 20048 kHz **Other often used frequencies:** L 5156.5, 6917.5, 8497.8 kHz V 3658, 4084 kHz R 4325.9 kHz W, N, L, K, R 5620, 8029, 8170 kHz (Air Force)	**Cluster beacon slots:** .7 "D", Sevastopol .8 "P", Kaliningrad .9 "S", Severomorsk .0 "C", Moscow .1 "A", Astrakhan .2 "F", Vladivostok .3 "K", Petropavlovsk Kamchatskiy .4 "M", Magadan

Reported beacons and channel markers.

European Cluster Beacons: D, P, S, C, L ("A" was not reported)
Asian Cluster Beacons: F, K, M

16-03, 0711 UTC, 5156.5, 6917.5, 8497.8 kHz: "L" sending strings of "LLLLLZ". Back to normal around 1800 UTC.

Channel markers:
R: 4325.9
V: 3658, 4084, 5619.5
W: 5620, 8029, 8170
L: 5620, 8029, 8170
N: 5620, 8029, 8170
K: 5620, 8029, 8170
R: 8029, 8170 (not related to "R" on 4325.9)

Home of beacon "D" and navy Sevastopol

M03

6977 kHz, 23-03, 1536 UTC:

798/30 = =
68040 68040 12161 12161 55102 55102 11568 11568 92797 92797 10421 10421 57658 57658 42389 42389 59781 59781
92721 92721 79980 79980 04572 04572 03196 03196 92348 92348 52761 52761 99968 99968 90020 90020 47472 47472
39907 39907 77800 77800 74287 74287 70556 70556 16136 16136 41480 41480 97782 97782 37272 37272 14931 14931
04827 04827 23596 23596 48992 48992
= = 798/30 = =
68040 12161 55102 11568 92797 10421 57658 42389 59781 92721 79980 04572 03196 92348 52761 99968 90020 47472
39907 77800 74287 70556 16136 41480 97782 37272 14931 04827 23596 48992
= = 000

13

M12

10343 kHz, 12-03, 1830 UTC:

```
124 124 124 1 (R) 1112 54 1112 54
45108 61752 06118 65204 43648 07966 47014 33394 79632 78356
81278 26087 24424 86576 83538 55801 07369 71606 26300 24749
57193 34654 69207 31385 59006 70838 43539 54800 98068 19391
34832 63549 37434 92229 72043 30664 95830 36921 91357 22775
05722 95601 57550 33240 80023 03281 72128 76241 11699 45599
62730 57157 02858 27013
000 000
```

13479/11579 kHz, 24-03, 1850/1910 UTC:

```
845 845 845 1 (R) 4054 89 4054 89
87931 37327 03004 24749 29205 81746 56710 73111 79282 63320
01569 01461 29090 79546 51727 64040 94969 31692 18181 54455
29405 14584 55241 21327 46996 06486 52457 94556 58012 47809
22879 13852 61132 05139 74086 53568 69611 64295 90266 60731
76217 81981 30525 52269 39631 13589 22143 83660 25015 01874
03522 78050 47504 82304 11290 77078 60520 28770 46001 66146
66049 10307 26481 10495 05577 36850 97842 02380 35131 67111
80603 11237 21750 72664 25655 75709 13302 51246 70080 74656
70045 52997 34100 02282 62947 77950 07458 30869 09960
000 000
```

M14

6774 kHz, 11-03, 0712 UTC: in progress "0126" for 2 minutes then off. Carrier on until 0800
6774 kHz, 11-03, 0800 UTC: Error. G06 was replaced by M14. "215" for 2 minutes then into G06

10463 kHz, 27-03, 1000 UTC:

```
980 (R3) 425 425 36 36 = =
21.98 64642 10950 29919 96898 92388 97446 08937 63246 73304
12255 55904 71594 27016 64859 29993 01569 45448 52947 45214
76101 82902 26808 61184 59103 62793 96262 86469  .5932 99123
42288 55583  41677 56489 08544 65155 = = (Could be mistakes in some of the group due to distortion)
425 425 36 36
980 (R1) 673 673 51 51 = =
27374 39121 00226 30.10 88960 (Cont'd - Although signal loud, a bit distorted and some lagging from the remote tuner)
= = 673 673 51 51 00000
```

M18

Frequency change per March 1st from 3803 to 4073 kHz

4073 kHz, 04-03, 2126 UTC: 0126 0126 etc.
4073 kHz, 05-03, 2033 UTC: 0030 0030 0030 0031 etc.
4073 kHz, 06-03, 1751 UTC: 0050 0050 etc.
4073 kHz, 07-03, 2052 UTC: 0400 0400 etc.
4073 kHz, 08-03, 0156 UTC: 0156 0156 0156 0156 0157 0157 0157 0157 0157 0157 0157 0157 0158 etc.
4073 kHz, 08-03, 1820 UTC: 2220 2220 etc.
4073 kHz, 12-03, 1520 UTC: 1919 1919 1919 etc.
4073 kHz, 13-03, 1802 UTC: 0102 0102 etc.
4073 kHz, 20-03, 1805 UTC: 0019 0019 0019 0019 0020 0020 etc.
4073 kHz, 22-03, 2246 UTC: 0254 0254 0254 etc.
4073 kHz, 22-03, 2142 UTC: 0349 0349 0349 0350 etc.
4073 kHz, 22-03, 1958 UTC: 0204 0204 0204 etc.
4073 kHz, 23-03, 0155 UTC: 0902 0902 etc.
4073 kHz, 25-03, 1830 UTC: 2329 2329 2329 2330 etc.
4073 kHz, 26-03, 2202 UTC: 0705 0705 0705 0706 0706 etc.
4073 kHz, 30-03, 1821 UTC: 0037 0038 0038 0038 etc.
4073 kHz, 31-03, 1339 UTC: 2046 2046 etc.

M21 + variants
Russian Air Defence Forces
Войска ПВО   Voyska PVO

Id 0: 4390, 5752, 5913, 6425.5, 7994 kHz
Id 8: 5752 kHz

M23

Freq.	Date	UTC	Remarks
5345	12-3-2013	1731	135 (R5)
5914	29-3-2013	1702	747 (R) //7668 kHz
7668	13-3-2013	1704	747
7668	13-3-2013	1759	747
7668	15-3-2013	1755	747
7668	16-3-2013	1654	747
7668	17-3-2013	1804	747 ended with a very long DASH
7668	18-3-2013	1755	747
7668	21-3-2013	1756	747
7668	29-3-2013	1702	747 (R) //5914 kHz

M24

Freq.	Date	UTC	Remarks
5380	12-3-2013	1831	(ip) == 578 578 132 132 ttttt (rpt from 11.03.2013 1800 8116kc/ 1830 5410 Kc)
5410	11-3-2013	1831	441 (R3) 578 578 132 132 == 16818(x2)...
5410	25-3-2013	1830	441 9t6 9t6 132 132== 29946(x2) ..
6792	7-3-2013	1630	910 347 16 = 26351
8116	11-3-2013	1800	441 441 441 578 578 132 132 = = 16818 16818 ... 3t831 3t831 = =578 578 132 132 ttttt
8116	11-3-2013	1802	(ip)== 16818(x2)...== 578 578 132 132 ttttt (rpt 11.3.2013 1830 5410kc)
8116	25-3-2013	1800	441 9t6 9t6 132 132== 29946(x2)..
9083	12-3-2013	1809	(ip) 21t 21t ... ttttt

M32
Russian/CIS/Ukrainian
Military CW Stations

Freq.	Date	UTC	Remarks
3214.5	4-3-2013	1756	Russian Mil: SSEF
3337	5-3-2013	1725	Russian Mil. RMQW QSL .79 K. RMQW R K.
3651	30-3-2013	1800	PH6S: Russian Mil. PH6S OK ZQV ZSW3 K.
3870	23-3-2013	2238	Russian Mil. Simplex circuit. 1TLD obtaining receipts from (at least) O1IA SGY4 7SI3 and 1AY4
4062	5-3-2013	1432	Russian Mil. JXXS DE 2RQI K. R K. 8PL8 DE 2RQI K. R K. 6ND6 DE 2RQI K. R K. 2T.8 DE 2RQI K. R K. .E5 DE 2RQI K. R K. 1TM. DE 2RQI K. R K. EIX1 DE 2RQI K. R K
4401	1-3-2013	2049	VQE7 DE KMAU QSA/ QXS AR K. ZW3J DE KMAU. MZL4 DE KMAU
4456	21-3-2013	2118	Russian Mil. YRON clg BK8J and IQDG
4811	14-3-2013	1227	XXX XXX PABA PABA KORWET 375 K
5021	2-3-2013	0505	AUEP: Russian mil. Duplex net ; Calling Q3KQ and BLMX for QSA check
5052	2-3-2013	0518	DUAR: Russian mil. 7V1M DE DUAR QTC DUAR 23 2 172 0912 28 = 335 =
5062	2-3-2013	0505	2DFZ: Russian mil. 2DFZ and LQAY calling Duplex for net control X2IU
5109.9	2-3-2013	0443	7L7Q: Russian mil. IOFS DE 7L7Q
5114	15-3-2013	1902	VPF9: Russian mil. Calling ZNYJ for QRJ3
5129	2-3-2013	0442	KB5P: Russian mil. Duplex radio check with CYNF, HEK1 and 8VZQ
5265	21-3-2013	0814	Russian Mil. IKA5
5310	14-3-2013	1053	XXX XXX PABA PABA KORWET 375 K
5311.5	4-3-2013	1132	Russian Mil.XXX XXX PABA PABA KORWET 375 K
5311.5	9-3-2013	0606	KRPH: Russian Mil. Simplex radio check with CDLX and GSZQ
5416	4-3-2013	1135	Russian Mil.XXX XXX PABA PABA KORWET 375 K
5416	4-3-2013	1140	Russian Mil. BFPN QBE QYT 1 QYT 4 K BFPN RPT K etc
5416	14-3-2013	1056	XXX XXX PABA PABA KORWET 375 K
5416	14-3-2013	1232	XXX XXX PABA PABA KORWET 375 K
5426	8-3-2013	0407	Russian mil. HVCU wkg unheard stn, QSA? and numbered QTC.
5426	14-3-2013	0957	XXX XXX N1DX N1DX 05368 BROWNOZA 8339 2758 K
5426	14-3-2013	1037	XXX XXX N1DX N1DX 22739 GDOWEC 6848 2662 K
5426	28-3-2013	1031	XXX XXX N1DX N1DX 80360 PEREKARINA 5524 2648 K
5514	2-3-2013	2039	Russian Mil. Ends msg: ... KRGUB KRGUW KBGRU WBKGR BUWRG PEPWT RPT AL QLN K
5693	2-3-2013	2029	PCSX: Russian mil. DEK7 DE PCSX RPA ADS, PCSX R490
7768	26-3-2013	1901	TUC3: Russian Mil. "RD8O DE TUC3 QRV TUC3 QTC 123 10 26 2301 123 = 23456210 ="
7815	8-3-2013	0704	Russian Mil "... RMW36 ROXXZSA 2 K"
7815.5	18-3-2013	1853	1PZN: Russian Mil. "1PZN QTC 145 24 18 2236 145 = ZFT 658 = "
7825	18-3-2013	1901	KFAE: Russian Mil. "ZNVM DE KFAE K QRJ3"

Freq.	Date	UTC	Remarks
7963	2-3-2013	2117	Russian Mil. Msg in progress: ..2 03 0106 538 = ZUX 124 = FAAOY BÄUÜF UMChCZ CMÜUH HI... RPT AL QLN AR.
7964	5-3-2013	1858	ZF5A: Russian Mil. Duplex net clg GSZZ for QTC 665 19 5 2248 665 = 710 = LOZGK .....
7964	19-3-2013	1913	BY7M: Russian Mil. ip "...de by7m by7m qtc 7 6 7 17 19 23t4 767 = zd m 321= ppppp...244 ar"
8035.7	13-3-2013	1735	Russian mil. BR7K DE MNY2 QRJ3
8476	31-3-2013	1356	QIHJ DE B96I QSV K
8512	20-3-2013	0558	DKZ5: Russian Mil.
9149	21-3-2013	0728	Russian Mil. "D2NS D2NS D2NS DE MKWE MKWE QTC ZND 799 29 21 11 26 799 = ZND = 388 PPPPP AWOTE RITNO"
9187	12-3-2013	1651	Russian Mil. QRX K TK 7T 1653 QRX 75958 QRX 75958 K
10683	27-3-2013	1129	XXX XXX VN6B VN6B 7...8 ...NON 69.. 35.9 Transmission jammed
10796	10-3-2013	1012	rje56 wkg rje56, rjd71 and perhaps others, "..11068/11068 k rje56 qyt4...11 0 68k rje56 de rjd71 ok qyt4 qwh 11068/11068k rje56 qczk...rje56 de rjd71 ok qyt4 qwh 11068/11068k rje56rk...93166 27778 32558 1tt43 = rpt all arrje56k...831 44 1t 1128 831 = 68543 52148 78162...77144 6t724 47422 bb 47442k rmprptk...rje56rptpblk..."
11408	11-3-2013	1303	XXX XXX 59584 LEJKOTIP 3889 2729 Retranslation of WEGI
11408	11-3-2013	1342	REA4 REA4 11130 20069 75320 51405 11011 85600 18725 82458 41203 11103 81421 = REA4 K
11408	28-3-2013	0935	REA4 REA 4 07923 SPLOENX 5720 2162
12688	27-3-2013	1129	XXX XXX VN6B VN6B 7...8 ...NON 69.. 35.9 Transmission jammed
12688	27-3-2013	1141	XXX XXX VN6B VN6B 85973 SLUGA 8034 3640 Repeated at 1143 UTC. Transmission jammed
12688	27-3-2013	1206	XXX XXX VN6B VN6B 72722 BLESTAeNKA 6284 8654. Transmission jammed
12688	27-3-2013	1215	XXX XXX VN6B VN6B 06216 SORNOSTX 1307 0950. Transmission jammed
12688	28-3-2013	0846	XXX XXX X2BM X2BM 2V8I 2V8I 62737 96220 ARGOTIZM 9163 4475 POGREBICA 5226 8068
12688	28-3-2013	0933	XXX XXX SHEU SHEU 06923 41080 SPLOENX 5720 2162
12741	28-3-2013	1024	XXX XXX RGT77 RGT77 48164 23690 NABEGLYJ 8164 3851
12981	28-3-2013	0858	XXX XXX LNR4 LNR4 TUZR TUZR 5J7Q 5J7Q 93749 49041 22314 SUGREB 7750 4917 WEGLA 9699 4121 POGLAe-DENXE 1975 8497
12981	28-3-2013	0901	XXX XXX N1DX N1DX 05967 NAGAEOeNYJ 1212 4429
12981	28-3-2013	0904	XXX XXX G5CX G5CX F2ET F2ET 31329 07071 OeULOOeNIK 6060 6817
12981	28-3-2013	1051	1HSF 1HSF 94VT 94VT LNR4 LNR4 09443 28723 34592 SKLEENNYJ 0884 5924
12981	28-3-2013	1124	XXX XXX WLHN WLHN 23454 40703 88773 OPAJOeINA 6866 0417
12981	28-3-2013	1127	XXX XXX WLHN WLHN 15123 09449 88428 ALANT 7318 7549
13433	27-3-2013	1141	XXX XXX VN6B VN6B 85973 SLUGA 8034 3640 Repeated at 1143 UTC. Transmission jammed
13433	27-3-2013	1206	XXX XXX VN6B VN6B 72722 BLESTAeNKA 6284 8654. Transmission jammed
13433	27-3-2013	1215	XXX XXX VN6B VN6B 06216 SORNOSTX 1307 0950. Transmission jammed
13443	11-3-2013	1300	XXX XXX WEGI WEGI 82937 LEJKOTIP 3889 2729
13443	27-3-2013	1129	XXX XXX VN6B VN6B 7...8 ...NON 69.. 35.9 Transmission jammed
14411	11-3-2013	1309	XXX XXX WEGI WEGI 83361 82937 LEJKOTIP 3889 2729
14411	28-3-2013	0834	XXX XXX RGT77 RGT77 89565 01531 WOLYNKA 7194 9404

M32a
Russian Navy
Voyenno-Morskoy Flot Rossii

Freq.	Date	UTC	Remarks
4425	4-3-2013	2105	Russian Navy. RLO RLO RLO DE RIT RIT QTC 251 34 5 0057 251 = RADIO
5083	30-3-2013	2022	RIR98: Russian navy. Simplex contact with RCV requesting QYT4
5129	2-3-2013	0457	RIR98: Russian navy warship clg RCV Sevastopol
5129	15-3-2013	1804	RIR98: Russian navy warship calling RCV Sevastopol
5775	2-3-2013	0530	RCV: Russian Navy Sevastopol UKR. RIC87 DE RCV QTC
7664	11-3-2013	1913	RIW: Navy HQ Moscow calling RIS96
7861	18-3-2013	1905	RAL2: Russian Naval Air radio check with RFH2
8345	2-3-2013	1902	RHI99: navy warship 19:02 A1A/CW RCV DE RHI99 QSA?
8345	2-3-2013	1903	RHL80: navy warship 19:03 A1A/CW RCV DE RHL80 K
8345	29-3-2013	0430	Russian Navy. VVV RIW DE RGV82 QSA? RIW DE RGV82 QYT4 QLS. RGV82 OK AS2. RIW DE RGV82 OK QYT4

Freq.	Date	UTC	Remarks
			QWH 8338
8345	29-3-2013	0656	Russian Navy. VVV RIW DE RGV82 QSA?. VVV RIW DE RGV82 QSA?
8816	5-3-2013	1647	Russian Navy. 04102 DE RJF94 QSA3 QRV (04102 faint reply)
8816	5-3-2013	1650	Russian Navy. RJF94 QTO 1620 QRD XLLV XUMO QAY XUEM 1647 QAH 5500 QBD 0440 QAL XLLV 1820 K (04102 faint reply)
8816	5-3-2013	1839	Russian Navy. RJF94 DE 04102 QTC. RCB QQM XLLV 1837. VVV RCB DE RJF94 QSA? RJF94 DE RCB QSA3. RCB DE RJF94 RPT. 04102 K. RCB RPT QQM XLLV 1837. RJF94 R K
10796	11-3-2013	0747	RJE56: 301st central comms point Navy, mil unit 49383, Moscow signal check with RIT Severomorsk naval (RIT qsa4/RJE56 qsa2) later signal check and trfc with RJH57. RJH57 weaker then RIT, location unknown
10796	30-3-2013	0930	Russian Navy. RIW DE RJC66 OK QRR 3 QDW 11652 K
11418	2-3-2013	1747	RMP: Russian Navy Kaliningrad. RGV82 DE RMP
12464	28-3-2013	0952	RCRE: Russian Navy Vessel "RIW RIW DE RCRE OK QSU1 QWH 3086 QSX 122 K"
13469	13-3-2013	1030	Russian Navy: RJE56 QSA? K RJE56 DE .... RJE56 QSA2 QAP K. RJE65 DE RJE56 K. RJE65 DE RJE56 QYT4 QWH 9676 / 9176 QSX 9700 / 9914 K. RJE56 SK
14556	16-3-2013	1121	RIW: Navy HQ Moscow calling RFE70 and RFX56

Home of beacon "S" and navy Sevoromorsk
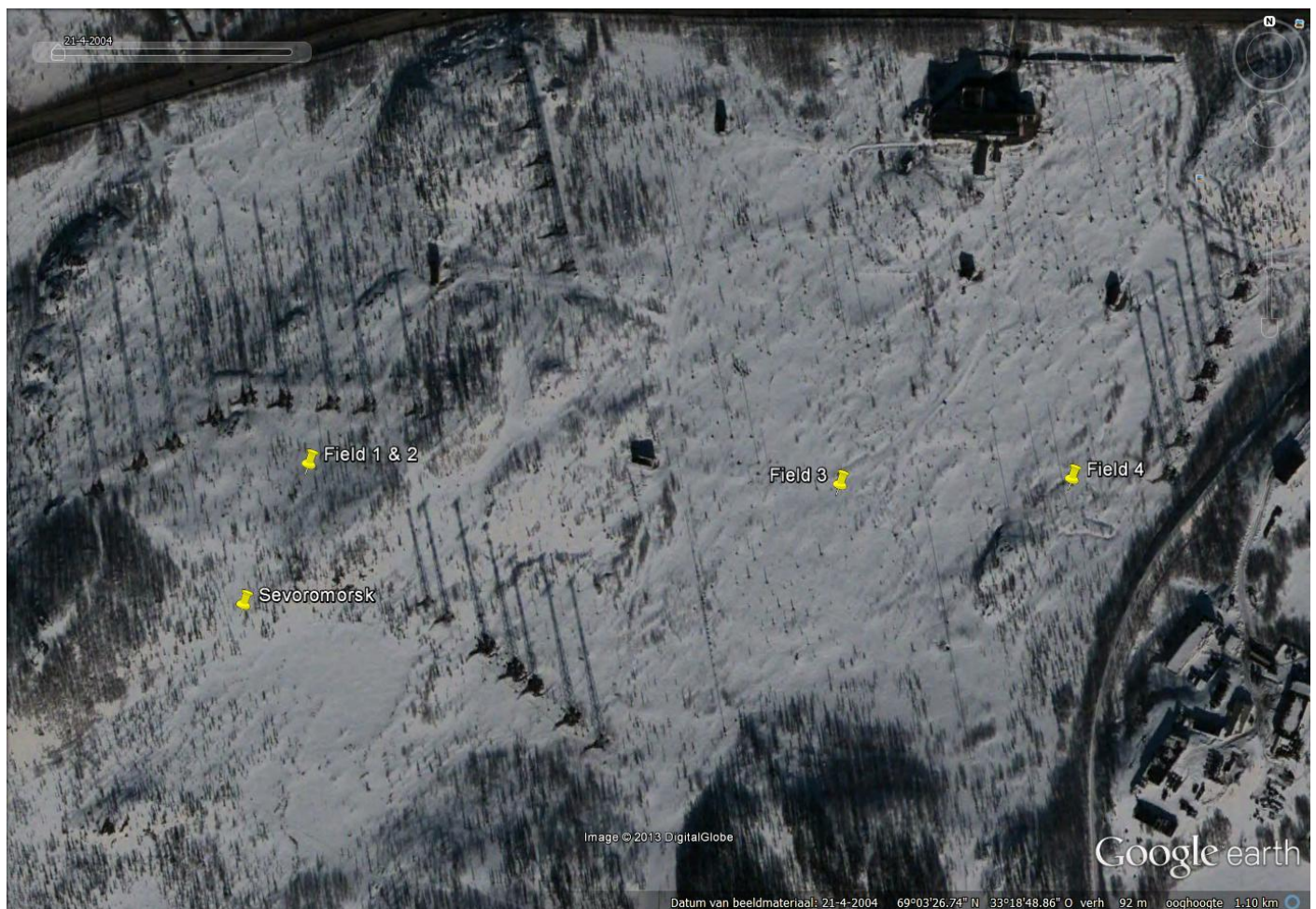
M32b
Russian Naval Aviation
Aviatsiya Voenno-morskogo Flota Rossii

Freq.	Date	UTC	Remarks
8816	29-3-2013	0952	Russian Naval Air Transport. RJF94 QTO 0947 QRD XRRC XRKE QRE 1010 QBD 14000 K. RJF94 RPT QTO 0947 QRD XRRC XRKE QRE 1010 QBD 14000 K
8816	29-3-2013	1009	Russian Naval Air Transport. RJF94 QQM XRRC 1007
13469	15-3-2013	0910	RJE56 Moscow wkg RJD52, Astrakhan Naval

M32c
Russian Air Force
Voyenno-vozdushnye sily Rossii

Most of the M32c logs are from Tom and Tony. Thanks to everyone who contributed.

This is an interesting net. I wonder if the markers mean anything. They are using 5 different markers, K, L, N, R, W. Maybe the markers indicate that a certain type of message will follow. Something like that. On the other hand, maybe they don't mean a thing :-)

Freq.	Date	UTC	Remarks
5619	26-3-2013	1921	Russian AF. wwwwwwwww k
5620	26-3-2013	2300	W-markers
5620	29-3-2013	2040	Russian AF. W-markers
5620	29-3-2013	2253	Russian AF. DIHI DE W4H1 K. W4H1 DE DIHI = 521 910 952 584 223 669 254 268 K. W4H1 = 521 910 952 584 223 669 254 268 K
5620	29-3-2013	2300	Russian AF. W-markers
8029	12-3-2013	0922	Russian AF. W-beacon and plenty of CW
8029	12-3-2013	1000	Russian AF. VVVVVVV + msg
8029	12-3-2013	1023	Russian Air Force. W Beacon and plenty of CW. Most CW has been VVVVVVVVV but there's been a couple of faint messages
8029	12-3-2013	1043	Russian AF. G8NO DE TRL5 K
8029	12-3-2013	1043	Russian AF. W-marker
8029	12-3-2013	1047	Russian AF. 069 012 315 024 428 K
8029	12-3-2013	1160	Russian AF. G8NO de TRL5 K. TRL5 QRV K. TRL5 = 903 444 704 972 274 K.
8029	12-3-2013	1335	Russian AF. 2QLC DE W4H1 (Repeats 3 figure traffic)
8029	12-3-2013	1520	Russian AF. W-markers followed by 2QLC DE TRL5 K
8029	12-3-2013	1600	TRL5: Russian Air Force 1600 CW W-marker until 16:02 then message: G8NO de TRL5 K. TRL5 QRV K. TRL5 = 903 444 704 972 274 K
8029	12-3-2013	1659	Russian AF. G8NO wkg TRL5: = 700 801 011 717 = (TRL5 qsl'd) followed by 20 seconds of WWW at 1700
8029	12-3-2013	1740	Russian AF. W-markers
8029	12-3-2013	1749	Russian AF. G8NO DE TRL5 K. (G8NO) QTC K. TRL5 QRV K. G8NO = 429 024 048 940 308 K. TRL5 OK = 429 024 048 940 308 C ? K. (G8NO) OK QRU ? K. TRL5 QRU K. (G8NO) OK K
8029	13-3-2013	1700	Russian AF. W-markers
8029	13-3-2013	1738	Russian Air Force bear net. CKW7 DE TRL5 QRV TRL5 = 521 3T5 362 62T T24 7T4 61T 779 C?
8029	13-3-2013	1738	Russian AF. CKW7 DE TRL5 K. (CKW7) QTC K. CKW7 = 521 305 362 620 024 704 610 779 K. TRL5 = 521 305 362 620 024 704 610 779 C ? K. (CKW7) OK SK K
8029	14-3-2013	1000	Beacon "W"
8029	14-3-2013	1020	Beacon "W"
8029	14-3-2013	1100	Beacon "W"
8029	14-3-2013	1135	Beacon "W"
8029	14-3-2013	1138	NP02(??) DE TRL5
8029	14-3-2013	1200	??? 303 541 966 836 043 779 C? K
8029	14-3-2013	1700	W Marker
8029	14-3-2013	1738	CKW7 DE TRL5 K. (CKW7) QTC K. CKW7 = 521 305 362 620 024 704 610 779 K. TRL5 = 521 305 362 620 024 704 610 779 C ? K. (CKW7) OK SK K
8029	15-3-2013	0900	Russian AF. W Marker
8029	15-3-2013	0920	Russian AF. W Marker
8029	15-3-2013	1000	Russian AF. VVVVVVVV
8029	21-3-2013	0540	Russian Air Force: "W" Markers at 0540, 0600, 0620 UTC
8029	21-3-2013	0638	Russian Air Force: WP5P DE TRL5 K TRL5 QSA 4 K
8029	21-3-2013	2020	Russian Air Force. W Markers @2020-22Z
8029	21-3-2013	2040	Russian Air Force. W Markers @2040-42Z
8029	22-3-2013	1220	Russian Air Force: W Marker
8029	26-3-2013	1805	Russian Air Force: 5XPY DE TRL5 QSA3 K. 5XPY DE TRL5. VVVVVVVVVV 5XPY DE TRL5 QSA3 K
8029	26-3-2013	1820	Russian Air Force: W-marker
8029	26-3-2013	1840	Russian Air Force: W-marker
8029	26-3-2013	1900	Russian Air Force: W-marker
8029	26-3-2013	1940	Russian Air Force: R-markers followed by W-markers
8029	26-3-2013	2000	Russian Air Force: W and R Markers, followed by L markers
8029	26-3-2013	2020	Russian Air Force: R, N and L Markers
8029	26-3-2013	2300	W-markers
8029	26-3-2013	2320	Russian Air Force. 5620 HAFL DE TRL5 K
8029	28-3-2013	1841	Russian AF. W-Marker
8029	29-3-2013	2040	Russian AF. W-markers
8029	29-3-2013	2253	Russian AF. DIHI DE W4H1 K. W4H1 DE DIHI = 521 910 952 584 223 669 254 268 K. W4H1 = 521 910 952 584 223 669 254 268 K
8029	29-3-2013	2300	Russian AF. W-markers

Freq.	Date	UTC	Remarks
8170	12-3-2013	1046	Russian AF. TRL5 (partial message copy) 069 012 315 024
8170	12-3-2013	1333	Russian AF. W4H1 DE 2QLC QTC (3 figure traffic very weak)
8170	12-3-2013	1749	Russian AF. TRL5 DE G8NO K.
8170	13-3-2013	1738	Russian AF. TRL5 DE CKW7 K
8170	14-3-2013	1738	TRL5 DE CKW7 K
8170	21-3-2013	1508	Russian Air Force: A8DO DE EGCE BLIND = 733 711 628 848 186 737 301 856 952 713 481 = 733 711 628 848 186 737 301 856 952 713 481 K
8170	21-3-2013	1510	Russian AF: A8DO DE EGCE BLIND = 461 711 012 845 256 369 713 941 = 461 711 012 845 256 369 713 941 K
8170	21-3-2013	1512	Russian Air Force: A8DO DE EGCE BLIND = 461 106 463 612 245 194 005 = 461 106 463 612 245 194 005 K
8170	21-3-2013	1515	Russian Air Force: A8DO DE EGCE BLIND = 902 966 810 194 553 = 902 966 810 194 553 K
8170	21-3-2013	1516	Russian Air Force: A8DO DE EGCE BLIND = 733 711 106 013 256 597 301 856 952 713 228 = 733 711 106 013 256 597 301 856 952 713 228 K
8170	21-3-2013	1519	Russian Air Force: A8DO DE EGCE BLIND = 733 711 810 686 605 463 301 329 843 194 310 = 733 711 810 686 605 463 301 329 843 194 310 K
8170	21-3-2013	1520	Russian Air Force: EGCE sending extensive blind messages.
8170	21-3-2013	1520	Russian Air Force: A8DO DE EGCE BLIND = 088 057 316 377 194 061 = 088 057 316 377 194 061 K
8170	21-3-2013	1527	Russian Air Force: W4H1 DE EGCE K. W4H1 K. EGCE QTC K. W4H1 DE EGCE = 733 711 628 848 186 737 301 856 752 713 481 K. W4H1 = 733 711 628 848 186 737 301 856 752 713 481 C ? K (EGCE) C K
8170	21-3-2013	1539	Russian Air Force: now working with EGCE on 8029 kHz. Aircraft EGCE. Control W4H1
8170	21-3-2013	1607	Russian Air Force: W4H1 DE EGCE = 461 168 694 810 205 090 418 K
8170	21-3-2013	1957	Russian Air Force. W4H1 DE EGCE K. (EGCE) QTC K. W4H1 DE EGCE = 5?? ?33 4?9 201 205 704 441 278 K
8170	21-3-2013	2007	Russian AF. W4H1 DE EGCE K. (EGCE) QRV K. (EGCE) RPT K. EGCE = 780 373 644 033 209 0?6 8?5 739 264 952 K
8170	26-3-2013	1932	Russian Air Force: W4H1 DE CKW7 K
8170	29-3-2013	0130	Russian AF. "DE DIHI GUHOR BLIND = 566 263 704 388 060 K RPT = 566 263 704 388 060 K"
8170	29-3-2013	2253	Russian AF. W4H1 DE DIHI K

M45

Freq.	date	UTC	remarks
4555	14-3-2013	1802	555 231/30 = 92524 //4955
4555	14-3-2013	1802	555 (R3) 231 231 30 30 = = msg = = 231 231 30 30 000 //4995 kHz
4556.3	12-3-2013	1802	41067 70153 54178 99633 46058 ...
4955	14-3-2013	1802	555 231/30 = 92524 //4555
4955	21-3-2013	1830	555 555 555 into 231 231 30 30 = = header followed by repeated 5F group message
4956.19	5-3-2013	1806	ip
4957.3	7-3-2013	1802	317 30 = = 76937 80076 59133 24590 ... 54045 91890 29868 63009 18936 = = 317 30 000 //4956.15
4995	14-3-2013	1802	555 (R3) 231 231 30 30 = = msg = = 231 231 30 30 000 //4555 kHz

M89
Chinese military

Lots of traffic copied by Jean-Paul who also found new frequencies and callsigns. Mauro also reported a new frequency. Great job gentlemen !

Stations, strings and callsigns:

VVV Q2M Q2M Q2M DE NYZ NYZ
V 7NPE 7NPE 7NPE DE QV5B QV5B
V DKG6 DKG6 DKG6 DE 3A7D 3A7D
V GKVZ GKVZ GKVZ DE Q7NW Q7NW
V RXP7 RXP7 RXP7 DE CZT2 CZT2
V H2FL H2FL H2FL DE DRV8 DRV8
V WITN WITN WITN DE GNXG GNXG
V JF3M JF3M JF3M DE LG5P LG5P

V K9GH K9GH K9GH DE M2ZF M2ZF
VV .... DE NIWS
DG75 DE FND5
V H1UT DE C44D
V 8CPZ 8CPZ 8CPZ DE XW6W XW6W
M6NW DE KQZE K
A6KW DE KQZE K
VD4J DE J4PQ

Messages and comments supplied by JPL:

3330 kHz, 04-03, 2239 UTC:

35A3 T54 N7D 7NUD .UN 75UT (Cont'd)
= 635T AR
MSG NR 016 CK 301 44 0.05 0630 =
356T U7AT UNT6 4NA6 576T N546 D7A6 (Cont'd)
= .35T (Silent – 2253z)

5588 kHz, 05-03, 1225 UTC:

MSG NR 019 CK 301 44 0305 2030 =
74N3 D567 45T3 A7T4 635N NU3NT37D6 N476 TT66 TTT6 7T4U (Cont'd)
= 3T4U
MSG NR 019 CK 301 44 0305 2030 =
74N3 D567 45T3 A7T4 635N NU3NT37D6 N476 TT66 TTT6 7T4U DA6N 7UTN (Cont'd)
= .... (Return to roundslip 1254z)

5588 kHz, 05-03, 2305 UTC:

453U A64T 536A NUAD TA37 5TU4 (Cont'd)
= 3T4U
MSG NR 020 CK 301 44 0306 0700
74N3 D5.7 45T3 A7T4 635N NU3NT37D6 N476 TT66 TTT6 7T4U DA6N 7UTN U3TT (Cont'd)
= 3T4U (2326z return to roundslip)

Note: Msg 020 is identical to msg 019 which was sent at 1228 UTC and repeated at 1242 UTC

5588 kHz, 08-03, 1131 UTC:

6743 UNAD N537 U65U UT6N 7NUA T653 U5AN (Cont'd)
II = 3T4U
MSG NR 031 CK 301 44 0308 0930 =
74N3 D576 45T3 A7T4 635N U3NT 37D6 N476 TT66 TTT6 7T4U DA6N 74TN UIUATA6DU
6743 UNAD N537 U65U UT6N 7NUA A653 U5AN 54N7 (slowed down sending speed- repeat of above msg – 1144z)
II = 3T4U (1154z silent)

This msg appears to be the same as msg nr 020 which was sent at 2313z on 05-03.

5588 kHz, 11-03, 1056 UTC:

CQ 63 1489 T..... COMM AAES 66 5175/1286/2000/117NR/2819 AR
= = = 65175/1286/2000/117NR = = =
65175/1286/2000/117NR/2819 AR AR

3330 kHz, 11-03, 1125 UTC:

MSG NR 043 CK 301 44 0311 1.30 =
UNTA UTN5 U3NT N... (Cont'd)
II = 74N3
MSG NR 043 CK 301 44 0311 1..0 =
UNTA UTN5 U3NT N5DS 53DT 5636 73U. (Cont'd)
II = 74N3

3330 kHz, 12-03, 2204 UTC:

MSG NR 048 CK 301 44 0313 .... =
.... 465U T43U 4363 7U3T TDN6 TT64 TTT4 (Cont'd)
II = ..6. (Signal fading very quickly – mostly unreadable)
MSG NR 048 CK 301 44 0313 .603 =
II = ... (mostly unreadable)

3330 kHz, 13-03, 2211 UTC:
(Message appears to be a repeat of MSG NR 048 sent last night at this time)

MSG NR 052 CK 301 44 0324 0630 =
TDTU U6DU ..TN 46.U T43U 4363 7U3T TDN6 TT64 TTT4 (Cont'd)
(signal faded)
II = ...
MSG NR 052 CK 301 44 0324 0630 =
T....U6DU ....

8050 kHz, 15-03, 1336 UTC:

76N7 6TUA U54T UA64 676N NA7U 57A. 4353 6475 III 437 6T5A 3U6A N3AT 354U DUA5 4N4T 67N3 56ND AUD3 4DUA T567 6U4T T6 4A TN34 6N4A 76UA 63D7 435D ANA6 UA66 U3AT 4A74 5UD6 4UA5 D3 TN 4T4A 637N 5U7N 53U6 3D5D 736D 45NA 54D5 7T47 37NA 3N73 47 U6 N467 D346 U53N 4DTU 674T 57DU 3U43 UAU6 75DT 3T5U NAT4 3D A6 NUDT 57AT 7A5 NUAT N373 N5D6 NT3D D6DN 6N5A UN7A DU.U U7T 5 5NAT T3DU D75A T47D T6U5 DNIN5 743U 3NT6 UN3NS 7AT 7UT5 N UAT N373 N5D6 NT3D D6DN 6N5A UN7A DU4? DU4U U7T5 5NAT T3DT D7 5A T47D T6U5 DNN5 743U 3NT6 UT3N AR K
K K K K K K K K K K K K K
RE R R U MSG GA K N GA
Female voice came up on freq and followed by data transmission at 1335z
Back to female voice at 1336z. Silent at 1344z

8050 kHz, 16-03, 1001 UTC:

4U5N UADN 57UA 5NUU (Cont'd)
UAUT 67UT 63A7 5TDU U7T6 356N 65AN TNNN T6T4 AAN7 67A4 UAU3
II = 6D3N AR
6D3N H7AD 3AN6 H77N UU34 ANT4 UNNA A567 5767 (Cont'd)
Did not send a msg nr – also strange that msg started with last group of
previously sent msg
II = ... AR (Missed ending – possibly U473 ?)
U473 N33U AA54 5AU7 6656 N7AT U77A 57U7 736A (Cont'd)
II = 4T53 AR
=
4T53 535T A5AU 55DN 6456 7N56 TNA7 7NT7 33DA 7T7T TA6A (Cont'd)
Again, started with last group of previously sent msg – Still no msg nr being
sent – Either this is a very long message or possibly operator training.
II = T677 AR
=
T677 A374 757T 5N47 TD5T A75D (Cont'd)
Again, started with last group of previously sent msg – end of msg format
same as that used by 2SLC.
II = 3D67 AR
=
3D67 U566 U3TU U57A 7TD4 T344 73UN 657A UA3N (Cont'd)

5821 kHz, 28-03, 0213 UTC:

D4.T 4U7A DDN3 .5DT 3AT. TU36 (Cont'd)
QSL ? K//A
... K//B (Other station on same freq – mostly unreadable)
R . 4W. 6 UN7 TU A3 U43T AR K//A
... K//B
RPT 76W = N6DU TU3D R K//A
... //B
87W = D7NA ? D7A7 .. 3N AR K//A
.... //B
R . GA K//A
(Other station into tfc – unreadable)

4621 kHz, 27-03, 1807 UTC:

NT67 5TDA NU.4 DTN. 4U.. (Cont'd)
AR QSL ? K //A
RPT 38W K//B (Both stations on same freq)
RPT 39W TA 4N TA4N K//A
QSL 0210 K//B
R UGM GA//A
...//B
GA//A
SAR7G GA K//B
R GA K//A
SR7G NR 67 CK 5 EE NR 067 CK 99 40 032. 0EEE67 CK 99 40 032.. 00
RMKS .039
TO 910.//B
... (Into tfc – mostly unreadable)
AR QSL ? K //B (1820z)
R QSL 031 EE K//A
R HR JK NR 22 K//A
R HR HRM EEE HR . R2900 //B
R NIL SK//A
... //B

7607 kHz, 30-03, 1315 UTC:

NW SVC GA NR 11 WS VV
HR VC GA NR 120 2115 RMKS .3.4 TO 2849/2354 =
COMM /2200/LZ441.4/2374/2849 AR
AGN
NR 120 2115 RMKS 2.7. TO ..48/2354 =
COMM/2200/LZ44164/2374/2354 AR
QSL ? HR WK NR 17
Return to round slip

5555 kHz, 25-03, 1105 UTC:

7AD3 3D4A TNAD ND6U 5 ? U45?
11200 = =
U35D 091718 =
3841091898622453643837D ..391 0182 0038 9707M E? 6540 6308
230? 2384 9929 6822 4167 7330 7062 8369 6897 2595 3143 2878
1216 9541 5198 7951 5635 7397 1314 728? 728.? 7283 5058 1040
4102 452 0570 7410 1382 6340 9358 9129 7082 2891 16? 1964
9127 1967 0764 0817 0? 6067 AR (Handsent – long zeros)
II EEEE AR (Silent - 1111z)

8142 kHz, 25-03, 1453 UTC:

N67T 6743 DUAD D... (Cont'd - handsent)
(When a mistake is made, the ? is used to make a correction)
EE K K
R R 2G.1MGA = =
U6DN 46.. T.3AT (Cont'd)
R. MP 5I EEEE 3P OM 1W GA = A4NU 75.D (Cont'd)
.R K
GA GA

5593 kHz, 16-03, 1812 UTC:

NU6T DT3U 3A54 U34A T5N6 43AD UNT4 T376 (Cont'd)
AR
R OK QSL 02 EEE
R QSL EEE
QSL 0212 K
W. K
R HR MSG GA NR 033 CK 99 63 0212 0027 . 1TD EEE RMKS 1668 TO 9535
GA
R 1W GA (Both on same freq)
= .. N.. N6UT .. (Cont'd)
R QSL 02.8 K
R OK
... CK 99 .. 1032 AS 0218 N.UI 953.. Q. 6O...
=
GA
4T7. AAD4 ... (Cont'd)
4UA7 TD7T TT.. N4U7 .55N AR
R R QSL 02.0 K
OK
HR MSG GA K
HR MSG GA MSG NR .34 2 EEE
NR 034 CK 199 72 0327 0230 RMKS 1668 TO 9532
GA GA =
TUDN 7D. ? 7D4T A5N4 4D6. (Cont'd)
AR
R QSL ....
U MSG GA
MSG NR 047 CK 299 1EEE
MSG NR 047 CK 199 04 0170 1406 RMKS 9532 TO 1668
R GA R =
D745 4.N3 D.N6 .D6U 5D3U A344 4347 (Cont'd)
AR
R R QSL 0259 K K
QSL 0259 K
OK RHR MSG GA K
GA
MSG NR 035 CK 299 14 0327 0259 RMKS 1668 TO 9532 K
GA =
4DN4D 6UD7 5D.. T (Cont'd)
AR K K
QSL 0EEE 0410 K EE
QSL 01 EE
QSL 0310 K
OK (Silent – 1916z)

3330 kHz, 11-03, 1355 UTC:

EEE (These 3 E letters were sent as Barred E – Handsent)
CQ 63 RMKS 1489 TO 4069 WETCOMM S. 033
65175/4069/2230/237NR/1489 = =
65175/4069/2230/237NR/1489 AR

3330 kHz, 11-03, 2241 UTC:

4U6T 3544 6U.U (Cont'd)
II = ..43

5500 kHz, 12-03, 1402 UTC: hand sent

22weeeee
VV UGT COMM = 0745/22U EEEE
UGT COMM = 0745/2230/M37/6820 AR

5588 kHz, 14-03, 1043 UTC:

75/2000/610NR/2819 AR
= 65175/2000/610NR/2819 AR

3330 kHz, 14-03, 1110 UTC:

MSG NR 05. CK 301 44 031. 1930 =
A4T3 UN34 AT64 .N6D N4T7 37DT TT64 TTT. 7N.. (Cont'd)
II = UTNA
MSG NR 055 CK 301 44 03.4 1... =
A4T3 UN3. UT64 .N6D N4T7 37DT TT64 TTTU 7N6T 57AU (Cont'd)
II = UTNA (Return to roundslip 1152z)

3330 kHz, 14-03, 2258 UTC:

MSG NR 056 CK 301 44 0315 0700 =
TDTN U6DU NTN3 465U T43U 4363 7U3T TDN6 TT64 TTT4 7576 3.34 675T
(Cont'd)
II = UN56
MSG NR 056 CK 301 44 03.5 0700 =
TDTN U.DU NTN3 465. T43U 436. 7U3T TDN6 TT64 TTT4 75.6 3D34 (Cont'd)
II = UN56 (Return to roundslip 2324z)

7582 kHz, 15-03, 1628 UTC:

AA7T 75TN DD34 A754 TA7A 3DNS3 A36. (Cont'd)
II = 3D67 AR (Silent - 1631z)

3330 kHz, 21-03, 2225 UTC:

MSG NR 08. CK 301 44 0322 0.30 ..
MSG NR 084 CK 301 44 03.3 ..
MSG NR 084 CK 301 44 .3.2.... =
A4T3 ..34 .T34 .... N4T7 .... (Cont'd)

5555 kHz, 21-03, 1253 UTC:

SVC QSL . 313 NR 00. K. CCK 5 C.5. (In tfc - handsent)
75.120.45 5N 7800 5313 K/C313. QSP T. T EE R SVC GA
SV. 3333. 3A 3AVE 3. 33 RM 3 =
SVC VVV QSL C.T.3 RTT16K CK. K
5075OAWA.T9455678 TO .313/.313/QSP P AR K K
= = 5U HR VVV HR SVC .. 11020 NW.S 4678 TO C313
(Format being used would suggest that this station is part of the QV4B
family)

3330 kHz, 06-03, 1636 UTC:

VVV UG GA GA BQB3 RMKS 2819 TO 1202/1489 UGT K (1638z)
COMM AES = = =
65175/1202/0200/117NR/2819 AR = =
65175/1202/0200/117NR/2819 AR AR = =
65175/1202/0200/117NR/2819 AR UGT AR AR AR

3330 kHz, 07-03, 1146 UTC:

CQ 63 RMKS 2819 TO 4371/1/1E89.COMM AAEEE
175/4371/2100/117//2819 AR
CN65 175/4371/2100/117//281/2/2819 AR (Sent extremely slow)
MSG NR 027 CK 301 44 0307 2000 =
A7D5 6UA5 4ADT 54NT 65T7 63T7 N36U (running groups together)
II = 4UA7 AR
MSG NR 027 CK 301 44 0307 2000 =
A7D5 6UA5 4A.T 54NT 65T7 63T7 N36 U456 TT66 TTTU (Cont'd)
II = 4UA7 II AR

Msg nr 027 appears to be the same as msg nr 024 sent at 2300 UTC, 06-03
except for the last group which is different

It should be noted that before the last group is sent, the format II = is used –
until now I've only been showing the =, but it is in fact II =

At the moment it appears that the same msg may be sent several times
during a 24 hour period using a different message number. (From my
observations so far, M89 stations appear to QSL the Date Time Group (DTG)
of messages and not the message number.

After looking at previous messages sent by Q7NW and comparing the format
of messages being sent by 2SLC, I'm now more convinced that Q7NW has
changed his callsign to 2SLC as well as changed freqs. Q7NW messages had
the same format as *2SLCMSG NR XXX CK 301 44 XXXX XXXX =* When sending
COMM messages, Q7NW format was CQ 63 RMKS XXXX TO XXXX .....
COMMS AAS - refer to yesterday's COMM msg sent by 2SLC and you'll see
the same format.

5555 kHz, 22-03, 1604 UTC:

UA7D N363 TUDN TTAN 5DDT 364D (Cont'd)
Operator having a lot of problems with his sending abilities – very slow and
poor CW
Second weaker station came up on frequency and sends the following:

VV .... DE NIWS
Original station on this frequency stops sending – 1617z
... 149/COMM/182.. 1550/99/.
HR SVC RA HR SVC GA = 1550NN EE
= 1552/99.49./.MMN.. = EE
Original station on this frequency sends again while second station
continues to send – 1618z
282./DUTY J.. 1.. 1..
Original station makes it impossible to copy weaker station – 1620z It stops
at 1626z
9505050 //A
DG75 DE FND5 // B
R DE K //A
RRIC = = 4446 AR K//A
R QSL ?//A
QSL .... //B
OK HR NR 120 K //A
R OK NIL SK GB //A
E EEEEEEEEE //A
0H H000 T DA3AUTNADTZ TU U3U6 3ADI 3U7T AU77 3TA7 773T AD77 3354
//A
VV DAHU //A
VV V DA3U TNAD T7.N 676A A56N //A
S7G. //B
MSG GA //A
MSG GA = TUTT A47NTA ? UA.43 TAU6 UAN5 5 //A
VV 334 //A
3333 43 //A
NR 00001 CK 91 055 0305 0 EE //A
MSG GA TAT NR NR 357 NUBSTAUNT 7 //A
EE M 7T35NA6ADNTU463T.? T657 453T.//A (Cont'd)

5314 kHz, 26-03, 1923 UTC:

555T A6D4 U3UD D456 AAUT AT6. (Cont'd)
(Using II = format when error is made in group)
II = 35DU 636T 4U57 DN65 6D4A (Cont'd – 1932z)
II II II
MSG NR 0048 CK 2274 70 0326 2011 =
U643 3.4T 5UT7 DUU7 A4N4 6ADD T6TA (Cont'd)
(This looks like it could be a very very very long message if actually 2274 groups!!!)
II = 337U 4NDN N3T. (Cont'd)
II = 767D U3.. 4N7U 7UN5 (Cont'd)
753N 76AD 76U7 (Cont'd)

5396 kHz, 28-03, 0240 UTC:

4A3D AR
QSA 2 K
HR RPT EEEE HR RPT 63W = 7T63 7T63 AR
R H. EE QSL .04. K
R WYR. 25.
NIL ..
UI EEE VD4J DE J4PQ
R QSA 2 K
R TR 1WNR 25 K
VV OWT EEEE
VV 0PQQ DE J..Q
R QSA 2 K
HR NPT. EEE HR WK 2 = U53AA
NR PT 33 OK
73 .. GB K
HR RPT 30.. DUAA K
QSL 10.. K
NR 250 K
NIL K
VV 9. DE J.PQ
R QSA 2 K
R QSL 10.. QSL 1030
VV ..N DE .... Q
QSA 1 ..

10261 kHz, 30-03, 1536 UTC:

6ANT 7U6A NN46 A5ND TU74 T5TU T.T7 TN4U (Cont'd)
= = N3T5 3N5D D6U4. (Cont'd)
II II II = = T5N6 .N6D 5D73 DTNA 4U5D D.34 (Cont'd)
UAA7 A4UA 6.AD 65.A 5T5N 47N5 73N5 A737 D5T6
T AR K QSL ? K
R SK
GB

5818 kHz, 21-03, 1306 UTC:

V K9GH K9GH K9GH DE M2ZF M2ZF (new callsigns)
3616 T471 56DU 7A64 T3TN (Cont"d)
AR (Did repeat of groups missed by other station - Other station on same freq, but very weak)
R QSL 1110 K
R GA
.. NR 084. CK 99 .. 032. ... = (To weak to copy)
QSL 211. HR WK NR 39 K
R QSL 2115 HR WK NR 39 K
R ..
17 CR HR NIL K
R SK (1318z - Silent)
V K9GH K9GH K9GH DE M2ZF M2ZF

7889 kHz, 25-03, 1636 UTC:

AS G CK 91 12 126 0035 K
A K N K N. N.
4 = = (Weak signal)
TDDD 65UN NA4U 6DU7 54AU 36TU 357U N73T (Cont'd – Machine sent CW)
AR QSL ? K
... (Other station is also on this freq but mostly unreadable)
R QSL 0.. K
R K
.. 2.. 0034 0..
= (Into tfc – mostly unreadable – Machine sent CW)
QSL .. S0 K
R EEE R Z QS. /W K
NO K (Silent – 1646z)

5432 kHz, 26-03, 1205 UTC:

T554 5445 65N5 DU.N 73NU 5354 A567 DU3T 7534 (Cont'd)
III = 34UN T5U6 4744 (Cont)
T6T4 AAN7 67A4 UAU3 III =
6D3N AR
=
6D3N 5T6A DII (Silent - 1227z)

5589 kHz, 26-03, 1755 UTC:

73UT 7DN5 DAT6 UN6A 576T 6ANT A74D .374 (Cont'd)
? 4U73 54T6 D45T TNU6 36AN ... AR K
NR R AG K EEE
RR AGN K
NGA K
N EEE R A6A EEE
NAGN 6
 N GA K
N QSL 0158 K
N EE NR EEELL NR 008/EX 0200 K
= = =
A6C5/ABC5 II =
ABC5/A.CH CK
SK

5225 kHz, 24-03, 1517 UTC:

R K
M6NW DE KQZE K
R K
A6KW DE KQZE K
R K
OTD. DE KQZE K
R K
..SO DE KQZE K
R K
AY.8 DE KQZE K (Silent - 1520z)

5555 kHz, 25-03, 1428 UTC:

22W 22W 22W
AGN
22W 22W
AGN
R OK QSL 2229
QSL 2229
SK GB
VV (Silent - 1432z)

5588 kHz, 06-03, 2300 UTC

MSG NR 024 CK 301 44 0307 0700 = A7D5 6UA5 4ADT 54NT 65AT 763T 7N36 U456 TT66 TTTU 5NT4 (Cont'd)

8050 kHz, 17-03, 1213 UTC. A very long message. Nice catch, JP!!!

NAAN 47N4 7UTD TTD4 34DA DT7T 35UN 4UDN 465T NTT6 U554 4535
5TT3 N73U N5NU 5635 T34A A46A 6U37 DNUD 7A43 766N 5T6U 7TDT
4UDU AND7 N36N 4D5U D6DA N645 U4U3 7NDN AD7A U7A6 T3D5 D545
3A7D 43TD 653N 63TD UA6T 7A54 D33U T7D4 4767 5T3A EEE BT
3T36 37DA E? DT36 7TT4 UTD3 67A7 D6AN 6NT6 TA67 TTD3 BU6 T7D6
NTN4 D6D4 N534 N5T5 U3N6 4AT7 3TDU DU5U 7TA5 76TA N7TA 7TTN
5TTU N4TU D747 U6A7 D6NT T55D AN5A 464U N55D AN4U N3NU N7DU
I? D5AN NUN7 D543 D57N 6446 376T D7NU 7663 UT47 4NND T53U
7D65 3AA3 5UNU 5NA4 4335 43AN 4535 A47D 4D? 4DN3 65AU N476
3U4A N746 D633 53T5 UD63 5DD5 N6AU ATDA N4N3 N574 34UT U6T6
35AT 6AD7 TUUT D44D 6A7T T4NT 4DAU DA5T 764U A33A 6U7A 4UT5
D37N 7D67 4ADU 56TU U7U7 634U 63AU AT7A 4353 54DU 3773 76D4
AT5N U57N ? 5A66 43NA 6U54 AR K
R R
= = UTD3 AR K. = 67A7 AR K. = 6NT6 AR K
AGN
= 6NT6 AR K. = TTD3 AR K. = TTD3 AR K. = TTD3 AR K. = TA67 AR K
= 4TDU AR K. = N4N3 AR K R. = TTT7 AR K. = TA74 AR K
AGN
R = ... AR K R = AND7 AR K. R SK EEEE AS. UMSG GA K. U7G GA K
R GA
R AEEEE 11QMG K (1227z)
JEEE 2PTT 19W K (1236z) (2ND Part of msg 19th group?)
EEE 12 K
AGN
R
1PTT AS
QSL 2036 K. QSL 2036 K. R
AS
UMSG GA K GA
3EEEE3PK 1W
R
12W K
AGN
FM R
60W K. 62 W
FM
2P K. 97W K. 97W. 1W K
EEEEE 1PO 28R K
QSL 2054 K
AS
HR 7G GA K
MSG NR 39 CK 199 47 0317 2000 K = =
4373 T5DN 7UTA 7N56 3TU6 5D64 T73A N6U4 TA66 TT4A U46D 35NA
(Cont'd)
AS
NT4T DUT4 ND4N N737 T7U6 (Cont'd) ADU6 ADUT 7ATN AR K
R
= U6N7 AR K
EEEE D = = 7ATN AR K
= ADUT AR K
AGN
= 6T3T AR K
AGN
R R = 43TN AR K
AGN
R = 5T3 EEEE = 5T63 AR K
= = 6N7D AR K. = 6N7D AR K
R AS
U7G N EEE HR 7G GA K
R
U7GA K
GA GA
3P K. 3P K. 27W K. 56W K
FM FM FM
AGN FM
6W K. 56W
R
FM FM
99W K R
99W K. 90W. 91W TO 95W. 91 TEEE 91W TO 95W K. 95W. 95W K
R 95W K. 95W K. 94W TO 99W K. 94W TO 99W K. 97W K. 90EEE 99W K

2P
68 K. 68 68W K R
94W K. 95W TO 94 K
AGN
R 96W K. 96W K
1P K
QSL EEEE QSL 2134 K. QSL 2134 K
AS HR 7G GA K
7G GA EEE 7G
NR 37 CK 299 80 0317 2000 K
7G EEE 7G
NR 37 CK 299 80 0317 2000 K
AGN
C HR K37 = =
365A 76UA 34DN T5UD UN6U 3434 D5U5 5ND3 TAND TTU4 (Cont'd)
6T76 6U46 ATA7 AN4T D7UA NDA5 6TNA A7AD AR K
R R R
AGN
R
AGN AGN
= 434N AR K. = NDA4 AR K. = 57A6 AR K
AGN
R = D674 AR K
R AS
U7G GA K
GA GA
AGN NR NR 40 K K
NR 40 K
7G NR 40 CK 299 47 0317 2000 K
AGN NR AGN NR
MS
110MGA K. 3W 3P K. 3W 32W K. 12W K. 51W K. 51W K.
AGN 5
74W K. 74W K. 74W K
AGN AGN
Z78W K. 2P K. 59W K
AGN
QSL 2215 K
HR7G GA K
R 7G NR 38 CK 199 CK EEEE
7G NR 38 CK 199 80 0317 2000 K = =
6T73 64NA NT5D 3U5A U743 AUT3 DN4N 37A4 TADA TT33 D7AU (Cont'd)
AS M
1P R
= TTA7 AR K. = TTA7 AR K. = TA67 AR K. = TA67 AR K
= N3NA AR K
AGN
= TUNT AR K. = 5A7U AR K
AGN
= T = 3DU3 AR K
R AGN
= U574 AR K
AGN
= DN4N AR K R
U7G GA K
GA 110M. K
GA
R R 45 3P K
48W
AGN
R R. 2P K. 60W K. R 60W K. R R. 856 .W K. R R. 69W K . R 65W K. R R
59W K. 55W K. R R
5 EEE 55 EEEE 55W TO 60W K
AS EEEE R R
58W K R R
6 EEE 6 6W K. 65 EEEE 66W K R R
15151P K
2P K
3W 14W K
R R QSL 2255 K QSL 2255 K
UHE R R HW 7G .HU7G GA K
U QSU 7G GA K UMS UMSG GA K
SK GB
R R VI V VV (Silent)

M94

See V24

VARIOUS MODES

SK01 / HM01
Dirección General de Inteligencia

HM01 logs. Mode: mixed AM (V02) and RDFT.

Freq.	Date	UTC	remarks
5855	10-3-2013	0513	in progress
9155	3-3-2013	1005	numbers station mixed voice + digital
9155	17-3-2013	1014	Numbers station mixed voice+digital YL Spanish
9240	3-3-2013	0941	numbers station mixed voice + digital
9240	17-3-2013	0943	mixed voice+digital YL Spanish
10345	10-3-2013	0555	Callup 18834 14677 28766 43164 83062 18606
10715	6-3-2013	2206	ip, voice + data
10715	6-3-2013	2230	ip, voice + data
10715	10-3-2013	2243	DGI Havana Cuba. Spanish YL 5FGs
10715	20-3-2013	2210	mixed voice+digital
10715	22-3-2013	2157	mixed voice+digital
10715	22-3-2013	2245	Spanish voiced numbers alternating with data.
10715	24-3-2013	2231	mixed voice+digital
10715	27-3-2013	2204	voice+digital
10715	29-3-2013	2205	mixed voice+digital
11530	1-3-2013	2300	16221 48266 45614 03742 84466 32805
11530	4-3-2013	2300	16224 14672 28761 03745 51103 81601
11530	14-3-2013	2300	38831 63373 35403 52561 83065 65052
11530	24-3-2013	2300	38831 63373 35403 52561 83065 65052
11635	6-3-2013	2140	ip, voice + data
11635	10-3-2013	1800	in progress - Spanish YL and RDTF data
11635	15-3-2013	2108	numbers station mixed voice+digital
11635	22-3-2013	2101	mixed voice+digital
11635	25-3-2013	2107	mixed voice+digital
12120	9-3-2013	0920	18833 data 14676 data 28765 data 43163 data 83061 data 81605 data
12120	16-3-2013	0949	ip, YL Spanish + RDFT
12120	23-3-2013	0931	mixed voice+digital
12180	9-3-2013	1008	18833 data 14676 data 28765 data 43163 data 83061 data 81605 data
12180	23-3-2013	0959	mixed voice+digital
12180	30-3-2013	1052	mixed voice+digital
13435	28-3-2013	0737	in progress
16180	7-3-2013	2113	ip, voice + data

Freq.	Date	UTC	remarks
16180	19-3-2013	2100	mixed voice+digital
16180	23-3-2013	2100	in progress - spanish yl alternating with RDTF data
17480	7-3-2013	2201	ip, voice + data
17480	14-3-2013	2229	YL Spanish + RDFT msgs
17480	21-3-2013	2207	mixed voice+digital
17480	23-3-2013	2213	mixed voice+digital
17480	27-3-2013	2202	voice+digital
17540	2-3-2013	2300	16222 48267 45615 03743 51101 32806
17540	5-3-2013	2300	16225 14673 28762 03746 51104 81602
17540	9-3-2013	2300	18834 14677 28766 43164 83062 81606
17540	15-3-2013	2300	38831 63373 35403 52561 83065 65052
17540	16-3-2013	2300	38831 63373 35403 52561 83065 65052
17540	22-3-2013	2300	22026 22811 22363 60151 45126 01642
17540	27-3-2013	2300	24082 22813 22365 60153 50272 01644
17540	29-3-2013	2300	24084 22815 86151 60155 50274 26741
17540	30-3-2013	2300	58361 40851 86153 44181 84751 26743

M42 & X06

Russian Government & Intelligence

Modes:
Various digital modes, CW, voice,
tones (Мазелка / Mazielka)

M42 Logs

Freq.	Date	UTC	Mode	Remarks
3394	22-3-2013	2142	FSK 200/1000	Russian Intel.
4469	14-3-2013	2020	FSK 200/500	Russian Intel
4495	12-3-2013	2320	FSK 200/1000	Russian Intel, 0-msg
5089	4-3-2013	1800	FSK 200/1000	Russian intel
5103	20-3-2013	2020	FSK 200/1000	Russian Intel
5208	12-3-2013	2220	FSK 200/1000	Russian Intel, 0-msg
5732	2-3-2013	0532	Baudot 50/500	FGDE: Russian Gov./Intel. 5F msg with =50= =100= group seperator to CNOX
5756	14-3-2013	2010	FSK 200/500	Russian Intel
6834	19-3-2013	2146	FSK 200/1000	Russian Intel.
6842	12-3-2013	2210	FSK 200/1000	Russian Intel, 0-msg
6927	12-3-2013	2310	FSK 200/1000	Russian Intel, 0-msg
7565	18-3-2013	0636	Baudot 75/500	Russian Gov/Intel.
7602	14-3-2013	2000	FSK 200/500	Russian Intel
7640	12-3-2013	2200	FSK 200/1000	Russian Intel, 0-msg
7642	16-3-2013	1725	FSK 200/1000	Russian Intel, 46 blocks
7954	27-3-2013	0540	Baudot 200/500	Russian Intel
7984	19-3-2013	2130	FSK 200/1000	Russian Intel.
8054	9-3-2013	1828	Baudot 187.5/500	Russian Gov/intel testing with ryryryryryry then at 1830 into null message

Freq.	Date	UTC	Mode	Remarks
				00000++++++++++162)5761
8054	16-3-2013	1830	FSK 200/500	Russian Intel, 0-msg
8073	20-3-2013	1744	Baudot 50/500	BZL26: Russian Gov/Intel.
8093	7-3-2013	0710	FSK 200/1000	Russian Intel
8093	27-3-2013	0710	FSK 200/1000	Russian Intel, 37 blocks, Id 0xb0
8177	12-3-2013	2300	FSK 200/1000	Russian Intel, 0-msg
8186	15-3-2013	1025	FSK 200/500	Russian Intel, 0-msg
9082	16-3-2013	1715	FSK 200/1000	Russian Intel, 46 blocks
9187	12-3-2013	1715	CW + FSK50/500	K4MT: Russian Government. QRX 75983 K QRX 75983 QRX 75983 QRX 75983
9187	12-3-2013	1742	CW + FSK50/500	K4MT: Russian Government. NT9P DE K4MT K4MT K QA3 QSA? K EAC1 ZZC K IAE HI4
9187	12-3-2013	1747	CW + FSK50/500	K4MT: Russian Government. QRX746 63K R6 6 3 QRX7 4 663K CFM AR SDGTE K
9203	20-3-2013	2008	Baudot 200/500	Russian Gov/Intel. "31301453126082387=80110 814765492956531112=80711"
9244	5-3-2013	1710	FSK 200/1000	Russian Intel, 0-msg
9244	12-3-2013	1710	FSK 200/1000	Russian Intel, 0-msg
9466	21-3-2013	0731	Baudot 200/500	Russian Gov/Intel. "027322619075368113=81914 420241249646757125=82115"
9964	16-3-2013	1705	FSK 200/1000	Russian Intel, 46 blocks
10292	16-3-2013	1825	FSK 200/500	Russian Intel, 0-msg
10508	22-3-2013	0810	CROWD-36	Russian diplo.
10644	17-3-2013	0525	FSK 200/1000	Russian Intel, 46 blocks
10670	7-3-2013	0700	FSK 200/1000	Russian Intel
10670	27-3-2013	0700	FSK 200/1000	Russian Intel, 37 blocks, Id 0xb0
10860	15-3-2013	1015	FSK 200/500	Russian Intel, 0-msg
11128	12-3-2013	1700	FSK 200/1000	Russian Intel, 0-msg
11164	16-3-2013	0920	FSK 200/1000	Russian Intel, 14 blocks, Id 0xbb
11164	17-3-2013	0920	FSK 200/1000	Russian Intel, 14 blocks, Id 0xbb
12093	16-3-2013	1325	FSK 200/1000	Russian Intel, 46 blocks
12093	17-3-2013	1325	FSK 200/1000	Russian Intel, 56 blocks
12115	19-3-2013	0920	Baudot 200/500	Russian Gov/Intel. "074154215474023115=90428 951501424228494174=85529"
12196	31-3-2013	1552	FSK 200/1000	Russian Intel, Moscow, repeat of earlier null message on 14671 kHz
12199	17-3-2013	0515	FSK 200/1000	Russian Intel, 46 blocks
13385	12-3-2013	1650	FSK 200/1000	Russian Intel, 0-msg
13411	16-3-2013	0925	FSK 200/1000	Russian Intel, 46 blocks
13431	16-3-2013	1120	FSK 200/1000	Russian Intel, 27 blocks Id 0x92
13431	17-3-2013	1120	FSK 200/1000	Russian Intel, 27 blocks, Id 0x92
13441	17-3-2013	0925	FSK 200/1000	Russian Intel, 46 blocks
13563	16-3-2013	0910	FSK 200/1000	Russian Intel, 14 blocks, Id 0xbb
13563	17-3-2013	0910	FSK 200/1000	Russian Intel, 14 blocks, Id 0xbb
13955	16-3-2013	1319	FSK 200/1000	Russian Intel, 46 blocks
13955	17-3-2013	1315	FSK 200/1000	Russian Intel, 56 blocks
14671	31-3-2013	1544	FSK 200/1000	Russian Intel, Moscow, repeat of earlier null message on 16243 kHz
14719	2-3-2013	1320	CW	FSK 200/500
14914	16-3-2013	0915	FSK 200/1000	Russian Intel, 46 blocks
14914	17-3-2013	0915	FSK 200/1000	Russian Intel, 46 blocks
15708	22-3-2013	1057	FSK 200/1000	Russian Intel, Moscow
15817	17-3-2013	1105	FSK 200/1000	Russian Intel, 32 blocks
15817	17-3-2013	1305	FSK 200/1000	Russian Intel, 56 blocks
15876	16-3-2013	0900	FSK 200/1000	Russian Intel, 14 blocks, Id 0xbb
15876	17-3-2013	0900	FSK 200/1000	Russian Intel, 14 blocks, Id 0xbb
15925	16-3-2013	1110	FSK 200/1000	Russian Intel, 27 blocks, Id 0x92
15925	17-3-2013	1110	FSK 200/1000	Russian Intel, 27 blocks, Id 0x92
16286	20-3-2013	1225	FSK 200bd/1000	Russian Intel, Moscow
16305	2-3-2013	1310	FSK 200/500	Russian Intel
16305	16-3-2013	1310	FSK 200/1000	Russian Intel, 0-msg
16320	6-3-2012	0150	FSK 200/1000	Russian Intel. Msg of 28 blocks "fd, 12, b0, e6, 00, 00, 01, 10, 38, 00, 70, 00, 08, 00, f9, dc, 00, 01, 98, 00, 80, 00, 80, 07, 30, 0e, 6c, 00, 00, 03, f8, 00, d8, 05, 00, 04"etc.
16320	4-3-2013	0150	FSK 200/1000	Russian Intel. Id 0x31

Freq.	Date	UTC	Mode	Remarks
16320	4-3-2013	2240	FSK 200/1000	Russian Intel
16320	5-3-2013	0150	FSK 200/1000	Russian Intel.
16320	11-3-2013	0150	FSK 200/1000	Russian Intel Id 0x33
16320	11-3-2013	0150	FSK 200/1000	Russian Intel.
16320	12-3-2013	0150	FSK 200/1000	Russian Intel. Id 0x30
16320	15-3-2013	0150	FSK 200/1000	Russian Intel. Id 0x31
16320	18-3-2013	0150	FSK 200/1000	Russian Intel. Id 0x1
16320	19-3-2013	0150	FSK 200/1000	Russian Intel. Id 0x30
16320	20-3-2013	0150	FSK 200/1000	Russian Intel.
16320	21-3-2013	0150	FSK 200/1000	Russian Intel.
16320	22-3-2013	0150	FSK 200/1000	Russian Intel.
16320	25-3-2013	0150	FSK 200/1000	Russian Intel. Id: 0x31
16320	27-3-2013	0150	FSK 200/1000	Russian Intel. Id 0xaa
16320	27-3-2013	0150	FSK 200/1000	Russian Intel.
16320	28-3-2013	0150	FSK 200/1000	Russian Intel. Id 0x31
16320	29-3-2013	0150	FSK 200/1000	Russian Intel. Id 0x31
17452	16-3-2013	0908	FSK 200/1000	Russian Intel, 46 blocks
17452	17-3-2013	0905	FSK 200/1000	Russian Intel, 46 blocks
17464	16-3-2013	1100	FSK 200/1000	Russian Intel, 27 blocks, Id 0x92
17464	17-3-2013	1100	FSK 200/1000	Russian Intel, 27 blocks Id 0x92
18437	2-3-2013	1300	FSK 200/500	Russian Intel
18437	16-3-2013	1300	FSK 200/500	Russian Intel, 0-msg
18437	16-3-2013	1302	Baudot 200bd/500	Russian Gov/Intel. 576 1 00000 +++++ +++++ 162
18563	6-3-2013	1234	FSK 200bd/1000	Russian Intel. 5min call-up with null message
20885	21-3-2013	0907	Baudot 100/500	Russian diplo. Tfc on link 70169. Header: 11100 70169 40297 21022 03223

M42a logs

Freq.	Date	UTC	Mode	Remarks
5840	7-3-2013	1901	CW	GRU HFDF net. VVV ZLD ZLD ZLD
5840	7-3-2013	1907	CW	GRU HFDF net. VVV NWÄ NWÄ NWÄ 57856 Ä 67584
10436	2-3-2013	1403	CW	GRU hfdf net "vvv vvv vvv QSV 3k"

Trond posted a list of M42a frequencies. Thanks for that!

* = frequently used   () = single use, no regular transmissions observed, probably excercise related

2810, 3207, 4103.75, 4200, 4544*, 4559, 4977, 4988*, 5280, 5423, 5477, 5504*, 5817, 5825, 5840, 6243, 6263, 6374, 6423, 6810, 6812, 6825, 6874, 6934, 6951.5, 6973, (6998.5), 7697*, 8107*, 9055, 9088, 9142, 9160, 9228, 9316, 9350, 9358, 10126, 10202, 10435.75*, 10436*,10456, 10535.75, 10814*, 10948, 11041*, 11073*, 11082*, 11484, 13021*, 13066, 13426, 13435, (14352), 14716, (16927), (19354), 20200.4 kHz

X06 logs

Freq.	Date	UTC	Remarks
5800	20-3-2013	1900	Mazielka ip
6942	20-3-2013	1904	Mazielka. Sequence: 4213#6 (1904-2000(?))
6942	21-3-2013	1758	Mazielka. Sequence: 654321
7730	15-3-2013	0938	Mazielka. Sequence: 123456
7730	16-3-2013	1829	Mazielka. Sequence: 212112
7731	16-3-2013	1801	Mazielka. Sequence: 113456 (1801-1809)
7732	14-3-2013	1615	Mazielka
7855	16-3-2013	1605	Mazielka. Sequence: 113456 (1605-1710)
7856	16-3-2013	2159	Mazielka. Sequence: 121212 (2159-2207)

Freq.	Date	UTC	Remarks
8100	16-3-2013	1719	Mazielka. Sequence: 113456 (1719-1723)
8100	25-3-2013	1825	Mazielka. Sequence: 123456 (1825-1920)
9300	13-3-2013	1137	Mazielka. Two tones.
9300	16-3-2013	2034	Mazielka. Sequence: 223456
10508	22-3-2013	0815	Mazielka. Sequence: 162543
10653	22-3-2013	0849	Mazielka. Sequence: 356412
10871	16-3-2013	1617	Mazielka. Sequence: 113456 (1617-1703)
11090	16-3-2013	1859	Mazielka. Sequence: 223456
11091	16-3-2013	1745	Mazielka. Sequence: 113456 (1745-1848)
11571	16-3-2013	1312	Mazielka. Sequence: 113456 (1312-1320)
11571	16-3-2013	1323	Mazielka. Sequence: 113456 (1323-1403)
12091	13-3-2013	1347	Mazielka. Sequence: 216354
12100	16-3-2013	1424	Mazielka
12101	16-3-2013	1502	Mazielka. Sequence: 113456
13416	16-3-2013	1511	Mazielka. Sequence: 113456 (1511-1558)
14570	15-3-2013	0930	Mazielka. Sequence: 324615
14576	15-3-2013	0929	Mazielka. Sequence: 324615
14650	13-3-2013	1343	Mazielka. Sequence: 215346
14811	28-3-2013	1545	Mazielka. Sequence: 263145
14876	15-3-2013	0927	Mazielka. Sequence: 123456
15946	17-3-2013	0743	Mazielka. Sequence: 121212 (0743-0959)
16115	20-3-2013	1249	Mazielka. Sequence: 436457
16226	15-3-2013	0925	Mazielka. Sequence: 324615
20170	18-3-2013	1043	Mazielka. Sequence: 123456
20170	21-3-2013	0900	Mazielka. Sequence: 135246

XSL a.k.a. Slot Machine
Japan Maritime Self-Defense Force
海上自衛隊 *Kaijō Jieitai*

4153, 4231.5, 6250, 6417, 6445, 8313, 8588, 8703.5 kHz.

Mode: QPSK 1500bd

Reportedly telemetry transmitted by the Japanese navy. Copied at various dates and times.

North Korean diplomatic stations

16320.0 kHz, 27-03, 0835 UTC, DPRK-ARQ 600/600:　　　**MFA Pyongyang**
17413.5 kHz, 27-03, 0115 UTC, DPRK-ARQ 600/600:　　　**MFA Pyongyang**

XP family

8062 kHz, 07-03, 1921 UTC:

Block Sync
4444444444
304 304 304 1 304 304 304 1 304 304 304 1
Block Sync
4444444444
Block Sync
6
Message Start
00111 00101 44163 46222 7390 40544 79362 5901 4444 63444
88956 23566 4149 4983 12774 20606 75976 33402 25199 95382
0045 78239 90438 47995 17634 00844 15058 95731 50568 73814
78709 65820 69684 14028 41817 12738 46914 00549 00575 61828
73544 01154 93686 03085 39360 12940 67900 06610 22959 56548
53329 95415 44287 81293 64379 29349 70023 47866 00154 08959
61478 44293 4329 3445 666662666662688069 2800 34900 78870
1772077888833811 0112 1127 3155 9778 8782 44335 88747 88862
82203 59997 4166 56530 74309999030

8062 kHz, 21-03, 1921 UTC:

Block Sync
4444444444
Block Sync
304 304 304 000 304 304 304 000 304 304 304 000
Block Sync
444444444
Block Sync
6
Message Start
02335 00001 00000 10140

8062 kHz, 12-03, 1922 UTC:

Block Sync
4444444444
Block Sync
304 304 304 000 304 304 304 000 304 304 304 000
99996666662662222
4444444444
46666222622222222222222222222222
Message Start
08293 001 00000 10140

7462 kHz, 12-03, 1940 UTC:

Block Sync
4444444444
6666622262626304 304 304 000 304 300 04 000 304 304 334 000

7462 kHz, 21-03, 1940 UTC:

Block Sync
4444444444
Block Sync
304 304 304 000 304 304 304 000 304 304 304 000
Block Sync
444444444
Block Sync
6
Message Start
02335 00001 00000 10140

Egyptian diplomatic stations

Modes: SITOR-A 100/170 & Codan-9001

18033 kHz, 16-03, 1431 UTC, SITOR-A 100/170, Codan chirp, 16 tone modem
   MFA Cairo "99901" wkg Egyptian embassy Muscat "17" or "TVXY"

UTILITY ROUND-UP

Polish Military

Evan copied an unid Polish military net. Most probably an army net.
4847 kHz, 27-03, 1230-1300 UTC, voice and digital transmissions.
Callsigns: Opylacz70 and Stek57

Polish Air Force

Tony recorded the usual Wednesday morning exercises of the Polish Air Force on 6354 kHz USB, 13-03, 0700-0730 UTC.

Notes:
1. It started at 0700 UTC instead of the usual 0730
2. There didn't seem to be a use of a collective callsign this time. "Control" called individual callsigns
3. The message format appeared to be different. It was still structured, but wasn't groups of letters
4. Recording: http://snd.sc/ZC7Xbo

Dictionary:
"tu" = "this is", "Odebrano" = "Received", "rozdzial" = "Chapter"

Callsigns:
WWU (Control), WGA, KWO, M35, J9J.

0705 UTC:	**WGA tu WWU HZMM powtarzam (repeat)**
0709 UTC:	**WGA tu WWU HZLBMB**
0712 UTC:	**WGA tu WWU rozdzial YWSO powtarzam**
	(tu) WGA czekac (standby)
	tu WGA rozdzial
	WGA tu WWU odebrano
0713 UTC:	**KWO tu WWU rozdzial**
	tu WGA
	WGA tu WGA odebrano
	KWO tu WWU
0714 UTC:	**J9J tu WWU rozdzial**
	M35 tu WWU rozdzial
	J9J tu WWU rozdzial
0716 UTC:	**KWO tu WWU (Polish)**
	rozdzial KKUO rozdzial
	(message in Polish, not groups as before, but in a structured format, maybe numbers??)
	(Ends) OYNPKEUD (authentication??)
0719 UTC:	**tu WGA (Polish)**
	WGA tu WWU odebrano
	J9J tu WWU odebrano
0720 UTC:	**M35 tu WWU rozdzial**

The following logs and comments come from Ron, Geir and Maciej. Thanks for that.

11178 kHz, 27-03, 1042 UTC:	Unid wkg aircraft PLF-020 passing flt route information.
11178 kHz, 27-03, 1102 UTC:	PLF-252 (Lockheed C-130E Hercules) clg Arkada-25. Point 6 reached ETA 12:34 (unreadable)
11178 kHz, 27-03, 1146 UTC:	PLF-40 another Casa calling probably Arkada-25 (mostly unreadable)
11178 kHz, 27-03, 1204 UTC:	PLF-252 again working Arekada-25 giving eta to ?? at 14:41 UTC.
11178 kHz, 27-03, 1337 UTC:	Arkada-25 rxed and established another radio check at 13:37. PLF252 ack and tnx. Another pilot: Czesc Lukasz (Hi, Lukasz). PLF252: ack
	PLF252: Wojtek , slyszysz mnie (Wojtek, do you copy me?). PLF252: Hi, where are you? Air Bis?: We're just breathing over Zurich. PLF252: We are reaching Luxembourg so we might copy each other later. PLF038 calling Arkada25 on 11178 kHz, (another Casa C295/21). Radio check... and then "As you might have heard, sir, ... ??? behind us" - sounds like they were climbing and crossed alt point. PLF038 might be the one who first came as ERBIS (AirBis) in loose chat with PLF252
11178 kHz, 27-03, 1438 UTC:	PLF0-40 calling Arkada25
11178 kHz, 28-03, 1122 UTC:	PLF-25 clg Arkada-25
11178 kHz, 28-03, 1221 UTC:	Arkada w/PLF 025 with flight information.

Beacons

Chris found again a number of ditter beacons but not on the same frequencies as last time (see N&O 183).
Chris found the ditters on these frequencies so far: 10670, 10830, 10990, 11150, 11830 kHz.

Unid stations

Unid, possibly US diplo related. If you have any info for us, please let us know.
8058.6 kHz, 13-03, 1015 UTC.
Recording: http://snd.sc/ZzjhFa

Copied by Tony. Tony reports: *After going through the recordings it seems it's a weekly radio check after a "thanks for the weekly radio check".*

KWX90 does a "Challenge Authenticate" with KWT94 - "Challenge TZ". Then KWT94 Challenges back with "Challenge CD", answer "S". Additional callsign: KWX92

Igor copied a station on 7050 kHz, 12-03, 1021 UTC, CW. Callsign BA2AU. Most probably a Chinese radio amateur but the message is somewhat suspicious, unless it was a morse training of course ☺

Transcript:

```
cq cq cq cq cq de ba2au ba2au ba2au pse k
1234567890 1234567890 hw ??

51682 60584 27138 47149 72033 09659 68504 17932 96837 25068
72384 14159 83067 26193 05497 12405 48058 41052 43025 64173
06805 93726 18726 16971 79523 04148 50386 05243 98417 69726
15079 32786 25839 40179 68237 05972 31060 41684 03587 22159
50428 72459 60841 67931 38079 63128 37950 64251 05246 21441
78596 03507 92396 58304 81717 85587 24058 72502 74884 03392
65139 61079 62440 58364 12894 03154 09671 94861 72603 42392
77832 79678 51054 27814 06856 37824 13847 10396 30953 16962
hw ??

htrny uosuz aipts rlqjv fgmxe wbucf oyvlz huiqp whxsl aserm
cgnzu fifin nyhor xtqbg jlsas wlxqi poaut rbmtf vgeyb uauxc
iousv fqsmw jrdgl aekzn pybwl jifqs orchv xualx ehcrj snsgo
qabtf yvzup iwume hrlpy suitq bnwjx vfoam cgusz plnhc ixusz
sgmqs etwuy fvaoj ivung jarls wexcp dtyub qhfzm oiode uwtpv
zrfbs hykxn lqcaj gmxqr ubwtu gjoyl npfaz cmvsh qspln ivjbc
whysp ufqsz orgem uahve rtcaf guyqp dusis jzxwm oplrs ngcao
lfmuh vqjyw tsuib expyh jebrn oxalc igfss wtukz
hw ??
```

Sends also strings like: cq xm de ba2au

Intelligence Profile:

Negara Brunei Darussalam

BACKGROUND

The Sultanate of Brunei's influence peaked between the 15th and 17th centuries when its control extended over coastal areas of northwest Borneo and the southern Philippines. Brunei subsequently entered a period of decline brought on by internal strife over royal succession, colonial expansion of European powers, and piracy. In 1888, Brunei became a British protectorate; independence was achieved in 1984. The same family has ruled Brunei for over six centuries. Brunei benefits from extensive petroleum and natural gas fields, the source of one of the highest per capita GDPs in Asia.

GENERAL

Country name: Negara Brunei Darussalam (Brunei Darussalam)
Short name: Brunei
Capital: Bandar Seri Begawan
Districts: Belait, Brunei-Muara, Temburong, Tutong

MILITARY BRANCHES

Royal Brunei Armed Forces: Royal Brunei Land Forces, Royal Brunei Navy, Royal Brunei Air Force (Tentera Udara Diraja Brunei)

INTELLIGENCE & SECURITY AGENCIES

Brunei Research Department is Brunei's external intelligence agency
Brunei Internal Security Department (BISD)
Directorate of Intelligence

Brunei Internal Security Department (BISD) is one of the departments under the Prime Minister's Office, which was set up on 1st August 1993. BISD's main office is located at Jalan Utama Mentiri whereas three other branches are located in the Tutong, Belait and Temburong district.

BISD's mission is to give early warning to the government on any imminent threats to protect the country including the public and properties in Brunei. By doing so, the government would be able to take necessary precautions to avoid or reduce any harm that may be caused by such threats.

BISD's role and responsibility is to monitor and report to the government on internal security issues. The lists of internal security issues monitored by BISD are as follows :

– Subversion
  Any attempt may it be by an individual, group or an organisation aimed to jeopardize the national security, or to overthrow His Majesty's Government or the country's Constitution in a manner resorting to violent means or in any manner which contradicts the Constitution

– Espionage
  Any attempt to o=ain government-classified information or document illegally in order to assist a foreign power or gov-

ernment or to achieve specific objectives.

– Sabotage
Any act intended to cause physical damage to significant places and essential services in the country or to carry out (intentionally) any activities, which are detrimental to the country's economic interests to jeopardize public confidence towards the government.

– Terrorism
The use of various means of violence, threats and terror by individual, group or organisation intended to intimidate and instill fear towards the civilian population and their property to further their political or religious aim and ideology.

– Promotion of racial and religious violence
To promote feelings of enmity and resentment between different racial groups or different religion in order to instill values, beliefs and practice of the minority group towards another group or groups (majority).

The Directorate of Intelligence of the Royal Brunei Armed Forces has the following tasks:

– Render intelligence services to Ministry of Defence and Royal Brunei Armed Forces in a timely, accurate, objective and useful fashion.
– Act as the point of contact for all foreign defence and military organisation to Ministry of Defence and Royal Brunei Armed Forces.
– Train and guide Ministry of Defence and Royal Brunei Armed Forces personnel in intelligence and security activities

---

The Brunei **Research Department** is Brunei's external intelligence agency. Aside from a Wikileaks article, no information on them exists

---

SOURCES / RELATED WEBSITES / FURTHER INFORMATION

BISD   http://www.internal-security.gov.bn/
MOD   http://www.mindef.gov.bn
Wikileaks
CIA World Factbook

Intelligence profile
Malaysia
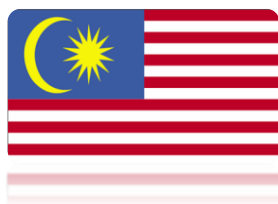
BACKGROUND
During the late 18th and 19th centuries, Great Britain established colonies and protectorates in the area of current Malaysia; these were occupied by Japan from 1942 to 1945. In 1948, the British-ruled territories on the Malay Peninsula except Singapore formed the Federation of Malaya, which became independent in 1957. Malaysia was formed in 1963 when the former British colonies of Singapore as well as Sabah and Sarawak on the northern coast of Borneo joined the Federation. The first several years of the country's independence were marred by a Communist insurgency, Indonesian confrontation with Malaysia, Philippine claims to Sabah, and Singapore's departure from the Federation in 1965. During the 22-year term of Prime Minister MAHATHIR bin Mohamad (1981-2003), Malaysia was successful in diversifying its economy from dependence on exports of raw materials to the development of manufacturing, services, and tourism. Prime Minister Mohamed NAJIB bin

Abdul Razak (in office since April 2009) has continued these pro-business policies.

GENERAL

Country name:	**Malaysia**
Former name:	**Federation of Malaya**
Capital:	**Kuala Lumpur**
1 Federal Territory:	**consisting of Kuala Lumpur, Labuan, and Putrajaya**
13 States:	**Johor, Kedah, Kelantan, Melaka, Negeri Sembilan, Pahang, Perak, Perlis, Pulau Pinang, Sabah, Sarawak, Selangor, Terengganu**

MILITARY BRANCHES

Malaysian Armed Forces (Angkatan Tentera Malaysia, ATM): Malaysian Army (Tentera Darat Malaysia), Royal Malaysian Navy (Tentera Laut Diraja Malaysia, TLDM), Royal Malaysian Air Force (Tentera Udara Diraja Malaysia, TUDM)

INTELLIGENCE & SECURITY

Special Branch
Kor Risik Diraja / Royal Corps intelligence
Bahagian Staf Perisikan Pertahanan - BSPP / Military Intelligence Staff Division

---

The **Malayan Security Service** (MSS) was the main intelligence agency of the British when they returned to Singapore in September 1945 following the Japanese surrender at the end of World War II. It was responsible for o=aining and collating information on subversive organisations and personalities in Singapore/Malaya. It was disbanded in August 1948 just after the start of the Malayan Emergency, and its functions were taken over by the Singapore and Malayan Police Special Branches.

The **Special Branch** is an intelligence agency of the Royal Malaysian Police. The SB is empowered to acquire and develop intelligence on internal and external threats to the nation, subversive activities, extremist activities and activities of sabotage and spying. It is also empowered to analyse and advise on the necessary course of action to the various departments and agencies both within the Police Department and other related agencies.

The **Kor Risik Diraja** (KRD) was established on 7 November 1969 and includes
- **Bahagian Staf Perisikan Pertahanan - BSPP / Defence Intelligence Staff Division**
- **Anggota Tentera Cawangan Khas - ATCK / Military Intelligence Special Branch**
- **Rejimen Khas Perisikan Tempur - RKPT / Special Regimental Combat Intelligence**
- **Cawangan Perisikan / Intelligence Branch**
- **Jabatan Arah Risik / Intelligence Directorate**
- **Intelligence Training Centre**

The KRD secializes in intelligence gathering, intelligence analysis, psychological warfare, surveillance, espionage, reconnaissance and counter-intelligence operations. It also manages the propaganda and counter-propaganda effort of the Malaysian Army.

Defence Staff Intelligence Division is the military intelligence agency of Malaysia Armed Forces. It consists of three services namely army intelligence, naval intelligence and air force intelligence.

SOURCES / RELATED WEBSITES / FURTHER INFORMATION

Government	**http://www.malaysia.gov.my**
Malaysian Army	**http://army.mod.gov.my/**
Ministry of Defence	**http://www.mod.gov.my/**
CIA World Factbook	**https://www.cia.gov/library/publications/the-world-factbook/**

Intelligence profile
Papua New Guinea

BACKGROUND

The eastern half of the island of New Guinea - second largest in the world - was divided between Germany (north) and the UK (south) in 1885. The latter area was transferred to Australia in 1902, which occupied the northern portion during World War I and continued to administer the combined areas until independence in 1975. A nine-year secessionist revolt on the island of Bougainville ended in 1997 after claiming some 20,000 lives.

GENERAL

Country name:	Independent State of Papua New Guinea
Short name:	Papuaniugini (Papua New Guinea)
Former name:	Territory of Papua and New Guinea
Capital:	Port Moresby
1 District:	National Capital
1 Autonomous region:	Bougainville
20 Provinces:	Central, Chimbu, Eastern Highlands, East New Britain, East Sepik, Enga, Gulf, Hela, Jiwaka, Madang, Manus, Milne Bay, Morobe, New Ireland, Northern, Sandaun, Southern Highlands, Western, Western Highlands, West New Britain

---

MILITARY BRANCHES

Papua New Guinea Defense Force (PNGDF; includes Maritime Operations Element, Air Operations Element)

INTELLIGENCE & SECURITY

National Security Council
National Intelligence Organization
Royal Papua New Guinea Constabulary

The **National Security Council** consists of
- the Prime Minister, who shall be Chairman
- the Deputy Prime Minister
- the Minister responsible for defence matters
- the Minister responsible for foreign affairs and trade matters
- the Minister responsible for provincial affairs matters
- the Minister responsible for police matters
- the Minister responsible for financial matters

The functions of the Council are
- to determine and direct the action to be taken in respect of matters affecting the sovereign integrity and security of Papua New Guinea and the security of its people; and
- to provide guidance and direction to those elements of Government which are responsible for
  - matters affecting the maintenance of good order in Papua New Guinea; and combating subversion and espionage; and providing defence against military attack or armed incursions into Papua New Guinea's sovereign territory or the use of military pressures against Papua New Guinea or activities designed to undermine the security of Papua New Guinea and its people; and

- to review, direct and provide guidance for the activities of the Committee and of the Organization.

The **National Intelligence Organization (NIC)** is the intelligence agency of Papua New Guinea. It was established by the National Intelligence Organization Act, an Act of Parliament in 1984. The NIC is headed by a Director-General of Intelligence, appointed by the Head of State.

The Act specifies that, before authorising the NIC to "collect intelligence information outside the country by other than overt means", the Director-General must o=ain written authorisation from the Prime Minister. (art.12)

The NIC may not search any person or premises, nor subject any person or premises to listening devices, nor access or intercept a person's post, without a warrant delivered by the National Security Council, which consists in the Prime Minister and various Cabinet Ministers. (part VI)

The identity of the Organization's agents and employees (other than the Director-General) is to be kept secret, and divulging the identity of any such agent or employee is an offence. (art.47)

The functions of the National Intelligence Organization are to collect, collate and process intelligence information and to provide to the National Executive Council, Departments and other bodies or persons approved by the National Executive Council, timely, accurate and impartial assessments, forecasts and reports in respect of
- matters affecting the maintenance of good order in the country; and
- the combating of seditious enterprises, espionage and sabotage and the provision of warning of potential military attack, armed incursions into the territory of Papua New Guinea or the use of military pressures against Papua New Guinea; and
- the preservation of national sovereignty and the detection of any attempts by a foreign power or person to engage in political, military or economic activities contrary to Papua New Guinea's interests; and
- the prospects for world and regional, political, economic and social stability insofar as these could have implications for, or could affect, Papua New Guinea; and
- future trends of the availability of resources and of prices as these could have implications for Papua New Guinea.

SOURCES / RELATED WEBSITES / FURTHER INFORMATION

PNG Defence Force	http://www.defence.gov.pg
Government Justice	http://www.lawandjustice.gov.pg
PNG Police	http://www.lawandjustice.gov.pg/www/html/145-the-commissioner.asp
PNG Consolidated Legislation	http://www.paclii.org/
CIA World Factbook	https://www.cia.gov/library/publications/the-world-factbook/

Intelligence profile
Sri Lanka

BACKGROUND
The first Sinhalese arrived in Sri Lanka late in the 6th century B.C., probably from northern India. Buddhism was introduced in about the mid-third century B.C., and a great civilization developed at the cities of Anuradhapura (kingdom from circa 200 B.C. to circa A.D. 1000) and Polonnaruwa (from about 1070 to 1200). In the 14th century, a south Indian dynasty established a Tamil kingdom in northern Sri Lanka. The coastal areas of the island were controlled by the Portuguese in the 16th century and by the Dutch in the 17th century. The island was ceded to the British in 1796, became a crown colony in 1802, and was formally united under British rule by 1815. As Ceylon, it became independent in 1948; its name was changed to Sri Lanka in 1972. Tensions between the Sinhalese majority and Tamil separatists erupted into war in 1983. After two decades of fighting, the government and Liberation Tigers of Tamil Eelam (LTTE) formalized a cease-fire in February 2002 with Norway brokering

peace negotiations. Violence between the LTTE and government forces intensified in 2006, but the government regained control of the Eastern Province in 2007. By May 2009, the government announced that its military had defeated the remnants of the LTTE.

GENERAL

Country name:	**Shri Lanka Prajatantrika Samajavadi Janarajaya / Ilankai Jananayaka Choshalichak Kutiyarachu (Democratic Socialist Republic of Sri Lanka)**
Short name:	**Shri Lanka/Ilankai (Sri Lanka)**
Former names:	**Serendib, Ceylon**
Capital:	**Colombo**
9 Provinces:	**Central, Eastern, North Central, Northern, North Western, Sabaragamuwa, Southern, Uva, Western**

MILITARY BRANCHES

Sri Lanka Army, Sri Lanka Navy, Sri Lanka Air Force

INTELLIGENCE & SECURITY

State Intelligence Service
Financial Intelligence Unit

State Intelligence Service

Until 1984, the Sri Lanka Police were responsible for internal intelligence functions, first under the Special Branch, and later under the Intelligence Services Division. The perceived failure of the Intelligence Services Division during the riots of July 1983 led the government to re-evaluate the nation's intelligence network, and in 1984 the President set up a National Intelligence Bureau. The new organization combined intelligence units from the Army, Navy, Air force, and Police. The agency has been renamed in 2006 and is now known as the State Intelligence Service.

The Service is one of the Directorates of the Ministry of Defence. Its primary function is collection of internal and external intelligence, counter-terrorism and covert operations. In addition, it is responsible for o=aining and analyzing information about foreign governments, corporations and persons in order to advise Sri Lankan foreign policymakers.

The SIS has its headquarters in Colombo, Sri Lanka and includes the following directorates: Directorate of Internal Intelligence, Directorate of Foreign Intelligence, Joint Service Language Training Institute, and the National Cadet Corps.

Financial Intelligence Unit

The FIU-Sri Lanka was established in March 2006 under the Financial Transactions Reporting Act No. 06 of 2006 and vested with Ministry of Finance and Planning. The FIU functions as a unit in the Central Bank of Sri Lanka.
The overall objective of the FIU - Sri Lanka is to combat money laundering, terrorist financing and related crimes in Sri Lanka in line with international regulations and standards.

SOURCES / RELATED WEBSITES / FURTHER INFORMATION

Ministry of Defence	**http://www.defence.lk**
Central Bank	**http://www.cbsl.gov.lk/**
Sri Lanka Army	**http://www.army.lk/**
Police	**http://www.police.lk/**
CIA World Factbook	**https://www.cia.gov/library/publications/the-world-factbook/**

LOGS SECTION

The logs are sorted on code, date and time

enigma	frequency	date	day	UTC	remarks	mode	contributor
---	3860	4-3-2013	Mon	2150	Unid 10-minuute net. C/s L6YC	CW	(JPL-FNL)
DPRK	17413.5	27-3-2013	Wed	0115	North Korean MFA, Pyongyang	DPRK-ARQ 600/600	(MCO)
DPRK	16320	27-3-2013	Wed	0835	North Korean MFA	DPRK-ARQ	(Dan)
E06	13890	7-3-2013	Thu	0600	864 153/101 = 88603	AM	(HFD)
E06	5186	7-3-2013		2030	891 116 15 17323 92836 15205 38945 14834 20954 18364 19356 20176 29476 18392 73624 05732 17283 09253 116 15 00000	AM	(Spec)
E06	5186	7-3-2013	Thu	2030	891 116 15 17323 92836 15205 38945 14834 20954 18364 19356 20176 29476 18392 73624 05732 16283 09253 116 15 00000	AM	(Q/MPJ/HFD)
E06	13890	8-3-2013	Fri	0600	864 153 101 88603 87228 12214 ... 67479 75940 42823 00000	AM	(AB)
E06	5197	8-3-2013		2130	634 561 15 34543 56432 34265 67865 98787 45311 89866 45362 76756 98786 34276 56342 63472 78643 67453 561 15 00000	AM	(Spec)
E06	5197	8-3-2013	Fri	2130	634 561 15 34543 56432 34265 67865 98787 45311 89866 45362 76756 98786 34276 56342 63472 78643 67453 561 15 00000	USB	(Topol/HFD)
E06	11114	19-3-2013	Tue	1130	325 (R) 471 471 60 60 5FGs 471 471 60 60 00000	AM	(MYK)
E06	16303	20-3-2013	Wed	1304	480 133 00000	USB	(Danix)
E06	5186	21-3-2013		2030	891 116 15 17323 92836 15205 38945 14834 20954 18364 19356 20176 29476 18392 73624 05732 17283 09253 116 15 00000	AM	(Spec)
E06	5186	21-3-2013	Thu	2030	891 116 15 17323 92836 15205 38945 14834 20954 18364 19356 29476 18392 73624 05732 17283 09253 116 15 00000	USB	(Q-HOL)
E06	13890	22-3-2013	Fri	0619	ip	AM	(HFD)
E06	5197	22-3-2013		2130	634 561 15 34543 56432 34265 67865 98787 45311 89866 45362 76756 98786 34276 56342 63472 78643 67453 561 15 00000	AM	(Spec)
E06	5197	22-3-2013	Fri	2130	634 561 15 34543 56432 34265 67865 98787 45311 89866 45362 76756 98786 34276 56342 63472 78643 67453 561 15 00000	USB	(MPJ/Q)
E07	9273	4-3-2013	Mon	2000	288 1 860 50 58706 07673 35000 04952 84144 ... 47951 67739 07962 63351 03955 000 000	AM	(MPJ/Q)
E07	7873	4-3-2013	Mon	2020	288 288 288 1 (R) 864 50 864 50 msg 000 000	AM	(Q-HOL)
E07	6873	4-3-2013	Mon	2040	288 288 288 1 (R) 864 50 864 50 msg 000 000	AM	(Q-HOL)
E07	9273	6-3-2013	Wed	2000	288 1 824/50 = 58703	AM	(HFD)
E07	9273	6-3-2013	Wed	2000	288 288 288 1 (R) 864 50 864 50 msg 000 000	AM	(Q-HOL)
E07	7873	6-3-2013	Wed	2020	288 288 288 1 (R) 864 50 864 50 msg 000 000	AM	(HFD/Q-HOL)
E07	6873	6-3-2013	Wed	2040	288 288 288 1 (R) 864 50 864 50 msg 000 000	AM	(Q-HOL/HFD)
E07	7516	7-3-2013	Thu	2110	584/00	USB	(MPJ)
E07	7516	7-3-2013	Thu	2110	584 0	AM	(HFD)
E07	5836	7-3-2013	Thu	2130	584 584 584 000	AM	(Q/HFD)
E07	9923	10-3-2013	Sun	1800	906 0	CW	(HFD)
E07	9068	10-3-2013	Sun	1820	906 0	AM	(HFD)
E07	9273	11-3-2013	Mon	2000	288 288 288 000	AM	(Q-HOL)
E07	7873	11-3-2013	Mon	2020	288 288 288 000	AM	(Q-HOL)
E07	7516	14-3-2013	Thu	2110	584 584 584 000	AM	(Q-HOL)
E07	5836	14-3-2013	Thu	2130	584 584 584 000	AM	(Q-HOL)
E07	9273	18-3-2013	Mon	2000	288 288 288 000 (R)	AM	(Q-HOL)
E07	5836	21-3-2013	Thu	2130	584 584 584 000	AM	(Q-HOL)
E07	7873	25-3-2013	Mon	2020	288 288 288 000	USB	(MPJ/Q)
E07a	11133	2-3-2013	Sat	0900	114 1 46909	USB	(HFD)
E07a	5864	6-3-2013	Wed	2100	815 815 815 000	USB	(Topol/Q)
E07a	5864	6-3-2013	Wed	2100	815 815 815 000	USB	(MPJ/HFD)
E07a	5164	6-3-2013	Wed	2120	815 815 815 000	USB	(To-pol/Q/HFD)
E07a	11133	9-3-2013	Sat	0900	114 0	USB	(HFD)
E07a	12133	9-3-2013	Sat	0920	114 114 114 000	USB	(Topol/HFD)
E07a	5864	13-3-2013	Wed	2100	815 815 815 000	USB	(Q-HOL)
E07a	5164	13-3-2013	Wed	2120	815 815 815 000	USB	(Q-HOL)
E07a	5864	14-3-2013	Thu	2100	815 815 815 000	USB	(MPJ)
E07a	5864	20-3-2013	Wed	2100	815 815 815 000	USB	(Q-HOL)
E07a	5164	20-3-2013	Wed	2120	815 815 815 000	USB	(Q-HOL)
E07a	12133	23-3-2013	Sat	0920	114 114 114 000	USB	(Q-HOL)
E07a	5864	27-3-2013		2100	815 1 14834 7337 54 85606 84250 02974 ... 46060 15925 64128 000 000	USB	(Spec)

41

enigma	frequency	date	day	UTC	remarks	mode	contributor
E07a	5864	27-3-2013	Wed	2100	815 815 815 1 14834 (R) 7337 54 7337 54 msg 000 000	USB	(Q/MPJ)
E07a	5164	27-3-2013		2120	815 1 14834 7337 54 85606 84250 02974 ... 46060 15925 64128 000 000	USB	(Spec)
E07a	5164	27-3-2013	Wed	2120	815 815 815 1 14834 (R) 7337 54 7337 54 msg 000 000	USB	(Q-HOL)
E07a	4564	27-3-2013		2140	815 1 14834 7337 54 85606 84250 02974 ... 46060 15925 64128 000 000	USB	(Spec)
E07a	4564	27-3-2013	Wed	2140	815 815 815 1 14834 (R) 7337 54 7337 54 msg 000 000	USB	(Q-HOL)
E07a	5146	28-3-2013		0530	188 1 14834 7337 54 85606 84250 02974 ... 46060 15925 64128 000 000	USB	(Spec)
E07a	5846	28-3-2013		0550	188 1 14834 7337 54 85606 84250 02974 ... 46060 15925 64128 000 000	USB	(Spec)
E07a	6846	28-3-2013		0610	188 1 14834 7337 54 85606 84250 02974 ... 46060 15925 64128 000 000	USB	(Spec)
E07a	10173	29-3-2013	Fri	1630	413 413 413 1 19187 413 413 413 1 19187 413 413 413 1 19187 537 83 537 83 43229 48273 ... 000 000	USB	(MOR)
E07a	12133	30-3-2013	Sat	0920	114 114 114 1 19187 (R) [0922] 537 83 537 83 msg 000 000	USB	(Q-HOL)
E07a	13433	30-3-2013	Sat	0940	114 114 114 1 19187 (R) [0942] 537 83 537 83 msg 000 000	USB	(Q-HOL)
E11	10221	1-3-2013	Fri	0710	633/00	USB	(HFD)
E11	6304	4-3-2013	Mon	0450	416/00	USB	(HFD)
E11	6814	4-3-2013	Mon	0820	438/00	USB	(HFD)
E11	10690	4-3-2013	Mon	0830	649/00	CW	(HFD)
E11	15915	4-3-2013	Mon	1540	228/00	USB	(HFD/MPJ)
E11	9399	6-3-2013	Wed	0900	534/00	USB	(Topol)
E11	15915	6-3-2013	Wed	1155	718/00	USB	(Topol)
E11	10800	7-3-2013	Thu	0645	517/00	USB	(HFD)
E11	10690	11-3-2013	Mon	0830	649/00	USB	(AB)
E11	7449	12-3-2013	Tue	1045	469/00	USB	(HFD)
E11	13873	12-3-2013	Tue	1045	576/00	USB	(HFD)
E11	9399	13-3-2013	Wed	0900	534/00	USB	(HS2)
E11	15915	14-3-2013	Thu	1155	718/00	USB	(HFD)
E11	9371	14-3-2013	Thu	1730	416/00	USB	(MPJ)
E11	5371	15-3-2013	Fri	2001	567/00	USB	(Q-HOL)
E11	15915	17-3-2013	Sun	1540	228/00	USB	(Q/MPJ)
E11	10690	18-3-2013	Mon	0830	648/30 attn. 50722	CW	(FN)
E11	9399	18-3-2013	Mon	0900	534/00	USB	(FN)
E11	14575	19-3-2013	Tue	0745	335/00	USB	(HFD)
E11	9399	25-3-2013	Mon	0900	534/00	USB	(HFD)
E11	15915	25-3-2013	Mon	1540	228/00	USB	(MPJ)
E11	10690	27-3-2013	Wed	0830	649/00	USB	(MYK)
E11	9399	27-3-2013	Wed	0900	534/00	USB	(HFD)
E11	15915	27-3-2013	Wed	1155	718/00	USB	(MPJ)
E11	10800	28-3-2013	Thu	0645	517/00	USB	(HS2)
E11	6814	28-3-2013	Thu	0820	438/00	USB	(HS2)
E11	15915	31-3-2013	Sun	1541	228/00	USB	(Q-HOL)
E11a	13375	1-3-2013	Fri	1110	954/31 = 56554	USB	(HFD)
E11a	5194	1-3-2013		1710	957/20 Attention 37573 17621 51621 09813 39908 67644 37135 99923 68003 01675 05895 85282 55922 48831 88913 55854 33644 33879 71875 90487 Out	USB	(Spec)
E11a	5194	1-3-2013	Fri	1710	957/20 = 37573	USB	(HFD)
E11a	4909	2-3-2013	Sat	0900	249/35 = 47367	USB	(HFD)
E11a	13375	2-3-2013	Sat	1400	987/10 = 26658	USB	(HFD)
E11a	4909	2-3-2013	Sat	1445	286/33 = 18969	USB	(HFD)
E11a	13455	2-3-2013	Sat	1810	986/10 = #877#	USB	(HFD)
E11a	5194	4-3-2013	Mon	1710	952/32 Attention 12910 47882 32323 60411 57233 ... 17698 02868 50858 65558 97142 (end missed).	USB	(MPJ)
E11a	13375	5-3-2013	Tue	1400	981/10 Attention 53033 90952 30613 00349 69974 99888 01608 14668 02894 51044 Attention, rpt msg, out	USB	(MPJ)
E11a	13455	5-3-2013	Tue	1810	982/10 Attention 36015 97869 11153 43813 41529 50116 82754 61155 04696 78592 Attention, rpt msg, out	USB	(Q-HOL)
E11a	4909	6-3-2013		1445	282/38 Attention 26659 37708 62510 ... 62442 82260 30725 Out	USB	(Spec)
E11a	14575	7-3-2013	Thu	0745	333/36 = 62747	USB	(HFD)
E11a	15915	7-3-2013		1155	711/38 Attention 70316 83487 45248 ... 52706 51732 09233 Out	USB	(Spec)
E11a	15915	7-3-2013	Thu	1155	711/38 70316 83487 45248 74519 87497 ... 95327 29701 52706 51732 09233 Attention, rpt msg, out	USB	(MPJ)

42

enigma	frequency	date	day	UTC	remarks	mode	contributor
E11a	9371	7-3-2013	Thu	1730	414/38 = 88542	USB	(HFD)
E11a	10221	8-3-2013		0710	631/36 Attention 83269 16192 27054 ... 20491 50324 99903 Out	USB	(Spec)
E11a	10221	8-3-2013	Fri	0710	631 36 Attention 83269 16192 27054 ... 20491 50324 99903 Attention (Repeats Groups) Out	USB	(Topol)
E11a	5194	8-3-2013		1710	953/21 Attention 88993 50085 42880 94409 77644 59007 41556 19540 94219 38518 14371 33283 41192 40168 68819 66322 91105 10419 26485 46922 51414 Out	USB	(Spec)
E11a	5194	8-3-2013	Fri	1710	953 21 Attention 88993 50085 42880 ... 26485 46922 51414 Attention (Repeats Groups) Out	USB	(Topol)
E11a	13375	9-3-2013		1400	984/10 Attention 69643 83550 62725 61659 13327 70893 03751 91718 65093 52402 Out	USB	(Spec)
E11a	13375	9-3-2013	Sat	1400	984/10 Attention 69643 83550 62725 61659 13327 70893 03751 91718 65093 52402 Attention, rpt msg, out	USB	(MPJ/Topol)
E11a	13455	9-3-2013		1810	985/10 Attention 37438 52935 83622 32430 26698 68510 08042 70423 06986 09795 Out	USB	(Spec)
E11a	13455	9-3-2013	Sat	1810	985/10 Attention 37438 52935 83622 32430 26698 68510 08042 70423 06986 09795 Attention, rpt msg, out	USB	(MPJ/Q/Topol)
E11a	6814	11-3-2013		0820	432/33 Attention 49911 82811 35543 ... 08012 22629 13030 Out	USB	(Spec)
E11a	6814	11-3-2013	Mon	0820	432/33 Attention 49911 82811 35543 ... 08012 22629 13030 Attention, rpt msg, out	USB	(AB)
E11a	5194	11-3-2013	Mon	1710	957/21	USB	(AB)
E11a	13375	12-3-2013	Tue	1400	988/10 Attention 28823 76113 04338 27650 20947 96309 12739 20172 62575 48153 Attention, rpt msg, out	USB	(MPJ)
E11a	13455	12-3-2013	Tue	1810	980/10 Attention 60249 94051 32976 10706 28091 48453 90005 76221 76298 64233 Attention, rpt msg, out	USB	(MPJ)
E11a	15915	13-3-2013	Wed	1155	710/30 Attention 18056 74125 09748 71199 37875 ... ... 84281 45349 16658 32543 10090 Attention, rpt msg, out	USB	(MPJ/HS2)
E11a	6814	14-3-2013		0820	435/32 Attention 38133 71473 47714 ... 34061 45924 00356 Out	USB	(Spec)
E11a	5194	15-3-2013		1710	953/21 Attention 50194 55199 26382 97763 96557 89604 93858 71268 90554 05944 71761 06732 35427 29336 36017 82021 25490 43739 23723 30894 61178 Out	USB	(Spec)
E11a	13375	16-3-2013	Sat	1400	980/10 Attention 72419 51486 14327 95866 74188 05030 01268 39582 08101 52172 Attention, rpt msg, out	USB	(MPJ)
E11a	13455	16-3-2013		1810	984/10 Attention 41953 18946 97207 82778 27416 04743 09122 77676 95917 94610 Out	USB	(Spec)
E11a	3455	16-3-2013	Sat	1810	984/10 Attention 41953 18946 97207 82778 27416 04743 09122 77676 95917 94610 Attention, rpt msg, out	USB	(Q/MPJ)
E11a	10221	19-3-2013	Tue	0710	633/35 = 21502	USB	(HFD)
E11a	5194	22-3-2013	Fri	1710	92086 22869 77594 09578 23975 ... 67569 73312 40955 85172 82577	USB	(MPJ)
E11a	5371	22-3-2013	Fri	2002	569/38 Attention msg [5FSG pairs]	USB	(Q-HOL)
E11a	13375	23-3-2013	Sat	1400	981/10 Attention 78838 64544 74358 13286 01004 74989 04865 46238 62645 87956 Attention, rpt msg, out	USB	(MPJ/Q/AB)
E11a	13455	23-3-2013	Sat	1810	984/10 Attention 99388 50803 55433 67600 73500 59223 31742 63267 11589 74322 Attention, rpt msg, out	USB	(MPJ/Q)
E11a	5194	29-3-2013	Fri	1710	953/21 Attention 14261 45771 ... 88075	USB	(HS2)
E11a	13375	30-3-2013	Sat	1400	982/10 Attention 95187 10776 95320 42312 31584 44151 99774 87689 31878 52840 Attention, rpt msg, out	USB	(MPJ/JU)
E11a	13455	30-3-2013	Sat	1810	983/10 Attention 77609 19851 02487 69549 42067 79739 08650 59005 51858 70905 Attention, rpt msg, out	USB	(MPJ)
E11c	7863	5-3-2013	Tue	1925	758/0000/00	USB	(AB/Q/HFD)
E11c	7863	5-3-2013	Tue	2000	757/2200/00	USB	(AB/Q)
E11c	7863	7-3-2013	Thu	1925	758/0000/00	USB	(MPJ/Q-HOL)
E11c	7863	12-3-2013	Tue	1925	758/0001/00	USB	(MPJ/Q-HOL)
E11c	7863	12-3-2013	Tue	2000	757/2200/00	USB	(HFD/MPJ/Q)
E11c	7863	14-3-2013	Thu	1925	758/0000/00	USB	(Q/MPJ)
E11c	7863	19-3-2013	Tue	1926	758/0000/00	USB	(Q-HOL)
E11c	7863	19-3-2013	Tue	2001	757/0000/00	USB	(Q-HOL)
E11c	7863	21-3-2013	Thu	1925	758/0000/00	USB	(Q-HOL)
E17z	14260	7-3-2013	Thu	0800	674 981/5 = 39534	USB	(HFD)
E17z	12930	7-3-2013	Thu	0810	674	USB	(HFD)
E25	6140	3-2-2013		0754	YL. 116 116 116 MESSAGE 1011 1033 5990 9446 9321 7822 2761 4375 2824 4496 7431 REBEAT 1011 1033 5990 9446 9321 7822 2761 4375 2824 4496 7431 EOM EOT	AM	(AIK)
E25	6140	27-2-2013		1052	YL. 8 128 128 128 MESSAGE 1656 1021 0140 0648 8774 5493 7852 9614 9699 8782 9482 0140 REBEAT 1656 1021 0140 0648 8774 5493	AM	(AIK)

enigma	frequency	date	day	UTC	remarks	mode	contributor
					7852 9614 9699 8782 9482 0140 END OF MESSAGE		
E25	6140	28-2-2013		0730	Muazzin - Muslim praying	AM	(AIK)
E25	6140	10-3-2013	Sun	1043	YL. 3 5 3	AM	(AIK)
E25	6140	10-3-2013	Sun	1110	YL. 15 315 315 315 MESSAGE 1088 4590 1090 9142 2065 6520 6481 4590 2743 REBEAT 1088 4590 1090 9142 2065 6520 6481 4590 2743 EOM EOT	AM	(AIK)
E25	6140	12-3-2013	Tue	0737	YL. 0 360 360 360 MESSAGE 1001 8240 8671 9910 0357 3240 6742 1049 8240 1020 REBEAT 1001 8240 8671 9910 0357 3240 6742 1049 8240 1020 EOM 360 360 360 MESSAGE 1001 8240 8671 991... 1... 15... 4...	AM	(AIK)
E25	6140	16-3-2013	Sat	0914	YL. 9 0 950 950 950 MESSAGE 3090 1059 8020 0729 1845 5078 2179 3406 8020 REBEAT etc	AM	(AIK)
E25	6140	17-3-2013	Sun	0902	YL. 111 111 111 111 MESSAGE 1053 4170 4031 5158 4991 2458 4529 6905 6255 etc	AM	(AIK)
E25	6140	23-3-2013	Sat	0733	Carrier with music	USB	(AIK)
E25	6140	30-3-2013	Sat	0741	Music	USB	(AIK)
E25a	6140	12-3-2013	Tue	1054	YL. 6 1 126 1 126 1 MESSAGE REBEAT EOM	AM	(AIK)
E25a	9450	12-3-2013	Tue	1213	Enta Omri intro. YL. 830 9 830 9 830 9 EOM EOT	AM	(AIK)
E25a	6140	17-3-2013	Sun	0949	Music: Entra Omri. YL. 33 350 350 MESSAGE 1052 1052 3320 3011 5458 5399 8709 7078 6196 5136 8199 3320 etc	AM	(AIK)
E25a	9450	17-3-2013	Sun	1215	Music: Entra Omri. YL. 35 830 10 835 830 10 MESSAGE 5555 5555 5555 5555 REBEAT 5555 5555 5555 etc	AM	(AIK)
E25a	9450	19-3-2013	Tue	1214	Music: Entra Omri. YL. 80 11 830 11 MESSAGE	AM	(AIK)
E25a	6140	24-3-2013	Sun	0815	YL. 014 014 014 014 014 (105x) MESSAGE REBEAT END OF MESSAGE	AM	(AIK)
EGY	8023.7	2-3-2013	Sat	1950	MFA Cairo EGY short ATU-A operator traffic	SITOR-A 100/170	(PPA)
EGY	18033	16-3-2013	Sat	1431	MFA Cairo "99901" wkg Egyptian embassy Muscat "17" or "TVXY"	SITOR-A 100/170 + 16 tone modem	(MCO)
G06	6774	4-3-2013	Mon	0800	215 0	AM	(HFD)
G06	5424	4-3-2013	Mon	1802	567 567 567 00000	AM	(Q-HOL)
G06	5872	6-3-2013	Wed	1207	Test counts: 01234 01234 01234	AM	(Avare)
G06	4569	11-3-2013	Mon	1700	564 0	AM	(HFD)
G06	4569	11-3-2013	Mon	1700	564 564 564 00000	AM	(AB)
G06	5424	11-3-2013	Mon	1800	564 564 564 00000	AM	(AB)
G06	5424	11-3-2013	Mon	1800	564 0	AM	(HFD)
G06	5934	14-3-2013	Thu	1830	579 564/15 = 67567	CW	(HFD)
G06	5934	14-3-2013	Thu	1830	579 564 15 67564 56453 57876 54345 19878 64534 64532 16754 89657 67453 24655 45654 78965 65231 78563 564 15 00000	USB	(Q-HOL)
G06	5442	15-3-2013		1930	947 647 15 37264 38594 71835 04729 47244 36218 47309 12736 26354 26374 19284 56302 00305 28492 17362 647 15 00000	AM	(Spec)
G06	5442	15-3-2013	Fri	1930	preamble 5 20 947 647/15 = 3726	CW	(HFD)
G06	4526	28-3-2013	Thu	1300	215 0	AM	(HFD)
G06	5442	29-3-2013		1930	947 647 15 37264 38594 71835 04729 47244 36218 47309 12736 26354 26374 19284 56302 00305 28492 17362 647 15 00000	AM	(Spec)
G06	5442	29-3-2013	Fri	1930	947 (R) 647 647 15 15 msg 647 647 15 15 00000	USB	(Q/MPJ)
G11	5815	1-3-2013	Fri	1325	299/00	USB	(HFD)
G11	6433	1-3-2013	Fri	2000	263/36 = 05922	USB	(HFD)
G11	5815	3-3-2013	Sun	1755	272/36 (R) ACHTUNG! msg ACHTUNG! rpt msg ENDE	USB	(Q-HOL)
G11	6433	3-3-2013	Sun	2000	262/00	USB	(MPJ)
G11	5815	5-3-2013	Tue	1755	270/00	USB	(AB/HFD/MPJ /Q)
G11	5815	8-3-2013		1325	296/37 Achtung 73101 63280 40461 ... 61313 11247 33282 Ende	USB	(Spec)
G11	5815	9-3-2013		1325	296/37 Achtung 73101 63280 40461 ... 61313 11247 33282 Ende	USB	(Spec)
G11	5815	10-3-2013	Sun	1755	270/00	USB	(Q-HOL)
G11	6433	10-3-2013	Sun	2000	264/34 Achtung 90548 90548 36299 ... 19409 83773 83773 Acht-ung, rpt msg, ende	USB	(Q-HOL)
G11	5815	12-3-2013	Tue	1755	270/00	USB	(Q-HOL)
G11	5815	15-3-2013		1325	294/37 Achtung 16997 08489 07264 ... 35942 62063 87949 Ende	USB	(Spec)
G11	5815	15-3-2013	Fri	1325	299/00	USB	(MPJ)
G11	6433	15-3-2013	Fri	2000	262/00	USB	(Q-HOL)
G11	5815	16-3-2013		1325	294/37 Achtung 16997 08489 07264 ... 35942 62063 87949 Ende	USB	(Spec)
G11	5815	16-3-2013	Sat	1325	299/00	USB	(MPJ)
G11	5815	17-3-2013	Sun	1755	270/00	USB	(Q/MPJ)
G11	6433	17-3-2013	Sun	2000	262/00	USB	(Q/MPJ)

enigma	frequency	date	day	UTC	remarks	mode	contributor
G11	6433	22-3-2013	Fri	2000	262/00	USB	(MPJ/Q)
G11	5815	23-3-2013	Sat	1325	299/00	USB	(Q-HOL)
G11	5815	24-3-2013	Sun	1755	i.p.	USB	(Q-HOL)
G11	6433	24-3-2013	Sun	2000	262/00	USB	(Q-HOL)
G11	6433	29-3-2013	Fri	2000	262/00	USB	(Q/MPJ)
G11	5815	31-3-2013	Sun	1755	262/00	USB	(Q-HOL)
G11	6433	31-3-2013	Sun	2000	261/33 (R) ACHTUNG! msg [5FSG pairs] ACHTUNG! rpt msg [5f] ENDE	USB	(Q-HOL)
HM01	11530	1-3-2013	Fri	2300	16221 48266 45614 03742 84466 32805	AM/RDFT	(Dan)
HM01	17540	2-3-2013	Sat	2300	16222 48267 45615 03743 51101 32806	AM/RDFT	(Dan)
HM01	9240	3-3-2013	Sun	0941	numbers station mixed voice + digital	AM/RDFT	(Q-HOL)
HM01	9155	3-3-2013	Sun	1005	numbers station mixed voice + digital	AM/RDFT	(Q-HOL)
HM01	11530	4-3-2013	Mon	2300	16224 14672 28761 03745 51103 81601	AM/RDFT	(Dan)
HM01	17540	5-3-2013	Tue	2300	16225 14673 28762 03746 51104 81602	AM/RDFT	(Dan)
HM01	11635	6-3-2013	Wed	2140	ip, voice + data	AM/RDFT	(Q-HOL)
HM01	10715	6-3-2013	Wed	2206	ip, voice + data	AM/RDFT	(Q-HOL)
HM01	10715	6-3-2013	Wed	2230	ip, voice + data	AM/RDFT	(Q-HOL)
HM01	16180	7-3-2013	Thu	2113	ip, voice + data	AM/RDFT	(Q-HOL)
HM01	17480	7-3-2013	Thu	2201	ip, voice + data	AM/RDFT	(Q-HOL)
HM01	12120	9-3-2013	Sat	0920	18833 data 14676 data 28765 data 43163 data 83061 data 81605 data	AM/RDFT	(Topol)
HM01	12180	9-3-2013	Sat	1008	18833 data 14676 data 28765 data 43163 data 83061 data 81605 data	AM/RDFT	(Topol)
HM01	17540	9-3-2013	Sat	2300	18834 14677 28766 43164 83062 81606	AM/RDFT	(Dan)
HM01	5855	10-3-2013	Sun	0513	in progress	AM/RDFT	(KC2TTK)
HM01	10345	10-3-2013	Sun	0555	Callup 18834 14677 28766 43164 83062 18606	AM/RDFT	(KC2TTK)
HM01	11635	10-3-2013	Sun	1800	in progress - Spanish YL and RDTF data	AM/RDFT	(E2601)
HM01	10715	10-3-2013	Sun	2243	DGI Havana Cuba. Spanish YL 5FGs	AM/RDFT	(LG2)
HM01	17480	14-3-2013	Thu	2229	YL Spanish + RDFT msgs	AM/RDFT	(Q-HOL)
HM01	11530	14-3-2013	Thu	2300	38831 63373 35403 52561 83065 65052	AM/RDFT	(Dan)
HM01	11635	15-3-2013	Fri	2108	numbers station mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	17540	15-3-2013	Fri	2300	38831 63373 35403 52561 83065 65052	AM/RDFT	(Dan)
HM01	12120	16-3-2013	Sat	0949	ip, YL Spanish + RDFT	AM/RDFT	(Q-HOL)
HM01	17540	16-3-2013	Sat	2300	38831 63373 35403 52561 83065 65052	AM/RDFT	(Dan)
HM01	9240	17-3-2013	Sun	0943	mixed voice+digital YL Spanish	AM/RDFT	(Q-HOL)
HM01	9155	17-3-2013	Sun	1014	Numbers station mixed voice+digital YL Spanish	AM/RDFT	(Q-HOL)
HM01	16180	19-3-2013	Tue	2100	mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	10715	20-3-2013	Wed	2210	mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	17480	21-3-2013	Thu	2207	mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	11635	22-3-2013	Fri	2101	mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	10715	22-3-2013	Fri	2157	mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	10715	22-3-2013	Fri	2245	Spanish voiced numbers alternating with data.	AM/RDFT	(MYK)
HM01	17540	22-3-2013	Fri	2300	22026 22811 22363 60151 45126 01642	AM/RDFT	(Dan)
HM01	12120	23-3-2013	Sat	0931	mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	12180	23-3-2013	Sat	0959	mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	16180	23-3-2013	Sat	2100	in progress - spanish yl alternating with RDTF data	AM/RDFT	(E2601)
HM01	17480	23-3-2013	Sat	2213	mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	10715	24-3-2013	Sun	2231	mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	11530	24-3-2013	Sun	2300	38831 63373 35403 52561 83065 65052	AM/RDFT	(Dan)
HM01	11635	25-3-2013	Mon	2107	mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	17480	27-3-2013	Wed	2202	voice+digital	AM/RDFT	(Q-HOL)
HM01	10715	27-3-2013	Wed	2204	voice+digital	AM/RDFT	(Q-HOL)
HM01	17540	27-3-2013	Wed	2300	24082 22813 22365 60153 50272 01644	AM/RDFT	(Dan)
HM01	13435	28-3-2013	Thu	0737	in progress	AM/RDFT	(HS2)
HM01	10715	29-3-2013	Fri	2205	mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	17540	29-3-2013	Fri	2300	24084 22815 86151 60155 50274 26741	AM/RDFT	(Dan)
HM01	12180	30-3-2013	Sat	1052	mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	17540	30-3-2013	Sat	2300	58361 40851 86153 44181 84751 26743	AM/RDFT	(Dan)
M01	6261	2-3-2013	Sat	1500	463	CW	(HFD)
M01	5476.1	5-3-2013	Tue	1800	ip, 5FSG, "463 (R) == msg "	CW	(Q-HOL)
M01	5020	7-3-2013	Thu	2000	271 30 = = 77538 76989 45073 52209 05456 ... 66836 95059 71233 80959 43589 = = 271 30 000	CW	(MPJ)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M01	5020	7-3-2013	Thu	2000	ip, 5FSG, 463 (R) 513 513 30 30 // 20895 20895 4 3 6 2 4 3262 89928 89928...81588 81588 03396 03396 / / 513 513 30 30 000	CW	(Q-HOL)
M01	5030	7-3-2013	Thu	2000	Vs and dots at 1952z 515 30 // 20895 43624 (42624) 89928 50719 15449 ... 93751 99198 96158 81855 88 81588 03396 //513 30 000	CW	(MPJ)
M01	5474	12-3-2013	Tue	1800	325 30 = = 84534 62661 69360 32405 71992 ... 59594 04060 18444 86937 94085 = = 325 30 000	CW	(Q-HOL)
M01	5021	12-3-2013	Tue	2000	127 30 80329 55620 70404 51304 74830 ... 59555 50189 52200 82079 33795 = = 127 30 000	CW	(Q-HOL)
M01	5020	12-3-2013	Tue	2005	ip, 5FSG, "... = 127 127 30 30 000"	CW	(Q-HOL)
M01	5475	14-3-2013	Thu	1800	981 30 = = 65859 87674 63442 10148 52223 ... 88492 34912 83752 80881 10554 = = 981 30 000 //5474 & 5476.05	CW	(MPJ)
M01	5474	14-3-2013	Thu	1800	463 981/30 = 65859	CW	(HFD)
M01	5020	14-3-2013	Thu	2000	463 981/30 = 65859	CW	(HFD)
M01	5020	14-3-2013	Thu	2000	463 (R) msg [5FSG pairs]... = = 134 134 30 30 000	CW	(Q-HOL)
M01	5020	19-3-2013	Tue	1800	463 463 463 into 568 568 30 30 = = header followed by repeated 5F group message ending = = 568 568 30 30 000	CW	(PPA)
M01	5020	21-3-2013	Thu	2001	463 (R) 108 108 30 30 == [msg 5FSG pairs] == 108 108 30 30 000	CW	(Q-HOL)
M01	6261	23-3-2013	Sat	1500	4638 30 = = 99318 82424 70121 51801 57680 ... 71006 99904 00055 92323 09782 = = 468 30 000	CW	(MPJ)
M01	5020	26-3-2013	Tue	2000	463 498 30 // 11364 66358 19913 06350 63886 ... 16614 52454 45892 55895 01969 // 798 30 000	CW	(MPJ)
M01	6261	30-3-2013	Sat	1500	579 30 // 31523 08752 38369 27109 61374 ... 64915 32082 12987 32919 88053 // 579 30 000 //6260 kHz	CW	(MPJ)
M01a	13876	15-3-2013	Fri	0947	uhc(x3) 94892(x2),	CW	(FMB)
M01a	8109	21-3-2013	Thu	0634	9t2 (x3) 36441 (x2)	CW	(FMB)
M01a	4178	25-3-2013	Mon	1816	525(x3) 736t8(x2)	CW	(FMB)
M01a	5121	25-3-2013	Mon	1930	746(x3) 42t29(x2)	CW	(FMB)
M01a	5295	26-3-2013	Tue	0540	111 ttt	CW	(FMB)
M01b	4440	1-3-2013	Fri	2002	153 527/30 = 52973 //3625	CW	(HFD)
M01b	3625	1-3-2013	Fri	2002	153 527/30 = 52973 //4440	CW	(HFD)
M01b	3520	1-3-2013	Fri	2110	582 527/30 = 52973 //4585	CW	(HFD)
M01b	4585	1-3-2013	Fri	2110	582 527/30 = 52973 //3520	CW	(HFD)
M01b	4590	4-3-2013	Mon	1910	420	CW	(HFD)
M01b	3643.89	4-3-2013	Mon	2015	527 30 = = 52973 39778 94000 17057 81709 ... 10131 91167 48393 38290 67056 = = 527 30 000	CW	(MPJ)
M01b	3643.89	4-3-2013	Mon	2015	527 30 = = 52973 39778 94000 17057 81709 ... 10131 91167 48393 38290 67056 = = 527 30 000	CW	(MPJ)
M01b	4606.1	7-3-2013	Thu	1931	ip, 120 (R) msg [5FSG pairs] //3511.1	CW	(Q-HOL)
M01b	3511.1	7-3-2013	Thu	1931	ip, 120 (R) msg [5FSG pairs] //4606.1	CW	(Q-HOL)
M01b	4572.3	7-3-2013	Thu	2052	392 30 = = 07143 51772 (fades) ... 4 freqs in use: 4572.3 4671.15 3716.15 and 3717.3 kHz all equally poor. 29100 21407 31629 91842 16486 = = 392 30 000	CW	(MPJ)
M01b	3161	14-3-2013	Thu	0035	ip 5LGs	CW	(LG2)
M01b	5942.3	14-3-2013	Thu	1605	142 30 = = 91289 26970 04389 23199 09129 ... 48263 07556 44677 78578 39669 = = 142 30 000 // 938.9 & 5941.16	CW	(MPJ)
M01b	4605	14-3-2013	Thu	1932	201 392/30 = 07143 //3510	CW	(HFD)
M01b	3510	14-3-2013	Thu	1932	201 392/30 = 07143 //4605	CW	(HFD)
M01b	3511.1	14-3-2013	Thu	1932	calling + msg [5FSG pairs] //4606 kHz	CW	(Q-HOL)
M01b	4606.1	14-3-2013	Thu	1932	201 392 30 = = 07143 51772 48267 55456 95859 ... 29100 21407 91842 16486 = = 392 30 0 0 0. //4607.3,3511.15, 3512.3 kHz	CW	(Q/MPJ)
M01b	4572.2	14-3-2013	Thu	2042	477 (R) 392 392 30 30 = = msg [5FSG pairs]...392 392 30 30 000	CW	(Q-HOL)
M01b	3715	14-3-2013	Thu	2042	477 392/30 = 07143 //4570	CW	(HFD)
M01b	4570	14-3-2013	Thu	2042	477 392/30 = 07143 //3715	CW	(HFD)
M01b	4571.13	14-3-2013	Thu	2042	392 30 = = 07143 51772 48267 55456 95859 ... 29100 21407 31629 91842 16486 = = 392 30 000 //3716.15, 3717.3, 4572.3 kHz	CW	(MPJ)
M01b	5810	15-3-2013	Fri	1615	Unreadable ... _4_ 30 = = 99_89 _6970 ...	CW	(MPJ)
M01b	3625	15-3-2013	Fri	2002	153 392/30 = 07143 //4440	CW	(HFD)
M01b	4440	15-3-2013	Fri	2002	153 392/30 = 07143 //3625	CW	(HFD)
M01b	4586	15-3-2013	Fri	2110	582 392 392 30 30 msg 000	CW	(Q-HOL)
M01b	4456.1	18-3-2013	Mon	2015	771 (R) msg	CW	(Q-HOL)
M01b	4454	18-3-2013	Mon	2015	771 392/30 = 07143	CW	(HFD)
M01b	4606.2	21-3-2013	Thu	1932	201 (R) 392 392 30 30 = = 07153 07153...msg [5FSG pairs]...16486 16486 = = 392 392 30 30 000 //3511.2	CW	(Q-HOL)
M01b	3511.2	21-3-2013	Thu	1932	201 (R) 392 392 30 30 = = 07153 07153...msg [5FSG pairs]...16486 16486 = = 392 392 30 30 000 //4606.2	CW	(Q-HOL)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M01b	4571	21-3-2013	Thu	2043	477 (R) 392 392 30 30 = =...[msg 5FSG pairs]...= = 392 392 30 30 000	CW	(Q-HOL)
M01b	4586.15	22-3-2013	Fri	2002	582 = = 392 30 07143 51772 48267 55456 75859 ... 29100 11407 31629 817 42 15486 = = 392 30 000 //3526.2	CW	(MPJ)
M01b	3526.2	22-3-2013	Fri	2002	582 = = 392 30 07143 51772 48267 55456 75859 ... 29100 11407 31629 817 42 15486 = = 392 30 000 //4586.15	CW	(MPJ)
M01b	3521.1	22-3-2013	Fri	2126	ip, 5FSG pairs, "...[msg 5FSG pairs]...= = 392 392 30 30 000	CW	(Q-HOL)
M01b	3536.14	25-3-2013	Mon	1910	420 392 30 = = 09903 0_123 51772 4_026 75544 ... 29100 21407 31629 91842 16486 = = 392 30 000	CW	(MPJ)
M01b	3647.3	25-3-2013	Mon	2015	771 392 30 = = 07143 51772 48267 55456 95859 ... 29100 21407 21629 91842 16486 = = 392 30 000 //3646.14	CW	(MPJ)
M01b	5021	26-3-2013	Tue	2002	i.p. 463 (R1) 798 (x2) 30 (x2) // msg // 798 (x2) 39 (x2) 000	CW	(JPL-Sib)
M01b	5811.1	29-3-2013	Fri	1615	158 _2_ 30 = = 91289 2697_ 7__88 23199 ... (Unreadable in QRM) //5812.3	CW	(MPJ)
M01b	5812.3	29-3-2013	Fri	1615	158 _2_ 30 = = 91289 2697_ 7__88 23199 ... (Unreadable in QRM) //5811.1	CW	(MPJ)
M01b	3521.1	29-3-2013	Fri	2114	ip "...3 0 3 0 = =...msg [5FSG pairs]...16486 16486 = = 392 392 30 30 000 //4586.1	CW	(Q-HOL)
M01b	4586.1	29-3-2013	Fri	2114	ip "...3 0 3 0 = =...msg [5FSG pairs]...16486 16486 = = 392 392 30 30 000 //3521.1	CW	(Q-HOL)
M03	6977	2-3-2013	Sat	1535	798/00	CW	(HFD)
M03	13911	3-3-2013	Sun	1420	873/37 = 99769	CW	(HFD)
M03	6977	5-3-2013	Tue	1535	798/00	CW	(MPJ)
M03	9150	6-3-2013	Wed	1115	82413 93508 61845 89408 46175 ... 20322 62844 39250 18722 11737 = = 652/36 = = 82413 93508 ...	CW	(MPJ)
M03	9150	10-3-2013	Sun	1320	437/00	CW	(HFD)
M03	9150	12-3-2013	Tue	1115	272/00	CW	(HFD)
M03	6977	12-3-2013	Tue	1535	797/35 06283 52350 84231 36126 64701 ... 74525 51300 20168 38421 42523 = = 797/35 = = 06283 52350 ...	CW	(MPJ)
M03	13911.17	15-3-2013	Fri	1420	879/00	CW	(MPJ)
M03	9148	17-3-2013	Sun	1128	(ip) 6tt24 66t51==ttt	CW	(FMB)
M03	13911	17-3-2013	Sun	1420	879/35 = = 32452 78620 58958 44226 42591 ... 86139 12095 63310 48003 07802 = = 879/35 (repeats) = = 000	CW	(Q/MPJ)
M03	13911	22-3-2013	Fri	1420	879/00	CW	(MPJ)
M03	6977	23-3-2013	Sat	1535	798/30 = = 68040 12161 55102 11568 92797 ... 37272 14931 04827 23596 48992 = = 798/30 (rpts)	CW	(MPJ/Q)
M03	6977	26-3-2013	Tue	1535	798/00	CW	(MPJ)
M08a	9155	24-3-2013	Sun	1008	i.p. 5LGs	CW	(Q-HOL)
M12	20937	1-3-2013	Fri	1503	957 957 957 000	CW	(MCO)
M12	10343	1-3-2013	Fri	1800	124 1	CW	(HFD)
M12	9264	1-3-2013	Fri	1820	124 1	CW	(HFD)
M12	8116	1-3-2013	Fri	1840	124 1	CW	(HFD)
M12	5792	4-3-2013	Mon	0530	796 000	CW	(FN)
M12	6992	4-3-2013	Mon	0550	796 000	CW	(FN)
M12	11524	4-3-2013	Mon	1300	543 1 5653 191 47107	CW	(FN)
M12	10424	4-3-2013	Mon	1320	543 1 5653 191 47107	CW	(FN)
M12	10424	4-3-2013	Mon	1320	543 1 5653 191 47107 34102 70008 30513 39146 ... 14711 12273 32326 20949 72465 000 000	CW	(FN/MPJ)
M12	9324	4-3-2013	Mon	1340	543 1 5653 191 47107	CW	(FN)
M12	12162	4-3-2013	Mon	1600	546 1 8845 87 87610	CW	(FN/HFD)
M12	11566	4-3-2013	Mon	1620	546 1 8845 87 87610	CW	(FN/HFD)
M12	10711	4-3-2013	Mon	1640	546 1 8845 87 87610	CW	(FN/HFD)
M12	9176	4-3-2013	Mon	1700	257 1 8509 72 48124	CW	(FN/HFD)
M12	7931	4-3-2013	Mon	1720	257 1 8509 72 48124	CW	(FN/HFD)
M12	6904	4-3-2013	Mon	1740	257 1 8509 72 48124	CW	(FN/HFD)
M12	9176	4-3-2013	Mon	1800	257 1 4191 64 60407 38241 56074 81297 62180 ... 50449 69388 82969 03541 10418 000 000	CW	(MPJ)
M12	9176	4-3-2013	Mon	1800	257 1 4191 64 60407 38241 56074 81297 62180 ... 50449 69388 82969 03541 10418 000 000	CW	(FN/MPJ)
M12	7931	4-3-2013	Mon	1820	257 1 4191 64 60408	CW	(FN)
M12	6904	4-3-2013	Mon	1840	257 1 4191 64 60408	CW	(FN)
M12	9176	4-3-2013	Mon	1900	257 1 5599 67 51827	CW	(FN/HFD)
M12	7931	4-3-2013	Mon	1920	257 1 5599 67 51827	CW	(FN/HFD)
M12	6904	4-3-2013	Mon	1940	257 1 5599 67 51827	CW	(FN/HFD)
M12	10343	5-3-2013	Tue	1830	124 1 5572 69 06974	CW	(FN)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M12	10343	5-3-2013	Tue	1840	124 124 1 (R) 5572 69 5572 69 msg 000 000	CW	(Q-HOL)
M12	8116	5-3-2013	Tue	1850	124 1 5572 69 06974	CW	(Q-HOL)
M12	9264	5-3-2013	Tue	1850	124 1 5572 69 06974	CW	(FN/Q-HOL)
M12	8116	5-3-2013	Tue	1910	124 1 5572 69 06974	CW	(FN)
M12	10968	6-3-2013	Wed	1500	543 1 5653 1919 47107 34102 70008 30513 39146 ... 14711 12273 32326 20949 72465 000 000	CW	(FN/MPJ)
M12	10168	6-3-2013	Wed	1520	543 1 5653 191 47107	CW	(FN)
M12	9128	6-3-2013	Wed	1540	543 1 5653 191 47107	CW	(FN)
M12	8047	6-3-2013	Wed	1700	463 1 6844 54 58912	CW	(FN/HFD)
M12	6802	6-3-2013	Wed	1720	463 1 6844 54 58912	CW	(FN)
M12	6802	6-3-2013	Wed	1720	463 1	CW	(HFD)
M12	5788	6-3-2013	Wed	1740	463 1 6844 54 58912	CW	(FN/HFD)
M12	11435	6-3-2013	Wed	1830	938 1 5306 66 55804	CW	(FN)
M12	10598	6-3-2013	Wed	1850	938 1 5306 66 55804	CW	(FN)
M12	9327	6-3-2013	Wed	1910	938 1 5306 66 55804	CW	(FN)
M12	5763	6-3-2013	Wed	2200	714 714 714 000 (R)	CW	(Q/FN)
M12	5163	6-3-2013	Wed	2220	714 714 714 000 (R)	CW	(Q/FN
M12	6784	7-3-2013	Thu	0730	761 0	CW	(HFD)
M12	6784	7-3-2013	Thu	0730	761 000	CW	(FN)
M12	7684	7-3-2013	Thu	0750	761 000	CW	(FN/HFD)
M12	14769	7-3-2013	Thu	1010	721 1 2060 119 81081	CW	(FN/HFD)
M12	16269	7-3-2013	Thu	1030	721 1 2060 119 81081	CW	(FN/HFD)
M12	18169	7-3-2013	Thu	1050	721 1 2060 119 81081	CW	(FN/HFD)
M12	9176	7-3-2013	Thu	1700	257 1 7889 99 78221 89675 99191 05284 87422 ... 35239 30750 99045 49736 38732 000	CW	(FN/MPJ)
M12	10343	7-3-2013	Thu	1700	124 1 5280 77 40036	CW	(FN/HFD)
M12	9264	7-3-2013	Thu	1720	124 1 5280 77 40036	CW	(FN/HFD)
M12	7931	7-3-2013	Thu	1720	257 1 7889 99 78221	CW	(FN)
M12	8116	7-3-2013	Thu	1740	124 1 5280 77 40036	CW	(FN/HFD)
M12	6904	7-3-2013	Thu	1740	257 1 7889 99 78221	CW	(FN)
M12	10343	7-3-2013	Thu	1800	124 1 2294 95 40940	CW	(FN)
M12	9264	7-3-2013	Thu	1820	124 1 2294 95 40940	CW	(FN)
M12	8116	7-3-2013	Thu	1840	124 1 2294 95 40940	CW	(FN)
M12	9176	7-3-2013	Thu	1900	257 1 3957 52 43523	CW	(FN)
M12	7931	7-3-2013	Thu	1920	257 1 3957 52 43523	CW	(FN)
M12	6904	7-3-2013	Thu	1940	257 1 3957 52 43523	CW	(FN)
M12	10343	8-3-2013	Fri	1800	124 1 5740 71 82706	CW	(FN)
M12	9264	8-3-2013	Fri	1820	124 1 5740 71 82706	CW	(FN)
M12	8116	8-3-2013	Fri	1840	124 1 5740 71 82706	CW	(FN)
M12	14769	10-3-2013	Sun	1010	721 1 2060 119 81081	CW	(FN)
M12	16269	10-3-2013	Sun	1030	721 1 2060 119 81081 ...msg[5f]... 96111 64389 29917 17601 16312 53397 000 000	CW	(FN/Q-HOL)
M12	18169	10-3-2013	Sun	1050	721 1 2060 119 81081	CW	(FN)
M12	14879	10-3-2013	Sun	1830	845 1 9259 123 43064	CW	(FN/HFD)
M12	11579	10-3-2013	Sun	1910	845 1 9259 123 43064	CW	(FN/HFD/Q)
M12	5792	11-3-2013	Mon	0530	796 000	CW	(FN/HFD)
M12	6992	11-3-2013	Mon	0550	796 000	CW	(FN/HFD)
M12	11524	11-3-2013	Mon	1300	543 1 5157 259 ...	CW	(FN/HFD)
M12	10424	11-3-2013	Mon	1320	543 1 5157 259 57582	CW	(FN/HFD)
M12	9324	11-3-2013	Mon	1340	543 1 5157 259 57582	CW	(FN/HFD)
M12	12162	11-3-2013	Mon	1600	546 1 2475 84 83031	CW	(FN)
M12	11566	11-3-2013	Mon	1620	546 1 2475 84 83031	CW	(FN)
M12	10711	11-3-2013	Mon	1640	546 1 2475 84 83031	CW	(FN)
M12	9176	11-3-2013	Mon	1700	257 1 7451 71 70250	CW	(FN)
M12	7931	11-3-2013	Mon	1720	257 1 7451 71 70250	CW	(FN)
M12	6904	11-3-2013	Mon	1740	257 1 7451 71 70250	CW	(FN)
M12	9176	11-3-2013	Mon	1800	257 1 8611 62 91478	CW	(FN/Q-HOL)
M12	7931	11-3-2013	Mon	1820	257 1 8611 62 91478	CW	(FN/Q-HOL)
M12	6904	11-3-2013	Mon	1840	257 1 8611 62 91478	CW	(FN)
M12	9176	11-3-2013	Mon	1900	257 1 4627 91 27823	CW	(FN)
M12	7931	11-3-2013	Mon	1920	257 1 4627 91 27823	CW	(FN)
M12	6904	11-3-2013	Mon	1940	257 1 4627 91 27823	CW	(FN)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M12	10343	12-3-2013	Tue	1830	124 124 124 1 (R) 1112 54 1112 54 msg 000 000	CW	(Q/HFD)
M12	9264	12-3-2013	Tue	1850	124 1 1112 54 45108 61752 06118 65204 43648 ... 45599 62730 57157 02858 27013	CW	(Q/MPJ/HFD)
M12	8116	12-3-2013	Tue	1910	124 124 124 1 (R) 1112 54 1112 54 msg 000 000	CW	(HFD/Q-HOL)
M12	10968	13-3-2013	Wed	1500	543 1 5157 259 57582 78555 33182 59073 55690 ... 53772 32601 84085 27450 93834	CW	(MPJ/FN/HFD)
M12	10168	13-3-2013	Wed	1520	543 1 5157 259 57582	CW	(FN/HFD)
M12	9128	13-3-2013	Wed	1540	543 1 5157 259 57582	CW	(FN/HFD)
M12	8047	13-3-2013	Wed	1700	463 1 6609 77 06128	CW	(FN/FMB)
M12	6802	13-3-2013	Wed	1720	463 1 6609 77 06128	CW	(FN)
M12	5788	13-3-2013	Wed	1740	463 1 6609 77 06128	CW	(FN)
M12	14879	13-3-2013	Wed	1830	845 1 5502 177 33274	CW	(FN)
M12	11435	13-3-2013	Wed	1830	938 1 7275 70 01823	CW	(FN)
M12	10598	13-3-2013	Wed	1850	938 1 7275 70 01823	CW	(FN)
M12	13479	13-3-2013	Wed	1850	845 1 5502 177 33274	CW	(FN)
M12	9327	13-3-2013	Wed	1910	938 1 7275 70 01823	CW	(FN)
M12	11579	13-3-2013	Wed	1910	845 1 5502 177 33274	CW	(FN)
M12	5763	13-3-2013	Wed	2200	714 714 714 000	CW	(Q-HOL)
M12	5163	13-3-2013	Wed	2220	714 714 714 000	CW	(Q-HOL)
M12	6784	14-3-2013	Thu	0730	761 000	CW	(FN)
M12	7684	14-3-2013	Thu	0750	761 000	CW	(FN)
M12	14769	14-3-2013	Thu	1010	721 000	CW	(FN)
M12	16269	14-3-2013	Thu	1030	721 000	CW	(FN)
M12	10343	14-3-2013	Thu	1700	124 1 6086 70 47891 93105 90062 38463 93232 ... 07300 35028 14838 53271 66131 000	CW	(FN/MPJ)
M12	9176	14-3-2013	Thu	1700	257 1 1623 89 47817 88399 94277 14300 15745 ... 92386 77637 00432 21547 62347 000	CW	(FN/MPJ)
M12	7931	14-3-2013	Thu	1720	257 1 1623 89 47917	CW	(FN)
M12	9264	14-3-2013	Thu	1722	124 1 6086 70 47891	CW	(FN)
M12	6904	14-3-2013	Thu	1740	257 1 1623 89 47917	CW	(FN)
M12	8116	14-3-2013	Thu	1740	124 1 6086 70 47891	CW	(FN)
M12	10343	14-3-2013	Thu	1800	124 1 2285 100 24082	CW	(FN)
M12	9264	14-3-2013	Thu	1820	124 1 2285 100 24082	CW	(FN)
M12	8116	14-3-2013	Thu	1840	124 1 2285 100 24082	CW	(FN)
M12	9176	14-3-2013	Thu	1900	257 1 2910 60 31382	CW	(FN)/Q-HOL
M12	7931	14-3-2013	Thu	1920	257 1 2910 60 31382	CW	(FN/Q-HOL)
M12	6904	14-3-2013	Thu	1940	257 1 2910 60 31382	CW	(FN/Q-HOL)
M12	10831	16-3-2013	Sat	1338	(ip) ttt ttt	CW	(FMB)
M12	14879	17-3-2013	Sun	1830	845 845 845 1 (R) 5502 177 5502 177 msg 000 000	CW	(Q-HOL)
M12	13479	17-3-2013	Sun	1850	845 845 845 1 (R) 5502 177 5502 177 msg 000 000	CW	(Q-HOL)
M12	11579	17-3-2013	Sun	1910	845 845 845 1 (R) 5502 177 5502 177 msg 000 000	CW	(Q-HOL)
M12	12162	18-3-2013	Mon	1600	546 1 6068 83 63019	CW	(FN)
M12	11566	18-3-2013	Mon	1620	546 1 6068 83 63019	CW	(FN)
M12	10711	18-3-2013	Mon	1640	546 1 6068 83 63019	CW	(FN)
M12	9176	18-3-2013	Mon	1700	257 1 6159 80 43249	CW	(FN)
M12	7931	18-3-2013	Mon	1720	257 1 6159 80 43249	CW	(FN)
M12	6904	18-3-2013	Mon	1740	257 1 6159 80 43249	CW	(FN)
M12	9176	18-3-2013	Mon	1800	257 1 8318 62 70106	CW	(FN)
M12	7931	18-3-2013	Mon	1820	257 1 8318 62 70106	CW	(FN)
M12	6904	18-3-2013	Mon	1840	257 1 8318 62 70106	CW	(FN)
M12	9176	18-3-2013	Mon	1900	257 1 3081 81 10008	CW	(FN)
M12	7931	18-3-2013	Mon	1920	257 1 3081 81 10008	CW	(FN)
M12	6904	18-3-2013	Mon	1940	257 1 3081 81 10008	CW	(FN)
M12	11435	20-3-2013	Wed	1830	938 01	CW	(HFD)
M12	10598	20-3-2013	Wed	1850	938 1	CW	(HFD)
M12	9327	20-3-2013	Wed	1910	938 1	CW	(HFD)
M12	5763	20-3-2013	Wed	2200	714 714 714 1 (R) 8588 79 8588 79 msg 000 000	CW	(Q/FN/HFD)
M12	5163	20-3-2013	Wed	2220	714 714 714 1 (R) 8588 79 8588 79 msg 000 000	CW	(Q/FN/HFD)
M12	4463	20-3-2013	Wed	2240	714 714 714 1 (R) 8588 79 8588 79 msg 000 000	CW	(Q/HFD/FN)
M12	6784	21-3-2013	Thu	0730	761 000	CW	(FN)
M12	7684	21-3-2013	Thu	0750	761 000	CW	(FN)
M12	14769	21-3-2013	Thu	1010	721 1 1176 271 58052	CW	(FN)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M12	16269	21-3-2013	Thu	1030	721 1 1176 271 58052	CW	(FN)
M12	18169	21-3-2013	Thu	1050	721 1 1176 271 58052	CW	(FN)
M12	9176	21-3-2013	Thu	1700	257 1 3345 88 56426	CW	(FN/BCI)
M12	10343	21-3-2013	Thu	1700	124 1 1399 71 82579	CW	(FN)
M12	7931	21-3-2013	Thu	1720	257 1 3345 88 56426	CW	(FN)
M12	9264	21-3-2013	Thu	1720	124 1 1399 71 82579	CW	(FN)
M12	8116	21-3-2013	Thu	1740	124 1 1399 71 82579	CW	(FN)
M12	6904	21-3-2013	Thu	1740	257 1 3345 88 56426	CW	(FN)
M12	10343	21-3-2013	Thu	1800	124 1 5891 98 17375	CW	(FN)
M12	9264	21-3-2013	Thu	1820	124 1 5891 98 17375	CW	(FN)
M12	8116	21-3-2013	Thu	1840	124 1 5891 98 17375	CW	(FN)
M12	9176	21-3-2013	Thu	1900	257 1 6828 63 12766	CW	(FN)
M12	7931	21-3-2013	Thu	1920	257 1 6828 63 12766	CW	(FN)
M12	6904	21-3-2013	Thu	1940	257 1 6828 63 12766	CW	(FN)
M12	10343	22-3-2013	Fri	1800	124 1 4100 83 06974	CW	(FN)
M12	9264	22-3-2013	Fri	1820	124 1 4100 83 06974	CW	(FN)
M12	8116	22-3-2013	Fri	1840	124 1 4100 83 06974	CW	(FN)
M12	9264	22-3-2013	Fri	1920	124 124 124 1 (R) 4100 83 4100 83 msg 000 000	CW	(Q-HOL)
M12	8116	22-3-2013	Fri	1940	124 124 124 1 (R) 4100 83 4100 83 msg 000 000	CW	(Q-HOL)
M12	8158	23-3-2013	Sat	0600	126 1 8588 79 73520	CW	(FN)
M12	9258	23-3-2013	Sat	0600	126 1 8588 79 73520	CW	(FN)
M12	14879	24-3-2013	Sun	1830	845 1 4054 89 87931	CW	(FN)
M12	13479	24-3-2013	Sun	1850	845 1 4054 89 87931	CW	(FN/Q-HOL)
M12	11579	24-3-2013	Sun	1910	845 1 4054 89 87931	CW	(FN/Q-HOL)
M12	11524	25-3-2013	Mon	1300	543 1 ...	CW	(FN)
M12	11524	25-3-2013	Mon	1320	543 1 6781 121 06385	CW	(FN)
M12	11524	25-3-2013	Mon	1340	543 1 6781 121 06385	CW	(FN)
M12	12162	25-3-2013	Mon	1600	546 1 4872 83 13705	CW	(FN)
M12	11566	25-3-2013	Mon	1620	546 1 4872 83 13705	CW	(FN)
M12	10711	25-3-2013	Mon	1640	546 1 4872 83 13705	CW	(FN)
M12	9176	25-3-2013	Mon	1700	257 1 6440 77 78906 46733 58819 64243 79108 ... 67642 06745 25341 52057 93514	CW	(FN/MPJ)
M12	7931	25-3-2013	Mon	1720	257 1 6440 77 78906	CW	(FN)
M12	6904	25-3-2013	Mon	1740	257 1 6440 77 78906	CW	(FN)
M12	9176	25-3-2013	Mon	1800	257 1 7922 61 22183	CW	(FN)
M12	7931	25-3-2013	Mon	1820	257 1 7922 61 22183	CW	(FN)
M12	6904	25-3-2013	Mon	1840	257 1 7922 61 22183	CW	(FN)
M12	9176	25-3-2013	Mon	1900	257 1 4134 70 18633	CW	(FN)
M12	7931	25-3-2013	Mon	1920	257 1 4134 70 18633	CW	(FN)
M12	6904	25-3-2013	Mon	1940	257 1 4134 70 18633	CW	(FN)
M12	10343	26-3-2013	Tue	1830	124 1 8245 62 37816	CW	(FN/Q-HOL)
M12	9264	26-3-2013	Tue	1850	124 1 8245 62 37816	CW	(FN)
M12	8116	26-3-2013	Tue	1910	124 1 8245 62 37816	CW	(FN)
M12	10968	27-3-2013	Wed	1500	543 1 6781 121 06385 35858 99743 43818 60293 ... 92033 32829 74074 68701 18495 000 000	CW	(FN/MPJ)
M12	10168	27-3-2013	Wed	1520	543 1 6781 121 06385	CW	(FN)
M12	9128	27-3-2013	Wed	1540	543 1 6781 121 06385	CW	(FN)
M12	8047	27-3-2013	Wed	1700	463 1 1029 84 69510	CW	(FN)
M12	6802	27-3-2013	Wed	1720	463 1 1029 84 69510	CW	(FN)
M12	5788	27-3-2013	Wed	1740	463 1 1029 84 69510	CW	(FN)
M12	14879	27-3-2013	Wed	1830	845 1 5834 193 62854	CW	(FN)
M12	11435	27-3-2013	Wed	1830	938 1 7965 63 58463	CW	(FN)
M12	13479	27-3-2013	Wed	1850	845 1 5834 193 62854	CW	(FN)
M12	10598	27-3-2013	Wed	1850	938 1 7965 63 58463	CW	(FN)
M12	9264	27-3-2013	Wed	1850	124 1 8245 62 87816 75124 01016 89622 54616 ... 35613 63530 84505 61499 0__09 000	CW	(MPJ)
M12	11579	27-3-2013	Wed	1910	845 1 5834 193 62854	CW	(FN)
M12	9327	27-3-2013	Wed	1910	938 1 7965 63 58463	CW	(FN)
M12	5763	27-3-2013	Wed	2200	714 714 714 000	CW	(Q/MPJ/FN)
M12	5163	27-3-2013	Wed	2220	714 714 714 000	CW	(Q/FN)
M12	14769	28-3-2013	Thu	1010	721 1 7510 153 76567	CW	(FN)
M12	16269	28-3-2013	Thu	1030	721 1 7510 153 76567	CW	(FN)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M12	18169	28-3-2013	Thu	1050	721 1 7510 153 76567	CW	(FN)
M12	10343	28-3-2013	Thu	1700	124 1 2325 74 53842	CW	(FN)
M12	9176	28-3-2013	Thu	1700	257 1 4575 88 67338	CW	(FN)
M12	9264	28-3-2013	Thu	1720	124 1 2325 74 53842	CW	(FN)
M12	7931	28-3-2013	Thu	1720	257 1 4575 88 67338	CW	(FN)
M12	8116	28-3-2013	Thu	1740	124 1 2325 74 53842	CW	(FN)
M12	6904	28-3-2013	Thu	1740	257 1 4575 88 67338	CW	(FN)
M12	10343	28-3-2013	Thu	1800	124 1 2683 90 21858	CW	(FN)
M12	9264	28-3-2013	Thu	1820	124 1 2683 90 21858	CW	(FN)
M12	8116	28-3-2013	Thu	1840	124 1 2683 90 21858	CW	(FN)
M12	9176	28-3-2013	Thu	1900	257 1 1106 67 08320	CW	(FN)
M12	7931	28-3-2013	Thu	1920	257 1 1106 67 08320	CW	(FN)
M12	6904	28-3-2013	Thu	1940	257 1 1106 67 08320	CW	(FN)
M12	9264	29-3-2013	Fri	1920	124 124 124 1 (R) msg 000 000	CW	(Q-HOL)
M12	8116	29-3-2013	Fri	1940	124 124 124 1 (R) msg 000 000	CW	(Q-HOL)
M12	13479	31-3-2013	Sun	1850	845 845 845 1 (R) 5834 193 5834 193 msg 000 000	CW	(Q-HOL)
M12	11579	31-3-2013	Sun	1910	845 845 845 1 (R) 5834 193 5834 193 msg 000 000	CW	(Q-HOL)
M14	6774	11-3-2013	Mon	0712	in progress "0126" for 2 minutes then off. Carrier on until 0800	CW	(AB)
M14	6774	11-3-2013	Mon	0800	Error. G06 was replaced by M14. "215" for 2 minutes then into G06	CW	(AB)
M14	7395	12-3-2013	Tue	0800	362 0	CW	(HFD)
M14	5945	12-3-2013	Tue	1820	346	CW	(HFD)
M14	5948	12-3-2013	Tue	1822	ip, 5FSG, "346 (R) 106 106 15 15 == msg[5FSG pairs] 56453 56453 23765 23765 45342 45342...89656 89656 34214 34214 56438 56438 == 106 106 15 15 00000	CW	(Q-HOL)
M14	5464	13-3-2013	Wed	1920	110 15 = = 28391 37237 39103 47234 17436 ... 19283 27361 27394 13634 27453 = = 110 15 00000 Spurii 5465 & 5466 kHz.	CW	(MPJ)
M14	10755	14-3-2013	Thu	1730	975 (R) 210 210 83 83 = = 86497 ..... 62524 = = 210 210 83 83 00000	CW	(MOR)
M14	3626	22-3-2013	Fri	2000	153. Only callup readable. 30-group message. Both 3 MHz frequencies very poor //3627.3	CW	(MPJ)
M14	3627.3	22-3-2013	Fri	2000	153. Only callup readable. 30-group message. Both 3 MHz frequencies very poor //3626	CW	(MPJ)
M14	5464	27-3-2013	Wed	1920	537 110/15 = 28391	CW	(HFD)
M14a	10463	27-3-2013	Wed	1000	980 (R3) 425 425 36 36 BT BT etc	CW	(JPL)
M18	4073	4-3-2013	Mon	2126	0126 0126 etc.	CW	(JPL-FNL)
M18	4073	5-3-2013	Tue	2033	0030 0030 0030 0031 etc.	CW	(AB)
M18	4073	5-3-2013	Tue	2050	time strings	CW	(JPL-RUS)
M18	4073	6-3-2013	Wed	1751	0050 0050 etc.	CW	(JPL-POL)
M18	4073	7-3-2013	Thu	2052	0400 0400 etc.	CW	(JPL-FNL)
M18	4073	8-3-2013	Fri	0156	0156 0156 0156 0156 0157 0157 0157 0157 0157 0157 0157 0157 0158 etc	CW	(HS)
M18	4073	8-3-2013	Fri	1820	2220 2220 etc	CW	(JPL)
M18	4073	12-3-2013	Tue	1520	1919 1919 1919 etc.	CW	(JPL-FNL)
M18	4073	13-3-2013	Wed	1802	0102 0102 etc	CW	(JPL-S)
M18	4073	20-3-2013	Wed	1805	0019 0019 0019 0019 0020 0020 etc.	CW	(AB)
M18	4073	22-3-2013	Fri	1958	0204 0204 0204 ...	CW	(FN)
M18	4073	22-3-2013	Fri	2142	0349 0349 0349 0350 etc	CW	(AB)
M18	4073	22-3-2013	Fri	2246	0254 0254 0254 etc.	CW	(JPL-Sib)
M18	4073	23-3-2013	Sat	0155	0902 0902 etc	CW	(JPL-Sib)
M18	4073	25-3-2013	Mon	1830	2329 2329 2329 2330 etc.	CW	(AB)
M18	4073	26-3-2013	Tue	2202	0705 0705 0705 0706 0706 etc.	CW	(AB)
M18	4073	30-3-2013	Sat	1821	0037 0038 0038 0038 etc.	CW	(AB)
M18	4073	31-3-2013	Sun	1339	2046 2046 etc.	CW	(JPL-Sib)
M21	6425.5	2-3-2013	Sat	0552	Russian air defence =99T952??T?????	CW	(PPA)
M21	5752	2-3-2013	Sat	1847	Russian air defence =992247??8?????	CW	(PPA)
M21	4390	2-3-2013	Sat	2045	Russian Air Defence =990047??0?????	CW	(MPJ)
M21	5752	4-3-2013	Mon	2124	Russian Air Defense =990124??8?????	CW	(JPL-FNL)
M21	4391	8-3-2013	Fri	2123	Russian air defense =9901272??0?????	CW	(HS)
M21	7994	8-3-2013	Fri	2144	Russian air defense null-data tracking strings	CW	(HS)
M21	5752.2	9-3-2013	Sat	2055	Russian Air Defense =990055??8?????	CW	(HS)
M21	13479	10-3-2013	Sun	1852	ip, "...95823 42546 52147 67530 17201 96756 42296 78495 64010 11626 61398 000 000"	CW	(FN/HFD/Q)
M21	5752.1	15-3-2013	Fri	2006	Russian Air Defence =99tt12??8????? etc.	CW	(Q-HOL)
M21	3314	17-3-2013	Sun	1930	Russian Air Defence (PVO)	CW	(LG2)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M21	3314	21-3-2013	Thu	2050	PVO	CW	(BCI)
M21	5752	21-3-2013	Thu	2149	Russian Air Defense =990149??0?????	CW	(HS)
M21	5913	21-3-2013	Thu	2149	Russian Air Defense =990149??0?????	CW	(HS)
M21	5752	27-3-2013	Wed	1814	Russian Air Defence =992214??8?????	CW	(PPA)
M22	4331	3-3-2013	Sun	1824	4XZ HAIFA, ISRAEL	CW	(Q-HOL)
M22	6379	3-3-2013	Sun	2014	4XZ ip, "...= = vvv de 4xz 4xz = =...msg"	CW	(Q-HOL)
M22	4331	6-3-2013	Wed	2132	4XZ HAIFA ip, "...= = vvv de 4xz 4xz = =...msg"	CW	(Q-HOL)
M22	6379	6-3-2013	Wed	2139	4XZ HAIFA ip, "...= = vvv de 4xz 4xz = =...msg"	CW	(Q-HOL)
M22	4331	8-3-2013	Fri	2151	VVV DE 4XZ 4XZ = =	CW	(HS)
M22	4331	10-3-2013	Sun	0100	4XZ Israeli Navy, UH2S QSL NR 78 = = PL3M NR 991 SA GR 81 = = etc; into QTC at 0105	CW	(HS)
M22	4595	10-3-2013	Sun	0137	Mkr VVV DE 4XZ = = //4331 kHz	CW	(HS)
M22	6607	10-3-2013	Sun	1923	4XZ HAIFA, ip "...= = vvv de 4xz 4xz = =..."	CW	(Q-HOL)
M22	6379	10-3-2013	Sun	1928	4XZ HAIFA, ip, "...msg..."	CW	(Q-HOL)
M22	4595	12-3-2013	Tue	2156	VVV DE 4XZ & numbered QTC in 5L grps	CW	(HS)
M22	6607	14-3-2013	Thu	1940	4XZ msg #692 to UM3T in 5LGs	CW	(HS)
M22	6607	15-3-2013	Fri	2040	4zx HAIFA, ISRAEL ip "...= = vvv de 4xz 4xz = =...	CW	(Q-HOL)
M22	6379	16-3-2013	Sat	2306	4XZ: IDF/Israeli Navy Haifa. I.p. 5LGs	CW	(LG2)
M22	6607	19-3-2013	Tue	0020	5L grps & VVV DE 4XZ = =	CW	(HS)
M22	4331	19-3-2013	Tue	2238	4XZ: IDF/Israeli Navy Haifa ISR. Coded text	CW	(LG2)
M22	4331	19-3-2013	Tue	2342	4XZ: Israeli Navy. VVV DE 4XZ & numbered QTC in 5L grps. 2860//4331//4595//6607 kHz	CW	(HS)
M22	2860	19-3-2013	Tue	2342	4XZ: Israeli Navy. VVV DE 4XZ & numbered QTC in 5L grps. 2860//4331//4595//6607 kHz	CW	(HS)
M22	6607	19-3-2013	Tue	2342	4XZ: Israeli Navy. VVV DE 4XZ & numbered QTC in 5L grps. 2860//4331//4595//6607 kHz	CW	(HS)
M22	4595	19-3-2013	Tue	2342	4XZ: Israeli Navy. VVV DE 4XZ & numbered QTC in 5L grps. 2860//4331//4595//6607 kHz	CW	(HS)
M22	6607	21-3-2013	Thu	2038	4XZ in progress 2860//4595//6379//6607 kHz	CW	(AB)
M22	2860	21-3-2013	Thu	2038	4XZ in progress 2860//4595//6379//6607 kHz	CW	(AB)
M22	6379	21-3-2013	Thu	2038	4XZ in progress 2860//4595//6379//6607 kHz	CW	(AB)
M22	4331	21-3-2013	Thu	2038	4XZ in progress 2860//4595//6379//6607 kHz	CW	(AB)
M22	4595	21-3-2013	Thu	2038	4XZ in progress 2860//4595//6379//6607 kHz	CW	(AB)
M22	6607	21-3-2013	Thu	2133	4XZ: Israeli Navy. VVV DE 4XZ = = //2860 //4331 //4595 //6379 //6607	CW	(HS)
M22	4595	21-3-2013	Thu	2133	4XZ: Israeli Navy. VVV DE 4XZ = = //2860 //4331 //4595 //6379 //6607	CW	(HS)
M22	4331	21-3-2013	Thu	2133	4XZ: Israeli Navy. VVV DE 4XZ = = //2860 //4331 //4595 //6379 //6607	CW	(HS)
M22	2860	21-3-2013	Thu	2133	4XZ: Israeli Navy. VVV DE 4XZ = = //2860 //4331 //4595 //6379 //6607	CW	(HS)
M22	6379	21-3-2013	Thu	2133	4XZ: Israeli Navy. VVV DE 4XZ = = //2860 //4331 //4595 //6379 //6607	CW	(HS)
M22	4594	23-3-2013	Sat	0036	4XZ: IDF/Israeli Navy Haifa. VVV VVV DE 4XZ 4XZ into encrypted traffic	CW	(LG2)
M22	6607	23-3-2013	Sat	2047	4ZX Haifa "= = vvv de 4xz 4xz = =..."	CW	(Q-HOL)
M22	4331	25-3-2013	Mon	1836	4XZ: VVV and messages	CW	(AB)
M23	5345	12-3-2013	Tue	1731	135 (R5)	CW	(FMB)
M23	7668	13-3-2013	Wed	1704	747	CW	(FMB)
M23	7668	13-3-2013	Wed	1759	747	CW	(FMB)
M23	7668	15-3-2013	Fri	1755	747	CW	(FMB)
M23	7668	16-3-2013	Sat	1654	747	CW	(FMB)
M23	7668	17-3-2013	Sun	1804	747 ended with a very long DASH	CW	(Q-HOL)
M23	7668	18-3-2013	Mon	1755	747	CW	(FMB)
M23	7668	21-3-2013	Thu	1756	747	CW	(FMB)
M23	7668	29-3-2013	Fri	1702	747 (R) //5914 kHz	CW	(JPL-D)
M23	5914	29-3-2013	Fri	1702	747 (R) //7668 kHz	CW	(JPL-D)
M24	6792	7-3-2013	Thu	1630	910 347 16 = 26351	CW	(FN)
M24	8116	11-3-2013	Mon	1800	441 441 441 578 578 132 132 = = = 16818 16818 ... 3t831 3t831 = =578 578 132 132 ttttt	CW	(TJ)
M24	8116	11-3-2013	Mon	1802	(ip)== 16818(x2)...== 578 578 132 132 ttttt (rpt 11.3.2013 1830 5410kc)	CW	(FMB)
M24	5410	11-3-2013	Mon	1831	441 (R3) 578 578 132 132 == 16818(x2)...	CW	(FMB)
M24	9083	12-3-2013	Tue	1809	(ip) 21t 21t ... ttttt	CW	(FMB)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M24	5380	12-3-2013	Tue	1831	(ip) == 578 578 132 132 ttttt (rpt from 11.03.2013 1800 8116kc/ 1830 5410 Kc)	CW	(FMB)
M24	8116	25-3-2013	Mon	1800	441 9t6 9t6 132 132== 29946(x2)..	CW	(FMB)
M24	5410	25-3-2013	Mon	1830	441 9t6 9t6 132 132== 29946(x2) ..	CW	(FMB)
M32	4401	1-3-2013	Fri	2049	VQE7 DE KMAU QSA/ QXS AR K. ZW3J DE KMAU. MZL4 DE KMAU	CW	(MAUK)
M32	5129	2-3-2013	Sat	0442	KB5P: Russian mil. Duplex radio check with CYNF, HEK1 and 8VZQ	CW	(PPA)
M32	5109.9	2-3-2013	Sat	0443	7L7Q: Russian mil. IOFS DE 7L7Q	CW	(PPA)
M32	5021	2-3-2013	Sat	0505	AUEP: Russian mil. Duplex net ; Calling Q3KQ and BLMX for QSA check	CW	(PPA)
M32	5062	2-3-2013	Sat	0505	2DFZ: Russian mil. 2DFZ and LQAY calling Duplex for net control X2IU	CW	(PPA)
M32	5052	2-3-2013	Sat	0518	DUAR: Russian mil. 7V1M DE DUAR QTC DUAR 23 2 172 0912 28 = 335 =	CW	(PPA)
M32	5693	2-3-2013	Sat	2029	PCSX: Russian mil. DEK7 DE PCSX RPA ADS, PCSX R490	CW	(PPA)
M32	5514	2-3-2013	Sat	2039	Russian Mil. Ends msg: ... KRGUB KRGUW KBGRU WBKGR BUWRG PEPWT RPT AL QLN K	CW	(MPJ)
M32	7963	2-3-2013	Sat	2117	Russian Mil. Msg in progress: ..2 03 0106 538 = ZUX 124 = FAAOY BÄUÜF UMChCZ CMÜUH HI... RPT AL QLN AR.	CW	(MPJ)
M32	5311.5	4-3-2013	Mon	1132	Russian Mil.XXX XXX PABA PABA KORWET 375 K	CW	(Gwr)
M32	5416	4-3-2013	Mon	1135	Russian Mil.XXX XXX PABA PABA KORWET 375 K	CW	(Gwr)
M32	5416	4-3-2013	Mon	1140	Russian Mil. BFPN QBE QYT 1 QYT 4 K BFPN RPT K etc	CW	(Gwr)
M32	3214.5	4-3-2013	Mon	1756	Russian Mil: SSEF	CW	(BCI)
M32	4062	5-3-2013	Tue	1432	Russian Mil. JXXS DE 2RQI K. R K. 8PL8 DE 2RQI K. R K. 6ND6 DE 2RQI K. R K. 2T.8 DE 2RQI K. R K. .E5 DE 2RQI K. R K. 1TM. DE 2RQI K. R K. EIX1 DE 2RQI K. R K	CW	(JPL-D)
M32	3337	5-3-2013	Tue	1725	Russian Mil. RMQW QSL .79 K. RMQW R K.	CW	(JPL)
M32	7964	5-3-2013	Tue	1858	ZF5A: Russian Mil. Duplex net clg GSZZ for QTC 665 19 5 2248 665 = 710 = LOZGK	CW	(PPA)
M32	5426	8-3-2013	Fri	0407	Russian mil. HVCU wkg unheard stn, QSA? and numbered QTC.	CW	(HS)
M32	7815	8-3-2013	Fri	0704	Russian Mil "... RMW36 ROXXZSA 2 K"	CW	(TR2)
M32	5311.5	9-3-2013	Sat	0606	KRPH: Russian Mil. Simplex radio check with CDLX and GSZQ	CW	(PPA)
M32	10796	10-3-2013	Sun	1012	rje56 wkg rje56, rjd71 and perhaps others, "..11068/11068 k rje56 qyt4...11 0 68k rje56 de rjd71 ok qyt4 qwh 11068/11068k rje56 qczk...rje56 de rjd71 ok qyt4 qwh 11068/11068k rje56rk...93166 27778 32558 1tt43 = rpt all arrje56k...831 44 1t 1128 831 = 68543 52148 78162...77144 6t724 47422 bb 47442k rmprptk...rje56rptpblk..."	CW	(Q-HOL)
M32	13443	11-3-2013	Mon	1300	XXX XXX WEGI WEGI 82937 LEJKOTIP 3889 2729	CW	(JU)
M32	11408	11-3-2013	Mon	1303	XXX XXX 59584 LEJKOTIP 3889 2729 Retranslation of WEGI	CW	(JU)
M32	14411	11-3-2013	Mon	1309	XXX XXX WEGI WEGI 83361 82937 LEJKOTIP 3889 2729	CW	(JU)
M32	11408	11-3-2013	Mon	1342	REA4 REA4 11130 20069 75320 51405 11011 85600 18725 82458 41203 11103 81421 = REA4 K	CW	(JU)
M32	9187	12-3-2013	Tue	1651	Russian Mil. QRX K TK 7T 1653 QRX 75958 QRX 75958 K	CW	(LG2)
M32	8035.7	13-3-2013	Wed	1735	Russian mil. BR7K DE MNY2 QRJ3	CW	(PPA)
M32	5426	14-3-2013	Thu	0957	XXX XXX N1DX N1DX 05368 BROWNOZA 8339 2758 K	CW	(Gwr)
M32	5426	14-3-2013	Thu	1037	XXX XXX N1DX N1DX 22739 GDOWEC 6848 2662 K	CW	(Gwr)
M32	5310	14-3-2013	Thu	1053	XXX XXX PABA PABA KORWET 375 K	CW	(Gwr)
M32	5416	14-3-2013	Thu	1056	XXX XXX PABA PABA KORWET 375 K	CW	(Gwr)
M32	4811	14-3-2013	Thu	1227	XXX XXX PABA PABA KORWET 375 K	CW	(Gwr)
M32	5416	14-3-2013	Thu	1232	XXX XXX PABA PABA KORWET 375 K	CW	(Gwr)
M32	5114	15-3-2013	Fri	1902	VPF9: Russian mil. Calling ZNYJ for QRJ3	CW	(PPA)
M32	7815.5	18-3-2013	Mon	1853	1PZN: Russian Mil. "1PZN QTC 145 24 18 2236 145 = ZFT 658 = "	CW	(PPA)
M32	7825	18-3-2013	Mon	1901	KFAE: Russian Mil. "ZNVM DE KFAE K QRJ3"	CW	(PPA)
M32	7964	19-3-2013	Tue	1913	BY7M: Russian Mil. ip "...de by7m by7m qtc 7 6 7 17 19 23t4 767 = zd m 321= ppppp...244 ar"	CW	(Q-HOL)
M32	8512	20-3-2013	Wed	0558	DKZ5: Russian Mil.	CW	(BCI)
M32	9149	21-3-2013	Thu	0728	Russian Mil. "D2NS D2NS D2NS DE MKWE MKWE QTC ZND 799 29 21 11 26 799 = ZND = 388 PPPPP AWOTE RITNO"	CW	(BCI)
M32	5265	21-3-2013	Thu	0814	Russian Mil. IKA5	CW	(BCI)
M32	4456	21-3-2013	Thu	2118	Russian Mil. YRON clg BK8J and IQDG	CW	(BCI)
M32	3870	23-3-2013	Sat	2238	Russian Mil. Simplex circuit. 1TLD obtaining receipts from (at least) O1IA 7SI3 and 1AY4	CW	(MPJ)
M32	7768	26-3-2013	Tue	1901	TUC3: Russian Mil. "RD8O DE TUC3 QRV TUC3 QTC 123 10 26 2301 123 = 23456210 ="	CW	(PPA)
M32	12688	27-3-2013	Wed	1129	XXX XXX VN6B VN6B 7...8 ...NON 69.. 35.9 Transmission jammed	CW	(JU)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M32	10683	27-3-2013	Wed	1129	XXX XXX VN6B VN6B 7...8 ...NON 69.. 35.9 Transmission jammed	CW	(JU)
M32	13443	27-3-2013	Wed	1129	XXX XXX VN6B VN6B 7...8 ...NON 69.. 35.9 Transmission jammed	CW	(JU)
M32	13433	27-3-2013	Wed	1141	XXX XXX VN6B VN6B 85973 SLUGA 8034 3640 Repeated at 1143 UTC. Transmission jammed	CW	(JU)
M32	12688	27-3-2013	Wed	1141	XXX XXX VN6B VN6B 85973 SLUGA 8034 3640 Repeated at 1143 UTC. Transmission jammed	CW	(JU)
M32	13433	27-3-2013	Wed	1206	XXX XXX VN6B VN6B 72722 BLESTAeNKA 6284 8654. Transmission jammed	CW	(JU)
M32	12688	27-3-2013	Wed	1206	XXX XXX VN6B VN6B 72722 BLESTAeNKA 6284 8654. Transmission jammed	CW	(JU)
M32	13433	27-3-2013	Wed	1215	XXX XXX VN6B VN6B 06216 SORNOSTX 1307 0950. Transmission jammed	CW	(JU)
M32	12688	27-3-2013	Wed	1215	XXX XXX VN6B VN6B 06216 SORNOSTX 1307 0950. Transmission jammed	CW	(JU)
M32	14411	28-3-2013	Thu	0834	XXX XXX RGT77 RGT77 89565 01531 WOLYNKA 7194 9404	CW	(JU)
M32	12688	28-3-2013	Thu	0846	XXX XXX X2BM X2BM 2V8I 2V8I 62737 96220 ARGOTIZM 9163 4475 POGREBICA 5226 8068	CW	(JU)
M32	12981	28-3-2013	Thu	0858	XXX XXX LNR4 LNR4 TUZR TUZR 5J7Q 5J7Q 93749 49041 22314 SUGREB 7750 4917 WEGLA 9699 4121 POGLAeDENXE 1975 8497	CW	(JU)
M32	12981	28-3-2013	Thu	0901	XXX XXX N1DX N1DX 05967 NAGAEOeNYJ 1212 4429	CW	(JU)
M32	12981	28-3-2013	Thu	0904	XXX XXX G5CX G5CX F2ET F2ET 31329 07071 OeULOOeNIK 6060 6817	CW	(JU)
M32	12688	28-3-2013	Thu	0933	XXX XXX SHEU SHEU 06923 41080 SPLOENX 5720 2162	CW	(JU)
M32	11408	28-3-2013	Thu	0935	REA4 REA 4 07923 SPLOENX 5720 2162	CW	(JU)
M32	12741	28-3-2013	Thu	1024	XXX XXX RGT77 RGT77 48164 23690 NABEGLYJ 8164 3851	CW	(JU)
M32	5426	28-3-2013	Thu	1031	XXX XXX N1DX N1DX 80360 PEREKARINA 5524 2648 K	CW	(Gwr)
M32	12981	28-3-2013	Thu	1051	1HSF 1HSF 94VT 94VT LNR4 LNR4 09443 28723 34592 SKLEENNYJ 0884 5924	CW	(JU)
M32	12981	28-3-2013	Thu	1124	XXX XXX WLHN WLHN 23454 40703 88773 OPAJOeINA 6866 0417	CW	(JU)
M32	12981	28-3-2013	Thu	1127	XXX XXX WLHN WLHN 15123 09449 88428 ALANT 7318 7549	CW	(JU)
M32	3651	30-3-2013	Sat	1800	PH6S: Russian Mil. PH6S OK ZQV ZSW3 K.	CW	(MPJ-RUS)
M32	8476	31-3-2013	Sun	1356	QIHJ DE B96I QSV K	CW	(JPL)
M32a	5129	2-3-2013	Sat	0457	RIR98: Russian navy warship clg RCV Sevastopol	CW	(PPA)
M32a	5775	2-3-2013	Sat	0530	RCV: Russian Navy Sevastopol UKR. RIC87 DE RCV QTC	CW	(PPA)
M32a	11418	2-3-2013	Sat	1747	RMP: Russian Navy Kaliningrad. RGV82 DE RMP	CW	(PPA)
M32a	8345	2-3-2013	Sat	1902	RHI99: navy warship 19:02 A1A/CW RCV DE RHI99 QSA?	CW	(PPA)
M32a	8345	2-3-2013	Sat	1903	RHL80: navy warship 19:03 A1A/CW RCV DE RHL80 K	CW	(PPA)
M32a	4425	4-3-2013	Mon	2105	Russian Navy. RLO RLO RLO DE RIT RIT QTC 251 34 5 0057 251 = RADIO	CW	(JPL-FNL)
M32a	8816	5-3-2013	Tue	1647	Russian Navy. 04102 DE RJF94 QSA3 QRV (04102 faint reply)	CW	(TR2)
M32a	8816	5-3-2013	Tue	1650	Russian Navy. RJF94 QTO 1620 QRD XLLV XUMO QAY XUEM 1647 QAH 5500 QBD 0440 QAL XLLV 1820 K (04102 faint reply)	CW	(TR2)
M32a	8816	5-3-2013	Tue	1839	Russian Navy. RJF94 DE 04102 QTC. RCB QQM XLLV 1837. VVV RCB DE RJF94 QSA? RJF94 DE RCB QSA3. RCB DE RJF94 RPT. 04102 K. RCB RPT QQM XLLV 1837. RJF94 R K	CW	(TR2)
M32a	10796	11-3-2013	Mon	0747	RJE56: 301st central comms point Navy, mil unit 49383, Moscow signal check with RIT Severomorsk naval (RIT qsa4/RJE56 qsa2) later signal check and trfc with RJH57. RJH57 weaker then RIT, location unknown	CW	(TJ)
M32a	7664	11-3-2013	Mon	1913	RIW: Navy HQ Moscow calling RIS96	CW	(PPA)
M32a	13469	13-3-2013	Wed	1030	Russian Navy: RJE56 QSA? K RJE56 DE .... RJE56 QSA2 QAP K. RJE65 DE RJE56 K. RJE65 DE RJE56 QYT4 QWH 9676 / 9176 QSX 9700 / 9914 K. RJE56 SK	CW	(JU)
M32a	5129	15-3-2013	Fri	1804	RIR98: Russian navy warship calling RCV Sevastopol	CW	(PPA)
M32a	14556	16-3-2013	Sat	1121	RIW: Navy HQ Moscowcalling RFE70 and RFX56	CW	(PPA)
M32a	7861	18-3-2013	Mon	1905	RAL2: Russian Naval Air radio check with RFH2	CW	(PPA)
M32a	12464	28-3-2013	Thu	0952	RCRE: Russian Navy Vessel "RIW RIW DE RCRE OK QSU1 QWH 3086 QSX 122 K"	CW	(LG2)
M32a	8345	29-3-2013	Fri	0430	Russian Navy. VVV RIW DE RGV82 QSA? RIW DE RGV82 QYT4 QLS. RGV82 OK AS2. RIW DE RGV82 OK QYT4 QWH 8338	CW	(TR2)
M32a	8345	29-3-2013	Fri	0656	Russian Navy. VVV RIW DE RGV82 QSA?. VVV RIW DE RGV82 QSA?	CW	(TR2)
M32a	10796	30-3-2013	Sat	0930	Russian Navy. RIW DE RJC66 OK QRR 3 QDW 11652 K	CW	(JPL)
M32a	5083	30-3-2013	Sat	2022	RIR98: Russian navy. Simplex contact with RCV requesting QYT4	CW	(PPA)
M32b	13469	15-3-2013	Fri	0910	RJE56 Moscow wkg RJD52, Astrakhan Naval	CW	(TJ)
M32b	8816	29-3-2013	Fri	0952	Russian Naval Air Transport. RJF94 QTO 0947 QRD XRRC XRKE QRE 1010 QBD 14000 K. RJF94 RPT QTO 0947 QRD XRRC XRKE QRE 1010	CW	(TR2)

enigma	frequency	date	day	UTC	remarks	mode	contributor
					QBD 14000 K		
M32b	8816	29-3-2013	Fri	1009	Russian Naval Air Transport. RJF94 QQM XRRC 1007	CW	(TR2)
M32c	8029	12-3-2013	Tue	0922	Russian AF. W-beacon and plenty of CW	CW	(TR2)
M32c	8029	12-3-2013	Tue	1000	Russian AF. VVVVVVV + msg	CW	(TR2)
M32c	8029	12-3-2013	Tue	1023	Russian Air Force. W Beacon and plenty of CW. Most CW has been VVVVVVVVV but there's been a couple of faint messages	CW	(TR2)
M32c	8029	12-3-2013	Tue	1043	Russian AF. G8NO DE TRL5 K	CW	(Tom)
M32c	8029	12-3-2013	Tue	1043	Russian AF. W-marker	CW	(TR2)
M32c	8170	12-3-2013	Tue	1046	Russian AF. TRL5 (partial message copy) 069 012 315 024	CW	(Tom)
M32c	8029	12-3-2013	Tue	1047	Russian AF. 069 012 315 024 428 K	CW	(Tom)
M32c	8029	12-3-2013	Tue	1160	Russian AF. G8NO de TRL5 K. TRL5 QRV K. TRL5 = 903 444 704 972 274 K.	CW	(MPJ)
M32c	8170	12-3-2013	Tue	1333	Russian AF. W4H1 DE 2QLC QTC (3 figure traffic very weak)	CW	(Tom)
M32c	8029	12-3-2013	Tue	1335	Russian AF. 2QLC DE W4H1 (Repeats 3 figure traffic)	CW	(Tom)
M32c	8029	12-3-2013	Tue	1520	Russian AF. W-markers followed by 2QLC DE TRL5 K	CW	(Tom)
M32c	8029	12-3-2013	Tue	1600	TRL5: Russian Air Force 1600 CW W-marker until 16:02 then message: G8NO de TRL5 K. TRL5 QRV K. TRL5 = 903 444 704 972 274 K	CW	(MPJ)
M32c	8029	12-3-2013	Tue	1659	Russian AF. G8NO wkg TRL5: = 700 801 011 717 = (TRL5 qsl'd) followed by 20 seconds of WWW at 1700	CW	(MAUK)
M32c	8029	12-3-2013	Tue	1740	Russian AF. W-markers	CW	(Tom)
M32c	8170	12-3-2013	Tue	1749	Russian AF. TRL5 DE G8NO K.	CW	(Tom)
M32c	8029	12-3-2013	Tue	1749	Russian AF. G8NO DE TRL5 K. (G8NO) QTC K. TRL5 QRV K. G8NO = 429 024 048 940 308 K. TRL5 OK = 429 024 048 940 308 C ? K. (G8NO) OK QRU ? K. TRL5 QRU K. (G8NO) OK K	CW	(Tom)
M32c	8029	13-3-2013	Wed	1700	Russian AF. W-markers	CW	(Tom)
M32c	8029	13-3-2013	Wed	1738	Russian AF. CKW7 DE TRL5 K. (CKW7) QTC K. CKW7 = 521 305 362 620 024 704 610 779 K. TRL5 = 521 305 362 620 024 704 610 779 C ? K. (CKW7) OK SK K	CW	(Tom)
M32c	8170	13-3-2013	Wed	1738	Russian AF. TRL5 DE CKW7 K	CW	(Tom)
M32c	8029	13-3-2013	Wed	1738	Russian Air Force bear net. CKW7 DE TRL5 QRV TRL5 = 521 3T5 362 62T T24 7T4 61T 779 C?	CW	(PPA)
M32c	8029	14-3-2013	Thu	1000	Beacon "W"	CW	(TR2)
M32c	8029	14-3-2013	Thu	1020	Beacon "W"	CW	(TR2)
M32c	8029	14-3-2013	Thu	1100	Beacon "W"	CW	(TR2)
M32c	8029	14-3-2013	Thu	1135	Beacon "W"	CW	(TR2)
M32c	8029	14-3-2013	Thu	1138	NP02(??) DE TRL5	CW	(TR2)
M32c	8029	14-3-2013	Thu	1200	??? 303 541 966 836 043 779 C? K	CW	(TR2)
M32c	8029	14-3-2013	Thu	1700	W Marker	CW	(Tom)
M32c	8029	14-3-2013	Thu	1738	CKW7 DE TRL5 K. (CKW7) QTC K. CKW7 = 521 305 362 620 024 704 610 779 K. TRL5 = 521 305 362 620 024 704 610 779 C ? K. (CKW7) OK SK K	CW	(Tom)
M32c	8170	14-3-2013	Thu	1738	TRL5 DE CKW7 K	CW	(Tom)
M32c	8029	15-3-2013	Fri	0900	Russian AF. W Marker	CW	(Tom)
M32c	8029	15-3-2013	Fri	0920	Russian AF. W Marker	CW	(Tom)
M32c	8029	15-3-2013	Fri	1000	Russian AF. VVVVVVVV	CW	(Tom)
M32c	8029	21-3-2013	Thu	0540	Russian Air Force. "W" Markers at 0540, 0600, 0620 UTC	CW	(Tom)
M32c	8029	21-3-2013	Thu	0638	Russian Air Force: WP5P DE TRL5 K TRL5 QSA 4 K	CW	(Tom)
M32c	8170	21-3-2013	Thu	1508	Russian Air Force: A8DO DE EGCE BLIND = 733 711 628 848 186 737 301 856 952 713 481 = 733 711 628 848 186 737 301 856 952 713 481 K	CW	(Tom)
M32c	8170	21-3-2013	Thu	1510	Russian Air Force: A8DO DE EGCE BLIND = 461 711 012 845 256 369 713 941 = 461 711 012 845 256 369 713 941 K	CW	(Tom)
M32c	8170	21-3-2013	Thu	1512	Russian Air Force: A8DO DE EGCE BLIND = 461 106 463 612 245 194 005 = 461 106 463 612 245 194 005 K	CW	(Tom)
M32c	8170	21-3-2013	Thu	1515	Russian Air Force: A8DO DE EGCE BLIND = 902 966 810 194 553 = 902 966 810 194 553 K	CW	(Tom)
M32c	8170	21-3-2013	Thu	1516	Russian Air Force: A8DO DE EGCE BLIND = 733 711 106 013 256 597 301 856 952 713 228 = 733 711 106 013 256 597 301 856 952 713 228 K	CW	(Tom)
M32c	8170	21-3-2013	Thu	1519	Russian Air Force: A8DO DE EGCE BLIND = 733 711 810 686 605 463 301 329 843 194 310 = 733 711 810 686 605 463 301 329 843 194 310 K	CW	(Tom)
M32c	8170	21-3-2013	Thu	1520	Russian Air Force: EGCE sending extensive blind messages.	CW	(Tom)
M32c	8170	21-3-2013	Thu	1520	Russian Air Force: A8DO DE EGCE BLIND = 088 057 316 377 194 061 = 088 057 316 377 194 061 K	CW	(Tom)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M32c	8170	21-3-2013	Thu	1527	Russian Air Force: W4H1 DE EGCE K. W4H1 K. EGCE QTC K. W4H1 DE EGCE = 733 711 628 848 186 737 301 856 752 713 481 K. W4H1 = 733 711 628 848 186 737 301 856 752 713 481 C ? K (EGCE) C K	CW	(Tom)
M32c	8170	21-3-2013	Thu	1539	Russian Air Force: now working with EGCE on 8029 kHz. Aircraft EGCE. Control W4H1	CW	(Tom)
M32c	8170	21-3-2013	Thu	1607	Russian Air Force: W4H1 DE EGCE = 461 168 694 810 205 090 418 K	CW	(Tom)
M32c	8170	21-3-2013	Thu	1957	Russian Air Force. W4H1 DE EGCE K. (EGCE) QTC K. W4H1 DE EGCE = 5?? ?33 4?9 201 205 704 441 278 K	CW	(Tom)
M32c	8170	21-3-2013	Thu	2007	Russian Air Force. W4H1 DE EGCE K. (EGCE) QRV K. (EGCE) RPT K. EGCE = 780 373 644 033 209 0?6 8?5 739 264 952 K	CW	(Tom)
M32c	8029	21-3-2013	Thu	2020	Russian Air Force. W Markers @2020-22Z	CW	(Tom)
M32c	8029	21-3-2013	Thu	2040	Russian Air Force. W Markers @2040-42Z	CW	(Tom)
M32c	8029	22-3-2013	Fri	1220	Russian Air Force: W Marker	CW	(Tom)
M32c	8029	26-3-2013	Tue	1805	Russian Air Force: 5XPY DE TRL5 QSA3 K. 5XPY DE TRL5. VVVVVVVVV 5XPY DE TRL5 QSA3 K	CW	(TR2)
M32c	8029	26-3-2013	Tue	1820	Russian Air Force: W-marker	CW	(TR2)
M32c	8029	26-3-2013	Tue	1840	Russian Air Force: W-marker	CW	(TR2)
M32c	8029	26-3-2013	Tue	1900	Russian Air Force: W-marker	CW	(Tom)
M32c	5619	26-3-2013	Tue	1921	Russian AF. wwwwwwwww k	CW	(FMB)
M32c	8170	26-3-2013	Tue	1932	Russian Air Force: W4H1 DE CKW7 K	CW	(Tom)
M32c	8029	26-3-2013	Tue	1940	Russian Air Force: R-markers followed by W-markers	CW	(Tom)
M32c	8029	26-3-2013	Tue	2000	Russian Air Force: W and R Markers, followed by L markers	CW	(Tom)
M32c	8029	26-3-2013	Tue	2020	Russian Air Force: R, N and L Markers	CW	(TR2)
M32c	8029	26-3-2013	Tue	2300	W-markers	CW	(Tom)
M32c	5620	26-3-2013	Tue	2300	W-markers	CW	(Tom)
M32c	8029	26-3-2013	Tue	2320	Russian Air Force. 5620 HAFL DE TRL5 K	CW	(Tom)
M32c	8029	28-3-2013	Thu	1841	Russian AF. W-Marker	CW	(LG2)
M32c	8170	29-3-2013	Fri	0130	Russian AF. "DE DIHI GUHOR BLIND = 566 263 704 388 060 K RPT = 566 263 704 388 060 K"	CW	(AnUK)
M32c	5620	29-3-2013	Fri	2040	Russian AF. W-markers	CW	(Tom)
M32c	8029	29-3-2013	Fri	2040	Russian AF. W-markers	CW	(Tom)
M32c	8029	29-3-2013	Fri	2253	Russian AF. DIHI DE W4H1 K. W4H1 DE DIHI = 521 910 952 584 223 669 254 268 K. W4H1 = 521 910 952 584 223 669 254 268 K	CW	(Tom)
M32c	5620	29-3-2013	Fri	2253	Russian AF. DIHI DE W4H1 K. W4H1 DE DIHI = 521 910 952 584 223 669 254 268 K. W4H1 = 521 910 952 584 223 669 254 268 K	CW	(Tom)
M32c	8170	29-3-2013	Fri	2253	Russian AF. W4H1 DE DIHI K @2253Z	CW	(Tom)
M32c	8029	29-3-2013	Fri	2300	Russian AF. W-markers	CW	(Tom)
M32c	5620	29-3-2013	Fri	2300	Russian AF. W-markers	CW	(Tom)
M42	16320	6-3-2012		0150	Russian Intel. Msg of 28 blocks "fd,12,b0,e6,00,00,01,10,38,00,70,00,08,00,f9,dc,00,01,98,00,80,00, 80,07,30,0e,6c,00,00,03,f8,00,d8,05,00,04"etc.	FSK 200/1000	(Dan)
M42	5732	2-3-2013	Sat	0532	FGDE: Russian Gov./Intel. 5F msg with =50= =100= group seperator to CNOX	Baudot 50/500	(PPA)
M42	18437	2-3-2013	Sat	1300	Russian Intel	FSK 200/500	(HFD)
M42	16305	2-3-2013	Sat	1310	Russian Intel	FSK 200/500	(HFD)
M42	14719	2-3-2013	Sat	1320	FSK 200/500	CW	(HFD)
M42	16320	4-3-2013	Mon	0150	Russian Intel. Id 0x31	FSK 200/1000	(Dan)
M42	5089	4-3-2013	Mon	1800	Russian intel	FSK 200/1000	(PPA)
M42	16320	4-3-2013	Mon	2240	Russian Intel	FSK 200/1000	(Dan)
M42	16320	5-3-2013	Tue	0150	Russian Intel.	FSK 200/1000	(Dan)
M42	9244	5-3-2013	Tue	1710	Russian Intel, 0-msg	FSK 200/1000	(FMB)
M42	18563	6-3-2013	Wed	1234	Russian Intel. 5min call-up with null message	FSK 200bd/1000	(MCO)
M42	10670	7-3-2013	Thu	0700	Russian Intel	FSK 200/1000	(FMB)
M42	8093	7-3-2013	Thu	0710	Russian Intel	FSK 200/1000	(FMB)
M42	8054	9-3-2013	Sat	1828	Russian Gov/intel testing with ryryryryryy then at 1830 into null message 00000++++++++++162)5761	Baudot 187.5/500	(PPA)
M42	16320	11-3-2013	Mon	0150	Russian Intel Id 0x33	FSK 200/1000	(Dan)
M42	16320	11-3-2013	Mon	0150	Russian Intel.	FSK 200/1000	(Dan)
M42	16320	12-3-2013	Tue	0150	Russian Intel. Id 0x30	FSK 200/1000	(Dan)
M42	13385	12-3-2013	Tue	1650	Russian Intel, 0-msg	FSK 200/1000	(FMB)
M42	11128	12-3-2013	Tue	1700	Russian Intel, 0-msg	FSK 200/1000	(FMB)
M42	9244	12-3-2013	Tue	1710	Russian Intel, 0-msg	FSK 200/1000	(FMB)
M42	9187	12-3-2013	Tue	1715	K4MT: Russian Government. QRX 75983 K QRX 75983 QRX 75983	CW +	(LG2)

enigma	frequency	date	day	UTC	remarks	mode	contributor
					QRX 75983	FSK50/500	
M42	9187	12-3-2013	Tue	1742	K4MT: Russian Government. NT9P DE K4MT K4MT K QA3 QSA? K EAC1 ZZC K IAE HI4	CW + FSK50/500	(LG2)
M42	9187	12-3-2013	Tue	1747	K4MT: Russian Government. QRX746 63K R6 6 3 QRX7 4 663K CFM AR SDGTE K	CW + FSK50/500	(LG2)
M42	7640	12-3-2013	Tue	2200	Russian Intel, 0-msg	FSK 200/1000	(FMB)
M42	6842	12-3-2013	Tue	2210	Russian Intel, 0-msg	FSK 200/1000	(FMB)
M42	5208	12-3-2013	Tue	2220	Russian Intel, 0-msg	FSK 200/1000	(FMB)
M42	8177	12-3-2013	Tue	2300	Russian Intel, 0-msg	FSK 200/1000	(FMB)
M42	6927	12-3-2013	Tue	2310	Russian Intel, 0-msg	FSK 200/1000	(FMB)
M42	4495	12-3-2013	Tue	2320	Russian Intel, 0-msg	FSK 200/1000	(FMB)
M42	7602	14-3-2013	Thu	2000	Russian Intel	FSK 200/500	(HFD)
M42	5756	14-3-2013	Thu	2010	Russian Intel	FSK 200/500	(HFD)
M42	4469	14-3-2013	Thu	2020	Russian Intel	FSK 200/500	(HFD)
M42	16320	15-3-2013	Fri	0150	Russian Intel. Id 0x31	FSK 200/1000	(Dan)
M42	10860	15-3-2013	Fri	1015	Russian Intel, 0-msg	FSK 200/500	(FMB)
M42	8186	15-3-2013	Fri	1025	Russian Intel, 0-msg	FSK 200/500	(FMB)
M42	15876	16-3-2013	Sat	0900	Russian Intel, 14 blocks, Id 0xbb	FSK 200/1000	(FMB)
M42	17452	16-3-2013	Sat	0908	Russian Intel, 46 blocks	FSK 200/1000	(FMB)
M42	13563	16-3-2013	Sat	0910	Russian Intel, 14 blocks, Id 0xbb	FSK 200/1000	(FMB)
M42	14914	16-3-2013	Sat	0915	Russian Intel, 46 blocks	FSK 200/1000	(FMB)
M42	11164	16-3-2013	Sat	0920	Russian Intel, 14 blocks, Id 0xbb	FSK 200/1000	(FMB)
M42	13411	16-3-2013	Sat	0925	Russian Intel, 46 blocks	FSK 200/1000	(FMB)
M42	17464	16-3-2013	Sat	1100	Russian Intel, 27 blocks, Id 0x92	FSK 200/1000	(FMB)
M42	15925	16-3-2013	Sat	1110	Russian Intel, 27 blocks, Id 0x92	FSK 200/1000	(FMB)
M42	13431	16-3-2013	Sat	1120	Russian Intel, 27 blocks Id 0x92	FSK 200/1000	(FMB)
M42	18437	16-3-2013	Sat	1300	Russian Intel, 0-msg	FSK 200/500	(FMB)
M42	18437	16-3-2013	Sat	1302	Russian Gov/Intel. 576 1 00000 +++++ +++++ 162	Baudot 200bd/500	(MCO)
M42	16305	16-3-2013	Sat	1310	Russian Intel, 0-msg	FSK 200/1000	(FMB)
M42	13955	16-3-2013	Sat	1319	Russian Intel, 46 blocks	FSK 200/1000	(FMB)
M42	12093	16-3-2013	Sat	1325	Russian Intel, 46 blocks	FSK 200/1000	(FMB)
M42	9964	16-3-2013	Sat	1705	Russian Intel, 46 blocks	FSK 200/1000	(FMB)
M42	9082	16-3-2013	Sat	1715	Russian Intel, 46 blocks	FSK 200/1000	(FMB)
M42	7642	16-3-2013	Sat	1725	Russian Intel, 46 blocks	FSK 200/1000	(FMB)
M42	10292	16-3-2013	Sat	1825	Russian Intel, 0-msg	FSK 200/500	(FMB)
M42	8054	16-3-2013	Sat	1830	Russian Intel, 0-msg	FSK 200/500	(FMB)
M42	12199	17-3-2013	Sun	0515	Russian Intel, 46 blocks	FSK 200/1000	(FMB)
M42	10644	17-3-2013	Sun	0525	Russian Intel, 46 blocks	FSK 200/1000	(FMB)
M42	15876	17-3-2013	Sun	0900	Russian ZZintel, 14 blocks, Id 0xbb	FSK 200/1000	(FMB)
M42	17452	17-3-2013	Sun	0905	Russian Intel, 46 blocks	FSK 200/1000	(FMB)
M42	13563	17-3-2013	Sun	0910	Russian Intel, 14 blocks, Id 0xbb	FSK 200/1000	(FMB)
M42	14914	17-3-2013	Sun	0915	Russian Intel, 46 blocks	FSK 200/1000	(FMB)
M42	11164	17-3-2013	Sun	0920	Russian Intel, 14 blocks, Id 0xbb	FSK 200/1000	(FMB)
M42	13441	17-3-2013	Sun	0925	Russian Intel, 46 blocks	FSK 200/1000	(FMB)
M42	17464	17-3-2013	Sun	1100	Russian Intel, 27 blocks Id 0x92	FSK 200/1000	(FMB)
M42	15817	17-3-2013	Sun	1105	Russian Intel, 32 blocks	FSK 200/1000	(FMB)
M42	15925	17-3-2013	Sun	1110	Russian Intel, 27 b;ocks, Id 0x92	FSK 200/1000	(FMB)
M42	13431	17-3-2013	Sun	1120	Russian Intel, 27 blocks, Id 0x92	FSK 200/1000	(FMB)
M42	15817	17-3-2013	Sun	1305	Russian Intel, 56 blocks	FSK 200/1000	(FMB)
M42	13955	17-3-2013	Sun	1315	Russian Intel, 56 blocks	FSK 200/1000	(FMB)
M42	12093	17-3-2013	Sun	1325	Russian Intel, 56 blocks	FSK 200/1000	(FMB)
M42	16320	18-3-2013	Mon	0150	Russian Intel. Id 0x1	FSK 200/1000	(Dan)
M42	7565	18-3-2013	Mon	0636	Russian Gov/Intel.	Baudot 75/500	(BCI)
M42	16320	19-3-2013	Tue	0150	Russian Intel. Id 0x30	FSK 200/1000	(Dan)
M42	12115	19-3-2013	Tue	0920	Russian Gov/Intel. "074154215474023115=90428 951501424228494174=85529"	Baudot 200/500	(BCI)
M42	7984	19-3-2013	Tue	2130	Russian Intel.	FSK 200/1000	(BCI)
M42	6834	19-3-2013	Tue	2146	Russian Intel.	FSK 200/1000	(BCI)
M42	16320	20-3-2013	Wed	0150	Russian Intel.	FSK 200/1000	(Dan)
M42	16286	20-3-2013	Wed	1225	Russian Intel, Moscow	FSK 200bd/1000	(MCO)
M42	8073	20-3-2013	Wed	1744	BZL26: Russian Gov/Intel.	Baudot 50/500	(BCI)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M42	9203	20-3-2013	Wed	2008	Russian Gov/Intel. "31301453126082387=80110 814765492956531112=80711"	Baudot 200/500	(BCI)
M42	5103	20-3-2013	Wed	2020	Russian Intel	FSK 200/1000	(FMB)
M42	16320	21-3-2013	Thu	0150	Russian Intel.	FSK 200/1000	(Dan)
M42	9466	21-3-2013	Thu	0731	Russian Gov/Intel. "027322619075368113=81914 420241249646757125=82115"	Baudot 200/500	(BCI)
M42	20885	21-3-2013	Thu	0907	Russian diplo. Tfc on link 70169. Header: 11100 70169 40297 21022 03223	Baudot 100/500	(BCI)
M42	16320	22-3-2013	Fri	0150	Russian Intel.	FSK 200/1000	(Dan)
M42	10508	22-3-2013	Fri	0810	Russian diplo.	CROWD-36	(MYK)
M42	15708	22-3-2013	Fri	1057	Russian Intel, Moscow	FSK 200/1000	(MCO)
M42	3394	22-3-2013	Fri	2142	Russian Intel.	FSK 200/1000	(BCI)
M42	16320	25-3-2013	Mon	0150	Russian Intel. Id: 0x31	FSK 200/1000	(Dan)
M42	16320	27-3-2013	Wed	0150	Russian Intel.	FSK 200/1000	(Dan)
M42	16320	27-3-2013	Wed	0150	Russian Intel. Id 0xaa	FSK 200/1000	(Dan)
M42	7954	27-3-2013	Wed	0540	Russian Intel	Baudot 200/500	(FMB)
M42	10670	27-3-2013	Wed	0700	Russian Intel, 37 blocks, Id 0xb0	FSK 200/1000	(FMB)
M42	8093	27-3-2013	Wed	0710	Russian Intel, 37 blocks, Id 0xb0	FSK 200/1000	(FMB)
M42	16320	28-3-2013	Thu	0150	Russian Intel. Id 0x31	FSK 200/1000	(Dan)
M42	16320	29-3-2013	Fri	0150	Russian Intel. Id 0x31	FSK 200/1000	(Dan)
M42	14671	31-3-2013	Sun	1544	Russian Intel, Moscow, repeat of earlier null message on 16243 kHz	FSK 200/1000	(MCO)
M42	12196	31-3-2013	Sun	1552	Russian Intel, Moscow, repeat of earlier null message on 14671 kHz	FSK 200/1000	(MCO)
M42a	10436	2-3-2013	Sat	1403	GRU hfdf net "vvv vvv vvv QSV 3k"	CW	(PPA)
M42a	5840	7-3-2013	Thu	1901	GRU HFDF net. VVV ZLD ZLD ZLD	CW	(TR2)
M42a	5840	7-3-2013	Thu	1907	GRU HFDF net. VVV NWÄ NWÄ NWÄ 57856 Ä 67584	CW	(TR2)
M42b	4020	7-3-2013	Thu	2002	UZC2: DSTSZI, UKR. Opchat, calling UTN7 for QSA?, then into F1B 50/500 secure	CW + Baudot 50/500	(TJ)
M45	4956.19	5-3-2013	Tue	1806	ip	CW	(Q-HOL)
M45	4957.3	7-3-2013	Thu	1802	317 30 = = 76937 80076 59133 24590 ... 54045 91890 29868 63009 18936 = = 317 30 000 //4956.15	CW	(MPJ)
M45	4556.3	12-3-2013	Tue	1802	41067 70153 54178 99633 46058 ...	CW	(Q-HOL)
M45	4955	14-3-2013	Thu	1802	555 231/30 = 92524 //4555	CW	(HFD)
M45	4555	14-3-2013	Thu	1802	555 231/30 = 92524 //4955	CW	(HFD)
M45	4995	14-3-2013	Thu	1802	555 (R3) 231 231 30 30 = = msg = = 231 231 30 30 000 //4555 kHz	CW	(JPL-D)
M45	4555	14-3-2013	Thu	1802	555 (R3) 231 231 30 30 = = msg = = 231 231 30 30 000 //4995 kHz	CW	(JPL-D)
M45	4955	21-3-2013	Thu	1830	555 555 555 into 231 231 30 30 = = header followed by repeated 5F group message	CW	(PPA)
M51	16257.6	1-3-2013	Fri	1312	5LGs French MIL Intel, Paris	CW	(MCO)
M51	6853	2-3-2013	Sat	1757	French mil. intel Favieres F. 5L msg after = 47 F 27 18:56:11 1984 =	CW	(PPA)
M51	13472	4-3-2013	Mon	2023	5LGs tfc French MIL Intel, Paris	CW	(MCO)
M51	8016	6-3-2013	Wed	1904	ip	CW	(FMB)
M51	8016	7-3-2013	Thu	0632	ip	CW	(FMB)
M51	9213	11-3-2013	Mon	1502	sending 5 ltr cipher tfc dated 1985.	CW	(JPL)
M51	10358	11-3-2013	Mon	1707	ip	CW	(FMB)
M51	9213	11-3-2013	Mon	1709	ip	CW	(FMB)
M51	9213	11-3-2013	Mon	1805	= nr 11 m 11 19:15:18 1985 bt wtzqh tlvrm...	CW	(Q-HOL)
M51	6853	12-3-2013	Tue	1634	ip	CW	(FMB)
M51	8016	12-3-2013	Tue	2104	ip	CW	(FMB)
M51	13472	15-3-2013	Fri	0724	ip	CW	(FMB)
M51	3164	15-3-2013	Fri	2018	ip, 5fG ...fmwaw scvfl boqkq iinun...19 21:27:25 1985 =...pqkst bslot celhm...= nr 33 m 19 21:33:37 1985 =	CW	(Q-HOL)
M51	9213	17-3-2013	Sun	1510	= NR 10 M 18 17:01:40 1985 = 5FGs = NR 38 M 18 19:56:34 1985 =	CW	(EB-D)
M51	6825	18-3-2013	Mon	2007	ip, 5fG and text "...12 m 18 21:11:54 1985 bt fzipn cuypn..."	CW	(Q-HOL)
M51	6825	19-3-2013	Tue	0005	5L grps, sounds like FAV22 //3881 kHz	CW	(HS)
M51	3881	19-3-2013	Tue	0046	Numbered & time stamped QTC in 5L grps	CW	(HS)
M51	6825	19-3-2013	Tue	0936	FAV22: 8éme Régiment de Transmission "1/1 VITESSE 600 CODé ="	CW	(LG2)
M51	7528	20-3-2013	Wed	1935	ip	CW	(FMB)
M51	7528	21-3-2013	Thu	0610	ip	CW	(FMB)
M51	5444	22-3-2013	Fri	0557	ip	CW	(FMB)
M51	8016	24-3-2013	Sun	1555	5LGs "BT NR ... BT"	CW	(ALF1)
M51	3880	25-3-2013	Mon	1959	ip	CW	(FMB)
M51	3880	26-3-2013	Tue	0516	ip	CW	(FMB)
M51	5054	26-3-2013	Tue	0520	ip	CW	(FMB)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M51	5453	26-3-2013	Tue	1956	ip	CW	(FMB)
M51	3748	26-3-2013	Tue	2010	ip	CW	(FMB)
M51	9256	27-3-2013	Wed	0700	ip	CW	(FMB)
M51	9433	27-3-2013	Wed	0700	ip	CW	(FMB)
M51	6825	28-3-2013	Thu	1148	FAV2: 8éme Régiment de Transmission. Coded text lesson	CW	(LG2)
M89	4860	2-3-2013	Sat	1320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	2-3-2013	Sat	1320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	3330	2-3-2013	Sat	1326	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3642	2-3-2013	Sat	1328	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	2-3-2013	Sat	1328	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	4512	2-3-2013	Sat	1330	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	3725	2-3-2013	Sat	1332	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	7607	2-3-2013	Sat	1332	V WITN (x3) DE GNXG (x2) (Cont'd) //3725	CW	(JPL)
M89	5500	2-3-2013	Sat	1334	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	5500	2-3-2013	Sat	1435	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	3725	2-3-2013	Sat	1437	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	7607	2-3-2013	Sat	1437	V WITN (x3) DE GNXG (x2) (Cont'd) //3725	CW	(JPL)
M89	4512	2-3-2013	Sat	1439	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	3642	2-3-2013	Sat	1441	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	2-3-2013	Sat	1441	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3330	2-3-2013	Sat	1443	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5500	3-3-2013	Sun	0302	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	10779	3-3-2013	Sun	0304	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	6840	3-3-2013	Sun	0320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //10640	CW	(JPL)
M89	10640	3-3-2013	Sun	0320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	5500	3-3-2013	Sun	1219	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	6840	3-3-2013	Sun	1220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //10640	CW	(JPL)
M89	10640	3-3-2013	Sun	1220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	3725	3-3-2013	Sun	1225	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	3-3-2013	Sun	1227	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	3-3-2013	Sun	1227	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	5801	3-3-2013	Sun	1229	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	3-3-2013	Sun	1229	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5500	3-3-2013	Sun	1341	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	3725	3-3-2013	Sun	1343	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	3-3-2013	Sun	1345	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	3-3-2013	Tue	1345	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	7602	3-3-2013	Sun	1347	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	3-3-2013	Sun	1347	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	3725	3-3-2013	Sun	1857	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	3-3-2013	Sun	1859	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	3-3-2013	Sun	1859	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	7602	3-3-2013	Sun	1901	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	3-3-2013	Sun	1901	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	3330	3-3-2013	Sun	1903	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5500	3-3-2013	Sun	2107	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	3-3-2013	Sun	2107	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	3725	3-3-2013	Sun	2109	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	3-3-2013	Sun	2111	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	3-3-2013	Sun	2111	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3642	3-3-2013	Sun	2113	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	5500	3-3-2013	Sun	2115	QV5B in tfc: COMM B T 0671/.540/Z70/6926 AR //4225	CW	(JPL)
M89	4860	3-3-2013	Sun	2120	VVV (x3) Q2M DE NYZ (x2) QSA ? K	CW	(JPL)
M89	4225	3-3-2013	Sun	2255	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	3-3-2013	Sun	2255	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	3725	3-3-2013	Sun	2257	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	6773	3-3-2013	Sun	2259	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	3-3-2013	Sun	2259	V H2FL (x3) DE DRV8 (x2) (Cont'd) //6773	CW	(JPL)
M89	3642	3-3-2013	Sun	2301	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	4860	3-3-2013	Sun	2320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	3-3-2013	Sun	2320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	7582	4-3-2013	Mon	0405	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M89	8110	4-3-2013	Mon	0405	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	6840	4-3-2013	Mon	0420	VVV (x3) Q2M DE NYZ (x2) QSA ? K	CW	(JPL)
M89	5500	4-3-2013	Mon	1110	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	4-3-2013	Mon	1110	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	3797	4-3-2013	Mon	1112	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	4-3-2013	Mon	1112	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	5801	4-3-2013	Mon	1114	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	4-3-2013	Mon	1114	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	4860	4-3-2013	Mon	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	4-3-2013	Mon	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	5588	4-3-2013	Mon	1126	2SLC in tfc: = 4... AR	CW	(JPL)
M89	5500	4-3-2013	Mon	1930	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	4-3-2013	Mon	1930	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	4590	4-3-2013	Mon	1932	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	4-3-2013	Mon	1934	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	4-3-2013	Mon	1934	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3642	4-3-2013	Mon	1936	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	7602	4-3-2013	Mon	1936	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3330	4-3-2013	Mon	1938	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4225	4-3-2013	Mon	2232	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	4-3-2013	Mon	2232	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	3725	4-3-2013	Mon	2234	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	4590	4-3-2013	Mon	2234	V WITN (x3) DE GNXG (x2) (Cont'd) //3725	CW	(JPL)
M89	4512	4-3-2013	Mon	2236	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	4-3-2013	Mon	2236	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	7602	4-3-2013	Mon	2238	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	4-3-2013	Mon	2238	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	3330	4-3-2013	Mon	2239	2SLC in tfc: 35A3 T54 N7D 7NUD .UN 75UT (ContÆd)	CW	(JPL)
M89	7582	5-3-2013	Tue	0536	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	8110	5-3-2013	Tue	0536	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	4225	5-3-2013	Tue	1158	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	5-3-2013	Tue	1158	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	7607	5-3-2013	Tue	1205	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	5588	5-3-2013	Tue	1207	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	3797	5-3-2013	Tue	1208	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	5-3-2013	Tue	1208	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	10180	5-3-2013	Tue	1210	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5801	5-3-2013	Tue	1210	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	4860	5-3-2013	Tue	1220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	5-3-2013	Tue	1220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	5588	5-3-2013	Tue	1228	MSG NR 019 CK 301 44 0305 2030 = (see N&O 186)	CW	(JPL)
M89	5588	5-3-2013	Tue	1342	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	4225	5-3-2013	Tue	1344	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	5-3-2013	Tue	1344	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	3725	5-3-2013	Tue	1346	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	5-3-2013	Tue	1348	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	5-3-2013	Tue	1348	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	5230	5-3-2013	Tue	1350	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	5-3-2013	Tue	1350	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5588	5-3-2013	Tue	1449	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	5588	5-3-2013	Tue	1551	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	5500	5-3-2013	Tue	1552	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	5-3-2013	Tue	1552	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	3725	5-3-2013	Tue	1554	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	5-3-2013	Tue	1556	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	5-3-2013	Tue	1556	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3642	5-3-2013	Tue	1558	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	3330	5-3-2013	Tue	1638	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	3330	5-3-2013	Tue	1730	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	4225	5-3-2013	Tue	1731	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	5-3-2013	Tue	1731	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	3725	5-3-2013	Tue	1732	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M89	3797	5-3-2013	Tue	1733	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	5-3-2013	Tue	1733	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3642	5-3-2013	Tue	1735	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	5-3-2013	Tue	1735	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	4225	5-3-2013	Tue	1840	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	5-3-2013	Tue	1840	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	3725	5-3-2013	Tue	1841	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	5-3-2013	Tue	1842	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	5-3-2013	Tue	1842	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	5230	5-3-2013	Tue	1843	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	5-3-2013	Tue	1843	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3330	5-3-2013	Tue	1844	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	5500	5-3-2013	Tue	1929	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	5-3-2013	Tue	1929	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	3725	5-3-2013	Tue	1930	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	5-3-2013	Tue	1931	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	5-3-2013	Tue	1931	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3642	5-3-2013	Tue	1932	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	5-3-2013	Tue	1932	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3330	5-3-2013	Tue	1934	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	3330	5-3-2013	Tue	2031	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	5500	5-3-2013	Tue	2127	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	5-3-2013	Tue	2127	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	3725	5-3-2013	Tue	2128	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	5-3-2013	Tue	2129	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	5-3-2013	Tue	2129	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3642	5-3-2013	Tue	2130	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	5-3-2013	Tue	2130	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3330	5-3-2013	Tue	2131	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	4860	5-3-2013	Tue	2220	VVV (x3) Q2M DE NYZ (x2) QSA ? K	CW	(JPL)
M89	5500	5-3-2013	Tue	2225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	5-3-2013	Tue	2225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	3725	5-3-2013	Tue	2226	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	5-3-2013	Tue	2227	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	5-3-2013	Tue	2227	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3642	5-3-2013	Tue	2228	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	5-3-2013	Tue	2228	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3330	5-3-2013	Tue	2230	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	5588	5-3-2013	Tue	2305	2SLC in tfc: 453U A64T 536A NUAD TA37 5TU4 (ContÆd)	CW	(JPL)
M89	7582	6-3-2013	Wed	0309	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	8110	6-3-2013	Wed	0309	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	10779	6-3-2013	Wed	0311	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10640	6-3-2013	Wed	0320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	6-3-2013	Wed	0320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //10640	CW	(JPL)
M89	10180	6-3-2013	Wed	0325	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	5500	6-3-2013	Wed	1226	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	7607	6-3-2013	Wed	1227	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	6-3-2013	Wed	1229	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	6-3-2013	Wed	1229	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	5801	6-3-2013	Wed	1230	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	6-3-2013	Wed	1230	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	3330	6-3-2013	Wed	1231	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3330	6-3-2013	Wed	1301	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4860	6-3-2013	Wed	1624	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	6-3-2013	Wed	1624	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	5500	6-3-2013	Wed	1630	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	4590	6-3-2013	Wed	1632	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	6-3-2013	Wed	1633	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	6-3-2013	Wed	1633	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	5230	6-3-2013	Wed	1635	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	6-3-2013	Wed	1635	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3330	6-3-2013	Wed	1636	VVV UG GA GA BQB3 RMKS 2819 TO 1202/1489 UGT K	CW	(JPL)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M89	6840	6-3-2013	Wed	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	3330	6-3-2013	Wed	1726	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5230	6-3-2013	Wed	1752	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	6-3-2013	Wed	1752	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3330	6-3-2013	Wed	1808	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	6840	6-3-2013	Wed	1820	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	6-3-2013	Wed	1820	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	4590	6-3-2013	Wed	2018	V WITN WITN WITN DE GNXG GNXG	CW	(PPA)
M89	3330	6-3-2013	Wed	2026	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4590	6-3-2013	Wed	2104	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	6-3-2013	Wed	2106	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	6-3-2013	Wed	2106	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3642	6-3-2013	Wed	2108	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	6-3-2013	Wed	2108	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3330	6-3-2013	Wed	2110	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	6840	6-3-2013	Wed	2120	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	6-3-2013	Wed	2120	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	3330	6-3-2013	Wed	2125	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5588	6-3-2013	Wed	2300	QSY from 3330 kHz: MSG NR 024 CK 301 44 0307 0700 = A7D5 6UA5 4ADT 54NT 65AT 763T 7N36 U456 TT66 TTTU 5NT4 (ContÆd) = 36AU	CW	(JPL)
M89	6840	6-3-2013	Wed	2320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	6-3-2013	Wed	2320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	5500	6-3-2013	Wed	2325	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	8789	6-3-2013	Wed	2327	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	6773	6-3-2013	Wed	2329	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	10779	7-3-2013	Thu	0126	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4860	7-3-2013	Thu	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	7-3-2013	Thu	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	5500	7-3-2013	Thu	1125	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	8789	7-3-2013	Thu	1127	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	4590	7-3-2013	Thu	1127	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	4512	7-3-2013	Thu	1129	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	7-3-2013	Thu	1129	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	5801	7-3-2013	Thu	1131	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	7-3-2013	Thu	1131	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5588	7-3-2013	Thu	1132	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3330	7-3-2013	Thu	1146	QSY from 5588 kHz. CQ 63 RMKS 2819 TO 4371/1/1E89.*COMM* AAEEE 175/4371/2100/117//2819 AR	CW	(JPL)
M89	4225	7-3-2013	Thu	1707	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	3725	7-3-2013	Thu	1709	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	7-3-2013	Thu	1711	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	7-3-2013	Thu	1711	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3642	7-3-2013	Thu	1713	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	7-3-2013	Thu	1713	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3330	7-3-2013	Thu	1715	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	6840	7-3-2013	Thu	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	7-3-2013	Thu	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	4225	7-3-2013	Thu	2028	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	3725	7-3-2013	Thu	2030	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	7-3-2013	Thu	2032	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	7-3-2013	Thu	2032	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3642	7-3-2013	Thu	2034	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	7-3-2013	Thu	2034	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3330	7-3-2013	Thu	2035	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3330	7-3-2013	Thu	2244	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5588	7-3-2013	Thu	2257	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4860	8-3-2013	Fri	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	8-3-2013	Fri	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4512	8-3-2013	Fri	1128	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	8-3-2013	Fri	1128	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	10180	8-3-2013	Fri	1130	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M89	5588	8-3-2013	Fri	1131	2SLC msgs: 6743 UNAD N537 U65U UT6N 7NUA T653 U5AN (see N&O 186)	CW	(JPL)
M89	3330	8-3-2013	Fri	1157	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3725	8-3-2013	Fri	1202	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	7582	8-3-2013	Fri	1457	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	3725	8-3-2013	Fri	1459	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	8-3-2013	Fri	1500	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	8-3-2013	Fri	1500	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3642	8-3-2013	Fri	1501	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	8-3-2013	Fri	1501	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3330	8-3-2013	Fri	1502	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4474	8-3-2013	Fri	1824	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	7582	8-3-2013	Fri	1908	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	3725	8-3-2013	Fri	1910	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	8-3-2013	Fri	1912	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	8-3-2013	Fri	1912	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3642	8-3-2013	Fri	1913	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	8-3-2013	Fri	1913	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3330	8-3-2013	Fri	1916	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	6840	8-3-2013	Fri	1920	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	8-3-2013	Fri	1920	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	11321	8-3-2013	Fri	2203	V RXP7 RXP7 RXP7 DE CZT2 CZT2	CW	(NCI)
M89	4474	10-3-2013	Sun	0129	V RXP7 RXP7 RXP7 DE CZT2 CZT2	CW	(HS)
M89	5588	11-3-2013	Mon	1038	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4225	11-3-2013	Mon	1047	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	11-3-2013	Mon	1047	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	3725	11-3-2013	Mon	1051	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	11-3-2013	Mon	1053	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	11-3-2013	Mon	1053	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	5588	11-3-2013	Mon	1056	CQ 63 1489 T..... COMM AAES 66 5175/1286/2000/117NR/2819 AR. = = = 65175/1286/2000/117NR = = = 65175/1286/2000/117NR/2819 AR AR	CW	(JPL)
M89	3330	11-3-2013	Mon	1100	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4860	11-3-2013	Mon	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	11-3-2013	Mon	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	3330	11-3-2013	Mon	1125	MSG NR 043 CK 301 44 0311 1.30 =. UNTA UTN5 U3NT N... II BT 74N3 MSG NR 043 CK 301 44 0311 1..0 = UNTA UTN5 U3NT N5DS 53DT 5636 73U. II BT 74N3	CW	(JPL)
M89	5500	11-3-2013	Mon	1349	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	11-3-2013	Mon	1349	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	3725	11-3-2013	Mon	1351	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	7607	11-3-2013	Mon	1351	V WITN (x3) DE GNXG (x2) (Cont'd) //3725	CW	(JPL)
M89	4512	11-3-2013	Mon	1353	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	11-3-2013	Mon	1353	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3642	11-3-2013	Mon	1354	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	11-3-2013	Mon	1354	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3330	11-3-2013	Mon	1355	CQ 63 RMKS 1489 TO 4069 WETCOMM S. 033. 65175/4069/2230/237NR/1489 = = 65175/4069/2230/237NR/1489 AR	CW	(JPL)
M89	5500	11-3-2013	Mon	2008	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	11-3-2013	Mon	2008	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	7607	11-3-2013	Mon	2010	V WITN (x3) DE GNXG (x2) (Cont'd) //3725	CW	(JPL)
M89	3725	11-3-2013	Mon	2010	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	3797	11-3-2013	Mon	2012	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	11-3-2013	Mon	2012	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	5230	11-3-2013	Mon	2013	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	11-3-2013	Mon	2013	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3330	11-3-2013	Mon	2014	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	6840	11-3-2013	Mon	2020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	11-3-2013	Mon	2020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	3330	11-3-2013	Mon	2241	4U6T 3544 6U.U II BT ..43 (Silent û 2252z)	CW	(JPL)
M89	5500	11-3-2013	Mon	2259	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	11-3-2013	Mon	2259	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M89	5763	11-3-2013	Mon	2301	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	11-3-2013	Mon	2303	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	11-3-2013	Mon	2303	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3642	11-3-2013	Mon	2305	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	11-3-2013	Mon	2305	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	4860	11-3-2013	Mon	2320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	11-3-2013	Mon	2320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	8110	12-3-2013	Tue	0117	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	7582	12-3-2013	Tue	0117	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	10640	12-3-2013	Tue	0920	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	12-3-2013	Tue	0920	VVV (x3) Q2M DE NYZ (x2) QSA ? K //10640	CW	(JPL)
M89	8110	12-3-2013	Tue	0925	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	7582	12-3-2013	Tue	0925	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	5763	12-3-2013	Tue	0926	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	8789	12-3-2013	Tue	0926	V WITN (x3) DE GNXG (x2) (Cont'd) //5763	CW	(JPL)
M89	5588	12-3-2013	Tue	0930	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4225	12-3-2013	Tue	0932	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	12-3-2013	Tue	0932	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	3330	12-3-2013	Tue	1140	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	7607	12-3-2013	Tue	1233	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	4590	12-3-2013	Tue	1233	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	5801	12-3-2013	Tue	1234	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //1018	CW	(JPL)
M89	10180	12-3-2013	Tue	1234	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	4225	12-3-2013	Tue	1333	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	12-3-2013	Tue	1333	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	7607	12-3-2013	Tue	1335	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	4590	12-3-2013	Tue	1335	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	4512	12-3-2013	Tue	1336	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	12-3-2013	Tue	1336	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	5230	12-3-2013	Tue	1338	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	12-3-2013	Tue	1338	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3330	12-3-2013	Tue	1340	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5500	12-3-2013	Tue	1402	VV UGT COMM* BT 0745/22U EEEE UGT COMM = 0745/2230/M37/6820 AR (Return to R/S 1404z)	CW	(JPL)
M89	4225	12-3-2013	Tue	1551	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	12-3-2013	Tue	1551	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	7607	12-3-2013	Tue	1553	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	4590	12-3-2013	Tue	1553	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	3797	12-3-2013	Tue	1554	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	12-3-2013	Tue	1554	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	5230	12-3-2013	Tue	1555	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	12-3-2013	Tue	1555	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3330	12-3-2013	Tue	1556	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5500	12-3-2013	Tue	1840	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	4590	12-3-2013	Tue	1842	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	7607	12-3-2013	Tue	1842	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	4512	12-3-2013	Tue	1844	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	12-3-2013	Tue	1844	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	5230	12-3-2013	Tue	1846	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	12-3-2013	Tue	1846	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3330	12-3-2013	Tue	1848	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	6840	12-3-2013	Tue	1920	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	12-3-2013	Tue	1920	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	4590	12-3-2013	Tue	2200	V WITN WITN WITN DE GNXG GNXG	CW	(HS)
M89	3330	12-3-2013	Tue	2204	MSG NR 048 CK 301 44 0313 .... = ... 465U T43U 4363 7U3T TDN6 TT64 TTT4 (ContÆd) II = ..6. MSG NR 048 CK 301 44 0313 .603 = II = ...	CW	(JPL)
M89	3725	13-3-2013	Wed	1516	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	8110	13-3-2013	Wed	1516	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	7582	13-3-2013	Wed	1516	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	4512	13-3-2013	Wed	1517	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	13-3-2013	Wed	1517	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M89	5230	13-3-2013	Wed	1518	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	5588	13-3-2013	Wed	1519	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	6840	13-3-2013	Wed	1520	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	13-3-2013	Wed	1520	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	13-3-2013	Wed	1620	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	13-3-2013	Wed	1620	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	7582	13-3-2013	Wed	1625	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	8110	13-3-2013	Wed	1625	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	3725	13-3-2013	Wed	1627	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	13-3-2013	Wed	1628	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	13-3-2013	Wed	1628	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	5230	13-3-2013	Wed	1629	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	3330	13-3-2013	Wed	1630	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4225	13-3-2013	Wed	1913	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	13-3-2013	Wed	1913	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	3725	13-3-2013	Wed	1915	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	13-3-2013	Wed	1916	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	13-3-2013	Wed	1916	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	5230	13-3-2013	Wed	1917	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	13-3-2013	Wed	1917	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3330	13-3-2013	Wed	1918	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	6840	13-3-2013	Wed	1920	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	13-3-2013	Wed	1920	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	3330	13-3-2013	Wed	2211	MSG NR 052 CK 301 44 0324 0630 = TDTU U6DU ..TN 46.U T43U 4363 7U3T TDN6 TT64 TTT4 (ContÆd)	CW	(JPL)
M89	5500	13-3-2013	Wed	2254	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	13-3-2013	Wed	2254	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	3725	13-3-2013	Wed	2256	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	5588	13-3-2013	Wed	2259	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3642	13-3-2013	Wed	2301	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	4474	13-3-2013	Wed	2303	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	8110	14-3-2013	Thu	0208	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	7582	14-3-2013	Thu	0208	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	6840	14-3-2013	Thu	0220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //10640	CW	(JPL)
M89	10640	14-3-2013	Thu	0220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	8110	14-3-2013	Thu	1036	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	7582	14-3-2013	Thu	1036	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	5588	14-3-2013	Thu	1038	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	8789	14-3-2013	Thu	1039	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	10779	14-3-2013	Thu	1039	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	4512	14-3-2013	Thu	1041	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	14-3-2013	Thu	1041	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	10180	14-3-2013	Thu	1042	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	5588	14-3-2013	Thu	1043	75/2000/610NR/2819 AR = 65175/2000/610NR/2819 AR	CW	(JPL)
M89	3330	14-3-2013	Thu	1110	MSG NR 05. CK 301 44 031. 1930 =	CW	(JPL)
M89	7607	14-3-2013	Thu	1155	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	14-3-2013	Thu	1157	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	10180	14-3-2013	Thu	1159	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	7607	14-3-2013	Thu	1840	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	14-3-2013	Thu	1842	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	14-3-2013	Thu	1842	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3642	14-3-2013	Thu	1844	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	3330	14-3-2013	Thu	1845	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3642	14-3-2013	Thu	2217	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	7607	14-3-2013	Thu	2218	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4860	14-3-2013	Thu	2220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	14-3-2013	Thu	2220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	3330	14-3-2013	Thu	2225	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3330	14-3-2013	Thu	2258	MSG NR 056 CK 301 44 0315 0700 =	CW	(JPL)
M89	4474	14-3-2013	Thu	2329	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	7607	15-3-2013	Fri	1202	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10180	15-3-2013	Fri	1204	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M89	5801	15-3-2013	Fri	1204	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	4512	15-3-2013	Fri	1206	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	15-3-2013	Fri	1206	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	5588	15-3-2013	Fri	1208	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3330	15-3-2013	Fri	1216	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	6840	15-3-2013	Fri	1220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	15-3-2013	Fri	1220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	8050	15-3-2013	Fri	1336	In tfc: 76N7 6TUA U54T UA64 676N NA7U 57A. 4353 6475 III 437 6T5A 3U6A (see N&O 186)	CW	(JPL)
M89	7582	15-3-2013	Fri	1628	In tfc: AA7T 75TN DD34 A754 TA7A 3DNS3 A36. II BT 3D67 AR (Silent - 1631z)	CW	(JPL)
M89	3330	15-3-2013	Fri	1636	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4512	15-3-2013	Fri	1638	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	7607	15-3-2013	Fri	1640	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3642	15-3-2013	Fri	1642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	7602	15-3-2013	Fri	1642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3330	15-3-2013	Fri	1903	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3797	15-3-2013	Fri	1905	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3642	15-3-2013	Fri	1907	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	7602	15-3-2013	Fri	1907	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	7607	15-3-2013	Fri	1909	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3330	15-3-2013	Fri	2005	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3642	15-3-2013	Fri	2012	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	7602	15-3-2013	Fri	2012	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3797	15-3-2013	Fri	2014	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	15-3-2013	Fri	2014	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	7607	15-3-2013	Fri	2016	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4860	15-3-2013	Fri	2020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	15-3-2013	Fri	2020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	3330	15-3-2013	Fri	2238	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	7607	15-3-2013	Fri	2248	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	6773	15-3-2013	Fri	2250	V H2FL (x3) DE DRV8 (x2) (Cont'd) //8040	CW	(JPL)
M89	4474	15-3-2013	Fri	2252	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	10779	16-3-2013	Sat	0954	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	8789	16-3-2013	Sat	0954	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	4512	16-3-2013	Sat	0957	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	16-3-2013	Sat	0957	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	10180	16-3-2013	Sat	0959	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	5588	16-3-2013	Sat	1000	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	8050	16-3-2013	Sat	1001	In tfc: 4U5N UADN 57UA 5NUU (ContÆd)	CW	(JPL)
M89	5588	16-3-2013	Sat	1124	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5500	16-3-2013	Sat	1708	V 7NPE (x3) DE QST5B (x2) Appears to be having problems. QV5B is being sent as QST5B	CW	(JPL)
M89	3338	16-3-2013	Sat	1709	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	7607	16-3-2013	Sat	1713	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	16-3-2013	Sat	1715	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	16-3-2013	Sat	1715	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3642	16-3-2013	Sat	1717	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	4860	16-3-2013	Sat	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	16-3-2013	Sat	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	7582	17-3-2013	Sun	0006	V 7NPE (x3) DE QST5B (x2) (Cont'd)	CW	(JPL)
M89	8789	17-3-2013	Sun	0008	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	8040	17-3-2013	Sun	0010	V H2FL (x3) DE DRV8 (x2) (Cont'd) //6773	CW	(JPL)
M89	6773	17-3-2013	Sun	0010	V H2FL (x3) DE DRV8 (x2) (Cont'd) //8040	CW	(JPL)
M89	4860	17-3-2013	Sun	0020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	17-3-2013	Sun	0020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	8050	17-3-2013	Sun	1213	In tfc: AAN 47N4 7UTD TTD4 34DA DT7T 35UN 4UDN 465T NTT6 U554 4535 (see N&O 186)	CW	(JPL)
M89	5500	17-3-2013	Sun	1900	V 7NPE (x3) DE QST5B (x2) (Cont'd)	CW	(JPL)
M89	4590	17-3-2013	Sun	1906	V WITN (x3) DE GNXG (x2) (Cont'd) //3725	CW	(JPL)
M89	3725	17-3-2013	Sun	1906	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	4512	17-3-2013	Sun	1908	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M89	3797	17-3-2013	Sun	1908	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	5230	17-3-2013	Sun	1910	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	17-3-2013	Sun	1910	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3330	17-3-2013	Sun	1912	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	6840	17-3-2013	Sun	1920	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	17-3-2013	Sun	1920	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	5500	17-3-2013	Sun	2130	V 7NPE (x3) DE QST5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	17-3-2013	Sun	2130	V 7NPE (x3) DE QST5B (x2) (Cont'd) //5500	CW	(JPL)
M89	4590	17-3-2013	Sun	2139	V WITN (x3) DE GNXG (x2) (Cont'd) //3725	CW	(JPL)
M89	3725	17-3-2013	Sun	2139	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	3797	17-3-2013	Sun	2141	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	5230	17-3-2013	Sun	2143	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	17-3-2013	Sun	2143	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3330	17-3-2013	Sun	2145	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3330	17-3-2013	Sun	2228z	very poor signal MSG NR ... CK ... 44 0319 0610 =	CW	(JPL)
M89	8110	18-3-2013	Mon	0936	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	7582	18-3-2013	Mon	0936	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	8789	18-3-2013	Mon	0938	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	10779	18-3-2013	Mon	0938	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	4512	18-3-2013	Mon	0940	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	5588	18-3-2013	Mon	0943	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4225	18-3-2013	Mon	1005	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	18-3-2013	Mon	1005	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	5588	18-3-2013	Mon	1101	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4225	18-3-2013	Mon	1103	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	18-3-2013	Mon	1103	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	8789	18-3-2013	Mon	1105	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	10779	18-3-2013	Mon	1105	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	3797	18-3-2013	Mon	1107	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	18-3-2013	Mon	1107	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	10180	18-3-2013	Mon	1108	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	8049	18-3-2013	Mon	1157	Into male voice. When voice comes on there is CW in the background. Into data mode ca 1 min. at 1218z. Back to voice at 1220z. Silent at 1226z	USB	(JPL)
M89	3330	18-3-2013	Mon	1231	In tfc T7A3 45D5 NUTT UN53 (ContÆd)	CW	(JPL)
M89	4225	18-3-2013	Mon	1748	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	18-3-2013	Mon	1748	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	3725	18-3-2013	Mon	1750	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	7607	18-3-2013	Mon	1750	V WITN (x3) DE GNXG (x2) (Cont'd) //3725	CW	(JPL)
M89	3642	18-3-2013	Mon	1752	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	18-3-2013	Mon	1752	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	4512	18-3-2013	Mon	1754	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	18-3-2013	Mon	1754	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3330	18-3-2013	Mon	1757	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	7607	18-3-2013	Mon	2008	V WITN (x3) DE GNXG (x2) (Cont'd) //3725	CW	(JPL)
M89	3725	18-3-2013	Mon	2008	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	4512	18-3-2013	Mon	2010	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	18-3-2013	Mon	2010	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3642	18-3-2013	Mon	2012	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	18-3-2013	Mon	2012	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3330	18-3-2013	Mon	2012	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4225	18-3-2013	Mon	2014	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	18-3-2013	Mon	2014	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4860	18-3-2013	Mon	2023	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	18-3-2013	Mon	2023	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4474	18-3-2013	Mon	2029	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	8110	19-3-2013	Tue	0013	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	7582	19-3-2013	Tue	0013	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	8789	19-3-2013	Tue	0014	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	10779	19-3-2013	Tue	0014	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	4860	19-3-2013	Tue	0020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	19-3-2013	Tue	0020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M89	5230	19-3-2013	Tue	0025	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	19-3-2013	Tue	0025	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	4474	19-3-2013	Tue	0026	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	8110	19-3-2013	Tue	0441	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	7582	19-3-2013	Tue	0441	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	5500	19-3-2013	Tue	1114	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	19-3-2013	Tue	1114	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	3797	19-3-2013	Tue	1115	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	19-3-2013	Tue	1115	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	19-3-2013	Tue	1115	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	19-3-2013	Tue	1115	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	4590	19-3-2013	Tue	1117	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	7607	19-3-2013	Tue	1117	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	4860	19-3-2013	Tue	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	19-3-2013	Tue	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	3330	19-3-2013	Tue	1125	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	10180	19-3-2013	Tue	1228	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	5500	19-3-2013	Tue	1902	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	4590	19-3-2013	Tue	1904	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	19-3-2013	Tue	1906	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	19-3-2013	Tue	1906	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3642	19-3-2013	Tue	1908	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	3330	19-3-2013	Tue	1910	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5500	19-3-2013	Tue	2100	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	4590	19-3-2013	Tue	2102	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	19-3-2013	Tue	2104	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	19-3-2013	Tue	2104	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3642	19-3-2013	Tue	2106	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	3330	19-3-2013	Tue	2107	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5500	19-3-2013	Tue	2206	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	4590	19-3-2013	Tue	2208	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	19-3-2013	Tue	2210	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	19-3-2013	Tue	2210	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3642	19-3-2013	Tue	2212	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	3330	19-3-2013	Tue	2214	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4474	19-3-2013	Tue	2217	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	6840	19-3-2013	Tue	2220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	19-3-2013	Tue	2220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	3330	19-3-2013	Tue	2225	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	8110	20-3-2013	Wed	0910	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	8789	20-3-2013	Wed	0911	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	10779	20-3-2013	Wed	0911	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	6773	20-3-2013	Wed	0913	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	5588	20-3-2013	Wed	0915	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	10640	20-3-2013	Wed	0920	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	20-3-2013	Wed	0920	VVV (x3) Q2M DE NYZ (x2) QSA ? K //10640	CW	(JPL)
M89	3330	20-3-2013	Wed	1128	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3330	20-3-2013	Wed	1512	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4225	20-3-2013	Wed	1514	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	20-3-2013	Wed	1514	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	3725	20-3-2013	Wed	1516	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	20-3-2013	Wed	1518	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	20-3-2013	Wed	1518	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3642	20-3-2013	Wed	1520	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	20-3-2013	Wed	1520	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	5500	20-3-2013	Wed	1712	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	3725	20-3-2013	Wed	1714	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	20-3-2013	Wed	1716	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	20-3-2013	Wed	1716	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	5230	20-3-2013	Wed	1718	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	20-3-2013	Wed	1718	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	6840	20-3-2013	Wed	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K //10640	CW	(JPL)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M89	10640	20-3-2013	Wed	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	10518	20-3-2013	Wed	1810	RXP7 DE CZT2	CW	(MOR)
M89	3330	20-3-2013	Wed	2144	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5588	21-3-2013	Thu	1119	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3797	21-3-2013	Thu	1217	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	21-3-2013	Thu	1217	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	4860	21-3-2013	Thu	1220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	21-3-2013	Thu	1220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	5588	21-3-2013	Thu	1225	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5555	21-3-2013	Thu	1253	SVC QSL . 313 NR 00. K. CCK 5 C.5. (see N&O 186)	CW	(JPL)
M89	5818	21-3-2013	Thu	1306	V K9GH (x3) DE M2ZF 3616 T471 56DU 7A64 T3TN (see N&O 186)	CW	(JPL)
M89	5230	21-3-2013	Thu	1900	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	21-3-2013	Thu	1900	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3725	21-3-2013	Thu	1904	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3330	21-3-2013	Thu	1911	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4474	21-3-2013	Thu	1914	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	4860	21-3-2013	Thu	2220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	21-3-2013	Thu	2220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	3330	21-3-2013	Thu	2225	MSG NR 08. CK 301 44 0322 0.30 .. MSG NR 084 CK 301 44 03.3 ... MSG NR 084 CK 301 44 .3.2.... =	CW	(JPL)
M89	3725	21-3-2013	Thu	2248	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	7607	21-3-2013	Thu	2248	V WITN (x3) DE GNXG (x2) (Cont'd) //3725	CW	(JPL)
M89	5230	21-3-2013	Thu	2254	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10779	22-3-2013	Fri	0304	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10180	22-3-2013	Fri	0308	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10518	22-3-2013	Fri	0311	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	4512	22-3-2013	Fri	1107	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	22-3-2013	Fri	1107	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	10180	22-3-2013	Fri	1110	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	3330	22-3-2013	Fri	1112	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4590	22-3-2013	Fri	1325	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	7607	22-3-2013	Fri	1325	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	3797	22-3-2013	Fri	1327	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	22-3-2013	Fri	1327	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	5230	22-3-2013	Fri	1329	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	22-3-2013	Fri	1329	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3330	22-3-2013	Fri	1331	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5555	22-3-2013	Fri	1604	UA7D N363 TUDN TTAN 5DDT 364D (see N&O 186)	CW	(JPL)
M89	7607	22-3-2013	Fri	2022	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	4590	22-3-2013	Fri	2022	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	3797	22-3-2013	Fri	2024	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	22-3-2013	Fri	2024	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	5230	22-3-2013	Fri	2026	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	22-3-2013	Fri	2026	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3330	22-3-2013	Fri	2028	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5583	22-3-2013	Fri	2033	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	4860	22-3-2013	Fri	2120	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	22-3-2013	Fri	2120	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	3330	22-3-2013	Fri	2125	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3330	22-3-2013	Fri	2229	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5588	22-3-2013	Fri	2327	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5440	23-3-2013	Sat	0201	VV R EEER QSA 2 K NR 36 K	CW	(JPL)
M89	5588	23-3-2013	Sat	0929	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	10779	23-3-2013	Sat	0935	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	8789	23-3-2013	Sat	0935	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	5230	23-3-2013	Sat	1435	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10518	23-3-2013	Sat	1528	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	10518	23-3-2013	Sat	1919	V RXP7 RXP7 RXP7 DE CZT2 CZT2	CW	(PPA)
M89	5230	23-3-2013	Sat	2312	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	4474	23-3-2013	Sat	2317	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	6840	23-3-2013	Sat	2320	VVV (x3) Q2M DE NYZ (x2) QSA ? K	CW	(JPL)
M89	10180	24-3-2013	Sun	0707	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M89	10418	24-3-2013	Sun	0714	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	4590	24-3-2013	Sun	1259	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	5555	24-3-2013	Sun	1304	UUTA U66D 445AZ T5N4 DT4A 4AN6 (see N&O 186)	CW	(JPL)
M89	3330	24-3-2013	Sun	1335	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	5555	24-3-2013	Sun	1336	in chat	CW	(AB-HK)
M89	3797	24-3-2013	Sun	1337	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	24-3-2013	Sun	1337	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	7602	24-3-2013	Sun	1358	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	5225	24-3-2013	Sun	1517	M6NW DE KQZE K (see N&O 186)	CW	(JPL)
M89	4474	24-3-2013	Sun	1535	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	4590	24-3-2013	Sun	1538	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	7602	24-3-2013	Sun	1540	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	24-3-2013	Sun	1540	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	5583	24-3-2013	Sun	1708	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	7602	24-3-2013	Sun	1719	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	6840	24-3-2013	Sun	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K	CW	(JPL)
M89	5550	24-3-2013	Sun	1725	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	24-3-2013	Sun	1725	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	4590	24-3-2013	Sun	1727	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	7607	24-3-2013	Sun	1727	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	3797	24-3-2013	Sun	1729	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	24-3-2013	Sun	1729	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3330	24-3-2013	Sun	1734	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	5550	24-3-2013	Sun	2101	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	24-3-2013	Sun	2101	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	4590	24-3-2013	Sun	2103	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	24-3-2013	Sun	2105	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	24-3-2013	Sun	2105	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3642	24-3-2013	Sun	2107	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	3330	24-3-2013	Sun	2109	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	5583	24-3-2013	Sun	2111	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	3330	24-3-2013	Sun	2127	V MW3D (x3) DE 2SLC (x2)	CW	(JPL)
M89	5555	25-3-2013	Mon	1105	7AD3 3D4A TNAD ND6U 5 ? U45? (see N&O 186)	CW	(JPL)
M89	4860	25-3-2013	Mon	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K	CW	(JPL)
M89	6840	25-3-2013	Mon	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K	CW	(JPL)
M89	3330	25-3-2013	Mon	1125	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	4225	25-3-2013	Mon	1135	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	25-3-2013	Mon	1135	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	7607	25-3-2013	Mon	1137	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	25-3-2013	Mon	1139	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	25-3-2013	Mon	1139	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	10180	25-3-2013	Mon	1141	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10518	25-3-2013	Mon	1205	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	3330	25-3-2013	Mon	1259	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	3330	25-3-2013	Mon	1427	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	5555	25-3-2013	Mon	1428	22W 22W 22W AGN etc	CW	(JPL)
M89	4225	25-3-2013	Mon	1436	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	7607	25-3-2013	Mon	1438	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	25-3-2013	Mon	1440	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	25-3-2013	Mon	1440	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3642	25-3-2013	Mon	1442	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	25-3-2013	Mon	1442	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	10518	25-3-2013	Mon	1444	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	8142	25-3-2013	Mon	1453	N67T 6743 DUAD D... (see N&O 186)	CW	(JPL)
M89	4860	25-3-2013	Mon	1620	VVV (x3) Q2M DE NYZ (x2) QSA ? K	CW	(JPL)
M89	6840	25-3-2013	Mon	1620	VVV (x3) Q2M DE NYZ (x2) QSA ? K	CW	(JPL)
M89	3330	25-3-2013	Mon	1625	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	5500	25-3-2013	Mon	1626	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	25-3-2013	Mon	1626	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	7607	25-3-2013	Mon	1628	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	25-3-2013	Mon	1630	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	25-3-2013	Mon	1630	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M89	3642	25-3-2013	Mon	1631	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	25-3-2013	Mon	1631	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	7889	25-3-2013	Mon	1636	AS G CK 91 12 126 0035 K (see N&O 186)	CW	(JPL)
M89	7607	25-3-2013	Mon	1913	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	5230	25-3-2013	Mon	1916	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	25-3-2013	Mon	1916	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3330	25-3-2013	Mon	1930	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	3330	25-3-2013	Mon	2120	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	10779	26-3-2013	Tue	0507	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10180	26-3-2013	Tue	0517	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	7582	26-3-2013	Tue	0600	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	8110	26-3-2013	Tue	0600	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	3330	26-3-2013	Tue	1146	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	4225	26-3-2013	Tue	1150	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	26-3-2013	Tue	1150	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	10779	26-3-2013	Tue	1152	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	26-3-2013	Tue	1154	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	26-3-2013	Tue	1154	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	5801	26-3-2013	Tue	1200	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10779	CW	(JPL)
M89	10180	26-3-2013	Tue	1200	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5432	26-3-2013	Tue	1205	T554 5445 65N5 DU.N 73NU 5354 A567 DU3T 7534 (see N&O 186)	CW	(JPL)
M89	4225	26-3-2013	Tue	1747	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	26-3-2013	Tue	1747	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	10779	26-3-2013	Tue	1749	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	26-3-2013	Tue	1751	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	3330	26-3-2013	Tue	1753	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	5589	26-3-2013	Tue	1755	73UT 7DN5 DAT6 UN6A 576T 6ANT A74D .374 (see N&O 186)	CW	(JPL)
M89	5593	26-3-2013	Tue	1812	NU6T DT3U 3A54 U34A T5N6 43AD UNT4 T376 (see N&O 186)	CW	(JPL)
M89	5314	26-3-2013	Tue	1923	555T A6D4 U3UD D456 AAUT AT6. (see N&O 186)	CW	(JPL)
M89	4474	26-3-2013	Tue	2009	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	4860	26-3-2013	Tue	2020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	26-3-2013	Tue	2020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	5230	26-3-2013	Tue	2315	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	4474	26-3-2013	Tue	2318	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //5583	CW	(JPL)
M89	5583	26-3-2013	Tue	2318	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //4474	CW	(JPL)
M89	10180	27-3-2013	Wed	0155	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10180	27-3-2013	Wed	0957	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	5432	27-3-2013	Wed	1510	4 Fig cut nr groups û mostly unreadable. K. AGN. AGN K	CW	(JPL)
M89	5583	27-3-2013	Wed	1602	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	5230	27-3-2013	Wed	1611	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	8010	27-3-2013	Wed	1723	GA. OK .... K (1729z - too weak to copy)	CW	(JPL)
M89	4621	27-3-2013	Wed	1807	NT67 5TDA NU.4 DTN. 4U.. (see N&O 186)	CW	(JPL)
M89	4885	27-3-2013	Wed	1918	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	5583	27-3-2013	Wed	2006	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //4885	CW	(JPL)
M89	4885	27-3-2013	Wed	2006	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //5583	CW	(JPL)
M89	4885	27-3-2013	Wed	2006	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //5583	CW	(JPL)
M89	5583	27-3-2013	Wed	2006	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //4885	CW	(JPL)
M89	3330	27-3-2013	Wed	2107	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	3330	27-3-2013	Wed	2107	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	5230	27-3-2013	Wed	2117	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5326	CW	(JPL)
M89	5326	27-3-2013	Wed	2117	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	10779	28-3-2013	Thu	0210	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10180	28-3-2013	Thu	0212	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (//5801	CW	(JPL)
M89	5801	28-3-2013	Thu	0212	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (//10180	CW	(JPL)
M89	5821	28-3-2013	Thu	0213	D4.T 4U7A DDN3 .5DT 3AT. TU36 (see N&O 186)	CW	(JPL)
M89	5396	28-3-2013	Thu	0240	4A3D AR (see N&O 186)	CW	(JPL)
M89	5588	28-3-2013	Thu	0903	4UT6 56NA 6A5N 4745 4DT6 A336 (see N&O 186)	CW	(JPL)
M89	8789	28-3-2013	Thu	0917	V WITN (x3) DE GNXG (x2) (Cont'd) (//10779	CW	(JPL)
M89	10779	28-3-2013	Thu	0917	V WITN (x3) DE GNXG (x2) (Cont'd) (//8789	CW	(JPL)
M89	10180	28-3-2013	Thu	0932	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	4512	28-3-2013	Thu	0934	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	3330	28-3-2013	Thu	0939	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M89	7607	28-3-2013	Thu	1149	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	28-3-2013	Thu	1150	V H2FL (x3) DE DRV8 (x2) (Cont'd) (//3797	CW	(JPL)
M89	3797	28-3-2013	Thu	1150	V H2FL (x3) DE DRV8 (x2) (Cont'd) (//4512	CW	(JPL)
M89	5801	28-3-2013	Thu	1151	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (//10180	CW	(JPL)
M89	10180	28-3-2013	Thu	1151	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (//5801	CW	(JPL)
M89	3330	28-3-2013	Thu	1153	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	3330	28-3-2013	Thu	1945	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	7607	28-3-2013	Thu	1947	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	28-3-2013	Thu	1950	V H2FL (x3) DE DRV8 (x2) (Cont'd) (//3797	CW	(JPL)
M89	3797	28-3-2013	Thu	1950	V H2FL (x3) DE DRV8 (x2) (Cont'd) (//4512	CW	(JPL)
M89	3642	28-3-2013	Thu	1952	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	4590	29-3-2013	Fri	1205	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	29-3-2013	Fri	1207	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	3330	29-3-2013	Fri	1220	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	5583	29-3-2013	Fri	1652	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	7602	29-3-2013	Fri	1654	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	5583	29-3-2013	Fri	2002	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	7602	29-3-2013	Fri	2004	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	4590	29-3-2013	Fri	2006	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3330	29-3-2013	Fri	2010	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	10180	30-3-2013	Sat	0236	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5801	30-3-2013	Sat	0236	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10321	30-3-2013	Sat	0246	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	10180	30-3-2013	Sat	0919	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10321	30-3-2013	Sat	0922	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	3330	30-3-2013	Sat	1302	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	4512	30-3-2013	Sat	1305	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	7607	30-3-2013	Sat	1307	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10321	30-3-2013	Sat	1310	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	7607	30-3-2013	Sat	1315	NW SVC GA NR 11 WS VV (see N&O 186)	CW	(JPL)
M89	10321	30-3-2013	Sat	1428	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	5230	30-3-2013	Sat	1435	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10261	30-3-2013	Sat	1536	6ANT 7U6A NN46 A5ND TU74 T5TU T.T7 TN4U (see N&O 186)	CW	(JPL)
M89	5583	30-3-2013	Sat	1556	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	5230	30-3-2013	Sat	1557	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	3642	30-3-2013	Sat	1758	V DKG6 de 3A7D	CW	(MPJ-RUS)
M89	3642	30-3-2013	Sat	1842	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	30-3-2013	Sat	1842	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	5583	30-3-2013	Sat	1845	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //4474	CW	(JPL)
M89	4474	30-3-2013	Sat	1845	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //5583	CW	(JPL)
M89	3330	30-3-2013	Sat	1847	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	4512	30-3-2013	Sat	1852	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	7607	30-3-2013	Sat	1854	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	7607	30-3-2013	Sat	2151	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	30-3-2013	Sat	2153	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	5230	30-3-2013	Sat	2155	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	30-3-2013	Sat	2155	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3330	30-3-2013	Sat	2157	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	5801	31-3-2013	Sun	1045	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	31-3-2013	Sun	1045	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	4225	31-3-2013	Sun	1304	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	31-3-2013	Sun	1304	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	7607	31-3-2013	Sun	1306	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	5801	31-3-2013	Sun	1307	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	31-3-2013	Sun	1307	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	3330	31-3-2013	Sun	1309	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	3797	31-3-2013	Sun	1311	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	31-3-2013	Sun	1311	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	4860	31-3-2013	Sun	1320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	31-3-2013	Sun	1320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	11321	31-3-2013	Sun	1330	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	7602	31-3-2013	Sun	1334	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)

enigma	frequency	date	day	UTC	remarks	mode	contributor
M89	6840	31-3-2013	Sun	1920	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	31-3-2013	Sun	1920	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	3330	31-3-2013	Sun	1925	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	4225	31-3-2013	Sun	1926	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	31-3-2013	Sun	1926	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	7607	31-3-2013	Sun	1927	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	31-3-2013	Sun	1928	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	31-3-2013	Sun	1928	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3642	31-3-2013	Sun	1929	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	7602	31-3-2013	Sun	1929	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	5583	31-3-2013	Sun	1933	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	4225	31-3-2013	Sun	2249	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	31-3-2013	Sun	2249	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	7607	31-3-2013	Sun	2251	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	6773	31-3-2013	Sun	2253	V H2FL (x3) DE DRV8 (x2) (Cont'd) //8040	CW	(JPL)
M89	8040	31-3-2013	Sun	2253	V H2FL (x3) DE DRV8 (x2) (Cont'd) //6773	CW	(JPL)
M94	5115	10-3-2013	Sun	1400	935	CW	(Token)
M94	5115	11-3-2013	Mon	1400	935	CW	(Token)
M94	5115	26-3-2013	Tue	1400	935	CW	(Token)
M94	5115	27-3-2013	Wed	1400	935	CW	(Token)
MX	16331.7	3-3-2013	Sun	1505	Beacon "D"	CW	(AB)
MX	13527.8	3-3-2013	Sun	1505	Beacon "P"	CW	(AB)
MX	8494.8	3-3-2013	Sun	1505	Beacon "P"	CW	(AB)
MX	10872	3-3-2013	Sun	1505	Beacon "C"	CW	(AB)
MX	13527.7	3-3-2013	Sun	1505	Beacon "D"	CW	(AB)
MX	8495	3-3-2013	Sun	1505	Beacon "C"	CW	(AB)
MX	10871.8	3-3-2013	Sun	1505	Beacon "P"	CW	(AB)
MX	7038.7	3-3-2013	Sun	1505	Beacon "D"	CW	(AB)
MX	20047.7	3-3-2013	Sun	1505	Beacon "D"	CW	(AB)
MX	10047.9	3-3-2013	Sun	1505	Beacon "S"	CW	(AB)
MX	10871.7	3-3-2013	Sun	1505	Beacon "D"	CW	(AB)
MX	13528	3-3-2013	Sun	1505	Beacon "C"	CW	(AB)
MX	5153.7	3-3-2013	Sun	2145	Beacon "D"	CW	(AB)
MX	4557.7	3-3-2013	Sun	2145	Beacon "D"	CW	(AB)
MX	4325.9	4-3-2013	Mon	1740	Beacon "R"	CW	(JPL-RUS)
MX	4325.9	4-3-2013	Mon	1844	Beacon "R" Izhevsk	CW	(AB)
MX	4325.9	4-3-2013	Mon	2004	Russian Mil. Marker "R"	CW	(PPA)
MX	5153.9	4-3-2013	Mon	2029	Beacon "S"	CW	(AB)
MX	4084	4-3-2013	Mon	2140	Beacon "V"	CW	(JPL-FNL)
MX	4325.9	5-3-2013	Tue	1651	Beacon "R"	CW	(JPL-RUS)
MX	4325.9	5-3-2013	Tue	2007	Beacon "R"	CW	(JPL-RUS)
MX	4325.9	5-3-2013	Tue	2036	Beacon "R"	CW	(AB)
MX	3594	5-3-2013	Tue	2039	Beacon "C"	CW	(AB)
MX	4557.9	5-3-2013	Tue	2040	Beacon "S"	CW	(AB)
MX	4325.9	6-3-2013	Wed	1758	Beacon "R"	CW	(JPL-POL)
MX	4084	6-3-2013	Wed	2030	Beacon "V"	CW	(JPL-RUS)
MX	4325.9	6-3-2013	Wed	2059	Beacon "R"	CW	(AB)
MX	4557.3	6-3-2013	Wed	2140	Russian Navy Marker "S" Sevoromorsk	CW	(TR2)
MX	4325.9	7-3-2013	Thu	2057	Beacon "R"	CW	(JPL-FNL)
MX	4325.9	8-3-2013	Fri	1815	Marker "R"	CW	(TJ)
MX	4325.9	8-3-2013	Fri	1822	Beacon "R"	CW	(JPL)
MX	4084	8-3-2013	Fri	1943	Beacon "V"	CW	(AB)
MX	4325.9	8-3-2013	Fri	1948	Beacon "R"	CW	(AB)
MX	5153.7	8-3-2013	Fri	2130	Russian Navy "D" Beacon	CW	(TR2)
MX	4325.9	8-3-2013	Fri	2147	Russian beacon	CW	(HS)
MX	4327.8	8-3-2013	Fri	2147	Russian beacon "R" synced to 4325.9, weaker, spur?	CW	(HS)
MX	4084	8-3-2013	Fri	2200	Russian beacon "V"	CW	(HS)
MX	4557.8	8-3-2013	Fri	2220	Russian beacon "P"	CW	(HS)
MX	4557.9	8-3-2013	Fri	2220	Russian beacon "S"	CW	(HS)
MX	4557.7	8-3-2013	Fri	2220	Russian beacon "D"	CW	(HS)
MX	20047.9	10-3-2013	Sun	0805	Beacon "S" Severomorsk	CW	(TJ)
MX	16332.3	10-3-2013	Sun	0805	Beacon "K" Petropavlovsk Kamchatka	CW	(TJ)

enigma	frequency	date	day	UTC	remarks	mode	contributor
MX	10871.8	10-3-2013	Sun	1014	Beacon "P"	CW	(Q-HOL)
MX	10872	10-3-2013	Sun	2329	Russian Navy Beacon D Odessa	CW	(LG2)
MX	10872	10-3-2013	Sun	2329	Russian Navy Beacon C Moscow	CW	(LG2)
MX	4325.9	11-3-2013	Mon	1456	Marker "R"	CW	(JPL-FNL)
MX	4084	11-3-2013	Mon	2114	Beacon "V"	CW	(JPL)
MX	4325.9	12-3-2013	Tue	1347	Beacon "R"	CW	(JPL-FNL)
MX	5156.5	12-3-2013	Tue	1351	Beacon "L"	CW	(JPL-FNL)
MX	4084	13-3-2013	Wed	1807	Beacon "V"	CW	(JPL-S)
MX	4325.9	13-3-2013	Wed	1809	Beacon "R"	CW	(JPL-S)
MX	6917.5	13-3-2013	Wed	1811	Beacon "L"	CW	(JPL-S)
MX	8497.8	13-3-2013	Wed	1854	Beacon "L"	CW	(AB)
MX	6719.5	13-3-2013	Wed	1854	Beacon "L"	CW	(AB)
MX	5616.5	13-3-2013	Wed	1854	Beacon "L"	CW	(AB)
MX	4325.9	14-3-2013	Thu	1830	Beacon "R"	CW	(JPL-D)
MX	6917.5	14-3-2013	Thu	1947	Beacon "L"	CW	(Q/MPJ)
MX	13527.7	15-3-2013	Fri	1558	Beacon "D" Odessa/Sevastopol	CW	(MPJ)
MX	13528	15-3-2013	Fri	1558	Beacon "C" Moscow	CW	(MPJ)
MX	16331.7	15-3-2013	Fri	1558	Beacon "D" Odessa/Sevastopol	CW	(MPJ)
MX	16332	15-3-2013	Fri	1558	Beacon "C" Moscow	CW	(MPJ)
MX	5156.8	15-3-2013	Fri	1759	Beacon "L" St.Petersburg	CW	(PPA)
MX	10871.7	15-3-2013	Fri	2046	Beacon "D"	CW	(Q-HOL)
MX	10872	15-3-2013	Fri	2046	Beacon "C"	CW	(Q-HOL)
MX	4084	15-3-2013	Fri	2115	Beacon "V"	CW	(AB)
MX	4325.9	15-3-2013	Fri	2115	Beacon "R"	CW	(AB)
MX	6917.5	15-3-2013	Fri	2115	Beacon "L"	CW	(AB)
MX	5156.5	15-3-2013	Fri	2115	Beacon "L"	CW	(AB)
MX	4557.9	15-3-2013	Fri	2119	Beacon "S"	CW	(AB)
MX	5154.9	15-3-2013	Fri	2119	Beacon "S"	CW	(AB)
MX	4557.7	15-3-2013	Fri	2119	Beacon "D"	CW	(AB)
MX	5154.7	15-3-2013	Fri	2119	Beacon "D"	CW	(AB)
MX	3594	15-3-2013	Fri	2121	Beacon "C"	CW	(AB)
MX	3593.8	15-3-2013	Fri	2121	Beacon "P"	CW	(AB)
MX	7038.9	15-3-2013	Fri	2125	Beacon "S"	CW	(AB)
MX	7038.7	15-3-2013	Fri	2125	Beacon "D"	CW	(AB)
MX	8495	15-3-2013	Fri	2126	Beacon "C"	CW	(AB)
MX	10872	15-3-2013	Fri	2126	Beacon "C"	CW	(AB)
MX	10871.7	15-3-2013	Fri	2126	Beacon "D"	CW	(AB)
MX	8494.9	15-3-2013	Fri	2126	Beacon "S"	CW	(AB)
MX	5153.7	15-3-2013	Fri	2138	Beacon "D"	CW	(Q-HOL)
MX	5153.9	15-3-2013	Fri	2138	Beacon "C"	CW	(Q-HOL)
MX	5156.5	16-3-2013	Sat	0711	Beacon "L" sending strings of "LLLLLZ"	CW	(AB)
MX	8497.8	16-3-2013	Sat	0711	Beacon "L" sending strings of "LLLLLZ"	CW	(AB)
MX	6917.5	16-3-2013	Sat	0711	Beacon "L" sending strings of "LLLLLZ"	CW	(AB)
MX	7038.7	16-3-2013	Sat	0712	Beacon "D"	CW	(EB-D)
MX	8494.8	16-3-2013	Sat	0715	Beacon "P"	CW	(EB-D)
MX	13528	16-3-2013	Sat	0716	Beacon "C"	CW	(EB-D)
MX	16332	16-3-2013	Sat	0716	Beacon "C"	CW	(EB-D)
MX	10872	16-3-2013	Sat	0716	Beacon "C"	CW	(EB-D)
MX	13527.7	16-3-2013	Sat	0717	Beacon "D"	CW	(EB-D)
MX	20047.7	16-3-2013	Sat	0717	Beacon "D"	CW	(EB-D)
MX	10871.7	16-3-2013	Sat	0717	Beacon "D"	CW	(EB-D)
MX	8497.8	16-3-2013	Sat	0742	Beacon "L"	CW	(EB-D)
MX	20047.7	16-3-2013	Sat	0956	Beacon "D"	CW	(Q-HOL)
MX	20047.9	16-3-2013	Sat	0956	Beacon "S"	CW	(Q-HOL)
MX	16332	16-3-2013	Sat	1010	Beacon "C"	CW	(Q-HOL)
MX	16332.7	16-3-2013	Sat	1010	Beacon "D"	CW	(Q-HOL)
MX	7038.7	17-3-2013	Sun	0746	Beacon "D"	CW	(EB-D)
MX	8495	17-3-2013	Sun	0747	Beacon "C"	CW	(EB-D)
MX	8494.8	17-3-2013	Sun	0748	Beacon "P"	CW	(EB-D)
MX	10872	17-3-2013	Sun	0749	Beacon "C"	CW	(EB-D)
MX	10871.7	17-3-2013	Sun	0750	Beacon "D"	CW	(EB-D)
MX	13528	17-3-2013	Sun	0750	Beacon "C"	CW	(EB-D)

enigma	frequency	date	day	UTC	remarks	mode	contributor
MX	13527.7	17-3-2013	Sun	0752	Beacon "D"	CW	(EB-D)
MX	16331.7	17-3-2013	Sun	0753	Beacon "D"	CW	(EB-D)
MX	16332	17-3-2013	Sun	0753	Beacon "C"	CW	(EB-D)
MX	13528.3	17-3-2013	Sun	0759	Beacon "K"	CW	(EB-J)
MX	16332.3	17-3-2013	Sun	0759	Beacon "K"	CW	(EB-J)
MX	16332	17-3-2013	Sun	0801	Beacon "C"	CW	(EB-J)
MX	13528.2	17-3-2013	Sun	0802	Beacon "F"	CW	(EB-J)
MX	13528.4	17-3-2013	Sun	0804	Beacon "M"	CW	(EB-J)
MX	16331.7	17-3-2013	Sun	0813	Beacon "D"	CW	(EB-GRC)
MX	16332	17-3-2013	Sun	0813	Beacon "C"	CW	(EB-GRC)
MX	13528	17-3-2013	Sun	0813	Beacon "C"	CW	(EB-GRC)
MX	13527.7	17-3-2013	Sun	0813	Beacon "D"	CW	(EB-GRC)
MX	10872	17-3-2013	Sun	0813	Beacon "C"	CW	(EB-GRC)
MX	10871.7	17-3-2013	Sun	0813	Beacon "D"	CW	(EB-GRC)
MX	10872	17-3-2013	Sun	1002	Beacon "C"	CW	(Q-HOL)
MX	16332	17-3-2013	Sun	1003	Beacon "C"	CW	(Q-HOL)
MX	16332.7	17-3-2013	Sun	1003	Beacon "D"	CW	(Q-HOL)
MX	20048.7	17-3-2013	Sun	1004	Beacon "D"	CW	(Q-HOL)
MX	16331.7	17-3-2013	Sun	1253	Beacon "D" Odessa/Sevastopol	CW	(Q-HOL)
MX	16332	17-3-2013	Sun	1253	Beacon "C"	CW	(Q-HOL)
MX	13527.8	17-3-2013	Sun	1312	Beacon "P"	CW	(EB-D)
MX	16332	17-3-2013	Sun	1312	Beacon "C"	CW	(EB-D)
MX	13528	17-3-2013	Sun	1312	Beacon "C"	CW	(EB-D)
MX	8495	17-3-2013	Sun	1312	Beacon "C"	CW	(EB-D)
MX	8494.8	17-3-2013	Sun	1312	Beacon "P"	CW	(EB-D)
MX	10872	17-3-2013	Sun	1312	Beacon "C"	CW	(EB-D)
MX	20047.7	17-3-2013	Sun	1313	Beacon "D"	CW	(EB-D)
MX	16331.7	17-3-2013	Sun	1313	Beacon "D"	CW	(EB-D)
MX	10871.7	17-3-2013	Sun	1313	Beacon "D"	CW	(EB-D)
MX	13527.7	17-3-2013	Sun	1313	Beacon "D"	CW	(EB-D)
MX	20047.9	17-3-2013	Sun	1318	Beacon "S"	CW	(EB-D)
MX	13528.3	17-3-2013	Sun	1325	Beacon "K"	CW	(EB-J)
MX	7039.3	17-3-2013	Sun	1325	Beacon "K"	CW	(EB-J)
MX	13527.7	17-3-2013	Sun	1327	Beacon "D"	CW	(EB-J)
MX	7039.4	17-3-2013	Sun	1328	Beacon "M"	CW	(EB-J)
MX	8495.2	17-3-2013	Sun	1328	Beacon "F"	CW	(EB-J)
MX	8495.4	17-3-2013	Sun	1328	Beacon "M"	CW	(EB-J)
MX	4557.7	17-3-2013	Sun	2114	Beacon "D"	CW	(EB-D)
MX	5153.7	17-3-2013	Sun	2117	Beacon "D"	CW	(EB-D)
MX	7038.7	17-3-2013	Sun	2118	Beacon "D"	CW	(EB-D)
MX	8495.4	17-3-2013	Sun	2121	Beacon "M"	CW	(EB-J)
MX	10872.4	17-3-2013	Sun	2121	Beacon "M"	CW	(EB-J)
MX	13528.3	17-3-2013	Sun	2121	Beacon "K"	CW	(EB-J)
MX	13528.4	17-3-2013	Sun	2121	Beacon "M"	CW	(EB-J)
MX	7039.4	17-3-2013	Sun	2121	Beacon "M"	CW	(EB-J)
MX	7039.3	17-3-2013	Sun	2121	Beacon "K"	CW	(EB-J)
MX	8495	17-3-2013	Sun	2124	Beacon "C"	CW	(EB-J)
MX	8495.2	17-3-2013	Sun	2125	Beacon "F"	CW	(EB-J)
MX	7038.7	17-3-2013	Sun	2126	Beacon "D"	CW	(EB-J)
MX	7038.7	17-3-2013	Sun	2129	Beacon "D"	CW	(EB-RUS)
MX	5153.7	17-3-2013	Sun	2129	Beacon "D"	CW	(EB-RUS)
MX	16332	17-3-2013	Sun	2131	Beacon "C"	CW	(EB-RUS)
MX	10872	17-3-2013	Sun	2131	Beacon "C"	CW	(EB-RUS)
MX	8495	17-3-2013	Sun	2131	Beacon "C"	CW	(EB-RUS)
MX	4325.9	18-3-2013	Mon	1038	Beacon "R"	CW	(AB)
MX	6917.5	18-3-2013	Mon	1038	Beacon "L"	CW	(AB)
MX	5156.8	18-3-2013	Mon	1038	Beacon "L"	CW	(AB)
MX	4084	18-3-2013	Mon	2038	Beacon "V"	CW	(AB)
MX	4325.9	19-3-2013	Tue	0108	Beacon "R"	CW	(HS)
MX	4557.7	19-3-2013	Tue	0140	Beacon "D"	CW	(HS)
MX	4557.9	19-3-2013	Tue	0140	Beacon "S"	CW	(HS)
MX	4558	19-3-2013	Tue	0140	Beacon "C"	CW	(HS)

enigma	frequency	date	day	UTC	remarks	mode	contributor
MX	5154.9	19-3-2013	Tue	2256	Beacon "S"	CW	(HS)
MX	5154.7	19-3-2013	Tue	2256	Beacon "D"	CW	(HS)
MX	4329.5	20-3-2013	Wed	1800	Beacon "R"	CW	(AB)
MX	4094	20-3-2013	Wed	1809	Beacon "V"	CW	(AB)
MX	5619.5	21-3-2013	Thu	1250	Beacon "V" Khiva	CW	(JPL-Sib)
MX	4084	21-3-2013	Thu	1909	Beacon "V" Khiva	CW	(JPL-Sib)
MX	4084	21-3-2013	Thu	2002	Beacon "V" Khiva	CW	(AB)
MX	4325.9	21-3-2013	Thu	2002	Beacon "R" Izhevsk	CW	(AB)
MX	16331.7	22-3-2013	Fri	1348	Beacon "D" Odessa/Sevastopol	CW	(MPJ)
MX	16332	22-3-2013	Fri	1349	Beacon "C"	CW	(MPJ)
MX	4084	22-3-2013	Fri	2144	Beacon "V"	CW	(AB)
MX	4328.2	22-3-2013	Fri	2145	Beacon "R"	CW	(AB)
MX	4326.1	22-3-2013	Fri	2145	Beacon "R"	CW	(AB)
MX	13528.2	24-3-2013	Sun	1418	Beacon "F"	CW	(AB-HK)
MX	8495.2	24-3-2013	Sun	1418	Beacon "F"	CW	(AB-HK)
MX	16332.4	24-3-2013	Sun	1418	Beacon "M"	CW	(AB-HK)
MX	7039.2	24-3-2013	Sun	1418	Beacon "F"	CW	(AB-HK)
MX	5154.2	24-3-2013	Sun	1418	Beacon "F"	CW	(AB-HK)
MX	8495.3	24-3-2013	Sun	1418	Beacon "K"	CW	(AB-HK)
MX	7039.3	24-3-2013	Sun	1418	Beacon "K"	CW	(AB-HK)
MX	13528.4	24-3-2013	Sun	1418	Beacon "M"	CW	(AB-HK)
MX	5154.4	24-3-2013	Sun	1418	Beacon "M"	CW	(AB-HK)
MX	5154.3	24-3-2013	Sun	1418	Beacon "K"	CW	(AB-HK)
MX	4325.9	25-3-2013	Mon	1835	Beacon "R" Izhevsk	CW	(AB)
MX	5153.7	25-3-2013	Mon	2210	Beacon "S" Severomorsk	CW	(MPJ)
MX	5153.7	25-3-2013	Mon	2210	Beacon "D" Odessa/Sevastopol	CW	(MPJ)
MX	5153.8	25-3-2013	Mon	2210	Beacon "P" Kaliningrad	CW	(MPJ)
MX	16331.7	30-3-2013	Sat	1549	Beacon "D"	CW	(AB)
MX	20047.9	30-3-2013	Sat	1549	Beacon "S"	CW	(AB)
MX	10871.9	30-3-2013	Sat	1549	Beacon "S"	CW	(AB)
MX	13527.7	30-3-2013	Sat	1549	Beacon "D"	CW	(AB)
MX	10871.7	30-3-2013	Sat	1549	Beacon "D"	CW	(AB)
MX	20047.7	30-3-2013	Sat	1549	Beacon "D"	CW	(AB)
MX	10871.8	30-3-2013	Sat	1549	Beacon "P"	CW	(AB)
MX	8494.8	30-3-2013	Sat	1549	Beacon "P"	CW	(AB)
MX	8495	30-3-2013	Sat	1549	Beacon "C"	CW	(AB)
MX	4325.9	30-3-2013	Sat	1801	Beacon "R"	CW	(AB)
MX	5619.5	31-3-2013	Sun	1336	Beacon "V"	CW	(JPL-Sib)
RAv	6685	2-3-2013	Sat	1444	Korsar (Russian AF Pskov) w/82032 (weak) ETA at Tver & fuel 78 tons	USB	(RP-MD)
RAv	6685	2-3-2013	Sat	1450	Korsar w/82014 (weak unreadable) reporting depature from Kapa (sounds like) at 1419 MSK and landing at Aybaktum (sounds like) at 1700 MSK fuel 61 tons	USB	(RP-MD)
RAv	6685	2-3-2013	Sat	1505	Korsar w/78842 reporting deparute from Kipelovo at 1855 MSK.	USB	(RP-MD)
RAv	6685	3-3-2013	Sun	1428	Korsar (Russian AF, Pskov) w/82039 (AN-124 not heard) who reports departure from Kabul, Afghanistan at 1236 MSK. Also mention of aerodrom Al Batrov (??)	USB	(RP-MD)
RAv	6685	3-3-2013	Sun	1428	Korsar (Russian AF, Pskov) w/82039 (AN-22 not heard) who reports departure from Kabul, Afghanistan at 1236 MSK. Also mention of aerodrom Al Batrov (??)	USB	(RP-MD)
RAv	6885	4-3-2013	Mon	0500	Korsar (Russian AF Pskov) w/78838 (IL-76MD) w/radio checks	USB	(RP-MD)
RAv	6685	4-3-2013	Mon	1247	78778 calling Proselok (Russian AF, Bryansk) w/no response. Klaranetist answers & 78778 reports ETA at ???-East (Vostochnij) at 1741 MSK & fuel 47 tons.	USB	(RP-MD)
RAv	6685	4-3-2013	Mon	1620	Korsar w/82032 who reports working at "the point" according to the flt plan at alt 1000 Mtrs	USB	(RP-MD)
RAv	6685	4-3-2013	Mon	1658	Korsar w/76741 reporting landing at (?Ryzan?) at 2050 MSK	USB	(RP-MD)
RAv	6685	4-3-2013	Mon	1748	56776 calling Korsar w/no response. Klaranetist(Russian AF, Tver) responds & 56776 reports ETA at (?Krasochka?) at 2130 MSK.	USB	(RP-MD)
RAv	8090	6-3-2013	Wed	1501	Sporoh/Scoroh (sounds like) clg 56756 w/no response.	USB	(RP-MD)
RAv	8090	6-3-2013	Wed	1502	Sporoh/Scoroh w/56759	USB	(RP-MD)
RAv	8090	6-3-2013	Wed	1505	Sporoh/Scoroh w/76562	USB	(RP-MD)
RAv	8090	6-3-2013	Wed	1515	Sporoh/Scoroh w/56756 w/3-figure group encrypted msgs.	USB	(RP-MD)
RAv	5833	6-3-2013	Wed	1849	Acft 56??1 clg Sporoh/Scoroh and Novor/Nobor w/no responses.	USB	(RP-MD)

enigma	frequency	date	day	UTC	remarks	mode	contributor
RAv	6685	7-3-2013	Thu	1805	Davlenie (Russian AF Taganrog) radio checks w/Proselok (Russian AF Bryansk), & Korsar (Russian AF Pskov)	USB	(RP-MD)
RAv	6685	7-3-2013	Thu	1823	Korsar w/86496 (Russian AF IL-62) w/departure from Mozdok 0037 MSK and ETA (missed) 0430 MSK	USB	(RP-MD)
RAv	6685	14-3-2013	Thu	1343	Korsar (Russian AF Pskov) w/82040 (AN-124) reporting departure for Kabul w/fuel 180 tons. At 1523 82040 reports passing (?BUDOP/BUTOP?) enroute to Kabul.	USB	(RP-MD)
RAv	6685	14-3-2013	Thu	1401	Korsar w/78834 (prob IL-76) reporting departure from Chkalov (then rest fades out).	USB	(RP-MD)
RAv	6685	14-3-2013	Thu	1453	Acft 78834 clg Davlenie w/no response. Korsar responds and 78834 reports passing w/fuel 58 tons. Asks Korsar to relay info to Davlenie (Russian AF Taganrog).	USB	(RP-MD)
RAv	6685	14-3-2013	Thu	1630	Davelenie w/78834 (prob IL-76) reporting landing at Sochi w/fuel 80 tons.	USB	(RP-MD)
RAv	6685	14-3-2013	Thu	1917	Korsar w/78834 reporting passing Makhachkala next will be the border (Granitsa) w/fuel 38 tons.)	USB	(RP-MD)
RAv	6685	14-3-2013	Thu	1952	Korsar w/78834 reporting landing at Gabala, Azerbaijan at 2345 MSK.	USB	(RP-MD)
RAv	6685	15-3-2013	Fri	1155	Korsar (Russian AF, Pskov) w/76746 (AN-72) caught at sign off.	USB	(RP-MD)
RAv	8090	21-3-2013	Thu	1448	Russian Air Force "Nabor" (Y/L Russian) working with acft ??157 (first 2 digits missed--weak unreadable) who passes encypted msg 693/313/940/085	USB	(RP-MD)
RAv	8090	21-3-2013	Thu	2102	Russian Air Force. NABOR clg aircraft 57832, xx252 ...	USB	(ASh)
RAv	6885	25-3-2013	Mon	1315	Kasar (Russian Air Force, Pskov): w/76786 flt status report. Only caught fuel remainder of 48 tons.	USB	(RP-MD)
RAv	5833	26-3-2013	Tue	1302	Nabor w/88604 (not heard) w/radio checks	USB	(RP-MD)
RAv	11360	26-3-2013	Tue	1302	Korsar (Russian AF Pskov) w/Davlenie (Russian AF Taganrog), Klaranetist (Russian AF Tver) & Proselok (Russian AF Bryansk) w/radio checks.	USB	(RP-MD)
RAv	11360	26-3-2013	Tue	1302	Proselok calling Korsar & Davelnie w/no response.	USB	(RP-MD)
RAv	11360	26-3-2013	Tue	1312	Korsar w/86870 (IL-76M--not heard) confirming 1 hour flt w/fuel 63 tons. At 1413 Karsar confirms 2 hr flt w/fuel 50 tons. At 1544 86870 reports landing at Quadrille w/fuel 49 tons.	USB	(RP-MD)
RAv	11360	26-3-2013	Tue	1420	Davlenie w/unheard acft confirming it was a flt of 3 acft enroute to Quadrille (unid).	USB	(RP-MD)
RAv	11360	26-3-2013	Tue	1441	Korsar w/78809	USB	(RP-MD)
RAv	11360	26-3-2013	Tue	1616	Korsar w/78794 reporting landing at Ivanova at 1950 MSK	USB	(RP-MD)
RAv	11360	26-3-2013	Tue	1619	Dozor (unid Russian AF) w/uheard acft confirming fuel remainder of 48 tons	USB	(RP-MD)
RAv	6685	26-3-2013	Tue	2023	Korsar w/82014 (prob AN-124) reporting departure from Koltsovo and ETA (missed) for landing at Minsk. Fuel 128 tons	USB	(RP-MD)
RAv	5833	26-3-2013	Tue	2048	Nabor (Y/L Russian) w/88604 (weak unreadable) w/encrypted msg ???/920/663/902/011/085	USB	(RP-MD)
RAv	5833	26-3-2013	Tue	2056	Acft 96?59 calling Nabor w/no response	USB	(RP-MD)
RAv	11360	27-3-2013	Wed	1039	Korsar (Russian AF Pskov) USB w/09342 (AN-22) reporting passing Baranovo w/fuel 29 tonsn	USB	(RP-MD)
RAv	11360	28-3-2013	Thu	1157	Korsar (Russian AF Pskov) w/76740 (AN-72--not heard) confirming landing at Anapa w/fuel 43 tons.	USB	(RP-MD)
RAv	11360	28-3-2013	Thu	1302	Korsar calling 76612 (IL-76) w/no response. Tries again at 1335 still w/no response.	USB	(RP-MD)
RAv	11360	28-3-2013	Thu	1335	Aircraft 76?35 calling Pskov w/no response.	USB	(RP-MD)
RAv	11360	28-3-2013	Thu	1409	Korsar calling 78835 (IL-76) who reports 1 hour flt time remaining at alt 3100 mtrs w/fuel 61 tons.	USB	(RP-MD)
RAv	11354	28-3-2013	Thu	1600	Priboy (Air Transports Central Sector, Moscow) w/26947 (Russian Navy AN-26) reporting departure from Kacha and landing at Anapa at 1555 MSK w/fuel 5300 kgs. Flight info also QSL'ed by Novator (Air Transports Northern Sector, Murmansk)	USB	(RP-MD)
RAv	11360	28-3-2013	Thu	1648	Korsar w/78835 who reports work completed at 2039 MSK & will return to Murmansk. Korniti (sounds like---unid) w/Korsar QSL'ing for 78835 flt info	USB	(RP-MD)
RAv	6685	28-3-2013	Thu	1749	Aircraft 78834 calling Davlenie (Russian AF Taganrog) w/no response. Korsar responds and 78834 reports departure from Anapa)	USB	(RP-MD)
RAv	6685	28-3-2013	Thu	1754	Korsar w/75516 (unid) reporting work complete and RTB Anapa at 2115 MSK	USB	(RP-MD)
RAv	6685	28-3-2013	Thu	1805	Korsar w/76726 (prob IL-76) reporting passing ?TUDEC? w/fuel 29 tons. At 1715 reports landing at Yerevan at 2115 MSK w/fuel 15 tons	USB	(RP-MD)
RAv	6685	28-3-2013	Thu	1812	Korsar w/76612 (IK-76) reporting departure from Anapa at 08 past	USB	(RP-MD)

enigma	frequency	date	day	UTC	remarks	mode	contributor
					the hour w/fuel 30 tons		
RAv	6685	28-3-2013	Thu	1828	Korsar w/78712 (unid). Korsar has trouble receiving him so another acft relays information that 78712 departed Karakniy (sounds like) at 2110 MSK w/fuel 43 tons	USB	(RP-MD)
RAv	6685	28-3-2013	Thu	1921	Korsar w/7834 reporting departure from Anapa w/control ?RIBLA? at alt 1500 mtrs	USB	(RP-MD)
RAv	6685	28-3-2013	Thu	1936	Aircraft 76741 (AN-72) calling Polis (Russian AF Orenburg) w/no response	USB	(RP-MD)
RAv	6685	28-3-2013	Thu	1939	Korsar w/76741 (AN-72) reporting departure from Pskov and ETA at Kubinka w/fuel 54 tons	USB	(RP-MD)
RMv	4357	5-3-2013	Tue	1320	Russian Mil. "Privkus30 Privkus30 80414 IYeRARHIYa 7282 2452 4668"	LSB	(Avare)
RNAv	11354	4-3-2013	Mon	1151	Priboy (Air Transports Central Sector,Moscow) w/52436 (Russian Navy AN-26) reporting departure from Anapa at 1135 MSK and ETA Kacha of 1945 MSK.	USB	(RP-MD)
RNAv	11354	4-3-2013	Mon	1152	Kacha w/Priboy confirmation flt info for 52436.	USB	(RP-MD)
RNAv	11354	4-3-2013	Mon	1233	Priboy w/26910 (Navy AN-26) w/report: 6222N/3300E at 1332 MSK alt 5200 Mtrs & fuel 4200 KG. Novator (Air Transports Northern Sector,Murmansk) asks Priboy for flt info confirmation.	USB	(RP-MD)
RNAv	11354	6-3-2013	Wed	1135	Priboy w/26901 who report landing at Levashevo	USB	(RP-MD)
RNAv	11354	14-3-2013	Thu	1106	Priboy (Air Transports Central Sector, Moscow) & Novator (Air Transports Northern Sector,Murmansk) w/26901 (Russian Navy AN-26) passing position (missed) at altitude 5800 mtrs fuel 4200 kgs and ETA at (missed) 1155 MSK.	USB	(RP-MD)
RNAv	11354	14-3-2013	Thu	1220	Priboy w/26947 (Russian Navy AN-26) reporting depature from Anapa at 1205 MSK w/ETA at Rostov of 1325 MSK w/fuel 5800 kgs. 26947 requests that info be relayed to Kraket (Air Transports West-ern Sector,Kaliningrad). Kraket w/Priboy QSL'ing for flt info.	USB	(RP-MD)
RNAv	11354	25-3-2013	Mon	1530	in progress	USB	(MAUK)
RNAv	11354	26-3-2013	Tue	1433	Priboy (Air Transports Central Sector, Moscow) USB w/75095 (unid) reporting passing point (missed) at 1329 MSK at alt 7,300 mtrs w/fuel 11,000 kgs. Priboy then relays information to Novator (Air Transports Northern Sector, Murmansk)	USB	(RP-MD)
RNAv	11354	26-3-2013	Tue	1435	Acft 26909 (Russian Navy AN-26) calling Priboy w/no response. Novator responds and 26909 relays flt info (too weak to copy). At 1547 26909 reports passing point (missed) at alt 6,000 mtrs w/fuel 4000 kgs	USB	(RP-MD)
S06	5127	4-3-2013	Mon	1905	349 0	AM	(HFD)
S06	5784	7-3-2013	Thu	1900	349 0	AM	(HFD)
S06	7472	9-3-2013	Sat	1605	764 764 764 00000	AM	(Topol)
S06	5784	11-3-2013	Mon	1900	349 0	AM	(HFD)
S06	11030	11-3-2013	Mon	1915	865 0	AM	(HFD)
S06	9084	13-3-2013	Wed	1644	971(R5) 836 2 11111(x2) 00056(x2) 971(R1) 254 30 58894(x2)...88829 254 30 000	USB	(FMB)
S06	5127	14-3-2013	Thu	1905	349 349 349 00000	USB	(Q-HOL/HFD)
S06	5823	16-3-2013	Sat	1930	426 0	AM	(HFD)
S06	4967	16-3-2013	Sat	2000	319 319 319 00000	AM	(AB/HFD)
S06	6885	16-3-2013	Sat	2030	857 0	AM	(HFD)
S06	4020	16-3-2013	Sat	2100	319 0	AM	(HFD)
S06	5912	16-3-2013	Sat	2131	857 857 857 00000	USB	(Q-HOL/HFD)
S06	5127	18-3-2013	Mon	1905	349 0	AM	(HFD)
S06	7967	19-3-2013	Tue	2133	i.p. 5204.....	USB	(BCI)
S06	9225	21-3-2013	Thu	0830	480 925 44 73201 71458 72797 ... 26660 57159 43347 925 44 00000	USB	(Danix)
S06	5127	21-3-2013	Thu	1905	349 349 349 00000	AM	(AB)
S06	5127	25-3-2013	Mon	1905	349 0	AM	(HFD)
S06	11030	25-3-2013	Mon	1915	865 0	AM	(HFD)
S06	9140	25-3-2013	Mon	2015	865(x3) 00000	USB	(FMB)
S06	5127	28-3-2013	Thu	1905	349 0	AM	(HFD)
S06s	7795	1-3-2013	Fri	0700	196 827/5 = 78465	USB	(HFD)
S06s	8695	1-3-2013	Fri	0710	196	USB	(HFD)
S06s	12140	1-3-2013	Fri	0930	516 920/7 = 11171	USB	(HFD)
S06s	13515	1-3-2013	Fri	0940	516	USB	(HFD)
S06s	10350	2-3-2013	Sat	1200	254 973/6 = 16945	USB	(HFD)
S06s	8520	2-3-2013	Sat	1210	254	USB	(HFD)
S06s	6410	5-3-2013	Tue	1000	893 426/5 = 78172	USB	(HFD)
S06s	7340	5-3-2013	Tue	1010	893	USB	(HFD)

enigma	frequency	date	day	UTC	remarks	mode	contributor
S06s	7605	6-3-2013	Wed	0820	471 286 5 88554 11171 64385 82707 06123 286 5 00000	USB	(Topol)
S06s	9255	6-3-2013	Wed	0830	471 286 5 88554 11171 64385 82707 06123 286 5 00000	USB	(Topol)
S06s	8650	7-3-2013	Thu	0930	314 982/5 = 53516	USB	(HFD)
S06s	7385	7-3-2013	Thu	0940	314	CW	(HFD)
S06s	7795	8-3-2013	Fri	0700	196 827 5 78465 77381 02988 47388 23909 827 5 00000	USB	(Topol)
S06s	12140	8-3-2013	Fri	0930	516 920 7 11171 64385 83707 06123 22536 88280 84116 920 7 00000	USB	(Topol)
S06s	13515	8-3-2013	Fri	0940	516 920 7 11171 64385 83707 06123 22536 88280 84116 920 7 00000	USB	(Topol)
S06s	9145	11-3-2013	Mon	1200	831 204/5 = 94289	USB	(HFD)
S06s	11460	11-3-2013	Mon	1210	831	USB	(HFD)
S06s	6464	12-3-2013	Tue	1500	537 928/6 = 82561	USB	(HFD)
S06s	7242	12-3-2013	Tue	1510	537	USB	(HFD)
S06s	7605	13-3-2013	Wed	0820	471 286 5 88554 11171 64385 82707 06123 286 5 00000	USB	(HS2)
S06s	11854	13-3-2013	Wed	0830	745 239 6 45279 43828 55581 20044 96813 14131 239 6 00000	USB	(HS2)
S06s	12140	13-3-2013	Wed	0840	745 239 6 45279 43828 55581 20044 96813 14131 239 6 00000	USB	(HS2)
S06s	13365	13-3-2013	Wed	1000	729 431 5 42597 67857 67758 08613 81375	USB	(HS2)
S06s	12952	14-3-2013	Thu	0900	167 984/5 = 10597	USB	(HFD)
S06s	13565	14-3-2013	Thu	0910	167	USB	(HFD)
S06s	12415	14-3-2013	Thu	1200	425 870/6 = 11171	USB	(HFD)
S06s	14212	14-3-2013	Thu	1210	425	USB	(HFD)
S06s	5760	19-3-2013	Tue	0700	374 852/6 = 45321	USB	(HFD)
S06s	6930	19-3-2013	Tue	0715	374	USB	(HFD)
S06s	11635	19-3-2013	Tue	0800	352	USB	(HFD)
S06s	10420	19-3-2013	Tue	0810	352	USB	(HFD)
S06s	13365	20-3-2013	Wed	1000	729 813/5 = 11160	USB	(HFD)
S06s	14505	20-3-2013	Wed	1010	729	USB	(HFD)
S06s	9220	25-3-2013	Mon	0830	371 284/5 = 23143	USB	(HFD)
S06s	8270	25-3-2013	Mon	0840	371	USB	(HFD)
S06s	9255	27-3-2013	Wed	0830	471	USB	(HFD)
S06s	7620	27-3-2013	Wed	1230	967	CW	(HFD)
S06s	8105	27-3-2013	Wed	1240	967	USB	(HFD)
S06s	12952	28-3-2013	Thu	0900	167 234 5 78563 80945 13214 56443 90994 234 5 00000	USB	(HS2)
S11a	7317	1-3-2013	Fri	0915	484/00	USB	(HFD)
S11a	9960	1-3-2013	Fri	1020	426/00	USB	(HFD)
S11a	5815	2-3-2013	Sat	1020	221/00	USB	(HFD)
S11a	5815	2-3-2013	Sat	1020	221/00	USB	(tING)
S11a	16112	4-3-2013	Mon	1015	475/00	USB	(HFD)
S11a	5815	9-3-2013	Sat	1021	331/00	USB	(Q-HOL)
S11a	16112	11-3-2013	Mon	1015	475/00	USB	(AB)
S11a	7317	12-3-2013		0915	483/31 Vnimanje 37624 48883 95768 ... 68637 24012 74376	USB	(Spec)
S11a	5815	13-3-2013		1020	227/31 Vnimanje 06441 84743 29641 ... 66303 49286 39368	USB	(Spec)
S11a	16112	14-3-2013		1015	471/37 Vnimanje 18249 32312 53195 ... 56108 42479 88623	USB	(Spec)
S11a	9960	15-3-2013		1020	422/33 Vnimanje 27209 62139 83977 ... 67156 42910 38547	USB	(Spec)
S11a	7317	19-3-2013	Tue	0915	484/00	USB	(HFD)
S11a	5815	23-3-2013	Sat	1020	330/37 vnimanje 5FGs	USB	(Q-HOL)
S21	4854	5-3-2013	Tue	1841	ip, OM, Russian language "454 (R) 317 317 30 30 msg" //4454	USB	(Q-HOL)
S21	4454	5-3-2013	Tue	1841	ip, OM, Russian language "454 (R) 317 317 30 30 msg" //4854	USB	(Q-HOL)
S21	4454	12-3-2013	Tue	1842	454 231 231 30 30 msg 231 231 30 30 000 //4854 kHz	AM	(Q-HOL)
S21	4854	12-3-2013	Tue	1842	454 231 231 30 30 msg 231 231 30 30 000 //4454 kHz	AM	(Q-HOL)
S21	4854	12-3-2013	Tue	1842	454 231/30 = 42524 //4454	USB	(HFD)
S21	4454	12-3-2013	Tue	1842	454 231/30 = 42524 //4854	USB	(HFD)
S28	4625	6-3-2013	Wed	2140	The Buzzer	USB	(TR2)
S28	4625	7-3-2013	Thu	0900	MDZhB 13 658 GEGEChKORETs 55 41 19 07	USB	(AB-EST)
S28	4625	7-3-2013	Thu	1016	MDZhB 34 895 MEGALOZAVR 26 91 91 38	USB	(AB-EST)
S28	4625	7-3-2013	Thu	1017	MDZhB 57 187 REVMANOL 48 60 30 05	USB	(AB-EST)
S28	4625	10-3-2013	Sun	0040	Spurs on 4540.4, 4583.5, 4667.2, 4709.6, 4751.9, and 4794.2 kHz	USB	(HS)
S28	4625	11-3-2013	Mon	0326	MDZhB 98 83 FENTOFOS	USB	(AB-EST)
S28	4625	11-3-2013	Mon	0356	MDZhB 61 51 TsINTIM	USB	(AB-EST)
S28	4625	11-3-2013	Mon	0555	MDZhB 69 37 BENZOKSI	USB	(AB-EST)
S28	4625	11-3-2013	Mon	1432	MDZhB 15 105 NEVZRAChNYJ 29 04 38 17	USB	(AB-EST)
S28	4625	11-3-2013	Mon	1550	MDZhB 17 542 TEVERON 37 99 98 13	USB	(AB-EST)

enigma	frequency	date	day	UTC	remarks	mode	contributor
S28	4625	11-3-2013	Mon	1553	MDZhB 59 67 FENTAZIN	USB	(AB-EST)
S28	4625	12-3-2013	Tue	2213	"Buzzer" Pskov, usual buzzing noise, spurs on 4584.2, 4667, 4709.1, and 4751.3	USB	(HS)
S28	4710	12-3-2013	Tue	2221	The Buzzer	USB	(LG2)
S28	4667	12-3-2013	Tue	2221	The Buzzer	USB	(LG2)
S28	5240	18-3-2013	Mon	1520	Buzzer on an unusual freq.	USB	(RSRu)
S28	5240	18-3-2013	Mon	1732	Buzzer on an unusual freq. //4625 kHz	USB	(RSRu)
S28	5240	18-3-2013	Mon	2055	Buzzer still on 5240//4625 kHz	USB	(AB)
S28	4625	19-3-2013	Tue	0000	The Buzzer	USB	(HS)
S28	4625	21-3-2013	Thu	1450	MDZhB 68 498 DVUKRAN 97 01 22 39	USB	(AB-EST)
S28	4625	28-3-2013	Thu	0829	MDZhB 04 231 AVTOKAD 35 17 87 98	USB	(AB/Avare)
S28	4625	28-3-2013	Thu	0837	MDZhB 02 586 EVTINIYa 70 62 42 28	USB	(AB/Avare)
S28	4625	28-3-2013	Thu	0842	MDZhB 06 197 DVOROVYJ 76 77 13 16	USB	(AB/Avare)
S28	4625	28-3-2013	Thu	1020	MDZhB 89 739 SOLONINA 68 33 37 61	USB	(AB/Av/Gwr
S28	4625	28-3-2013	Thu	1021	MDZhB 23 690 NABEGLYJ 81 64 38 51 Repeat: MDZhB 83 690 NA-BEGLYJ 81 64 38 51	USB	(AB/Av/Gwr
S28	4625	28-3-2013	Thu	1024	MDZhB 17 705 YaVLENIE 76 65 56 15	USB	(AB/Avare)
S28	4625	28-3-2013	Thu	1025	MDZhB 80 091 SVITKA 46 27 65 97	USB	(AB/Av/Gwr
S28	4625	28-3-2013	Thu	1048	MDZhB 09 443 28 723 34 592 SKLEENNYJ 08 84 59 24	USB	(AB/Av/Gwr
S28	4625	28-3-2013	Thu	1051	MDZhB 31 164 KVINOKAIN 44 01 27 62	USB	(AB/Av/Gwr
S28	4625	28-3-2013	Thu	1128	MDZhB 39 345 TVIN 38 55 97 74	USB	(AB/Avare)
S28	4625	28-3-2013	Thu	1219	MDZhB 36 795 UVIDENNYJ 06 91 80 31	USB	(AB/Avare)
S28	4625	28-3-2013	Thu	1240	MDZhB 59 168 NAMOLVKA 81 30 73 20	USB	(AB/Avare)
S28	4625	28-3-2013	Thu	1242	MDZhB 10 752 KVIVET 50 69 45 28	USB	(AB/Avare)
S28	4625	28-3-2013	Thu	1312	MDZhB 82 064 VALCOVKA 83 39 62 76	USB	(AB/Avare)
S28	4625	28-3-2013	Thu	1325	MDZhB 14 200 AVIAZ'YeSKA 88 97 72 83	USB	(AB/Avare)
S28	4625	28-3-2013	Thu	1326	MDZhB 33 317 SVETLYJ 19 38 90 78	USB	(AB/Avare)
S30	3756	6-3-2013	Wed	1938	The Pip	CW	(Q-HOL)
S30	5448	8-3-2013	Fri	0348	The Pip	CW	(HS)
S30	3756	12-3-2013	Tue	2159	The Pip	CW	(LG2)
S32	5475.2	8-3-2013	Fri	0353	Russian Squeaky Wheel marker	USB	(HS)
S32	3828	12-3-2013	Tue	2211	Squeaky Wheel	USB	(LG2)
S32	5473	14-3-2013	Thu	0952	Al'fa-45 98 266 UVORKA 37 86 48 78	USB	(Gwr)
V02a	12120	30-3-2013	Sat	0937	in progress	AM	(JB5)
V13	7654	3-3-2013	Sun	0700	New Star #3. Tune + messages	AM	(AB-HK)
V13	7654	11-3-2013	Mon	0710	New Star in progress	USB	(AB-HK)
V13	7688	23-3-2013	Sat	0611	New Star in progress	USB	(AB-HK)
V24	5115	1-3-2013	Fri	1300		USB	(Token)
V24	5115	1-3-2013	Fri	1500		USB	(Token)
V24	4900	1-3-2013	Fri	1530	This is likely an error message, 6310 was anticipated in this time slot	USB	(Token)
V24	5115	2-3-2013	Sat	1300		USB	(Token)
V24	6215	2-3-2013	Sat	1500		USB	(Token)
V24	5115	2-3-2013	Sat	1530		USB	(Token)
V24	5115	3-3-2013	Sun	1300		USB	(Token)
V24	6310	3-3-2013	Sun	1330		USB	(Token)
V24	6215	3-3-2013	Sun	1500		USB	(Token)
V24	6215	3-3-2013	Sun	1600		USB	(Token)
V24	5115	4-3-2013	Mon	1300		USB	(Token)
V24	6310	4-3-2013	Mon	1330		USB	(Token)
V24	4900	4-3-2013	Mon	1500		USB	(Token)
V24	6215	4-3-2013	Mon	1600		USB	(Token)
V24	5115	5-3-2013	Tue	1400		USB	(Token)
V24	6310	5-3-2013	Tue	1430		USB	(Token)
V24	4900	5-3-2013	Tue	1500		USB	(Token)
V24	6310	5-3-2013	Tue	1530		USB	(Token)
V24	6310	5-3-2013	Tue	1630		USB	(Token)
V24	6310	6-3-2013	Wed	1300		USB	(Token)
V24	5115	6-3-2013	Wed	1400		USB	(Token)
V24	6310	6-3-2013	Wed	1430		USB	(Token)
V24	6310	6-3-2013	Wed	1530		USB	(Token)
V24	6310	6-3-2013	Wed	1630		USB	(Token)

enigma	frequency	date	day	UTC	remarks	mode	contributor
V24	6310	7-3-2013	Thu	1300		USB	(Token)
V24	6310	9-3-2013	Sat	1330		USB	(Token)
V24	6310	10-3-2013	Sun	1330		USB	(Token)
V24	5115	10-3-2013	Sun	1430		USB	(Token)
V24	5115	11-3-2013	Mon	1430		USB	(Token)
V24	6310	13-3-2013	Wed	1530		USB	(Token)
V24	6310	14-3-2013	Thu	1530		USB	(Token)
V24	6310	15-3-2013	Fri	1430		USB	(Token)
V24	4900	15-3-2013	Fri	1530		USB	(Token)
V24	6310	16-3-2013	Sat	1430		USB	(Token)
V24	4900	16-3-2013	Sat	1500		USB	(Token)
V24	4900	16-3-2013	Sat	1530		USB	(Token)
V24	4900	17-3-2013	Sun	1500		USB	(Token)
V24	5115	17-3-2013	Sun	1514	Believe error in transmission time, this is probably supposed to be 1530	USB	(Token)
V24	5115	18-3-2013	Mon	1300		USB	(Token)
V24	6310	18-3-2013	Mon	1330		USB	(Token)
V24	6215	18-3-2013	Mon	1500		USB	(Token)
V24	5115	19-3-2013	Tue	1300		USB	(Token)
V24	6310	19-3-2013	Tue	1330		USB	(Token)
V24	6215	19-3-2013	Tue	1500		USB	(Token)
V24	6215	19-3-2013	Tue	1600		USB	(Token)
V24	5115	20-3-2013	Wed	1400		USB	(Token)
V24	5115	20-3-2013	Wed	1430		USB	(Token)
V24	5115	20-3-2013	Wed	1500		USB	(Token)
V24	6215	20-3-2013	Wed	1600		USB	(Token)
V24	5115	21-3-2013	Thu	1400		USB	(Token)
V24	5115	21-3-2013	Thu	1430		USB	(Token)
V24	5115	21-3-2013	Thu	1500		USB	(Token)
V24	6310	21-3-2013	Thu	1530		USB	(Token)
V24	6310	22-3-2013	Fri	1530		USB	(Token)
V24	6310	23-3-2013	Sat	1330		USB	(Token)
V24	5115	24-3-2013	Sun	1300		USB	(Token)
V24	6310	24-3-2013	Sun	1330		USB	(Token)
V24	5115	25-3-2013	Mon	1300		USB	(Token)
V24	6310	26-3-2013	Tue	1530		USB	(Token)
V24	6310	27-3-2013	Wed	1530		USB	(Token)
V24	6310	28-3-2013	Thu	1300		USB	(Token)
V24	5115	31-3-2013	Sun	1500		USB	(Token)
VC01	5442	19-3-2013	Tue	1750	Chinese Robot in progress	LSB	(AB-HK)
VC01	7904	23-3-2013	Sat	0614	Chinese Robot	USB	(AB-HK)
VC01	7904	24-3-2013	Sun	0725	Chinese Robot	USB	(AB-HK)
VC01	5442	24-3-2013	Sun	1342	Chinese Robot in progress	LSB	(AB-HK)
VC03	10685	30-3-2013	Sat	1719	i.p. Male reading coded messages	USB	(PPA)
X06	14650	13-3-2013	Wed	1343	Mazielka. Sequence: 215346	USB	(HS2)
X06	12091	13-3-2013	Wed	1347	Mazielka. Sequence: 216354	USB	(HS2)
X06	7732	14-3-2013	Thu	1615	Mazielka	USB	(LG2)
X06	16226	15-3-2013	Fri	0925	Mazielka. Sequence: 324615	USB	(FMB)
X06	14876	15-3-2013	Fri	0927	Mazielka. Sequence: 123456	USB	(FMB)
X06	14576	15-3-2013	Fri	0929	Mazielka. Sequence: 324615	USB	(FMB)
X06	14570	15-3-2013	Fri	0930	Mazielka. Sequence: 324615	USB	(FMB)
X06	7730	15-3-2013	Fri	0938	Mazielka. Sequence: 123456	USB	(FMB)
X06	11571	16-3-2013	Sat	1312	Mazielka. Sequence: 113456 (1312-1320)	USB	(FMB)
X06	11571	16-3-2013	Sat	1323	Mazielka. Sequence: 113456 (1323-1403)	USB	(FMB)
X06	12100	16-3-2013	Sat	1424	Mazielka	USB	
X06	12101	16-3-2013	Sat	1502	Mazielka. Sequence: 113456	USB	(FMB)
X06	13416	16-3-2013	Sat	1511	Mazielka. Sequence: 113456 (1511-1558)	USB	(FMB)
X06	7855	16-3-2013	Sat	1605	Mazielka. Sequence: 113456 (1605-1710)	USB	(FMB)
X06	10871	16-3-2013	Sat	1617	Mazielka. Sequence: 113456 (1617-1703)	USB	(FMB)
X06	8100	16-3-2013	Sat	1719	Mazielka. Sequence: 113456 (1719-1723)	USB	(FMB)
X06	11091	16-3-2013	Sat	1745	Mazielka. Sequence: 113456 (1745-1848)	USB	(FMB)
X06	7731	16-3-2013	Sat	1801	Mazielka. Sequence: 113456 (1801-1809)	USB	(FMB)

enigma	frequency	date	day	UTC	remarks	mode	contributor
X06	11090	16-3-2013	Sat	1859	Mazielka. Sequence: 223456	USB	(Danix)
X06	9300	16-3-2013	Sat	2034	Mazielka. Sequence: 223456	USB	(AB/Q/JB5)
X06	7856	16-3-2013	Sat	2159	Mazielka. Sequence: 121212 (2159-2207)	USB	(FMB)
X06	15946	17-3-2013	Sun	0743	Mazielka. Sequence: 121212 (0743-0959)	USB	(FMB)
X06	16115	20-3-2013	Wed	1249	Mazielka. Sequence: 436457	USB	(MCO)
X06	5800	20-3-2013	Wed	1900	Mazielka ip	USB	(FMB)
X06	6942	20-3-2013	Wed	1904	Mazielka. Sequence: 4213#6 (1904-2000(?))	USB	(FMB)
X06	20170	21-3-2013	Thu	0900	Mazielka. Sequence: 135246	USB	(BCI)
X06	6942	21-3-2013	Thu	1758	Mazielka. Sequence: 654321	USB	(FMB)
X06	10508	22-3-2013	Fri	0815	Mazielka. Sequence: 162543	USB	(MYK)
X06	10653	22-3-2013	Fri	0849	Mazielka. Sequence: 356412	USB	(Danix)
X06	8100	25-3-2013	Mon	1825	Mazielka. Sequence: 123456 (1825-1920)	USB	(FMB)
X06	14811	28-3-2013	Thu	1545	Mazielka. Sequence: 263145	USB	(MCO)
X06b	9300	13-3-2013	Wed	1137	Mazielka. Two tones.	USB	(HS2)
X06b	7730	16-3-2013	Sat	1829	Mazielka. Sequence: 212112	USB	(Danix)
X06c	20170	18-3-2013	Mon	1043	Mazielka. Sequence: 123456	USB	(FN)
XPA	9362	5-3-2013	Tue	1900	Polytones numbers 304 304 304 1 (R) msg	MFSK	(Q-HOL)
XPA	8062	5-3-2013	Tue	1920	Polytones numbers 304 304 304 1 (R) msg	MFSK	(Q-HOL)
XPA	7462	5-3-2013	Tue	1940	Polytones numbers 304 304 304 1 (R) msg	MFSK	(Q-HOL)
XPA	8062	7-3-2013	Thu	1921	304 304 304 1 (R) msg	MFSK	(Q-HOL)
XPA	9362	12-3-2013	Tue	1900	msg	MFSK	(HFD)
XPA	9362	12-3-2013	Tue	1900	Polytones numbers station	MFSK	(Q-HOL)
XPA	8062	12-3-2013	Tue	1920	msg	MFSK	(HFD)
XPA	8062	12-3-2013	Tue	1920	304 304 304 000 (R) msg	MFSK	(Q-HOL)
XPA	7462	12-3-2013	Tue	1940	msg	MFSK	(HFD)
XPA	7462	12-3-2013	Tue	1940	304 304 304 000 (R) msg	MFSK	(Q-HOL)
XPA	7462	14-3-2013	Thu	1941	ip	MFSK	(Q-HOL)
XPA	8062	14-3-2013	Thu	2000	304 304 304 000	MKSF	(Q-HOL)
XPA	11410	16-3-2013	Sat	0702	ip	MFSK	(FMB)
XPA	14610	16-3-2013	Sat	0740	456(x3) 1 06653...23125	MFSK	(FMB)
XPA	9362	19-3-2013	Tue	1900	304 304 304 000	MFSK	(Q-HOL)
XPA	8062	19-3-2013	Tue	1920	304 304 304 000	MFSK	(Q-HOL)
XPA	7462	19-3-2013	Tue	1940	304 304 304 000	MFSK	(Q-HOL)
XPA	8062	21-3-2013	Thu	1921	304 304 304 000	MFSK	(Q-HOL)
XPA	7462	21-3-2013	Thu	1940	304 304 304 000	MFSK	(Q-HOL)
XPA	11410	27-3-2013	Wed	0705	ip	MFSK	(FMB)
XSL	8588	7-3-2013	Thu	1925	Japanese Navy a.k.a. Slot Machine	QPSK 1500	(Q-HOL)
XSL	8588	7-3-2013	Thu	2053	Japanese Navy a.k.a. Slot Machine	QPSK 1500	(Q-HOL)
XSL	8588	9-3-2013	Sat	2138	Japanese slot machine (XSL), idling.	QPSK 1500	(HS)
XSL	6445	11-3-2013	Mon	1803	Japan Maritime Self-Defense Force	QPSK 1500	(PPA)
XSL	8312.5	13-3-2013	Wed	1938	Japan Maritime Self-Defense Force	QPSK 1500	(PPA)
XSL	6417	14-3-2013	Thu	2006	Japan Maritime Self-Defense Force	QPSK 1500	(PPA)
XSL	8705.5	14-3-2013	Thu	2041	Japan Maritime Self-Defense Force	QPSK 1500	(PPA)
XSL	8587.7	14-3-2013	Thu	2041	Japan Maritime Self-Defense Force	QPSK 1500	(PPA)
XSL	8313	15-3-2013	Fri	2018	Japanese Navy a.k.a. Slot Machine	QPSK 1500bd	(AB)
XSL	4231.5	15-3-2013	Fri	2018	Japanese Navy a.k.a. Slot Machine	QPSK 1500bd	(AB)
XSL	6250	15-3-2013	Fri	2018	Japanese Navy a.k.a. Slot Machine	QPSK 1500bd	(AB)
XSL	6417	15-3-2013	Fri	2018	Japanese Navy a.k.a. Slot Machine	QPSK 1500bd	(AB)
XSL	6445	15-3-2013	Fri	2018	Japanese Navy a.k.a. Slot Machine	QPSK 1500bd	(AB)
XSL	8588	15-3-2013	Fri	2018	Japanese Navy a.k.a. Slot Machine	QPSK 1500bd	(AB)
XSL	8703.5	15-3-2013	Fri	2018	Japanese Navy a.k.a. Slot Machine	QPSK 1500bd	(AB)
XSL	4153	15-3-2013	Fri	2018	Japanese Navy a.k.a. Slot Machine	QPSK 1500bd	(AB)
XSL	8313	18-3-2013	Mon	1959	Japanese Navy a.k.a. Slot Machine 1	QPSK 1500bd	(Q-HOL)
XSL	8588	26-3-2013	Tue	1716	Japanese Navy	QPSK 1500	(LG2)

CONTRIBUTORS

AB	Ary Boender, Netherlands	JPL-HK	JPL via GlobalTuners Hong Kong
AB-EST	Ary Boender via remote rx Estonia	JPL-RUS	JPL via remote rx Russia
AB-HK	Ary Boender via remote rx Hong Kong	JPL-Sib	JPL via remote rx Siberia
AIK	Douglas, Israel	JU	Jay Updike, W. Europe
ALF	Alf, Germany	KC2TTK	KC2TTK, NY, USA
Avare	Avare	LG2	Les G, UK
BCI	Bruno Casula, Italy	MAUK	MikeA, UK
Dan	Daniel, Argentina	MCO	Mike Chace-Ortiz, PA, USA
Danix	Danix111, Poland	MOR	Mauro, North Italy
E2601	Emilio, Mexico	MPJ	Jim, SW England
EB-D	Eike Bierwirth, Germany	MYK	Mark, Yorkshire, UK
EB-GRC	Eike Bierwirth, Greece	NCILL	Nate, Chicago, ILL, USA
EB-J	Eike Bierwirth, Japan	PPA	Peter Poelstra, Netherlands
EB-RUS	Eike Bierwirth, Russia	Q-HOL	Chief via remote rx in The Netherlands
FMB	FMB, Germany	RP-MD	Ron, MD, USA
FN	Fritz Nusser, Switzerland	RSRu	via Radioscanner Russia
Gwr	Gwraspe (Priyom.org)	Spec	The Spectre 3000, UK
HFD	Hans-Friedrich Dumrese, Germany	tING	Thomas, Central Europe
HS	Hugh Stegman, USA	TJ	Trond Jacobsen, Norway
HS2	Hans Snekvik, W. Europe	Token	T!, CA, USA
JB5	John Bell	Tom	Tom, Lincs, UK
JPL	JPL, Ontario, Canada	Topol	Topol, UK
JPL-D	JPL via GlobalTuners Germany	TR2	Tony, UK
JPL-FNL	JPL via remote rx Finland		

Relevant mailing lists:

Utility DXers Forum (utility and spooks related logs)
To become a member go to http://groups.yahoo.com/group/udxf/ and follow the instructions.
Website: http://www.udxf.nl

Spooks (spooks related info and logs)
Go to the web interface http://mailman.qth.net/mailman/listinfo/spooks to subscribe. Fill in the form and follow the instructions that will be mailed to you.