

670	27364	92836	09428	61208	74982	36498	32764	81276	01
4986	40932	70987	32123	49817	26346	81287	65491	87364	81
721	75654	55656	12737	72727	72727	91918	63473	67867	70
723	87629	37677	32612	53498	71296	28756	18276	98716	87
7269	76329	74698	76857	98670	27601	56701	57601	73648	15
591	87364	87265	96710	27630	12673	84769	28743	98127	50
58	63298	75698	27465	87326	49876	28376	81273	98615	62
667	87432	74328	78674	29867	32867	67867	86786	43286	432
667	68768	68763	34234	34238	68768	62342	48273	48768	234
936	98432	32432	86743	43286	43286	43286	43286	43286	432
743	86743	86743	39867	32867	86743	43286	43286	43243	867
741	86743	86743	86743	86743	86743	86743	86743	86743	435
543	98798	98754	98754	98754	98754	29867	67543	67986	867
76	87698	69876	87698	69876	87612	12341	34867	86798	632
667	43298	65656	56756	56123	32143	14321	32143	14321	321
71	02787	58765	76587	58765	76587	58765	76587	58756	765
75476	76543	58765	36543	58765	36543	58765	36543	58765	587

Numbers & Oddities

a.k.a. The Spooks Newsletter

Edition #187, April 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>

Hi all,

Welcome to the 187th edition of Numbers & Oddities.

Spring has finally arrived !!! The sun is shining while I am writing this and the early birds are singing. I just had two Morse pigeons on my roof. One is cooing "R" and the other "L" and changed to "A". Somewhat later a third one arrived. That bird was more experienced, cooing two letters "WA" one of the others changed than to "U". After a final "RA" they took off. Funny ☺

VOICE STATIONS



E07

9387/7526/5884 kHz, 04-04, 2010/2030/2050 UTC:

358 358 358 1 (R) 652 156 652 156
55341 27296 65900 96381 66012 41996 57186 89140 23513 57261
28794 95238 50915 18101 03811 33638 77640 73784 42297 36084
86884 71851 79236 47293 63655 22948 24355 38694 41569 20279
12129 83440 83950 22693 30013 91021 83991 08187 28186 47872
00040 05887 93908 09789 51173 91964 00711 33321 52553 67327
91485 86378 76056 98322 76654 01354 48915 75587 17946 87480
19174 63394 70975 44420 68606 17126 15746 27064 28102 79076
98680 70166 92969 87047 04900 59377 35209 41450 64119 69147
52437 09338 15276 49209 99556 67913 52015 49204 35878 56245
72092 67186 46189 81418 10096 68171 34167 97062 66062 42501
94929 91385 41216 41183 74509 55559 21572 47951 65561 45179
91394 54271 84299 54101 57472 16677 91164 37959 31550 69386
52649 84695 41478 10450 59580 93005 78847 91021 90145 03558
28850 76117 57438 94647 15847 25742 89692 76950 86371 89444
85551 28207 75946 40801 25075 93258 70350 82942 79390 85939
36985 89054 20835 69865 55823 32574
000 0000

8173/7473/5773 kHz, 10-04 & 24-04, 2000/2020/2040 UTC:

147 1 16551 8781 61
26435 83333 63036 23100 53458 59179 29038 51126 34205 97757
92512 41329 69609 37866 88810 19614 16265 23748 10997 81137
57196 96952 99695 39944 49669 40395 34989 17809 86607 43936
46245 26816 13425 85651 84674 61527 22657 75358 00069 96324
27270 55314 07882 57040 42029 50256 35733 83550 73586 60550
31405 18833 43585 90694 66485 39843 09161 89807 60654 16036
21706 000 000



E11/ E11a

4909 kHz, 06-04, 0900 UTC:

244/36 Attention

65953 06814 28228 74240 15276 09650 09194 46393 49356 19845
34462 00694 05974 49587 72428 44064 39134 16853 27836 88910
03134 37872 58806 88278 11558 86600 94022 72355 85313 85903
53879 21590 10411 14326 56599 52419

Out

9371 kHz, 18-04, 1730 UTC:

418/31 Attention

27969 11225 74240 80710 96995 71510 33707 08575 10023 37422
69874 34315 21588 10007 47923 30554 69945 29402 32880 73576
48419 15806 35974 91561 85061 73800 73687 59329 37454 16103
75878

Out

9399 kHz, 15-04, 0900 UTC:

Note: This transmission had lots of malfunctions. The figures five and three were only heard during the call

53*/34 Attention

03996 56990 07923 81122 00549 10924 23465 09160 06259 95962
55324 86734 01310 64231 51896 07754 13070 56644 63830 40907
72979 42755 11268 50865 95603 30588 39505 42463 80465 75513
81978 99053 85693 02611

Out

13375 kHz, 08-04, 1110 UTC:

958/40 Attention

00088 33096 79940 44319 48053 65547 63403 55510 82326 66514
08913 26334 34920 30064 06725 14103 05094 63035 98717 25778
96784 64577 20722 32131 45679 74524 16142 92910 84253 07289
21253 34334 15391 29655 21521 61239 12748 58030 69605 38295

Out

13375 kHz, 15-04, 1110 UTC:

952/32 Attention

06817 92023 44995 60776 18688 56398 41323 88842 49339 84545
08869 79455 96437 65838 57791 27393 45537 22615 18562 70446
23952 67031 08415 35860 06391 54157 66779 62735 91576 58610
25204 49629

Out

13375 kHz, 22-04, 1110 UTC:

958/31 Attention

33898 72342 95804 71444 06993 30102 28848 02245 17300 68820

29530 72882 27412 97018 91453 21417 21139 86309 69723 01580

29363 47453 15657 45430 15212 77435 34347 04377 69266 72902

69002

Out



E25/E25a

In the last week of March E25 changed its schedules: 6140 kHz: 0600-1100 UTC and 9450 kHz: 1100-1400 UTC.

8450 kHz, 31-03, 1200 UTC: YL 75 277 275 277 275 277 275 277 275 277 275 277 275 277 275 277 275 277 277 277 277 277
MESSAGE MESSAGE MESSAGE 1330 1080 4410 5847 0739 4006 2214 4410 REPEAT REPEAT REPEAT 1330
1080 4410 5847 0739 4006 2214 4410 END OF MESSAGE END 275 277 275 277 275 277 275 277 27

9450 kHz, 31-03, 1316 UTC: YL 85 2 785 2 785 2 785 2 785 2 785 2 785 2 785 2 785 2 785 2 785 2 785 2
785 2 785 2 785 2 MESSAGE MESSAGE MESSAGE REPEAT REPEAT REPEAT END OF MESSAGE interrupted by Spider Solitaire game sounds

9450 kHz, 01-04, 1144 UTC: Carrier on, Spider Solitaire sounds. At 1145 UTC “2” and at 1159 UTC: YL 70 270! 270 MESSAGE MESSAGE MESSAGE REPEAT REPEAT REPEAT END OF MESSAGE END OF TRANSMISSION. Interrupted by Spider Solitaire sounds

6140 kHz, 02-04, 0638 UTC: Carrier on; Windows sounds; Spider Solitaire sounds and at 0659 UTC: YL 04 804 804 804 804 804 804 804 804 804 804 804 804 MESSAGE MESSAGE MESSAGE 1088 3260 3046 0331 1645 8274 1613 4098 0718 9537 4575 1021 REPEAT REPEAT REPEAT 1088 3260 3046 0331 1645 8274 1613 4098 0718 9537 4575 1021 END OF MESSAGE END

6140 kHz, 03-04, 0805 UTC: Carrier on; Spider Solitaire sounds; at 0935 UTC: YL 3 3 333 333 333 333 333 333 333 333 333 333 333 MESSAGE
MESSAGE MESSAGE 3090 1420 1125 3861 6776 2993 2536 1303 1420 REBEAT REBEAT REBEAT 3090 1420
1125 3861 6776 2993 2536 1303 1420

6140 kHz, 04-04, 0700 UTC: YL. 806 1 806 1 806 1 806 1806 1 806 1 806 1 806 1 806 1 80 (transmitter shuts off)

6140 kHz, 04-04, 0622 UTC: Carrier with music in USB.

6140 kHz, 04-04, 1115 UTC:

YL 880 880 880 880 880 880 880 880 880 880 880 880 880 MESSAGE MESSAGE MESSAGE 0230
4031 1995 1556 2356 2845 8276 6627 7697 0756 8752 1656 0230 REPEAT REPEAT REPEAT 0230 4031 1995
1556 2356 2845 8276 6627 7697 0756 8752 1656 0230 END OF MESSAGE

9450 kHz, 06-04, 1159 UTC: YL 277 3 4 277 3 4 277 3 4 277 3 4 277 3 4 277 3 4 277 3 4 277 3 4 277 3 4
277 3 4 277 3 4 277 3 4 277 3 4 277 3 4 277 3 4 MESSAGE MESSAGE END OF MESSAGE END OF TRANSMISSION

9450 kHz, 06-04, 1313 UTC: YL 785 3 785 3 785 3 785 3 785 3 785 3 785 3 785 3 785 3 785 3 785 3 785 3 785 3
785 3 785 3 785 3 MESSAGE MESSAGE MESSAGE REPEAT REPEAT REPEAT END OF MESSAGE END OF
TRANSMISSION END OF MESSAGE END OF TRANSMISSION

6140 kHz, 07-04, 1000 UTC: YL 570 570 570 570 570 570 570

6140 kHz, 07-04, 1001 UTC: YL. 70 570 570 570 570

6140 kHz, 07-04, 1002 UTC : YL 570 570 570 570 570 570 570 570 570 570 570 570 MESSAGE MESSAGE MESSAGE 2033 2033 9755
9412 9614 2887 4995 9902 REPEAT REPEAT REPEAT 2033 2033 9755 9412 9(truncated, xmtr off)

6140 kHz, 07-04, 1010 UTC: YL. 570 570 570 570 570 570 5(audio problems) 570 5

6140 kHz, 07-04, 1014 UTC: YL 570 570 MESSAGE MESSAGE MESSAGE 2033 2023 975(truncated msg)

6140 kHz, 07-04, 1015 UTC: YL 995 9902 REBEAT REBEAT REBEAT 2033 2023 9755 9412 9614 2887 4995 9902 END OF MESSAGE END OF TRANSMISSION

9450 kHz, 07-04, 1115 UTC: YL 887 2 887 2 887 2 887 2 887 2 887 2 887 2 887 2 887 2 887 2 887 2 MESSAGE
MESSAGE MESSAGE REPEAT REPEAT REPEAT END OF MESSAGE END OF TRANSMISSION

6140 kHz, 07-04, 0958 UTC: YL. 5...(very faint) 575 2 575 2 575 2 575 2 575 2 575 2 575 2 575 2 575 2 575 2
MESSAGE MESSAGE MESSAGE END OF MESSAGE END OF MESSAGE 5 END OF TRANSMISSION

6140 kHz, 09-04, 0923 UTC: YL 333 333 333 333 333 333 333 333 333 333 333 333 333 333 333 MESSAGE MESSAGE MESSAGE 3090
1420 1125 3861 6776 2993 2536 1303 1420 REBEAT REBEAT REBEAT 3090 1420 1125 3861 6776 2993 2536
1303 1420 END OF MESSAGE END OF TRANSMISSION

6140 kHz, 10-04, 0913 UTC: YL. 950 950 950 950 950 950 950 950 950 950 950 950 95

6140 kHz, 10-04, 0914 UTC: YL. MESSAGE MESSAGE MESSAGE 4001 1055 0380 6086 0130 0824 6785 4186 6796 0380 REPEAT REPEAT

[illegible]

G06

4526 kHz, 04-04, 1200 UTC: test count 01234 01234 01234

4526 kHz, 04-04, 1300 UTC: 215 253 43

86739 81178 86313 80423 19279 50952 81907 96563 77866 82799
97353 81321 65652 38297 65614 33335 99304 97576 67097 81987
11847 93030 61648 86635 25253 29437 91923 74564 63210 88282
04092 43746 78677 09661 65032 15131 65723 21562 47730 37092
47386 54914 28659
253 43 00000

5442 kHz, 12-04, 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

6433 kHz, 26-04 & 28-04, 2000 UTC:

265/38 Achtung

21455 62614 66775 19970 07650 62601 85610 50780 07808 27898
49708 96996 21257 69492 87760 87749 77295 21410 57179 24489
77846 71248 87427 60724 76786 48802 89854 10895 42188 05271
97296 50167 66182 12581 67646 08276 16517 28117

Achtung, Message repeat, Ende



S06

8173 kHz, 06-04 & 20-04, 1600 UTC:

764 958 32

00634 14533 68335 95135 36640 20790 13190 46871 31377 97484
69238 42995 18775 29363 42909 06365 57777 00010 93049 49043
62172 75503 14509 15819 26119 62858 86121 22128 86185 47265
34367 13983
958 32 00000

9225 kHz, 11-04, 0830 UTC:

480 913 40

29604 26043 90696 91313 23879 33264 70090 05259 79739 54765
34415 80223 55958 41217 65183 29850 11428 29156 59073 50456
13597 38965 53912 84941 38489 09759 70477 07936 70893 69464
49623 44813 70855 95057 73628 13974 60178 05871 95713 54413
913 40 00000



S11a

16112 kHz, 08-04, 1015 UTC:

475/38

53155 07400 05011 24884 20840 89819 72105 88868 71534 64243
07267 27150 61367 22785 91809 97931 29029 15738 61707 61884
69777 05808 15073 62767 17709 35500 92879 27930 33104 82323
56179 36230 32335 21263 38468 13145 73497 60632



S21

4454//4585 kHz, 02-04 & 09-04, 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

03-04, 0626 UTC: No buzzer till 1622 UTC
 03-04, 0732 UTC: Raz, dva, tri, raz, dva, tri (123 123) ya Revizor. Vozdukh 30 25 76 618 75 852 13 / 33 20 77 78.
 Notes:
 Raz = one
 Revizor = revisory officer, revision specialist (usually financial)
 Vozdukh = air (in the military terminology means air danger, attack from air, aviation attack)

04-04, 1400 UTC: MDZhB PERLOVICA 4188
 09-04, 1413 UTC: MDZhB 31 417 SVEKLOVITsA 47 23 24 71
 09-04, 1426 UTC: MDZhB 82 851 KVARTsIT 91 19 71 27
 09-04, 1446 UTC: MDZhB 30 517 KVARTIRNIK 05 72 88 04
 09-04, 1506 UTC: MDZhB 71 346 AVANTYurIST 10 18 54 50
 09-04, 1509 UTC: MDZhB 81 346 AVANTYurIST 10 18 54 50
 09-04, 1521 UTC: MDZhB 06 512 AVANSOVYJ 29 20 13 32
 09-04, 1530 UTC: MDZhB 11 468 EVANGELIST 70 43 61 40 KVADRATOR 77 85 90 68 ABShTRIKh 96 16 48 25
 11-04, 0825 UTC: MDZhB 59 213 OBTURATOR 05 73 02 17 Priyom
 11-04, 0827 UTC: MDZhB 73 662 OBTOPAN 86 07 39 92 Priyom
 11-04, 0832 UTC: MDZhB 05 243 SBROShYeNNYJ 16 45 54 84 Priyom
 11-04, 1110 UTC: MDZhB 17 345 SBODRYGA 10 72 63 81 Priyom
 11-04, 1150 UTC: MDZhB 75 989 OBLOM 45 99 25 66 priyom
 11-04, 1159 UTC: MDZhB 71 787 OBIDA 25 94 92 57 priyom
 11-04, 1207 UTC: MDZhB 92 285 OBZhIMOChNYJ 97 49 94 14 priyom
 11-04, 1313 UTC: MDZhB 15 182 OBYeZ'YANNIK 48 24 94 70 Priyom
 11-04, 1315 UTC: MDZhB 92 285 OBZhIMOCHNYJ 97 49 94 14 Priyom (same at 1210z)
 11-04, 1321 UTC: MDZhB 54 586 HAYATEL' 74 40 52 79 FAYaNIT 02 31 08 05 BASHMACHNIK 28 41 90 67 Priyom
 11-04, 1323 UTC: MDZhB 03 468 MAHILIS 70 60 61 71 NAHILA 02 41 44 66 NASTOKS 68 05 35 63 KAFIZMA 35 75 23 82 Priyom
 15-04, 0829 UTC: MDZhB 58 791 LAUDANUM 02 23 11 08 Priyom
 15-04, 0832 UTC: MDZhB 28 862 NAUGOLNIK 64 21 38 74 Priyom
 15-04, 1024 UTC: MDZhB 26 286 LATYSh 30 48 72 73 Priyom
 15-04, 1038 UTC: MDZhB 05 287 ZATYChKA 98 47 18 96 Priyom
 15-04, 1213 UTC: MDZhB 63 905 GATEROL 51 08 20 16 Priyom
 15-04, 1216 UTC: MDZhB 83 009 PATRUBEN 69 03 28 50 Priyom
 15-04, 1218 UTC: MDZhB 13 843 MATROSKA 29 66 92 06 Priyom



S32 - Squeaky Wheel

Mode: USB

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

3828 kHz, 09-04, 1829 UTC: Al'fa45 96753 41302 19668 52477 39291 ABYeTcYeDARIJ 4261 2956 Priyom

3828 kHz, 09-04, 1859 UTC: Al'fa45 49093 07726 53859 41107 08872 VOTRA 5974 6136 Priyom

3828 kHz, 10-04, 1726 UTC: Al'fa45 58562 95403 56475 02110 28544 TARITARU 6266 7754 Priyom

3828 kHz, 10-04, 1741 UTC: Al'fa45 31954 51301 21648 62586 71913 PIKSAL7354 0572 Priyom



RMv/RNv/RNAv/RAv **Russian military stations**

Frequency: various

Mode: USB / voice

RMv

5620 kHz, 12-04, 2232 UTC: Russian ground forces. Various stations establishing a radio net. c/s of the main operator is VALIK-17 , also heard SHTORA-79 . Both male voices. Many paired numbers like 0202 0606 1717 3333 3232 0505 1818 ... VALIK-79 wants to move to another freq. He said : "Go to 447 " .
Recording on www.numbersoddities.nl



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.



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, 5592, 5700, 5742, 5802, 5832, 6209, 6479, 6771, 6840, 6858, 6860, 6949, 6960, 7090, 7351, 7608, 7684, 7726, 7739, 7744, 7756, 7770, 7792, 7864, 7865, 7880, 7890, 7924, 7938, 8000, 8025, 8170, 9000, 9169, 9192, 9290, 9340, 10508 kHz.

No reports this month.



VC03 **Chinese Air Defense network**

18988 kHz, 09-04, 0630 UTC, LSB:

Female operator in progress. Each 4-figure is repeated. I'll leave out repeats.

9090 123 071 6990 399132 220 001 298 223 1440 310 0434 0420 57 0--1 (cut off by bandwidth change) 298 0431 0428 0416 3 126 (most of the above were passed without repeats.) Passed very rapidly: 288132 492 132

Thanks to Nick or the log and DJ for the transcript.

MORSE STATIONS



MX **Russian Military beacons**

Current cluster frequencies:

3594, 4558, 5154, 7039, 8495, 10872, 13528, 16332, 20048 kHz

Other frequencies:

L 5616.8, 6917.5, 8497.8 kHz

V 3658, 4150, 4084, 5619.5 kHz

R 5466 kHz (seldom reported these days)

W, K, C, N, R various freqs (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, A, L

Asian Cluster Beacons: F, K, M

Beacon "L" transmitted "LLLLL" followed by 4 dashes on 24-26 April.

Channel markers:

V: 4084, 4150, 5619.5

R: 4325.9



M01

5020 kHz, 04-04, 2000 UTC: 463 (R) 863 863 30 30 = =

69711 69711 65505 65505 15181 15181 60078 60078 92002 92002
01177 01177 92956 92956 43279 43279 96649 96649 14925 14925
95677 95677 73967 73967 18172 18172 56284 56284 53182 43182
41088 41088 07594 98594 76930 76930 74132 74132 88970 88970
07602 07602 48817 48817 37560 37560 72013 72013 19006 19006
83051 83051 92149 92149 26410 26410 59638 59648 12514 12514
= = 863 863 30 30 000

5020 kHz, 11-04, 2001 UTC: As always messy morse with many errors.

463 (R) 157 157 30 30 = =

49317 49317 23616 23616 24134 24134 24134 41902 41902 76392
76392 12658 12658 00000 58707 58707 20507 20507 54400 54400
52422 52422 14652 14652 46686 46686 60213 60213 82534 82534
39816 39816 22361 22361 89190 89190 47247 47247 36033 36033
30284 30284 51478 51478 03107 03107 81557 81557 10035 10035
51930 51930 93637 93637 06514 06514 03733 03733 79225 79225
5212..

= = 157 157 30 30 000

M01c: 4065 kHz, 12-04,

1847 UTC: 02 02 02

1848 UTC: 02 02 02

1849 UTC: 02 06

1850 UTC: 111 999 182 10 = 92337 62508 32613 03687 75802 84170 39676 61362 76893
10377 = 68260 39676 = 111 = 61362 333 111 000

Possible M01c transmissions:

4204 kHz, 23-03, 2036 UTC: 333 37. 333 45. 333 47. 333 50. 111

4136 kHz, 23-04, 2014 UTC: 333 95389 95389. 111. 333. 333 96739 96739. 111. 111. 111. 111 999 etc.
... 368 368 5. 368 49 = 88999 21051 08981 83091 03975 ... 07807 11717
16153 03475 23048 = 36849. 111 000



M12

10469//9169 kHz, 03-04, 2130/2150 UTC: 441 441 441 1 (R) 3783 71 3783 71
65214 76368 87600 90713 22183 80088 92830 93622 02380 50506
79234 13086 70420 20364 84722 49205 36295 48308 39764 65216
52437 95373 14921 70302 91044 30201 96198 95063 39205 20553
33265 98611 37929 63417 09011 21111 38351 07001 24276 92207
64894 58253 12847 04059 14665 92959 51688 49713 91331 57187
13121 31185 76184 74342 48428 14239 30843 65499 37296 24856
32412 73769 11210 10515 84277 24714 25718 43296 09193 49750
85987
000 000

10343 kHz, 09-04, 1830 UTC: 124 124 124 1 (R) 5073 66 6073 66
50389 40488 21276 86004 36858 78610 61819 73865 54392 71812
26367 39498 33854 88715 72793 73572 40917 47310 14348 23331
83192 75714 82134 19534 78605 57691 96601 70186 64169 72565
41101 81305 69689 76670 24735 61354 67441 76330 00651 72569
43765 89224 19288 96935 81604 22062 99819 44411 70951 60658
55454 39799 31575 69962 26279 51923 87280 08577 18708 53398
20829 13392 23983 45390 10627 55386
000 000

11469/10469/9169 kHz, 10-04, 2110/2130/2150 UTC: 441 441 441 1 (R) 8475 125 8475 125
17617 31195 55571 31288 85232 67483 97456 70184 63700 37718
33263 05657 08773 33784 59196 17716 53714 33552 54632 84680
47924 34261 15390 88945 01740 70958 04475 21596 20078 53385
63108 14750 60143 35322 41634 69905 61127 62311 70742 40099
36453 77221 23277 39800 24498 60337 81279 58210 83480 52299
51773 72228 08128 52264 99805 09419 31999 19785 77693 21748
74379 39921 16630 69407 44214 59151 06129 40232 85274 28508
32253 86269 21710 33904 77685 88401 21495 74724 70332 44324

92463 08548 56149 87524 42256 12114 79446 31764 12440 68747
41030 13784 20163 07760 32518 52905 61292 96359 82910 89968
25025 71259 35409 21164 21337 33238 24293 83657 58128 66271
54782 67866 18038 91142 87402 93936 87132 38544 37111 56096
44830 48239 51410 59300 75690
000 000

10343/9264/9117 kHz, 10-04, 1800/1820/1830 UTC:

124 124 124 1 6568 82 6568 82
86822 58215 99363 71629 18241 11267 28518 70162 91680 61675
44019 20621 89797 30093 44892 40411 54951 46817 13226 85827
75092 28007 95560 14474 94178 77258 62716 72550 95665 14290
02639 79926 68674 43061 50755 11077 17472 37448 47383 46008
51919 37497 05391 54278 90110 88268 79032 15723 18167 64008
10425 67589 46421 35918 61020 07042 57175 69220 09327 66162
58134 52633 44593 72073 11280 52943 18077 71124 93481 23587
69145 81508 70680 16714 74405 21047 09289 09090 70438 63649
81480 11986 000 000



M18

4073 kHz, 03-04, 1927 UTC: 0027 0027 0027 ...
4073 kHz, 05-04, 1840 UTC: 0144 0144 0144 ...
4073 kHz, 13-04, 0558 UTC: 0958 0958 ...
8145 kHz, 13-04, 0531 UTC: 0931 0931 ...
4073 kHz, 18-04, 2039 UTC: 0039 0039 0040 0040 0040 etc
4073 kHz, 20-04, 2017 UTC: 0117 0117 0117 0117 0118 0118 etc.
4073 kHz, 21-04, 1832 UTC: 0132 0132 0132 etc.
4073 kHz, 22-04, 1941 UTC: 2345 2345 2346 2346 2346 etc.
4073 kHz, 23-04, 2038 UTC: 0142 0142 0142 0143 etc.
4073 kHz, 24-04, 1830 UTC: 2334 2335 2335 2335 etc.
4073 kHz, 25-04, 2133 UTC: 0338 0338 0339 0339 0339 etc
4073 kHz, 26-04, 2012 UTC: 0023 0023 0024 0024 0024 etc.



M21 + variants **Russian Air Defence Forces** **Во́йска ПВО Voyska PVO**

Id 0: 3313, 4391 kHz



M32 **Russian/CIS/Ukrainian** **Military CW Stations**

4079 kHz, 04-04, 0300 UTC:

REO DE RMP QTC 295 1 53 4 0600 295 = SML = PROGNOZ POGODY DO 09 ÖASOW 05 AP RELÄ BALTIJSKOE MORE POGODA
OPREDELÄETSÄ POLOSJOJ POWYCHECOG ODAWLENIÄ DNEM ÜGU MORÄ LOVBNOJ CIKLONA CENTROM RUMYNIEJ

RAJON 1 WETER SEWEROWOSTOÖNYJ 7 TIRE 12 MS WOLNENIE 3 BALLA WYSOTOJ 8 TIRE 12 DO OBLAÖNOSTX 6 TIRE 9
BALLOW WYSOTOJ 300 TIRE 600 METROW MESTAMI OSADKI NOÖXÜ UTROM DYMKA WIDIMOSTX 4 TIRE 10 ÄW LEÄH 1

TIRE 2 KM TEMPERATURA WOZDUHA NOLX PLÜS 2 POBEREVXÜ NOÖXÜ NOLX MINUS 2 GRADUSA RLN POWYCHENNAÄ
OSADKASH NORMALXNAÄ

WETER ÜVNYJ 2 TIRE 7 NOÖXÜ WOSTOÖNYJ 5 TIRE 10 MS LED MESTAMI NEBOLXCHIE OSADKE NAÖALE DNÄ MESTAMI
TUMAN WEDEMOSTX 4 TIRE 10 TUMANE MENE 1 KM TEMPERATURA DNEM NOLX PLÜS 4 NOÖXÜ NOLX MINUS 3
GRADUSA

RAJON 3 WETER WOST OÖNYJ 5 TIRE 10 NOÖXU SEWEROWOSTOÖNYJ 7 TIRE 12 PORYWY 15 MS WOLNENIE 2 TIRE 3
NOÖXÜ 3 TIRE 4 BALLA

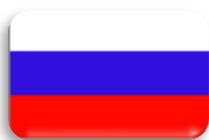
RAJON 4 WETER SEWEROWOSTOÖNYJ 7 TIRE 12 MS WOLNENIE 3 TIRE 4 BALLA =

3324 kHz, 12-04, 2230 UTC: Tentative Russian Mil:

8SFU DE V5LT K
8SFU K
R K .7I6D de V5LT
... R K
LBTG DE V5LT K
LBTG K
R K. 2W1Z DE V5LT K. R K. K... DE V5LT K
K7UE K
R K. 5.. DE V5LT
5IIA K
R K. UNNT DE V5LT K
UNNT K

10623 kHz, 20-04, 11067 UTC:

JI9E DE CALZ QLW QSA ? QXS AR
WPCJ DE CALZ QKW QSA ? QXS AR
P4SO DE CALZ K. P4SO DE CALZ K
R K
XS7J DE CALZ K. XS7J DE CALZ K. XS7J DE CALZ K. XS7J DE CALZ K
WBWF DE CALZ K
CALZ DE WBWF K
R K
QSA
QYMS DE CALZ QLW QSA ? QXS =
QYMS DE CALZ QLW QSA ? QXS AR
XS7J DE CALZ QLW QSA? QXS =



M32a
Russian Navy
Voyenno-Morskoy Flot Rossii

8345 kHz, 25-04, RIR96: Russian Navy vessel Azov (151) confirming xxx msgs from RCV.

RCV DE RIR96
74088 orit 6978 8633 k
49315 krizalxbn 7652 9564 k
97163 gopad 3151 7630 k
936688(?) ovika 2762 1141 k 49483 labawa 6347 2302 k83
86210 tokarnä 4002 8507 k
68059 gistorogiä 1410 3690 k

7861 kHz, 29-04, 1905 UTC: in progress.

RFH2 DE RAL2 QSA ? K
RDU2 DE RAL2 QSA ? K
DE RFH2 QSA 2 K
QSA 3 ZNN VA
RHW2 DE RAL2 QSA ? K
RBL71 DE RAL2 QSA ? K
RAL2 DE RBL71 QSA 2 K
QSA 4 ZNN ZNN VA VA
RDU2 DE RAL2 QSA ? K
RAL2 DE RDU2 QSA 3 ? K
QSA 2 ZNN
ZNN
VA VA
RHW2 DE RAL2 QSA ? K
RAL2 DE RHW2 QSA 2 ? K
QSA 4 ZNN ZNN
VA VA (Silent - 1908z)
56292 29542 54725 75829 278.5 38645 027.. (Cont 'd)
K
75L1 =
65428 350.. 027.EEEEE
75L1
RPT 71 =
02765 K (Handsent)
NA7W R7T.
3MJNR .1. (Silent - 1917z)



M32b
Russian Naval Aviation
Aviatsiya Voennno-morskogo Flota Rossii

See logs section



M32c
Russian Air Force
Voyenno-vozdushnye sily Rossii

Location of the various airfields.

POLIS - Orenburg <http://goo.gl/maps/bchf9>
PROSELOK - Bryansk <http://goo.gl/maps/MqWrT>
DAVLENIE - Taganrog <http://goo.gl/maps/V246b>
KLARNETIST - Tver <http://goo.gl/maps/JHa11>

See logs section



M89

Chinese military

Callsigns and strings:

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 (changed to CZT3 on 22-4. Back to CTZ2 on 26-4)
V RXP7 RXP7 RXP7 DE CZT3 CZT3
V H2FL H2FL H2FL DE DRV8 DRV8 (on 30-4 problems with the callsign, sending BQV5B)
V WITN WITN WITN DE GNXG GNXG
V JF3M JF3M JF3M DE LG5P LG5P
V 8CPZ 8CPZ 8CPZ DE XW6W XW6W
V FT7Y FT7Y FT7Y DE UE3G UE3G
V 3A7D 3A7D 3A7D DE UMX1 UMX1
F8UO
BYOG DE GN7V
ABCJ DE ABC2
XIGB
DE 0JQV
DE 4HMU
DE J7VQ
DE 64UX
T... DE WBCX

Messages:

5588 kHz, 02-04, 0957 UTC:

MSG NR 008 CK 301 44 0402 1800 =
AU5T ATU3 UN34 AT64 D63N 6DN4 T737D TTTT65 TTTU (Cont'd)
II = UTNA AR
MSG NR 008 CK 301 44 0402 1800 =
.... UN34 AT64 DT53 N66N4T 737D TTT64 TTTU 7N6T 57AU
II = UTNA AR

7769 kHz, 02-04, 1137 UTC:

= TD36 476U DU7A 3DT5 DTN4 D754 UTN5 (Cont'd)

10507 kHz, 03-04, 0236 UTC:

R QSL 1037 K K
OK QSL 1037 K
OK
NR 8003/EX 1039 RMKS .773 TO 0778 K K
OK =
QY2C DE RSA. AR K
OK OK
(Switched to voice – 0239z)

5588 kHz, 08-03, 0953 UTC:

MSG NR 032 CK 301 44 0408 1830 =
UAN6 N674 45A3 6464 DNU7 U7AD 5N3A 563T TT64 TTT3 DNAT 7N63
(Cont'd)
II = 5465
MSG NR 032 CK 301 44 0409 1830 =
UAN6 N674 45A3 6464 DNU7 U7AD 5N3A 563T TT64 TTT3 DNAT 7N63 7UT6
(Cont'd)
II = 5465

5801 kHz, 09-04, 0245 UTC:

VV HR SVC GA
NR 033 1100 RMKS 1339 TO 1089 =
119 = CL 1140/GBT/R/.29/2008/ AR
QSL ? HR WK NR 090
(Return to roundslip 0252z)
VV HR SVC GA
NR 043 1130 RMKS 1329 TO 1016 =
COMM /1200/X.978/83/1327..016 QSL ?
QSL ? HR WK .270
(Return to round slip 0258z)

8743 kHz, 09-04, 0314 UTC:

NA73 N? TAU4 N4? N373 TAU4 N566 T566 N564 (Cont'd)
(Sends ? when a mistake is made)
67N5 NNNA TU43 T3.4 TTT4 T64A NDU3 N? 67N5 N474 DT33 N3A3 ?
N3A3. .? N533 T3A3 N..
7544 T7UA 67N5 NNNA TU43 T344 TTT4 N3T3 NU34 7544 T.? NU76 N54A
(Silent – 0322z)

4590 kHz, 10-04, 1529 UTC:

.... 2330 RMKS 1478 TO 052. 0868 0839 0851 02.8 0808 0398 0698 1474
1498 .497 0529 0869 =
357N UN3 U.B3 356T T3UD 67A3 (Cont'd)
(Uses ? when a mistake is made)
AR QSL ? HR WK NR 4 FM
HR WK NR 4 8
(Return to roundslip 1538z)

5801 kHz, 10-04, 0249 UTC:

99 19 0410 10.. =
13.9 TO 1.89 1090 2250 1309 1292 1168 1270 1051 1185 1066 0045 A ==
5NT6 4TA6 6A5A NA44. UTA7 7346 N7D7 674D (Cont'd)
(Uses ? when a mistake is made)
AR QSL ? HR WK NR 23 ? EEE NR 23 (Return to roundslip 0257z)

5588 kHz, 10-04, 1019 UTC:

6T54 DNT6 N536 43AT (Cont'd)
II = 5465

3330 kHz, 12-04, 1228 UTC:

707/7.0/2100/23../D 615. AR =
67.07/0.9./2100/23.6 NR/615. AR =
6.07/PT7970/2100/237NR/6157 AR
V 8CPZ 8CPZ 8CPZ DE XW6W XW6W

5557 kHz, 16-04, 1510 UTC:

R R HR N R R R
HR NR 7G GA 7G 7G
NR 043/CK KG 12
HR GA
HR 7G NR
HR GA NR 243 EEE7G
NR 043/CKK CK 121 12 0416 1300 RMKS .98. TO 56. EEE RMKS 5984 TO 5617
K K
LN5R 7G GA
HR 7G GA 1W GA (Both stations on same frequency) ==
TU36 6TT7 5NNT (Cont'd)
AR K
(Other station now unreadable)
RPT 5W .. = 6T7D A6RN K
R HR R38W == DUTU AR K
LLTO HR
L EE LASEEE RLA A..HR
LLTO HR LL5A
LLTO HR
LLTO HR LLTO HR LLTO HR
F59L LLLTO HR
DL. LL.. EEE
LLL AS AS LL
QSL ? K (Silent - 1529z)

5588 kHz, 19-04, 0937 UTC:

VV EEE GA GA CQ D. 9567 TO 1769/6157//EEEE T M == (Handsent - 1000z)
6780..17 ...117NT/.567 AR
== 6807/.769/.90./117//9567P AR
(Return to roundslip)

7607 kHz, 23-04, 1243 UTC:

COMM/213./LZ852A8/1473/1178 AR
AGN
NR 138 2045 RMKS 1270 TO 1178/1497 =
COMM /2130/LZ..2A8/1473/1178 AR
HR WK NR 1. (Return to round slip - 1244z)

5555 kHz, 25-04, 1102 UTC:

VV 9
V // K3TT ==
U7T. VN3D T7U3 .. (Cont'd)
(Sends ? when a mistake is made)
AR QSL ? QSL ? K
QSL 0930 K
MSG NR 1 CK .3 .. 04

7841 kHz, 10-04, 1059 UTC:

.5A3 7U6N AR K
QSL ?
GA PSE C.KK OK GA GA
== == BNT3 G. ? .. (Fading badly)
GA GA OK GA GA
VV == T.NT3 A. (Both stations on same frequency – 1105z)
QSL 1907 HR ... K
OK OK QSL 1907 HR WK NR 112 AR K K (Silent - 1107z)

5550 kHz, 10-04, 1541 UTC:

43TA 6455 T757 (Cont'd)
II II II 2P == =
7T7D U3N3 5NTN T47A T4DN 55U. (Cont'd)
II II II 3P == =
N4.3 AT3U TUU3 7NNA (Cont'd)
II II II 4P == =
.3U3 N.5U 3ADT N... (Cont'd)

3330 kHz, 15-04, 1400 UTC:

7/1031/2230/237NR/6157 AR
= 67807/1031/2230/237NR/6157 AR
= 67807/1031/2230/237NR/6157 AR

10180 kHz, 12-04, 0242 UTC:

VV SVC GA NR 062 1100 RMKS 1329 TO 1205 =
COMM /1130/XZ978/84/1327/1205 AR
QSL ? HR WK NR 27
V DKG6 DKG6 DKG6 DE 3A7D 3A7D
VV HW 7G GA NR 015/CCK CK 133 19 0412 1100 RMKS CQ =
T.DA 3ADT TUNN ? DTTD TNAA AATN 33UA (Cont'd)
AR QSL ? HR WK NR 27
V DKG6 DKG6

6848 kHz, 15-04, 2057 UTC:

DT7N D46A D437 3.3T N56 EEEEE ?N56A II I 2P =
3A4N T4TU 7573 DA64 U57A 7TD4 456D 4... (Cont'd)
AR K //A
R K KE 6..//B (Other station on same frequency)
QSL A EEE QSL 0500 K //B
OK U MSG GA K//A
R HR NR 1200 K //B
GA K//A
R HR MSG GA K//B
6R NR A.. MSG GA K//B
OK GA K//A
R MSG NR 041 NR CCK 1.1 12 0416 0450 RMKS 56.8 TO 5984 K //B
OK GA K//A
1P1W GA = //B
= ? TU3. .TT. (Fading badly)//b

10180 kHz, 12-04, 1333 UTC:

1329 = COMM /22.5/LZ97.9.NR 1147/1190 AR
QSL ? HR WK NR 110
V DKG6 DKG6 DKG6 DE 3A7D 3A7D DKG6 DE 3A7D 3A7D

10998 kHz, 16-04, 1047 UTC:

AR HR WK NR 43 (Silent - 1048z)

10518 kHz, 17-04, 1112 UTC:

U73D 74NA T6AD A566 D63N 4A37 5DNU (Cont'd)
AR QSL ? HR WK NR 12 K

10255 kHz, 17-04, 0010 UTC:

AR K
OK U MSG GA K //A
.. 34 17 ... = //B (Mostly unreadable)
OK GA //A
RPT 27W (0016z)//A
RPT 28W //A
RPT 42 TO 49W K//A
RPT 42W //A
AGN//A
OK QSL 0819 K
UKP. //A
BYOG DE GN7V K
R DE DE X. EE
HR EGA K
NR 1826 DNEX 0821 RMKS 3892 TO 3470 K
METIG TIME 0821 K
OK = =
ABCI DE ABC2 K
OK QSL ?
QSL 0822 K
OK
USU. GA K
OK
C. EE NR 7036/.0823 K
OK GA
TET = T.A.B./B5.D CO
OK QSL 0824 K
OK HR MSG GA K GA
MSG NR NR 1826 CK 49 68 0417 0821 RMKS III
MSG NR 1827 CK 49 6. 04.7 0800 RMKS N RMKS 3892 TO 4470 K
OK =
GA
= DX = HUUH TDN7 N45A 45.4 D36T (Cont'd)
AR K
QSL ?
QSL 08.0 K
OK U MSG GA K
OK MSG NR NR ...37 CK 49 67 04.. 0800 RMKS 4470 TO 3892 K
OK GA = =
T.TA 7NA4 U6.U 7... (Cont'd)
AR K
RPT RPT 27W
RPT 39W
= = 53A5 AR
RPT 4 RPT 40W
= = T4.U K
RPT 41W
OK QSL 0834 K
OK UKP OK (0033z Silent)

5555 kHz, 23-04, 1149 UTC:

4746 437D 6ND4 A5T6 NNUA 55ND 3N74 U54N 7N6U (Cont'd)
K 2P K = = =
TN6A4 = TN6A AR TTAU AR
= = N45D AR
= = 37TU AR
MEM
= = U4T5 AR
AGN
= = U4T5 AR (1155z)
= = U3AU AR
= = 5T7D AR
K K AGN
= = UT67 AR
AGN
= = TTA4 AR
= = UT5 = = UT56 AR
= = A663 AR = = TDA4 AR
= = = = 347N AR
AGN AGN AGN R = = 466N AR
= = 466N AR
AGN R R SK

10998 kHz, 17-04, 0337 UTC:

54TA 354T A7U3 N3U6 6NTA U ? 5DUN 7AD5 763D 37DN (Cont'd)
(Sends ? when a mistake is made)
AR (0343z silent)

5801//10180 kHz, 19-04, 0257 UTC;

VV HR SVC GA (1203z – Handsent)
NR 074 1100 RMKS 1329 TO 1185 =
C/1130/Z=/1329/1185 AR
VV HR SVC GA
NR 097 1100 RMKS 1329 TO 1060 =
COMM/1130/XZ978/84/1317/1060 AR
QSL ? HR WK N NR 08

5421 kHz, 19-04, 1634 UTC:

5A5T 4N7N 7A3A UDT3 UU5T D564 6UD5 ANAT 5U5D 6475 A7N3 634T (Cont'd)
II II = T3TA D64U 35NN TT4T T353 (Cont'd – 1635z)
A537 4T54 7.77 4T47 5D4T 3U5. D337 TA54 6U5D A5.4 ANDT T377 UA64
II II T377 53AN 46N4 5AN4 T63T (Cont'd)
6A7A 76.D 66AA 77TA D375 63.. 5..7 4AN3 T3T7 UA4D 5NN. 37A6 5..U TA73 T34U
DTAD TD6U 5NTN ATD6 4NUU DAAT 667A U767 UA7U NT3T 4N7T. ...4 DD45 T6N.
7A53 77T3 3477 6D4U TNDT 33U5 744. ..4D U7TN 54D3 6AD7 UA73 D5D4 7TNU
75N6 565T 75DA NA34 44N3 DD36 TDN3 UUUU A..53 UN36 UUAU A6.D 3UDN
A64N 47A. 4A33 .N36 UT7T 6DTD NNTD A65T D4.T 56TA .77. .TU5 4475 7A5D
3A3D 5NAA 7NTD II II = AUAT 6TTU TD4A 566T U3T7 56DA AU.. (Cont'd)
II II = U.TD 56AU D36T .. (Cont'd)
4UD4 N754 ..36 7A33 D7A3 DU33 T.DN 434D N67D U575 7N4. NA.D UT75 D..6
DA.7 .74D 6.3D TDD5 T54T .NU6 3.T4 II = =
DNN4 6N.3 63D7 UN64 TT4T 4T3N (Cont'd)
(This is one long message!)
II II = = U7A7 TU3U 7T.A N65N 666T (Cont'd)
III III = (Silent – 1709z)

5556 kHz, 23-04, 1101 UTC:

R R R QSA 2 QS. 3419 AR K
R HR MSG CY GA HW ? (1202z)
R GA K
R MSG NR 012///// CCK CK 95 0620 A.900 RMKS 1798 TO 1712 =
UAT
MSG NR 1234 CK 7890 23 45 7890 =
7DNT AU34 567DN TAU34 567D NTAU 3
(Switched to voice - 1205z)

10542 kHz, 23-04, 1227 UTC:

Note: //A and //B indicate the sending station

028 RMKS 8178 TO 8145 = //A
RPT NR NR //B (On same frequency, but slightly off frequency)
OK VVV NR 155/EX //A
OK OK 7G GA GA//B
OK OK 4 =
I346 D634 3NTA 36D4 64D3 D7U5 7T4U 47A6 75AD N5A6 T547
TA4D 47UT 547D 6745 73UT 7AD3 7T5A 536T III //a
OK OK //B
OK //A
QSL ?
QSL QSL 2032//B
RPT//A
RPT 2032 QSL 2031 //B
RPT //A
OK QSL 2031 VA VA VA VA //B
OK GB //A

10466 kHz, 27-04, 0204 UTC:

UTD5 T53N A5T. 7DUA 7D.. (Cont'd)
AR K
7ATN AR K
R RPT GA ?
U. GA?
R U . GA ?
GA

10456 kHz, 28-04, 1001 UTC:

R GA K
R RPT 53 ..
R RPT .. K
R W.PT 77A EEEE RPT 77W K
R R QSL 0819 K
QSL 4THL EEEE QSL 1819 K
R HR ..7M EEE 7G NR 0.3/C.. 9 GN 7G
NR .03/CCK CK 91 3 BT 271. RMKS 420. TO 50EEEE RMKS 420. TO 67.8 K
==
NU6. DD.. TN4. 46UA (Cont'd)
Hand sent - Sends ? when a mistake is made
AR K K
..D2 N3D3 K
R RPT 39W BT D6 AR HR RPT 39W TAD6 K
R HR WK NR 902 K
R SK R GB K R GB K

6762 kHz, 28-04, 1402 UTC:

R R R R QSA 1 U QSY
QSA 1 U QSY 3.38 K
VV VV
T... DE WBCX KK
R R QSA 2 ICE = 4726*AR K
U GA K R GA R R GA
R R RPT 18W K. R R RPT 19W K
R R RPT 2.W K. R R RPT 3.W K
R R RPT 32W K. R R RPT 43W K
R R RPT 48W K . R R RPT 58W K
R R RPT 59W K. R R RPT ..W K
R R OK QSL 2218 K
R 7G GA 7G
NR 001/CCK CK 91 03 0428 2200 RMKS 4208 TO 4938 K
R = =
N75A U65T A4DT 7AN5 6T.5 NA73 (Cont'd)
AR
R R RAGN HR WK NR 901 UW.R K
OK SK GB

4225//5500 kHz, 30-04, 1009 UTC:

NR 10/CCK CK 1537 04300 430 RMKS 3893 TO 5EEEE
TK 117 GNR 10/CCK CK 2537 0430 043 EEEEE
TC117 GNR 10/CCK CK 1537 0430 0430 RMKS 3893 TO
5493/3413/9293/5333/5710/5973/5369/5900
TC12 EEE
TC12 UGT COMM = 5903/0600/.X 09730
TC13 UGT COMM = 1303/0545/Z15/3893 AR
TC14 UGT COMM = 5193/0900/4/0973 AR
TC15 UGT COMM = 5120/0900/G34/3895 AR
TC16 UGT COMM = 5170/1005/G34/3895 AR
TC17 UGT COMM = 5923/1100/9/0973 AR
TC18 UGT COMM = 5569/1310/Z14/4 EEEE
TC18 UGT COMM = 5569/1310/Z14/2 EEEE
TC18 UGT COMM = 5569/1310/Z14/3893 AR
TC19 UGT COMM = 5533/1400/4/0973 AR
TC20 UGT COMM = 5184/1600/4/0973 AR
SK SK
VVV VVV UGT COMM = 5303/1900/4/0973 AR
VVV UGT COMM = 5303/1900/4/0973 AR AR

5555 kHz, 24-04, 1016 UTC:

NR 41
OK R RR
DE 64UX K
R HR QSA 2
R
= 5094 AR K
R HR NR 91 K
R R
DE J7.Q*
R R R IEC = 5094 AR
R HR NR 72
R 4H.. QS.. (Very weak)
= 5094 AR
NR .. 3. HR NR 30
HR NR 30
R R R R R R
DE 0JQV
R QSL EM EEEE QSL 1827
QSL 1827
R R R R R SK GB R R NR R R
DE 4HMU
/ QSL
RR SK RR
DE J7VQ
R QSL 1830
AGN
21? AS
SK R R
DE 64UX
R QSL 1825 K
R SK EEEE 345 65073.. K
3NT7 4NA5 67N
35DU TAN3 6NA4 7ATD AT5D TU34A (Cont'd – handsent – groups run
together – horrible CW!)
73N5 A73T 74U6
NA34 EEE ? 56DA I ? U5
6?3 T.. UN 6ND... (Cont'd)
45AD 543U 43U5 4567 DTAD (Cont'd)
45AD 53U4 3U45
VVV
U QSY TO 111 K U QSY TO 111 K K
ICE = 2651 AR K
R R HR RH.R/NR .. K
AS NR GA K
FF NR 09/EX 1907 K
== =
XIGB 9/SPJO 0 AR K
K = =
XIGB 8 EEEE =
XIGB 9/SJ EEEE = = =
XIGB 9/SPJ EEEEE = =
XIGB 9/SPJO 3 EEEE = = =
XIGB 9/SPJO 0 K
K UIGU GA K GA GA
AGN
R QSL QSL 1910 EEEE QSL 1911 K
HR QG GA K
MSG NR 09 CK 115 EEEEE
MSG NR 09 CK 199 33 0424 1900 =
K = =
65DT 4T63 D46A D53A TA6D 54DT ND5U 3T76 TA7T TT34 43D7 6ADT
(Cont'd)
(Sends ? when a mistake is made)

5555 kHz, 25-04, 1209 UTC:

= = = = = = =
.37D 5U74 T7U3 56NA 4NTU 6U37 A4UT 673T (Cont'd)
(Sends ? when mistake is made – handsent)
AR (Silent - 1222z)

3797 kHz, 26-04, 1255 UT C:

UGT COMM = 234/.8.8/3119/3122/..2./21.0/88/.. AR
57/88/85 AR
UGT COMM = 234/.828/3119/3112/04/26.213./888/A.57/88/?.
UGT COMM B= 234/3828/3119/3112/04/26/213./888/A/.88/. AR
/3114/0./26/.139/.887/A/.7/56/5. AR
UGT COMM = 234/.828/3111/3..4..4/./2..0..87/A/57/5./..9 AR
UGT COMM = 234/38.8/3111/3..4/04.26..12./..A/5./5./5. AR
Return to round slip – 1303z
UGT COMM = .../382..04.26/3..5.888/.. ar (1304z)
UGT COMM = 2.4. 195/3.2./04/2./2135/88./A/59/57 AR
UGT COMM = 23./3A.5/3..8/..2./..888/A/59/57 AR
Return to round slip – 1307z

5588 kHz, 27-04, 1012 UTC:

CQ 63 LMS 9567 TO 1716/6157 =
UGT COMM
= 67807/1716/2000/117NR/9567 AR
= 67807/1716/2000/117NR/9567 AR
= 67807/1716/2000/117NR/9567 AR
Return to round slip 1042z

10180 kHz, 25-04, 0937 UTC:

N636 U733 U5NT ADUT 4D6U 45T5 4NUN NT36 54TT 3UAD (Cont'd)
(Sends ? when an error is made)
C K R R (0946z – Silent)

7777 kHz, 18-04, 1344 JTC:

R = 5N35 AR K
R R
R = A = A46D AR K
R = T4N7 AR K
R = AR K
R = N3AN AR K
R = 7.37 AR K
R = 6TAD AR K
R = 6TA. AR K
.. K R R HR MSG .. K
R HR MSG GA K
R MSG NR 105 CK 99 53 0428 2000
3AAD T7.5 DUD6 NU.. (Cont'd)
AR K R (
R R R SK GB

3797 kHz, 28-04, 1326 UTC:

3828/04/..215./851/A/85/57 AR
UGT COMM BT 234/344./3828/04/2./2155/851/A/85/5. AR

7607 kHz, 29-04, 1155 UTC:

19..LZ25/A8/1473/1.04 AR\
GN. NR 173 2002 RMKS 2478 TO 1004/14.8 - COMM./ =
COMM./204L/L72./A8/1474/1004 AR\
SL? HR WK NR 36 K



M97

Vietnamese numbers

Frequency: 10375 kHz
Mode: Morse

10375 kHz, 12-04, 1455 UTC: SD81 SN70

VARIOUS MODES



SK01 / HM01

Dirección General de Inteligencia

HM01 logs. Modes: AM and RDFT.

11530	24-3-2013	2350	Hybrid numbers stn
10715	27-3-2013	2245	Cuban Hybrid
11530	27-3-2013	2255	Cuban Hybrid
16180	2-4-2013	2100	mixed voice+digital
10715	3-4-2013	2201	mixed voice+digital
10715	3-4-2013	2209	mixed voice+digital
11530	3-4-2013	2300	58365 40855 86157 44185 84755 26747
17540	4-4-2013	2300	58366 04861 86158 44186 84756 26748
11530	5-4-2013	2300	44415 75483 83363 47604 61532 22545
17480	6-4-2013	2200	S9+20dB and beautiful sound. No decode, caught IP.
17480	6-4-2013	2230	43047461.txt 991 bytes

17540	9-4-2013	2335	digital transmission and Spanish numbers
16180	11-4-2013	1116	mixed voice+digital
17480	13-4-2013	2157	03404 39673 72271 55775 40122 00273
17540	13-4-2013	2257	03404 39673 72271 55775 40122 00273
10715	14-4-2013	2157	03405 39674 72272 55776 40123 00274
11530	14-4-2013	2257	03405 39674 72272 55776 40123 00274
9240	15-4-2013	0900	03405 39674 72272 55776 40123 00274
10715	15-4-2013	2157	03406 39675 72273 55773 40124 00275
11530	15-4-2013	2257	03406 39675 72273 55773 40124 00275
9155	16-4-2013	0010	Spanish voice with groups of 5 numbers with various tones in between.
12120	16-4-2013	0857	03406 39675 72273 55773 40124 00275
12120	16-4-2013	0957	03406 39675 72273 55773 40124 00275 (Start on wrong frequency)
12180	16-4-2013	1016	03406 39675 72273 55773 40124 00275 (Switched to correct frequency)
16180	16-4-2013	2057	03407 39676 72274 55774 40125 00276
17480	16-4-2013	2157	03407 39676 72274 55774 40125 00276
17540	16-4-2013	2302	03407 39676 72274 55774 40125 00276
9155	17-4-2013	1000	03407 39676 72274 55774 40125 00276
10715	17-4-2013	2157	03407 39676 72274 55774 40125 00276
11530	17-4-2013	2257	03407 39676 72274 55774 40125 00276
16180	18-4-2013	2057	03407 39676 72274 55774 40125 00276
17480	18-4-2013	2157	03407 39676 72274 55774 40125 00276
10715	19-4-2013	2157	03407 39677 72275 55775 40126 68521
11530	19-4-2013	2257	03407 39677 72275 55775 40126 68521
16180	20-4-2013	2057	34461 39678 72276 55776 40127 68522
17480	20-4-2013	2157	34461 39678 72276 55776 40127 68522
9240	21-4-2013	0943	voice & data
10715	21-4-2013	2157	34462 71671 72277 68261 40128 68523
11530	21-4-2013	2257	34462 71671 72277 68261 40128 68523
10715	22-4-2013	2157	34463 71672 72278 68262 76681 68524
11530	22-4-2013	2257	34463 71672 72278 68262 76681 68524
12120	23-4-2013	0857	34463 71672 72278 68262 76681 68524
12180	23-4-2013	1000	34463 71672 72278 68262 76681 68524
16180	23-4-2013	2057	34464 71673 07131 68263 76681 68525
17480	23-4-2013	2157	34464 71673 07131 68263 76681 68525
17540	23-4-2013	2257	34464 71673 07131 68263 76681 68525
10715	24-4-2013	2157	34465 71674 07132 68264 76682 68526
11530	24-4-2013	2257	34465 71674 07132 68264 76682 68526
11435	27-4-2013	1557	in progress -- Spanish YL alternating with RDTF data.
11530	28-4-2013	2300	in progress -- Spanish YL alternating with RDTF data
10715	29-4-2013	1830	DGI. 5FGs in Spanish + RDFT data

M42 & X06



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

Russian Government & Intelligence



M42 logs

4181	25-3-2013	2144	Russian Gov/Intel. Mark after every 50th group	Baudot 50/500
16320	1-4-2013	0150	Russian Intel. Id 0x3f	FSK 200/1000
12122	1-4-2013	0703	Russian diplo	CROWD-36
14880	1-4-2013	0800	Russian diplo	CROWD-36
16320	2-4-2013	0150	Russian Intel. Id 0xff	FSK 200/1000
20574	2-4-2013	1402	Russian Intel, Moscow	FSK 200/1000
16320	3-4-2013	0150	Russian Intel.	FSK 200/1000
18476	3-4-2013	1235	Russian Intel, Moscow. Null msg	FSK 200/1000
16320	4-4-2013	0150	Russian Intel. Id 0xa5	FSK 200/1000
16321	4-4-2013	0201	Russian Intel, Moscow	FSK 200/1000
163452	4-4-2013	1105	Russian diplo	CROWD-36
15643	4-4-2013	1302	Russian diplo, Moscow clg "RAP" on link 50101	Baudot 75/500
7992	4-4-2013	1742	Russian intel	FSK 200/1000
9186	4-4-2013	1900		FSK 200/500
6989	4-4-2013	1910		FSK 200/500
5127	4-4-2013	1920		FSK 200/500
17471	5-4-2013	0001	Russian Intel, Moscow 5FGs offline crypto	FSK 200/500
16320	5-4-2013	0150	Russian Intel. Id 0xaf	FSK 200/1000
18206	6-4-2013	1200		FSK 200/500
16159	6-4-2013	1210		FSK 200/500
14551	6-4-2013	1220		FSK 200/500
14421	8-4-2013	0106	Russian Gov/Intel. 5FGs offline crypto	Baudot 200/500
16320	8-4-2013	0150	Russian Intel.	FSK 200/1000
16118	8-4-2013	0955	Russian diplo	CROWD-36
16320	9-4-2013	0150	Russian Intel.	FSK 200/1000
13979	9-4-2013	1213	Russian diplo	CROWD-36
16320	10-4-2013	0150	Russian Intel. Id 0xaa	FSK 200/1000
16320	11-4-2013	0150	Russian Intel.	FSK 200/1000
16320	12-4-2013	0150	Russian Intel.	FSK 200/1000
16320	15-4-2013	0150	Russian Intel. Id 0x36	FSK 200/1000
16320	16-4-2013	0150	Russian Intel.	FSK 200/1000
7549	16-4-2013	0707	ROK2: Russian Gov. Comms ends with "priyom" and counting	USB
16320	17-4-2013	0150	Russian Intel. Id 0x3e	FSK 200/1000
16320	18-4-2013	0150	Russian Intel.	FSK 200/1000
10595	18-4-2013	0656	RKD48: Russian Gov. Encrypted tfc	FSK 100/500
10704.7	18-4-2013	0707	RBV70: Russian Gov. Yekaterinburg. Idling and sporadic bursts of traffic	FSK 100/1000
16320	19-4-2013	0150	Russian Intel	FSK 200/1000
12196	20-4-2013	1820	Russian Gov/Intel. Null message 00000+++++++162)5761	Baudot 187.5/500

16320	22-4-2013	0150	Russian Intel. Id 0x36	FSK 200/1000
16320	24-4-2013	0150	Russian Intel.	FSK 200/1000
16320	26-4-2013	0150	Russian Intel.	FSK 200/1000
16320	29-4-2013	0150	Russian Intel. Id 0xa	FSK 200/1000
14473	29-4-2013	1615	Russian Gov/Intel NT9P/K4MT net	FSK 50/500
16320	30-4-2013	0150	Chinese Mil.	FSK 200/1000
20574	30-4-2013	1400	Russian Intel.	FSK 200/1000
18469	30-4-2013	1410	Russian Intel.	FSK 200/1000
16311	30-4-2013	1420	Russian Intel.	FSK 200/1000
18509	30-4-2013	2110	Russian Intel.	FSK 200/1000
16231	30-4-2013	2120	Russian Intel.	FSK 200/1000
9265	30-4-2013	2300	Russian Intel.	FSK 200/1000
7869	30-4-2013	2310	Russian Intel.	FSK 200/1000
5353	30-4-2013	2320	Russian Intel.	FSK 200/1000

M42a logs

13371	5-4-2013	1419	'AA'-Type Station 1419 CW ... Ä 67432 Ä R. 98292 Ä A. VVVs 3 K. 3 K. VVVs 2 K.	CW
10184	23-4-2013	0743	GRU HFDF net VVV 3K VVV 3K VVV 3K	CW

X06 Mazielka logs

11438	2-4-2013	1540	Mazielka. Sequence: 532614
14405	3-4-2013	0640	Mazielka. Sequence: 256341
16103	6-4-2013	1400	Mazielka. Sequence: 231654 (Russian MFA, Moscow)
16117	8-4-2013	0943	Mazielka. Sequence: 463125
20604	12-4-2013	1009	Mazielka. Sequence: 256134
12149	16-4-2013	0919	Mazielka. Sequence: 154263
9288	25-4-2013	0943	Mazielka. Sequence: 356412
10653	25-4-2013	0949	Mazielka. Sequence: 356412
14863	25-4-2013	1000	Mazielka. Sequence: 615243
9288	26-4-2013	0940	Mazielka. Sequence: 356412
12105	28-4-2013	1740	Mazielka. Sequence: 145632
8171	28-4-2013	1806	Mazielka. Sequence: 145623



XP family

10943/10243 kHz, 02-04,
1900/1920 UTC:

Block Sync
4444444444
Block Sync
922 922 922 000 922 922 000 922 922 000
Block Sync
4444444444
Block Sync
6
Message Start
03232 00001 00000 10140

10943/10243 kHz, 09-04,
1900/1920 UTC:

Block Sync
44444444
Block Sync
922 922 922 1 922 922 922 1 922 922 992 1
4444444444
Block Sync
6
Message Start
07878 00213 6664 0578 6931 2446 66799 21491 88884 6607 88083 11500 49823 85988 1055
3322224465522211 15599 77704 1522 3399 0900 27900 0011211999963113 2511 7496677636 10645 27779
32458 7975 00455 24446 84623 85535 51898 53550 19366 14473 05889 23310 66024 51042 11014 28363
90318 04308 72583 80426 14370 54834 56197 79754 49604 21534 19020 21282 15432 58956 16254 51084
Block Sync
51646 20647 97347 12852 32075 80441 57067 64762 32377 63678 29715 25232 76854 54293 37992 64505
84515 45552 84314 40391 91365 91228 05972 9164 53112 84065 60140045643 42044 49652 98332241332
5775 57100 75601 667799810388666773 4099 38341 3662 1188 7899 111154 99192 07772 8836 97577 89073
28321 21132 79446 11434 52058 48372 57566 61075 30872 55755 52532 72268 26188 89199 19348
Block Sync
36907 40438 37757 07454 04155 76665 85826 36324 21959 55077 14480 01132 75160 43135 33314 78498
68983 74395 46875 71972 61959 31276 69322 90270 87751 35932 82398 51508 80847 83976 02794 69104
07820 37449 68857 36143 97948 58770 12707 38773 45875574584 71955 89520 70000 03975 25295 08499
51063 36538 53198 80042 77377 66550 6006 77228 3828 67986 8662 99273322660044700899669977747
66662226222555521 34519 89388 02561 66149337195992986333958776226 98998 70652 46069 37261
19488 77224 34165 13230 78129 17988 27430 28032 95882 30088 71554

9243 kHz, 09-04,
1940 UTC:

Block Sync
4444444444
Block Sync
922 922 922 1 922 922 922 1 922 922 922 1
Block Sync
4444444444
Block Sync
6
Message Start
07878 00213 64464 80578 86931 12406 60794 21491 81194 96097 84083 11508 49823 85982 12053 63200
24965 22010 61519 17704 15720 13391 50907 28790 60512 12959 63137 29514 84596 76368 10645 27009
32458 79756 70465 24556 84623 80535 51898 53050 19346 14473 05089 23310 66024 51042 11014 28863
90318

10243 kHz, 11-04,
1920 UTC:

99999999999
Message Start
99999996666626666666
4444444444
66662226666699229922992 199229922992211992 992 99220 9999
Message Start
9999999999999
Message Start
99999999999
Block Sync
4444444444
66666226626666
Message Start



OLO32

Bezpečnostní informační služba

Security Information Service

7463.6	4-4-2013	2153	Bezpečnostní informační služba (BIS) coded message	FEC 100
6945	7-4-2013	2211	Bezpečnostní informační služba (BIS)	FEC 100
6945	9-4-2013	2223	Czech Intelligence	FEC
6956	15-4-2013	2214	Czech Intel. Encrypted traffic only uses 99999 as separator	FEC



North Korean diplomatic stations

Eddy reports a few new from MFA Pyongyang or its overseas embassies, that have appeared in April at different times between 0800 and 1015 UTC. All DPRK-ARQ 600 baud / 600 shift.

18033.5, 20558.5, 19419.5, 17413.5, 21378.5, 20584.5, 24127.5, 21323.5, 20006.5, 18413.5 kHz.

28149.2	15-3-2013	0926	North Korean embassy, Dakar	DPRK-ARQ 1200/1200
14001.5	21-3-2013	0740	North Korean embassy, Moscow	DPRK-ARQ 600/600
16001.5	3-4-2013	2305	North Korean MFA, Pyongyang	DPRK-ARQ 600/600
16888.5	4-4-2013	0912	N. Korean diplo	DPRK-ARQ 600/600



Egyptian diplomatic stations

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

9055	1-4-2013	0017	Egyptian Diplo selcals Washington RCBV and TXIP	SITOR-A 100/170
9067.7	3-4-2013	2338	Egyptian Diplo. Selcals Pyongyang then calls several embassies in SITOR-B	SITOR-A 100/170
9067.7	5-4-2013	2048	MFA Cairo EGY lengthy ATU-Arabic message to Pyongyang	SITOR-A 100/170
9066	7-4-2013	2116	MFA Cairo idling	SITOR-A
18026.7	13-4-2013	0934	MFA Cairo EGY selcall VMXB Bonn	SITOR-A 100/170
10165	15-4-2013	2346	Egyptian Embassy msgs to Cairo and other embassies	SITOR-A 100/170

UTILITY ROUND-UP

JP submitted this log. He found it unusual that this coastal radio station was sending cipher traffic like M89 stations. Could this have to do with events in North Korea?

12969 kHz, 15-04, 0951 UTC:

OOO CQ CQ DE XSV XSV XSV HR N/W NR 31 =
 NW NR 031 U N/W XSV NR 031 CK 064 15 .72. =
 T370 5300 6.. G13. 3U5D 3ADN Y. U5DD ..16. U4DT ..
 UFA. 5U67 .4. U5DD . 22. U4DT ..2400. U5A4 TN6A TTTT7 T44A TTT63 7..
 . 39 .. ON/119 BT 10 AAA. . (Cont'd)
 TAA7 T5U3 TAA7 TA4N 53T7 53T6 TN.A TTT6 66A5 U5A4
 7T35 T355 TTTD A.7N 665A T354 6AA5 3T55 ATTTD T.W XSV AR
 DE XSV SK

Note: OOO normally signifies Immediate precedence traffic.

Another 4F message was heard on 8600 kHz, 16-04, 2024 UTC. Seems to be normal traffic.



Unid 10-minutes net

JP found the 10-minute net on several occasions.

4224 kHz, 09-04, 1617 UTC: Unid 10-mins network //3505 WF3A until 1620 UTC

3505 kHz, 09-04, 1617 UTC: Unid 10-mins network //4224 WF3A until 1620 UTC

4224 kHz, 09-04, 1840 UTC: Unid 10-mins network //3505 WF3A until 1850 UTC

3505 kHz, 09-04, 1840 UTC: Unid 10-mins network //4224 WF3A until 1850 UTC



Unid stations

Unid station, possibly Russian military. 4393 kHz, 09-04, 2105 UTC, in progress.

10006 40010 00005 00006 50015 00006 0000. 40.14 001.2 0006

40010 00.01 00612 40010 .0002 00.12 40011 0.005 00.12 60016

00026 00612 50015 00101 00612 40011 AR

0 (Silent)

JP found another unid. It looks familiar to me but I could not find further information. Sends cipher groups of various lengths. Possibly radar plots. Short zero.

Note that the “,” represents an unid morse character which sounded like dit dah dit dah dit dit .-.-..

17014 kHz, 15-04, 1001 UTC:

099398, 1010955, .871991..17011 .56.88. 1304160.54419 .1. .2340548. 2.80153. 094706. .011421. 9831353. A5R . U Q15.IU L

O3T.16000704. T8. 2060752, 00101890, 31151001, 655887, 98710.91, 183.06, 300.4, 0993.98, 513083, 3.17.,

130416005441911, 2180153, .14240, 35115570, 12340548, 9831353, 7185275, 302879, 094706, 512849, A.IU F NIL 73 K

If you can help identifying this station, please let us know.

Another one from JP. Copied on 26-04, 0231 UTC, 10216 UTC: In progress. Hand sent. Horrible Morse.

05150 EEE 05 = 0505 ...1 5050 5050 50512 15 250 5050 5050 5050 5050 505 15140

5050 5 = = 0505 1 . 05050 (Silent - 0235z) (Very strong signal – Monitored until 0245z)

One more from JP on 8531 using the Siberia tuner on 27-04, 1007 UTC:

CQ CQ CQ DE DP91 DP91

PSE PSE .. R R DD TO TO HR PSE PSE ..TO LL HR PSE PSE PSE .. R R DD.. LL TO HR .. RD. TO LL HR . A HR

NIL SK R NIL SK GB

6927.0 kHz, 19-04, 1920 UTC: Unid 2-pips on and off till 1937 UTC

6785.5 kHz, 25-04, 1900 UTC: Unid series of pips

6785.5 kHz, 26-04, 1743 UTC: Unid series of pips non-stop heard till I stopped listening at 2134 UTC

Recordings on the N&O website



Такси Taxi

Lots of Russian/Ukrainian taxis were heard my Tim Bucknall and myself. Below the frequencies.

25185	26175	26535	26690	27275	27665	27805	28140	28935	29470
25190	26325	26575	26775	27315	27670	27820	28150	29045	29505
25205	26385	26580	26835	27390	27720	27840	28215	29160	29805
25220	26415	26605	26855	27390	27725	27875	28275	29305	
25575	26460	26615	26995	27395	27730	27965	28275	29405	
25705	26485	26640	27005	27400	27735	27975	28365	29434	
25710	26495	26645	27015	27400	27740	27980	28675	29435	
25950	26505	26660	27045	27435	27750	27995	28715	29445	
25985	26515	26685	27054	27615	27755	28110	28855	29460	
26105	26530	26690	27060	27660	27780	28135	28925	29465	

Intelligence profile Tanzania



BACKGROUND

Shortly after achieving independence from Britain in the early 1960s, Tanganyika and Zanzibar merged to form the nation of Tanzania in 1964. One-party rule ended in 1995 with the first democratic elections held in the country since the 1970s. Zanzibar's semi-autonomous status and popular opposition have led to two contentious elections since 1995, which the ruling party won despite international observers' claims of voting irregularities. The formation of a government of national unity between Zanzibar's two leading parties succeeded in minimizing electoral tension in 2010.

GENERAL

Country name: Jamhuri ya Muungano wa Tanzania (United Republic of Tanzania)
Short name: Tanzania
Former name: United Republic of Tanganyika and Zanzibar
Capital: Dar-es-Salaam
30 Regions: Arusha, Dar es Salaam, Dodoma, Geita, Iringa, Kagera, Katavi, Kigoma, Kilimanjaro, Lindi, Manyara, Mara, Mbeya, Morogoro, Mtwara, Mwanza, Njombe, Pemba North, Pemba South, Pwani, Rukwa, Ruvuma, Shinyanga, Simiyu, Singida, Tabora, Tanga, Zanzibar Central/South, Zanzibar North, Zanzibar Urban/West

MILITARY BRANCHES

Tanzania People's Defense Force (Jeshi la Wananchi la Tanzania, JWTZ): Army, Naval Wing (includes Coast Guard), Air Defense Command (includes Air Wing), National Service

INTELLIGENCE & SECURITY

Tanzania Intelligence and Security Service (TISS)
Field Force Unit

The Tanzania Intelligence and Security Service has been created in 1996 as cited in the Tanzania Intelligence and Security Service Act of 1996.

The functions of the Service are to obtain, correlate, and evaluate intelligence relevant to security, and to communicate any such intelligence to the Minister and to persons whom, and in the manner which, the Director-General considers it to be in the interests of security; to advise Ministers, where the Director-General is satisfied that it is necessary to do so, in respect of matters -relevant to security, so far as those matters relate to departments or portfolios of which they are in charge; to cooperate as far as practicable and necessary with such other organs of state and public authorities within or outside Tanzania as are capable of assisting the Service in the performance of its functions; to inform the President, and any other person or authority which the Minister may so direct, of any new area of potential espionage, sabotage, terrorism or subversion in respect of which the Director-General has considered it necessary to institute surveillance.

The Service collects, and analyses information and intelligence respecting activities that may on reasonable grounds be suspected of constituting a threat to the security of the United Republic or any part of it.

The Field Force Unit in Tanzania was established in 1949 by the British Government in Dar es saalam. It is a paramilitary unit of the Tanzanian Police.

The main purpose of introducing Field Force Unit in the Tanganyika (nowadays Tanzania) was to safeguard the interest of the British colonialists. Tanzania got its Independence in 1961. The aim of the Unit and the Tanzania Police Force in general changed from safeguarding the interests of colonialists to safeguarding the interests of Tanzanians. The main responsibilities of the Unit became to protect its citizens/people and their properties.

The Field Force Unit in Tanzania performs a number of functions including Border Patrol, Crowd control and Civil Disorder management, V.I.P Protection and Protection of Vital Installation, Operations and Disaster management.

SOURCES / RELATED WEBSITES / FURTHER INFORMATION

Police	http://www.policeforce.go.tz
Security Service Act	http://polis.parliament.go.tz/PAMS/docs/15-1996.pdf
Ministry of Defence	http://modans.go.tz
Defence Forces	http://www.tpdf.mil.tz/
CIA World Factbook	https://www.cia.gov/library/publications/the-world-factbook/

Intelligence profile **Ghana**



BACKGROUND

Formed from the merger of the British colony of the Gold Coast and the Togoland trust territory, Ghana in 1957 became the first sub-Saharan country in colonial Africa to gain its independence. Ghana endured a long series of coups before Lt. Jerry RAWLINGS took power in 1981 and banned political parties. After approving a new constitution and restoring multiparty politics in 1992, RAWLINGS won presidential elections in 1992 and 1996 but was constitutionally prevented from running for a third term in 2000. John KUFUOR succeeded him and was reelected in 2004. John Atta MILLS took over as head of state in early 2009.

GENERAL

Country name: Republic of Ghana
Old name: Gold Coast
Capital: Accra
10 Regions: Ashanti, Brong-Ahafo, Central, Eastern, Greater Accra, Northern, Upper East, Upper West, Volta, Western

MILITARY BRANCHES

Ghana Army, Ghana Navy, Ghana Air Force

INTELLIGENCE & SECURITY

Security and Intelligence Act 526 – 1996

National Security Council

Regional Security Council (REGSEC)

District Security Council (DISEC)

Bureau of National Investigation (BNI)

Research Department (RD)

Defense Intelligence

National Security Council

The Council consists of the President; the Vice-President; the Ministers for the time being holding the portfolios of foreign affairs, defence, interior, and finance and such other Ministers as the President may determine; the Chief of Defence Staff and two other members of the Armed Forces; the Inspector-General of Police and two other members of the Police Service, one of whom shall be the Commissioner of Police responsible for Criminal Investigations Department; the Director-General of the Prisons Service; the Director of External Intelligence; the Director of Internal Intelligence; the Director of Military Intelligence; the Commissioner of Customs, Excise and Preventive Service; and three persons appointed by the President.

The functions of the Council include:

1. considering and taking appropriate measures to safeguard the internal and external security of Ghana;
2. ensuring the collection of information relating to the security of Ghana and the integration of the domestic, foreign and security policies relating to it so as to enable the security services and other departments and agencies of Government to co-operate more effectively in matters relating to national security;
3. assessing and appraising the objectives, commitments and risks of Ghana in relation to the actual and potential military power in the interest of national security; and
4. taking appropriate measures regarding the consideration of policies on matters of common interest to the departments and agencies of the Government concerned with national security.

There is a [Regional Security Council \(REGSEC\)](#) and [District Security Council \(DISEC\)](#) for each region and district of the country. They are the representatives of the Council throughout the country.

The [Bureau of National Investigation](#) and the [Research Department](#) are mentioned in Act 526 as the Internal (BNI) and External Intelligence of the Ministry of Foreign Affairs (RD) Agencies of the State, referred to in this Act as “the Intelligence Agencies”.

The governing body of the Intelligence Agencies is the National Security Council.

The functions of the Intelligence Agencies are:

1. collect, analyses retain and disseminate as appropriate information and intelligence respecting activities that may constitute threats to the security of the State and the government of Ghana;
 2. safeguard the economic well-being of the State against threats posed by the acts or omissions of persons or organisations both inside and outside the country;
 3. protect the State against threats of espionage, sabotage, terrorism, hijacking, piracy, drug trafficking and similar offences;
 4. protect the State against the activities of persons, both nationals and non-nationals, intended to overthrow the government of Ghana or undermine the constitutional order through illegal political, military, industrial or other means or through any other unconstitutional method; and
 5. perform such other functions as may be directed by the President or the Council.
-

Ghana Police Service / Criminal Investigation Department (CID)

The Gold Coast Police Force now called the Police Service was Formed in 1894 but the real police work started in the then Gold Coast, now the Republic of Ghana, in the year 1921.

The Ghana Police Service is organized on National basis, with a unified command under the Inspector-General of Police (IGP). The IGP, subject to the direction of the Minister of Interior, is responsible for exercising general day-to-day supervision over the operation and administration of the service.

The Criminal Investigations Department (CID) of the Ghana Police Service works in plain clothes. The personnel of this branch are employed as specialists in connection with various aspects of crime detection.

The **Academy of Intelligence, Security and Investigation** (initially Ghana Institute of Criminal Justice) is established in 2000 as training centre for those who desire to become either Forensic Science Officer, Professional Investigator, Crime Detective, Crime Prevention Officer, Investigative Journalist, Military Intelligence, Police Detective, Security and Investigative Consultant, Lecturer, Security Analyst, Information System Security Manager or Security Advisor and many more.

SOURCES / RELATED WEBSITES / FURTHER INFORMATION

Ghana Police Service	http://www.ghanapolice.info/cid/cid.htm
Ghana Armed Forces	http://www.gaf.mil.gh
Ghana Schools Online	http://www.ghanaschoolsonline.com
Presidency	http://www.presidency.gov.gh
CIA World Factbook	https://www.cia.gov/library/publications/the-world-factbook/

Intelligence profile Ethiopia



BACKGROUND

Unique among African countries, the ancient Ethiopian monarchy maintained its freedom from colonial rule with the exception of a short-lived Italian occupation from 1936-41. In 1974, a military junta, the Derg, deposed Emperor Haile SELASSIE (who had ruled since 1930) and established a socialist state. Torn by bloody coups, uprisings, wide-scale drought, and massive refugee problems, the regime was finally toppled in 1991 by a coalition of rebel forces, the Ethiopian People's Revolutionary Democratic Front (EPRDF). A constitution was adopted in 1994, and Ethiopia's first multiparty elections were held in 1995. A border war with Eritrea late in the 1990s ended with a peace treaty in December 2000. In November 2007, the Eritrea-Ethiopia Border Commission (EEBC) issued specific coordinates as virtually demarcating the border and pronounced its work finished. Alleging that the EEBC acted beyond its mandate in issuing the coordinates, Ethiopia has not accepted them and has not withdrawn troops from previously contested areas pronounced by the EEBC as belonging to Eritrea.

GENERAL

Country name:	Ityop'iya Federalawi Demokrasiyawi Ripeblik (Federal Democratic Republic of Ethiopia)
Short name:	Ityop'iya (Ethiopia)
Former names:	Abyssinia, Italian East Africa
Capital:	Addis Ababa
2 Administrations:	Adis Abeba, Dire Dawa
9 Ethnically states:	Afar, Amara, Binshangul Gumuz, Gambela Hizboch, Hareri Hizb, Oromiya, Sumale, Tigray, Ye Debub Biheroch Bihereseboch na Hizboch

MILITARY BRANCHES

Ethiopian National Defense Force (ENDF): Ground Forces, Ethiopian Air Force (Ye Ityopya Ayer Hayl, ETAF)

INTELLIGENCE & SECURITY

Beherawi Mereja na Deheninet Derijit - National Intelligence and Security Agency (NISS)

Information Network Security Agency (INSA)

Military Intelligence

Ethiopian Diaspora Intelligence Agency

Information Network Security Agency (INSA)

INSA states that it is “building a capacity that ensures the country’s security of information and information infrastructures to safeguard the National Interest.”

It also states that it has the following services: “Software Development, hardware programming, network security.”

Various African newspapers mention however the opposite: “INSA has stepped up surveillance and internet censorship. INSA has adopted Deep Packet Inspection (DPI) technology to eavesdrop, data mine, censor and intercept communications, according to the TOR Project.”

The agency is reportedly also active as jammer. INSA is jamming Arabsat, Al Jazeera, VOA radio broadcasts in Amharic, and Voice of Broad Masses of Eritrea (freqs 7170 – 7190 kHz)

Beherawi Mereja na Deheninet Derijit - National Intelligence and Security Agency (NISS)

NISS has a broad authority for intelligence, border security, and criminal investigation, was responsible for overall counterterrorism management.

Ethiopian Diaspora Intelligence Agency

This is an agency dedicated to processing and sharing information with various Anti-TPLF organisations as well as the wider public.

SOURCES / RELATED WEBSITES / FURTHER INFORMATION

INSA - <http://www.insa.gov.et>

<http://horn-africa.blogspot.com>

<http://www.ethiopianreview.com>

Intelligence profile Eritrea



BACKGROUND

The UN awarded Eritrea to Ethiopia in 1952 as part of a federation. Ethiopia's annexation of Eritrea as a province 10 years later sparked a 30-year struggle for independence that ended in 1991 with Eritrean rebels defeating governmental forces; independence was overwhelmingly approved in a 1993 referendum. A two-and-a-half-year border war with Ethiopia that erupted in 1998 ended under UN auspices in December 2000. Eritrea hosted a UN peacekeeping operation that monitored a 25 km-wide Temporary Security Zone (TSZ) on the border with Ethiopia. Eritrea's denial of fuel to the mission caused the UN to withdraw the mission and terminate its mandate 31 July 2008. An international commission, organized to resolve the border dispute, posted its findings in 2002. However, both parties have been unable to reach agreement on implementing the

decision. On 30 November 2007, the Eritrea-Ethiopia Boundary Commission remotely demarcated the border by coordinates and dissolved itself, leaving Ethiopia still occupying several tracts of disputed territory, including the town of Badme. Eritrea accepted the EEBC's "virtual demarcation" decision and called on Ethiopia to remove its troops from the TSZ that it states is Eritrean territory. Ethiopia has not accepted the virtual demarcation decision. In 2009 and 2011 the UN passed sanctions resolutions on Eritrea after accusing it of backing anti-Ethiopian Islamist insurgents in Somalia.

GENERAL

Country name: Hagere Ertra (State of Eritrea)
Short name: Ertra (Eritreal)
Former name: Eritrea Autonomous Region in Ethiopia
Capital: Asmara
6 Regions: Anseba, Debub (South), Debubawi K'eyih Bahri (Southern Red Sea), Gash Barka, Ma'akel (Central), Semenawi Keyih Bahri (Northern Red Sea)

MILITARY BRANCHES

Eritrean Armed Forces: Eritrean Ground Forces, Eritrean Navy, Eritrean Air Force (includes Air Defense Force)

INTELLIGENCE & SECURITY

Eritrean National Security Office (ENSO)

ENSO

The ENSO is the security and intelligence service of Eritrea. Also known as the Eritrean National Security Agency. The agency reports directly to the Office of the President and is responsible for the internal security and foreign intelligence. Besides that, ENSO also has a role in enforcing the laws on religion, which restrict the practise of Christianity.

SOURCES / RELATED WEBSITES / FURTHER INFORMATION

CIA World Factbook

LOGS SECTION

The logs are sorted on code, date and time

enigma Freq.	date	day	UTC	remarks	mode	contributor
--- 3505	9-4-2013	Tue	1617	Unid 10-mins network //4224 WF3A until 1620 UTC	CW	(JPL-Sib)
--- 4224	9-4-2013	Tue	1617	Unid 10-mins network //3505 WF3A until 1620 UTC	CW	(JPL-Sib)
--- 3505	9-4-2013	Tue	1840	Unid 10-mins network //4224 WF3A until 1620 UTC	CW	(JPL-Sib)
--- 4224	9-4-2013	Tue	1840	Unid 10-mins network //3505 WF3A until 1620 UTC	CW	(JPL-Sib)
--- 11150	12-4-2013	Fri	0231	Unid i.p. OL3E ... end s with AR	CW	(JPL-Sib)
--- 6927	19-4-2013	Fri	1920	Unid 2-pips till 1937 UTC	CW	(AB)
--- 6927	19-4-2013	Fri	1928	Unid 2-pips	CW	(AB)
--- 4136	23-4-2013	Tue	2014	333 95389 95389. 111. 333. 333 96739 96739. 111. 111. 111. 111 999 etc. ... 368 368 5. 368 49 = 88999 21051 08981 83091 03975 ... 07807 11717 16153 03475 23048 (23rd 48 groups) = 36849. 111 000	CW	(MPJ)
--- 4204	23-4-2013	Tue	2036	333 37. 333 45. 333 47. 333 50. 111. As for 4136, not parallel.	CW	(MPJ)
--- 6785.5	25-4-2013	Thu	1900	Unid series of pips	CW	(AB)
--- 10216	26-4-2013	Fri	0231	Unid. Hand sent. i.p. 05150 EEE 05 = 0505 ...1 5050 5050 50512 15 250 5050 5050 5050 5050 505 15140 5050 5 = = 0505 1 . 05050 (Silent - 0235z)	CW	(JPL-Sib)
--- 6785.5	26-4-2013	Fri	1743	Unid series of pips	CW	(AB)
--- 8531	27-4-2013	Sat	1007	Unid. CQ CQ CQ DE DP91 DP91. PSE PSE .. R R DD ... TO TO HR PSE PSE .. TO LL CW HR PSE PSE PSE .. R R DD.. LL TO HR .. RD. TO LL HR . A HR NIL SK. R NIL SK GB	CW	(JPL-Sib)
DPRK 28149.2	15-3-2013		0926	North Korean embassy, Dakar	DPRK-ARQ 1200/1200	(IARUMS)
DPRK 14001.5	21-3-2013		0740	North Korean embassy, Moscow	DPRK-ARQ 600/600	(IARUMS)
DPRK 16001.5	3-4-2013	Wed	2305	North Korean MFA, Pyongyang	DPRK-ARQ 600/600	(MCO)
DPRK 16888.5	4-4-2013	Thu	0912	N. Korean diplo	DPRK-ARQ 600/600	(Lau)
E06 14910	4-4-2013	Thu	0600	951 638 102 = 37339	AM	(HFD)
E06 5189	4-4-2013	Thu	1932	Test: 01234 01234 01234	AM	(YM)
E06 5189	4-4-2013	Thu	2030	891 116 15 17323 ... 09253 116 15 00000(s)	USB	(Spec)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
E06	5189	4-4-2013	Thu	2030	891 116 15 11323 92836 15205 38945 14834 20954 18364 19356 20176 29476 18392 73624 05732 17283 09253 116 15 00000	AM	(AB/MPJ)
E06	5189	4-4-2013	Thu	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	13530	5-4-2013	Fri	0500	951 638 102 = 37339	AM	(HFD)
E06	13530	5-4-2013	Fri	0500	951 638 102 37339 12011 ... 66079	AM	(HS2)
E06	5197	5-4-2013	Fri	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	5-4-2013	Fri	2130	634 561 15 34543 56432 34265 67865 45311 89866 45362 76756 98786 34276 56342 63472 78643 67453 561 15 00000	AM	(Q-HOL)
E06	5197	5-4-2013	Fri	2130	634 561 15 34543 ... 67453 561 15 00000(s)	USB	(Spec)
E06	5189	18-4-2013	Thu	1933	1234 0 1332 0	USB	(Spec)
E06	5189	18-4-2013	Thu	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	5189	18-4-2013	Thu	2030	891 116 15 17323 ... 09253 116 15 00000(s)	USB	(Spec)
E06	5197	19-4-2013	Fri	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	19-4-2013	Fri	2130	634 561 15 34543 ... 67453 561 15 00000(s)	USB	(Spec)
E07	12108	1-4-2013	Mon	1900	172 0	AM	(HFD)
E07	10708	1-4-2013	Mon	1920	172 0	AM	(HFD)
E07	12108	3-4-2013	Wed	1900	172 000	USB	(GJK-HOL)
E07	10708	3-4-2013	Wed	1920	172 000	USB	(GJK-HOL)
E07	9387	4-4-2013	Thu	2010	358 652 156 = 55341	AM	(HFD)
E07	9387	4-4-2013	Thu	2010	358 358 358 1 (R) 652 156 652 156 msg 000 000	AM	(Q-HOL)
E07	7526	4-4-2013	Thu	2030	358 652 156 = 35431	AM	(HFD)
E07	7526	4-4-2013	Thu	2030	358 358 358 1 (R) 652 156 652 156 msg 000 000	AM	(Q-HOL)
E07	5884	4-4-2013	Thu	2040	358 358 358 1 (R) 652 156 652 156 msg 000 000	AM	(Q-HOL)
E07	5884	4-4-2013	Thu	2050	358 652 156 = 55341	AM	(HFD)
E07	12108	8-4-2013	Mon	1900	172 1 817 40 02523 84934 ... 70427	AM	(HS2)
E07	12108	8-4-2013	Mon	1907	172 1 817 40 025.. 84934 30570 5515 41288 04536 (lost audio at 1907)	USB	(GJK-HOL)
E07	9208	10-4-2013	Wed	1940	172 1 817 40 02523 84934 30970 35515 41288 70427 000 000	USB	(GJK-HOL)
E07	9387	11-4-2013	Thu	2010	Active-U/R due to b/c station. clears at 2017z ... 32574 000 000	USB	(GJK-HOL)
E07	9387	11-4-2013	Thu	2010	358 358 358 1 (R) 652 156 652 156 msg 000 000	AM	(Q-HOL)
E07	7526	11-4-2013	Thu	2030	358 1 652 156 55341 27296 65900 96381 66012 32574 000	USB	(GJK-HOL)
E07	7526	11-4-2013	Thu	2030	358 358 358 1 (R) 652 156 652 156 msg 000 000	AM	(Q-HOL)
E07	5884	11-4-2013	Thu	2050	358 1 652 156 55341 (repeat of 2030z on 7526kHz) 32574 000	USB	(GJK-HOL)
E07	5884	11-4-2013	Thu	2050	358 358 358 1 (R) 652 156 652 156 msg 000 000	AM	(Q-HOL)
E07	14603	17-4-2013	Wed	1700	641 1 261 60 = 01417	AM	(HFD)
E07	13403	17-4-2013	Wed	1720	641 1	AM	(HFD)
E07	12103	17-4-2013	Wed	1740	641 1	AM	(HFD)
E07	9208	22-4-2013	Mon	1947	i.p. ending 000 000	AM	(PPA)
E07	9208	24-4-2013	Wed	1940	172 172 172 1 msg	AM	(BCI)
E07	10708	29-4-2013	Mon	1920	172 172 172 000	AM	(JBL)
E07a	12218	6-4-2013	Sat	0800	244 244 244 000	USB	(HS2)
E07a	12218	6-4-2013	Sat	0800	255 0	USB	(HFD)
E07a	13418	6-4-2013	Sat	0820	244 244 244 000	USB	(HS2)
E07a	13418	6-4-2013	Sat	0820	255 0	USB	(HFD)
E07a	8173	10-4-2013	Wed	2000	147 1 16551 8781 61 26435 833.. (lost audio) ... 21706 000 000	USB	(GJK-HOL)
E07a	8173	10-4-2013	Wed	2000	147 1 16551 8781 61 26435 833.. (lost audio) ... 21706 000 000	USB	(GJK/MPJ)
E07a	8173	10-4-2013	Wed	2000	147 1 16551 8781 61 26435 83333 63036 ... 60654 16036 21706 000 000	USB	(Spec)
E07a	8173	10-4-2013	Wed	2000	147 1 16551 8781 61 = 26435	USB	(HFD)
E07a	7473	10-4-2013	Wed	2020	147 1 16551 8781 61 26435 83333 63036 ... 60654 16036 21706 000 000	USB	(Spec)
E07a	7473	10-4-2013	Wed	2020	147 1 16551 8781 61 26435 83333 63036 23100 53458 21706 000 000	USB	(GJK-HOL)
E07a	7473	10-4-2013	Wed	2020	147 1 16551 8781 61 26435 83333 63036 23100 53458 21706 000 000	USB	(GJK/Q)
E07a	7473	10-4-2013	Wed	2020	147 1 16551	USB	(HFD)
E07a	5773	10-4-2013	Wed	2040	147 1 16551	USB	(HFD)
E07a	5773	10-4-2013	Wed	2040	147 1 16551 8781 61 26435 83333 63036 ... 60654 16036 21706 000 000	USB	(Spec)
E07a	5773	10-4-2013	Wed	2040	147 1 16551 8781 61 26435 (repeat of 2020z on 7473kHz) 21706 000 000	USB	(GJK-HOL)
E07a	7437	18-4-2013	Thu	0430	411 0	USB	(HFD)
E07a	8137	18-4-2013	Thu	0450	411 0	USB	(HFD)
E07a	8173	24-4-2013	Wed	2000	147 1 16551 8781 61 26435 83333 63036 ... 60654 16036 21706 000 000	USB	(Spec)
E07a	7473	24-4-2013	Wed	2020	147 1 16551 8781 61 26435 83333 63036 ... 60654 16036 21706 000 000	USB	(Spec)
E07a	5773	24-4-2013	Wed	2040	147 1 16551 8781 61 26435 83333 63036 ... 60654 16036 21706 000 000	USB	(Spec)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
E07s	5773	10-4-2013	Wed	2040	147 1 16551 8781 61 26435 (repeat of 2020z on 7473kHz) 21706 000 000	USB	(GJK/Q)
E11	9399	1-4-2013	Mon	0900	534/00	USB	(Q-HOL)
E11	10221	5-4-2013	Fri	0710	633/00	USB	(HS2)
E11	6304	8-4-2013	Mon	0450	416/00	USB	(HS2)
E11	6814	8-4-2013	Mon	0820	438/00	USB	(Spec)
E11	10690	8-4-2013	Mon	0830	649/00	USB	(Spec)
E11	9399	8-4-2013	Mon	0900	534/00	USB	(Spec)
E11	10800	9-4-2013	Tue	0645	517/00	USB	(HS2)
E11	7449	9-4-2013	Tue	1045	469/00	USB	(Spec)
E11	9399	10-4-2013	Wed	0900	534/00	USB	(Spec)
E11	9371	11-4-2013	Thu	1730	416/00	USB	(Spec)
E11	9371	11-4-2013	Thu	1730	416/00 OUT	USB	(GJK-HOL)
E11	15915	12-4-2013	Fri	0545	too weak to copy	USB	(HFD)
E11	10221	12-4-2013	Fri	0710	630/34 ATTENTION 28741 01512 05716 93239 77663 72220 OUT	USB	(GJK-HOL)
E11	5194	12-4-2013	Fri	1710	955/20 ATTENTION 71687 07374 84709 30538 81190 74183 OUT	USB	(GJK-HOL)
E11	4909	13-4-2013	Sat	0900	248/00	USB	(Spec)
E11	4909	13-4-2013	Sat	1445	287/00 OUT	USB	(GJK-HOL)
E11	4909	13-4-2013	Sat	1445	278/00	USB	(Spec)
E11	15915	14-4-2013	Sun	1540	228/00	USB	(Spec)
E11	15915	15-4-2013	Mon	1540	228/00	USB	(Spec)
E11	7449	16-4-2013	Tue	1045	469/00	USB	(Spec)
E11	15915	17-4-2013	Wed	0545	348/00	USB	(HFD)
E11	7449	17-4-2013	Wed	1045	469/00	USB	(Spec)
E11	5391	19-4-2013	Fri	2000	579/35 49237	USB	(HFD)
E11	4909	20-4-2013	Sat	1445	278/00	USB	(Spec)
E11	15915	22-4-2013	Mon	1540	228/00	USB	(Spec)
E11	7449	23-4-2013	Tue	1045	469/00	USB	(Spec)
E11	13873	23-4-2013	Tue	1045	576/00	USB	(Spec)
E11	7449	24-4-2013	Wed	1045	469/00	USB	(Spec)
E11	9371	25-4-2013	Thu	1730	416/00	USB	(Spec)
E11	5371	26-4-2013	Fri	2000	576/00	USB	(HS2)
E11	5194	29-4-2013	Mon	1710	957/23 5FG's out	AM	(JBL)
E11a	13455	2-4-2013	Tue	1810	987/10 Attention 08538 15962 59379 21059 88750 46803 47336 95053 60936 40882 Attention, rpt msg, out	USB	(Q/MPJ)
E11a	13375	5-4-2013	Fri	1110	950/40 Attention 17873 16004 ... 52962	USB	(HS2)
E11a	5194	5-4-2013	Fri	1710	958/38 69318 91213 32948 46905 15116 ... 21107 77443 91780 17304 46070	USB	(MPJ)
E11a	4909	6-4-2013	Sat	0900	244/36 Attention 65953 ... 52419 Out	USB	(Spec)
E11a	13455	6-4-2013	Sat	1810	983/10 Attention 42887 00470 74400	USB	(HS2)
E11a	15915	7-4-2013	Sun	1543	i/p	USB	(GJK-HOL)
E11a	13375	8-4-2013	Mon	1110	958/40 Attention 00088 ... 38295 Out	USB	(Spec)
E11a	13375	8-4-2013	Mon	1110	958/40 Attention 00088 33096 79940 ... 58030 69605 38295 Out	USB	(Spec)
E11a	13375	8-4-2013	Mon	1110	958/40 A 00088 33096 ... 38295	USB	(HS2)
E11a	5194	8-4-2013	Mon	1710	956/32 ATTENTION 74276 12274 11275 55926 87302 48998 OUT	USB	(GJK-HOL)
E11a	5194	8-4-2013	Mon	1710	956/32 Attention 74276 ... 48998 Out	USB	(Spec)
E11a	5194	8-4-2013	Mon	1710	956/30 74276 12274 11275 55926 87302 ... 18938 77_37 25512 83075 48998	USB	(MPJ)
E11a	5194	8-4-2013	Mon	1713	956/32 "Attention" and 5NGs, finished with "out"	USB	(JBL)
e11a	15915	8-4-2013	Mon	2240	229/36 09373 98678 72888 47941 80271 18389 out	USB	(GJK-HOL)
E11a	14575	9-4-2013	Tue	0745	334/36 Attention 64905 46120 ... 54516	USB	(HS2)
E11a	13375	9-4-2013	Tue	1400	985/00 ATTENTION 11085 52723 57873 77109 37991 19457 01463 76210 55366 26999 OUT	USB	(GJK-HOL)
E11a	13375	9-4-2013	Tue	1400	985/10 Attention 11085 ... 26999 Out	USB	(Spec)
E11a	13375	9-4-2013	Tue	1400	985/10 Attention 11085 52723 57873 77109 37991 19457 01463 76210 55366 26999 Out	USB	(Spec)
E11a	13375	9-4-2013	Tue	1400	985/10 Attention 11085 52723 57873 77109 37991 19457 01463 76210 55386 (55366 ?) 26999	USB	(MPJ)
E11a	13455	9-4-2013	Tue	1810	987/10 Attention 81211 24142 70077 90792 55229 15220 69085 08956 90761 81502 Attention, msg rptd, out	USB	(Q-HOL)
E11a	10221	12-4-2013	Fri	0710	630/34 Attention 28741 ... 72220 Out	USB	(Spec)
E11a	5194	12-4-2013	Fri	1710	955/20 Attention 71687 ... 74183 Out	USB	(Spec)
E11a	13375	13-4-2013	Sat	1400	985/10 Attention 51260 ... 21733 Out	USB	(Spec)
E11a	13375	13-4-2013	Sat	1400	985/10 ATTENTION 51260 38964 11980 13413 81760 21733 OUT	USB	(GJK-HOL)
E11a	13455	13-4-2013	Sat	1810	987/10 ATTENTION 45116 41656 35087 14091 03941 96212 OUT	USB	(GJK-HOL)
E11a	13455	13-4-2013	Sat	1810	987/10 Attention 45116 41656 35087 14091 03941 13817 98814 58638 82778	USB	(Spec)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
					96212 Out		
E11a	13455	13-4-2013	Sat	1810	987/10 Attention 45116 ... 96212 Out	USB	(Spec)
E11a	9399	15-4-2013	Mon	0900	53*/34 Attention 03996 56990 07923 ... 99053 85693 02611 Out	USB	(Spec)
E11a	9399	15-4-2013	Mon	0900	53*/34 Attention 03996 ... 02611 Out *=Not Heard.	USB	(Spec)
E11a	13375	15-4-2013	Mon	1110	952/32 Attention 06817 ... 49629 Out	USB	(Spec)
E11a	13375	15-4-2013	Mon	1110	952/32 Attention 06817 92023 44995 ... 58610 25204 49629 Out	USB	(Spec)
E11a	13375	16-4-2013	Tue	1400	981/10 Attention 94240 ... 30734 Out	USB	(Spec)
E11a	13375	16-4-2013	Tue	1400	981/10 Attention 94240 36193 79518 85925 80905 36506 19866 49693 87131 30734 Out	USB	(Spec)
E11a	13455	16-4-2013	Tue	1810	982/10 Attention 55481 ... 14926 Out	USB	(Spec)
E11a	13455	16-4-2013	Tue	1810	982/10 Attention 55481 00978 19537 83754 98096 36536 77364 51130 03924 14926 Out	USB	(Spec)
E11a	9371	18-4-2013	Thu	1730	418/31 Attention 27969 ... 75878 Out	USB	(Spec)
E11a	9371	18-4-2013	Thu	1730	418/31 Attention 27969 11225 74240 ... 37454 16103 75878 Out	USB	(Spec)
E11a	13375	22-4-2013	Mon	1110	958/31 Attention 33898 72342 95804 ... 69266 72902 69002 Out	USB	(Spec)
E11a	13375	22-4-2013	Mon	1110	958/31 Attention 33898 ... 69002 Out	USB	(Spec)
E11a	13375	27-4-2013	Sat	1400	988/10 attn 31445	USB	(FN)
E11c	7863	2-4-2013	Tue	1925	758/0000/00	USB	(Q-HOL)
E11c	7863	2-4-2013	Tue	2000	757/2200/00	USB	(Q-HOL)
E11c	7863	4-4-2013	Thu	1925	758/0000/00	USB	(MPJ)
E11c	7863	9-4-2013	Tue	1925	758/0000/00	USB	(MPJ/Q)
E11c	7863	9-4-2013	Tue	1925	758/0000/00 OUT	USB	(GJK-HOL)
E11c	7863	9-4-2013	Tue	1925	758/0000/00	USB	(Spec)
E11c	7863	9-4-2013	Tue	2000	757/0000/00	USB	(Spec)
E11c	7863	9-4-2013	Tue	2000	757/0000/00	USB	(MPJ/Q)
E11c	7863	9-4-2013	Tue	2000	757/0000/00 OUT	USB	(GJK-HOL)
E11c	7863	11-4-2013	Thu	1925	758/2222/22 OUT	USB	(GJK/MPJ)
E11c	7863	11-4-2013	Thu	1926	I/P 758/2222/22 OUT	USB	(GJK-HOL)
E11c	7863	18-4-2013	Thu	1925	758/0000/00	USB	(Spec)
E25	9450	1-4-2013	Mon	1144	Transmitter on; solitary sounds; at 1145 UTC: YL sending "2" followed by solitary game sounds	AM	(AIK)
E25	9450	1-4-2013	Mon	1159	YL. 70 270 (interrupted by solitary game sounds) 270 MESSAGE REBEAT EOM	AM	(AIK)
E25	6140	2-4-2013	Tue	0638	Carrier on/off, solitary game and windows sounds	AM	(AIK)
E25	6140	2-4-2013	Tue	0659	YL. 04 804 804 804 MESSAGE 1088 3260 3046 0331 1645 8274 1613 4098 0718 9537 4575 1021 REBEAT 1088 3260 3046 0331 1645 8274 1613 4098 0718 9537 4575 1021 EOM (interrupted by solitary game and windows sounds)	AM	(AIK)
E25	6140	3-4-2013	Wed	0805	Solitaire game sounds	AM	(AIK)
E25	6140	3-4-2013	Wed	0935	YL. 3 3 333 333 MESSAGE 3090 1420 1125 3861 6776 2993 2536 1303 1420 REBEAT 3090 1420 1125 3861 6776 2993 2536 1303 1420 EOM	AM	(AIK)
E25	6140	4-4-2013	Thu	0700	YL. 806 1 806 1 806 1 806 1806 1 806 1 806 1 806 1 806 1 806 1 806 1 806 1 80 (xmtr s/off)	AM	(AIK)
E25	6140	4-4-2013	Thu	0722	Carrier with music	AM	(AIK)
E25	9450	4-4-2013	Thu	1115	YL. 880 880 880 MESSAGE 0230 4031 1995 1556 2356 2845 8276 6627 7697 0756 8752 1656 0230 REBEAT 0230 4031 1995 1556 2356 2845 8276 6627 7697 0756 8752 1656 0230 EOM	AM	(AIK)
E25	9450	6-4-2013	Sat	1313	YL. 785 3 785 3 785 3 MESSAGE, REBEAT, END OF MESSAGE, END OF TRANSMISSION	AM	(AIK/MG)
E25	6140	7-4-2013	Sun	1000	YL. 570 570 570 MESSAGE 2033 2023 9755 9412 9614 2887 4995 9902 REBEAT 2033 2023 9755 9412 9(xmtr off)	AM	(AIK)
E25	6140	7-4-2013	Sun	1010	YL. 570 570 570 570 570 570 5(audio problems) 570 5	AM	(AIK)
E25	6140	7-4-2013	Sun	1014	YL. 570 570 MESSAGE 2033 2023 975(truncated msg	AM	(AIK)
E25	6140	7-4-2013	Sun	1015	YL. 995 9902 REBEAT 2033 2023 9755 9412 9614 2887 4995 9902 EOM EOT	AM	(AIK)
E25	9450	7-4-2013	Sun	1115	YL. 887 2 887 2 887 2 MESSAGE REBEAT EOM EOT	AM	(AIK)
E25	6140	8-4-2013	Mon	0958	YL. 575 2 575 2 575 2 MESSAGE EOM EOT	AM	(AIK)
E25	6140	9-4-2013	Tue	0923	YL. 333 333 333 333 MESSAGE 3090 1420 1125 3861 6776 2993 2536 1303 1420 REBEAT 3090 1420 1125 3861 6776 2993 2536 1303 1420 EOM EOT	AM	(AIK)
E25	6140	10-4-2013	Wed	0913	YL. 950 950 950 950 950 950 950 950 950 950 950 950 95 (xmtr off)	AM	(AIK)
E25	6140	10-4-2013	Wed	0914	YL. MESSAGE 4001 1055 0380 6086 0130 0824 6785 4186 6796 0380 REBEAT 4001 1055 0380 6086 0130 0824 6785 4186 6796 0380 EOM EOT	AM	(AIK)
E25	6140	10-4-2013	Wed	0930	YL. 33 33 3 333 333 333 MESSAGE 3090 1420 1125 3861 6776 2993 2536 1303 1420	AM	(AIK)
E25	6140	10-4-2013	Wed	0933	YL. REBEAT 3090 1420 1125 3861 6776 2993 253 253	AM	(AIK)
E25	6140	10-4-2013	Wed	0934	YL. 1303 142 142	AM	(AIK)
E25	6140	10-4-2013	Wed	0935	YL. END OF MESSAGE	AM	(AIK)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
E25	6140	10-4-2013	Wed	0941	Music: Entra Omri. Off within a minute. YL. 3(pause) 350 350 MESSAGE 1099 2311 4021 1122 8862 6975 3891 4825 5051 0440 7360 2311 REBEAT 1099 231]	AM	(AIK)
E25	6140	10-4-2013	Wed	0950	YL. REBEAT 1099 2311 4021 1122 8862 6975 3891 4825 5051 0440 7360 2311 END OF MESSAGE END OF TRANSMISSION	AM	(AIK)
E25	6140	13-4-2013	Sat	0754	OM. 804 804 804 MESSAGE 8981 0914 2380 2382 2751 0828 8841 5617 1527 8751 REBEAT 1898 4190 0832 2382 2751 0828 8841 5617 1527 8751 EOM EOT	AM	(AIK)
E25	9450	14-4-2013	Sun	1114	YL. 315 315 315 MESSAGE 4583 3490 6011 6141 0159 9147 5663 7131 3821 3490 0849 REBEAT 4583 3490 6011 6141 0159 9147 5663 7131 3821 3490 0849 EOM EOT Windows dings	AM	(AIK)
E25	9450	15-4-2013	Mon	1115	YL. 317 3 317 3 317 3 MESSAGE MESSAGE MESSAGE	AM	(AIK)
E25	6140	21-4-2013	Sun	0859	YL. 111 111 111 111 MESSAGE 1022 4170 5031 1730 6798 7086 4519 4808 5552 3242 4292 9870 4170 REBEAT 1022 4170 5031 1730 6798 7086 4519 4808 5552 3242 4292 9870 4170 EOM EOT	AM	(AIK)
E25	9450	25-4-2013	Thu	1214	Music: Enta Omri. YL. 8830 3 0 3 830 3 830 3 MESSAGE REBEAT EOM EOT	AM	(AIK)
E25	6140	26-4-2013	Fri	0813	YL. 187 22 187 22 187 22 MESSAGE REBEAT EOM EOT	AM	(AIK)
E25a	9450	31-3-2013		1200	YL. 75 277 275 MESSAGE 1330 1080 4410 5847 0739 4006 2214 4410 REBEAT 1330 1080 4410 5847 0739 4006 2214 4410 EOM	AM	(AIK)
E25a	9450	31-3-2013		1316	YL. 85 2 785 2 785 2 785 MESSAGE REBEAT EOM	AM	(AIK)
E25a	9450	4-4-2013	Thu	1159	YL. 277 3 4 MESSAGE, END OF MESSAGE, END OF TRANSMISSION	AM	(AIK)
E25a	6140	12-4-2013	Fri	0944	Music: Entra Omri. YL. 3355 355 4 355 4 MESSAGE REBEAT EOM EOT. Win-dows sounds	AM	(AIK)
E25a	9450	22-4-2013	Mon	1217	Music: Enta Omri. YL. 8830 2 8 1 830 2 837 1 830 2 8 837 1 830 2 837 1 830 2 837 1 830 2 837 1 830 2	AM	(AIK)
E25a	9450	23-4-2013	Tue	1215	Music: Enta Omri. YL. 830 1 830 1 830 1	AM	(AIK)
E25a	6140	28-4-2013	Sun	0959	YL. 575 3 MESSAGE REBEAT EOM	AM	(MG)
EGY	9055	1-4-2013	Mon	0017	Egyptian Diplo selcalls Washington RCBV and TXIP	SITOR-A 100/170	(LG2)
EGY	90677	3-4-2013	Wed	2338	Egyptian Diplo. Selcalls Pyongyang then calls several embassies in SITOR-B	SITOR-A 100/170	(LG2)
EGY	9067.7	5-4-2013	Fri	2048	MFA Cairo EGY lengthy ATU-Arabic message to Pyongyang	SITOR-A 100/170	(PPA)
EGY	9066	7-4-2013	Sun	2116	MFA Cairo idling	SITOR-A	(LG2)
EGY	18026.7	13-4-2013	Sat	0934	MFA Cairo EGY selcall VMXB Bonn	SITOR-A 100/170	(PPA)
EGY	10165	15-4-2013	Mon	2346	Egyptian Embassy msgs to Cairo and other embassies	SITOR-A 100/170	(LG2)
G06	4526	4-4-2013	Thu	1200	Testing: 01234 01234 01234	AM	(Avare)
G06	4526	4-4-2013	Thu	1300	215 253 43 86739 81178 86313 ... 47386 54914 28659 253 43 00000	AM	(Avare)
G06	6774	8-4-2013	Mon	0801	215 253 43 86739 81178 ... 28659. Started as E06 at 0759z but G06 took over after two minutes	AM	(HS2)
G06	5424	8-4-2013	Mon	1759	564 564 564 00000	AM	(HS2)
G06	5934	11-4-2013	Thu	1830	579 564 15 67564 56453 57876 54345 19878 78563 564 15 00000	USB	(GJK-HOL)
G06	5442	12-4-2013	Fri	1930	947 (R) 647 647 15 15 msg 647 647 15 15 00000	AM	(Q-HOL)
G06	5442	12-4-2013	Fri	1930	947 647 15 37264 38594 71835 24729 47244 17362 647 15 00000	USB	(GJK-HOL)
G06	6774	22-4-2013	Mon	0902	215 msg 00000	AM	(LG2)
G06	5442	26-4-2013	Fri	1930	947 647 15 37264 38594 71835 04729 47244 36218 47309 12736 26354 26374 19284 56302 00305 28592 17362 647 15 00000	USB	(JBL)
G11	5815	2-4-2013	Tue	1755	270/00	USB	(Q/MPJ)
G11	6433	5-4-2013	Fri	2000	262/00	USB	(HS2)
G11	6433	5-4-2013	Fri	2000	262/00	USB	(MPJ)
G11	6433	5-4-2013	Fri	2000	262/00	USB	(Q-HOL)
G11	5815	7-4-2013	Sun	1755	270/00	USB	(Q-HOL)
G11	6433	7-4-2013	Sun	2000	262/00	USB	(MPJ)
G11	6433	7-4-2013	Sun	2000	262/00	USB	(Q-HOL)
G11	6433	7-4-2013	Sun	2000	262/00	USB	(Spec)
G11	5815	9-4-2013	Tue	1755	270/00	USB	(Q-HOL)
G11	5815	12-4-2013	Fri	1335	I/P 16796 ENDE (very weak)	USB	(GJK-HOL)
G11	6433	12-4-2013	Fri	2000	262/00 ENDE	USB	(GJK-HOL)
G11	6433	12-4-2013	Fri	2000	262/00	USB	(Spec)
G11	6433	12-4-2013	Fri	2000	262/00	USB	(Q-HOL)
G11	5815	14-4-2013	Sun	1755	270/00	USB	(Spec)
G11	6433	14-4-2013	Sun	2000	262/00	USB	(Spec)
G11	5815	16-4-2013	Tue	1755	270/00	USB	(Spec)
G11	6433	26-4-2013	Fri	2000	265/38 Achtung 21455 62614 66775 ... 08236 16513 28117 Ende	USB	(Spec)
G11	6433	26-4-2013	Fri	2000	265/38 Achtung 21455 62614 66775 19970 ... 08276 16517 28117 Achtung, msg rpt, Ende	USB	(JBL/HS2)
G11	6433	28-4-2013	Sun	2000	265/38 Achtung 21455 62614 66775 ... 08236 16513 28117 Ende	USB	(Spec)
HM01	11530	24-3-2013		2350	Hybrid numbers stn	AM/RDFT	(Osc)
HM01	10715	27-3-2013		2245	Cuban Hybrid	AM/RDFT	(Osc)

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HM01	11530	27-3-2013		2255	Cuban Hybrid	AM/RDFT	(Osc)
HM01	16180	2-4-2013	Tue	2100	mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	10715	3-4-2013	Wed	2201	mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	10715	3-4-2013	Wed	2209	mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	11530	3-4-2013	Wed	2300	58365 40855 86157 44185 84755 26747	AM/RDFT	(Dan)
HM01	17540	4-4-2013	Thu	2300	58366 04861 86158 44186 84756 26748	AM/RDFT	(Dan)
HM01	11530	5-4-2013	Fri	2300	44415 75483 83363 47604 61532 22545	AM/RDFT	(Dan)
HM01	17480	6-4-2013	Sat	2200	S9+20dB and beautiful sound. No decode, caught IP.	AM	(BCA)
HM01	17480	6-4-2013	Sat	2230	43047461.txt 991 bytes	AM	(BCA)
HM01	17540	9-4-2013	Tue	2335	digital transmission and Spanish numbers	AM/RDFT	(GL)
HM01	16180	11-4-2013	Thu	1116	mixed voice+digital	AM/RDFT	(Q-HOL)
HM01	17480	13-4-2013	Sat	2157	03404 39673 72271 55775 40122 00273	AM	(Spec)
HM01	17540	13-4-2013	Sat	2257	03404 39673 72271 55775 40122 00273	AM	(Spec)
HM01	10715	14-4-2013	Sun	2157	03405 39674 72272 55776 40123 00274	AM	(Spec)
HM01	11530	14-4-2013	Sun	2257	03405 39674 72272 55776 40123 00274	AM	(Spec)
HM01	9240	15-4-2013	Mon	0900	03405 39674 72272 55776 40123 00274	AM	(Spec)
HM01	10715	15-4-2013	Mon	2157	03406 39675 72273 55773 40124 00275	AM	(Spec)
HM01	11530	15-4-2013	Mon	2257	03406 39675 72273 55773 40124 00275	AM	(Spec)
HM01	9155	16-4-2013	Tue	0010	Spanish voice with groups of 5 numbers with various tones in between.	USB	(AS3)
HM01	12120	16-4-2013	Tue	0857	03406 39675 72273 55773 40124 00275	AM	(Spec)
HM01	12120	16-4-2013	Tue	0957	03406 39675 72273 55773 40124 00275 (Start on wrong frequency)	AM	(Spec)
HM01	12180	16-4-2013	Tue	1016	03406 39675 72273 55773 40124 00275 (Switched to correct frequency)	AM	(Spec)
HM01	16180	16-4-2013	Tue	2057	03407 39676 72274 55774 40125 00276	AM	(Spec)
HM01	17480	16-4-2013	Tue	2157	03407 39676 72274 55774 40125 00276	AM	(Spec)
HM01	17540	16-4-2013	Tue	2302	03407 39676 72274 55774 40125 00276	AM	(Spec)
HM01	9155	17-4-2013	Wed	1000	03407 39676 72274 55774 40125 00276	AM	(Spec)
HM01	10715	17-4-2013	Wed	2157	03407 39676 72274 55774 40125 00276	AM	(Spec)
HM01	11530	17-4-2013	Wed	2257	03407 39676 72274 55774 40125 00276	AM	(Spec)
HM01	16180	18-4-2013	Thu	2057	03407 39676 72274 55774 40125 00276	AM	(Spec)
HM01	17480	18-4-2013	Thu	2157	03407 39676 72274 55774 40125 00276	AM	(Spec)
HM01	10715	19-4-2013	Fri	2157	03407 39677 72275 55775 40126 68521	AM	(Spec)
HM01	11530	19-4-2013	Fri	2257	03407 39677 72275 55775 40126 68521	AM	(Spec)
HM01	16180	20-4-2013	Sat	2057	34461 39678 72276 55776 40127 68522	AM	(Spec)
HM01	17480	20-4-2013	Sat	2157	34461 39678 72276 55776 40127 68522	AM	(Spec)
HM01	9240	21-4-2013	Sun	0943	voice & data	AM/RDFT	(DAU)
HM01	10715	21-4-2013	Sun	2157	34462 71671 72277 68261 40128 68523	AM	(Spec)
HM01	11530	21-4-2013	Sun	2257	34462 71671 72277 68261 40128 68523	AM	(Spec)
HM01	10715	22-4-2013	Mon	2157	34463 71672 72278 68262 76681 68524	AM	(Spec)
HM01	11530	22-4-2013	Mon	2257	34463 71672 72278 68262 76681 68524	AM	(Spec)
HM01	12120	23-4-2013	Tue	0857	34463 71672 72278 68262 76681 68524	AM	(Spec)
HM01	12180	23-4-2013	Tue	1000	34463 71672 72278 68262 76681 68524	AM	(Spec)
HM01	16180	23-4-2013	Tue	2057	34464 71673 07131 68263 76681 68525	AM	(Spec)
HM01	17480	23-4-2013	Tue	2157	34464 71673 07131 68263 76681 68525	AM	(Spec)
HM01	17540	23-4-2013	Tue	2257	34464 71673 07131 68263 76681 68525	AM	(Spec)
HM01	10715	24-4-2013	Wed	2157	34465 71674 07132 68264 76682 68526	AM	(Spec)
HM01	11530	24-4-2013	Wed	2257	34465 71674 07132 68264 76682 68526	AM	(Spec)
HM01	11435	27-4-2013	Sat	1557	in progress -- Spanish YL alternating with RDTF data.	AM	(E2601)
HM01	11530	28-4-2013	Sun	2300	in progress -- Spanish YL alternating with RDTF data	AM	(E2601)
HM01	10715	29-4-2013	Mon	1830	DGI. 5FGs in Spanish + RDFT data	AM/RDFT	(JS4)
M01	4037	24-4-2012		1846	Presumed M01: 327 327 327 52300 52300 327 327 327 51839 51839	CW	(PPA)
M01	5476	2-4-2013	Tue	1800	346 30 = = 51693 85162 89147 28227 74279 ... 72738 96079 50338 95462 94458 = = 346 30 000 //5475	CW	(Q/MPJ)
M01	5020	2-4-2013	Tue	2005	In progress ending 61515 09757 53031 99386 98604 = = 714 30 0 0 0, // 5020 & 5023.06	CW	(Q/MPJ)
M01	5475	4-4-2013	Thu	1803	In progress, ending 44265 10892 91723 37246 72339 = = 543 30 //5474 kHz	CW	(MPJ)
M01	5020	4-4-2013	Thu	2000	463 (R) 863 863 30 30 = = msg = = 863 863 30 30 000	CW	(Q-HOL)
M01	6510	7-4-2013	Thu	0700	463 273 3 0 = 53343	CW	(HFD)
M01	5474.13	9-4-2013	Tue	1800	327 30 = = 47705 34463 24997 59897 45763 ... 73813 77283 92302 52341 71806 = = 327 30 000 //5476.13	CW	(MPJ/Q)
M01	5475	9-4-2013	Tue	1800	463 327 30 = = 47705 34463 24997 59897 45763 71806 = = 327 30 000	CW	(GJK-HOL)
M01	5020	9-4-2013	Tue	2000	463 872 30 = = 33275 12418 85382 97489 33276 3558. = = 872 30 000	AM	(GJK-HOL)
M01	5020	9-4-2013	Tue	2000	872 30 = = 33275 12418 85382 97489 33276 ... 03934 37082 94927 14201	CW	(MPJ)

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					35583 53 = = 872 30 000. Many uncorrected errors		
M01	5476	11-4-2013	Thu	1800	289 30 = = 10196 27584 51090 42539 29672 ... 58347 88930 33645 86501 01745 = = 289 30 000	CW	(MPJ)
M01	5020	11-4-2013	Thu	2000	463 157 30 // 49317 23616 24134 41902 76392 ... 93637 96514 03733 79225 5212514 (as sent) // 157 30 000	CW	(GJK/MPJ)
M01	5020	11-4-2013	Thu	2000	463 157 30 = 49317 23616 24134 41902 76392 // 157 30	CW	(GJK-HOL)
M01	5020	11-4-2013	Thu	2001	463 (R) 157 157 30 30 = = msg = = ...79225 5212 514 / / 157 157 30 30 000	CW	(Q-HOL)
M01	6261	13-4-2013	Sat	1500	463 701 30 = 05366 42540 81072 15364 ... (24.87) = 701 30 000	CW	(GJK-HOL)
M01	9111	22-4-2013	Mon	1918	i.p., ends: 41757 == 148 148 32 32 000	CW	(FN)
M01a	4759	1-4-2013	Mon	1944	...672 333 42622 04001 672 333 42139 repeated	CW	(FN)
M01b	4590	1-4-2013	Mon	1810	420 392 30 = 07143	CW	(HFD)
M01b	4454	1-4-2013	Mon	1915	771 392 30 = 07143	CW	(HFD)
M01b	4571.1	4-4-2013	Thu	1942	477 (R) ...msg [5FGs pairs]...16486 16486 = = 392 392 30 30 00000	CW	(Q-HOL)
M01b	3625	5-4-2013	Fri	1902	153 392 30 = 07143 //4440	CW	(HFD)
M01b	4440	5-4-2013	Fri	1902	153 392 30 = 07143 //3625	CW	(HFD)
M01b	4585	5-4-2013	Fri	2010	582 392 30 = 07143 //3520	CW	(HFD)
M01b	3520	5-4-2013	Fri	2010	582 392 30 = 07143 //4585	CW	(HFD)
M01b	4456.13	8-4-2013	Mon	1915	148 32 = = 23276 67452 69914 42414 02622 ... 85317 41892 28190 97446 41757 = = 148 32 000. Freqs: 3643.9 4453.9 4456.13 & 4457.3 kHz	CW	(MPJ)
M01b	4454	8-4-2013	Mon	1916	771 1 148 32 = - 23276 67452 69914 42414 = 148 32 000 //3644	CW	(GJK-HOL)
M01b	4605	11-4-2013	Thu	1832	201 148 32 = 23286 //3510	CW	(HFD)
M01b	3510	11-4-2013	Thu	1832	201 148 32 = 23286 //4605	CW	(HFD)
M01b	4570	11-4-2013	Thu	1842	477 148 32 = = 23276 67452 69914 42414 02622 41757 = = 148 32 000	AM	(GJK-HOL)
M01b	3715	11-4-2013	Thu	1942	477 //4570	CW	(HFD)
M01b	3717.3	11-4-2013	Thu	1942	148 32 = = 23276 67452 69914 42414 02622 ... 85317 41892 28190 97446 41757 = = 148 32 000 //3716.15	CW	(MPJ)
M01b	4570	11-4-2013	Thu	1942	477 //3715	CW	(HFD)
M01b	4571	11-4-2013	Thu	1947	...msg [5FSG pairs]...69744 69744 64175 64175 = = 148 148 32 32 000	CW	(Q-HOL)
M01b	4441	12-4-2013	Fri	1902	153 (R) ...msg [5FSG pairs]...= = ...	CW	(Q-HOL)
M01b	4441	12-4-2013	Fri	1903	153 148 32 = 23276 67452 69914 42414 02622 ... 41757 = 148 32 000	CW	(GJK-HOL)
M01b	3520	12-4-2013	Fri	2010	582 148 32 = 23276 ... (same txt as 1903z on 4441kHz) ... 41757 = 148 32 000	USB	(GJK-HOL)
M01b	3521.1	12-4-2013	Fri	2010	...msg [5FSG pairs]...64175 73757 = = 148 148 232 000	CW	(Q-HOL)
M01b	5941	18-4-2013	Thu	1505	159 632 30 = 80797	CW	(HFD)
M01c	4065	12-4-2013	Fri	1847	02 02 02. 1848z: 02 02 02. 1849z: 02 06. 1850z: 111 999 182 10 = 92337 62508 32613 03687 75802 84170 39676 61362 76893 10377 = 68260 39676 = 111 = 61362 333 111 000	CW	(AB)
M03	9150	31-3-2013		1320	730/34 = 88926 36922 ...	CW	(FN)
M03	6977	2-4-2013	Tue	1535	798/00 = 000	CW	(FN)
M03	13911	5-4-2013	Fri	1420	874/31 = = 59688 57181 69717 50459 57291 ... 22731 34801 73283 28174 66665 = = 874/31 ...	CW	(MPJ)
M03	6977	6-4-2013	Sat	1535	693/00	CW	(HS2)
M03	6977	9-4-2013	Tue	1535	798/00 = = 000	CW	(GJK-HOL)
M03	6977	9-4-2013	Tue	1535	798/00	CW	(MPJ)
M03	9150	10-4-2013	Wed	1115	650/00	CW	(MPJ)
M03	9150	10-4-2013	Wed	1115	650/00	CW	(HS2)
M03	6977	13-4-2013	Sat	1535	798/00	CW	(GJK-HOL)
M03	9150	23-4-2013	Tue	1115	272/00 = 000	CW	(Spec)
M03	6977	23-4-2013	Tue	1535	798/00 - 000	CW	(Spec)
M03	6261	27-4-2013	Sat	1500	463 239 30 = 40388	CW	(FN)
M03	6977	27-4-2013	Sat	1535	798/00	CW	(FN)
M03	9150	28-4-2013	Sun	1320	437/00	CW	(FN)
M03	13911	28-4-2013	Sun	1420	879/00	CW	(FN)
M12	5792	1-4-2013	Mon	0430	796 0	CW	(HFD)
M12	5792	1-4-2013	Mon	0430	796 796 796 000	CW	(FN)
M12	6992	1-4-2013	Mon	0450	796 0	CW	(HFD)
M12	6992	1-4-2013	Mon	0450	796 796 796 000	CW	(FN)
M12	14964	1-4-2013	Mon	1300	991 1	CW	(HFD)
M12	14964	1-4-2013	Mon	1300	991 1 5703 181 98522	CW	(FN)
M12	13972	1-4-2013	Mon	1320	991 1	CW	(HFD)
M12	13972	1-4-2013	Mon	1320	991 1 5703 181 98522	CW	(FN)
M12	12164	1-4-2013	Mon	1340	991 1	CW	(HFD)
M12	12164	1-4-2013	Mon	1340	991 1 5703 181 98522	CW	(FN)
M12	12162	1-4-2013	Mon	1600	546 1 6352 75 64652	CW	(FN)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
M12	11566	1-4-2013	Mon	1620	546 1 6352 75 64652	CW	(FN)
M12	10711	1-4-2013	Mon	1640	546 1 6352 75 64652	CW	(FN)
M12	9176	1-4-2013	Mon	1700	257 1 8380 70 91408	CW	(FN)
M12	7931	1-4-2013	Mon	1720	257 1 8380 70 91408	CW	(FN)
M12	6904	1-4-2013	Mon	1740	257 1 8380 70 91408	CW	(FN)
M12	9176	1-4-2013	Mon	1800	257 1 6922 61 28472	CW	(FN)
M12	9176	1-4-2013	Mon	1800	257 1	CW	(HFD)
M12	7931	1-4-2013	Mon	1820	257 1 6922 61 28472	CW	(FN)
M12	7931	1-4-2013	Mon	1820	257 1	CW	(HFD)
M12	6904	1-4-2013	Mon	1840	257 1 6922 61 28472	CW	(FN)
M12	6904	1-4-2013	Mon	1840	257 1	CW	(HFD)
M12	9176	1-4-2013	Mon	1900	257 1 7554 85 73529	CW	(FN)
M12	7931	1-4-2013	Mon	1920	257 1 7554 85 73529	CW	(FN)
M12	6904	1-4-2013	Mon	1940	257 1 7554 85 73529	CW	(FN)
M12	10343	2-4-2013	Tue	1830	124 1 4046 64 29471	CW	(FN)
M12	10343	2-4-2013	Tue	1830	124 124 124 1 (R) 4046 64 4046 64 29471 69965 35375 32726 68342 ... 19584 44964 82653 64838 65280 000 000	CW	(Q/MPJ)
M12	9264	2-4-2013	Tue	1850	124 1 4046 64 29471	CW	(FN)
M12	9264	2-4-2013	Tue	1853	ipmsg 000 000	CW	(Q-HOL)
M12	8116	2-4-2013	Tue	1910	124 1 4046 64 29471	CW	(FN)
M12	8116	2-4-2013	Tue	1910	124 124 124 1 (R) 4046 64 4046 64 msg 000 000	CW	(Q-HOL)
M12	13918	3-4-2013	Wed	1500	991 1 5703 181 98522 93667 15156 40878 61858 56475 t t t t t t	CW	(GJK-HOL)
M12	13918	3-4-2013	Wed	1500	991 1 5703 181 98522	CW	(FN)
M12	12218	3-4-2013	Wed	1520	991 1 5703 181 98522	CW	(FN)
M12	12218	3-4-2013	Wed	1520	repeat of 1500z on 13918	CW	(GJK-HOL)
M12	10748	3-4-2013	Wed	1540	991 1 5703 181 98522	CW	(FN)
M12	10748	3-4-2013	Wed	1549	i/p 56475 000 000	CW	(GJK-HOL)
M12	8047	3-4-2013	Wed	1700	463 1 6708 86 64953	CW	(FN)
M12	8047	3-4-2013	Wed	1706	I/P 000 000	CW	(GJK-HOL)
M12	6802	3-4-2013	Wed	1720	463 1 6708 86 64953	CW	(FN)
M12	6802	3-4-2013	Wed	1726	I/P 000 000	CW	(GJK-HOL)
M12	5788	3-4-2013	Wed	1740	463 1 6708 86 64953 32986 40270 28183 09330 14446 000 000	CW	(GJK-HOL)
M12	5788	3-4-2013	Wed	1740	463 1 6708 86 64953	CW	(FN)
M12	11435	3-4-2013	Wed	1830	938 1 4852 67 30486	CW	(FN)
M12	14879	3-4-2013	Wed	1830	845 1 9916 103 17933	CW	(FN)
M12	11435	3-4-2013	Wed	1830	938 1 4852 67 30486 88541 33194 41669 61380 51194 000 000	CW	(GJK-HOL)
M12	10598	3-4-2013	Wed	1850	938 1 4852 67 30486	CW	(FN)
M12	13479	3-4-2013	Wed	1850	845 1 9916 103 17933	CW	(FN)
M12	10598	3-4-2013	Wed	1853	I/P 51194 000	CW	(GJK-HOL)
M12	11579	3-4-2013	Wed	1910	845 1 9916 103 17933	CW	(FN)
M12	9327	3-4-2013	Wed	1910	938 1 4852 67 30486	CW	(FN)
M12	6793	3-4-2013	Wed	2100	785 785 785 000	CW	(FN)
M12	6793	3-4-2013	Wed	2100	785 785 785 000	CW	(Q-HOL)
M12	11469	3-4-2013	Wed	2110	441 1 3783 71 65214	CW	(FN)
M12	11469	3-4-2013	Wed	2110	441 1	CW	(HFD)
M12	5893	3-4-2013	Wed	2120	785 785 785 000	CW	(Q-HOL)
M12	5893	3-4-2013	Wed	2120	785 785 785 000	CW	(FN)
M12	10469	3-4-2013	Wed	2130	441 1	CW	(HFD)
M12	10469	3-4-2013	Wed	2130	441 1 3783 71 65214 76368 87600 90713 22183 ... 85987 000 000	CW	(GJK-HOL)
M12	10469	3-4-2013	Wed	2130	441 441 441 1 (R) 3783 71 3783 71 msg 000 000	CW	(Q-HOL)
M12	10469	3-4-2013	Wed	2130	441 1 3783 71 65214	CW	(FN)
M12	9169	3-4-2013	Wed	2140	441 441 441 1 (R) 3783 71 3783 71 msg 000 000	CW	(Q-HOL)
M12	9169	3-4-2013	Wed	2150	441 1	CW	(HFD)
M12	9169	3-4-2013	Wed	2150	441 1 3783 71 65214	CW	(FN)
M12	9169	3-4-2013	Wed	2150	441 1 3783 71 rpt of 2130z on 10469	CW	(GJK-HOL)
M12	5683	3-4-2013	Wed	2199	785 000	CW	(GJK-HOL)
M12	7484	4-4-2013	Thu	0630	402 402 402 000	CW	(FN)
M12	8084	4-4-2013	Thu	0650	402 402 402 000	CW	(FN)
M12	10343	4-4-2013	Thu	1700	124 1 4564 71 77743	CW	(FN)
M12	9176	4-4-2013	Thu	1700	257 1 8030 89 39374	CW	(FN)
M12	9176	4-4-2013	Thu	1700	257 1 8030 89 39374 15495 77453 08606 43952 ... 87299 96753 37573 59826 55066 000 000	CW	(MPJ)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
M12	9264	4-4-2013	Thu	1720	124 1 4564 71 77743	CW	(FN)
M12	7931	4-4-2013	Thu	1720	257 1 8030 89 39374	CW	(FN)
M12	6904	4-4-2013	Thu	1740	257 1 8030 89 39374	CW	(FN)
M12	8116	4-4-2013	Thu	1740	124 1 4564 71 77743	CW	(FN)
M12	10343	4-4-2013	Thu	1800	124 1 2726 91 64773	CW	(FN)
M12	9264	4-4-2013	Thu	1820	124 1 2726 91 64773	CW	(FN)
M12	8116	4-4-2013	Thu	1840	124 1 2726 91 64773	CW	(FN)
M12	9176	4-4-2013	Thu	1900	257 1 8821 62 49282	CW	(FN)
M12	7931	4-4-2013	Thu	1920	257 1 8821 62 49282	CW	(FN)
M12	6904	4-4-2013	Thu	1940	257 1 8821 62 49282	CW	(FN)
M12	10343	5-4-2013	Fri	1800	124 1 6824 99 19234 54476 .2004 50750 93990 28579 000 000	CW	(GJK-HOL)
M12	10343	5-4-2013	Fri	1800	6824 99 19234 54476 12004 50750 93990 ... 64774 54875 43314 16212 28579 000 000	CW	(MPJ)
M12	10343	5-4-2013	Fri	1800	124 1 6824 99 19234	CW	(FN)
M12	9264	5-4-2013	Fri	1820	124 1 6824 99 19234	CW	(FN)
M12	8116	5-4-2013	Fri	1840	124 1 6824 99 19234	CW	(FN)
m12	10469	6-4-2013	Sat	2130	441 1 3783 71 65214 76368 87600 90713 22182 85987 000 000	CW	(GJK-HOL)
M12	14879	7-4-2013	Sun	1830	845 1 9916 103 17933	CW	(FN)
M12	14879	7-4-2013	Sun	1830	845 1	CW	(HFD)
M12	13479	7-4-2013	Sun	1850	845 1 9916 103 17933	CW	(FN)
M12	13479	7-4-2013	Sun	1850	845 1	CW	(HFD)
M12	11579	7-4-2013	Sun	1910	845 1 9916 103 17933	CW	(FN)
M12	11579	7-4-2013	Sun	1910	845 1	CW	(HFD)
M12	11579	7-4-2013	Sun	1917	i.p.	CW	(MCO)
M12	9176	8-4-2013	Mon	1700	257 1 7607 78 72393 72573 08049 72093 66353 ... 09565 90240 49838 13604 11997 000 000	CW	(MPJ)
M12	7931	8-4-2013	Mon	1720	257 1 7607 78 000 000	CW	(GJK-HOL)
M12	6904	8-4-2013	Mon	1740	257 1 7607 78 7.393 08.49 72093 11997 000 000	CW	(GJK-HOL)
M12	9176	8-4-2013	Mon	1800	257 1 1989 65 41909	CW	(FN)
M12	9176	8-4-2013	Mon	1800	257 1 1989 65 41909 59395 72676 80767 20828 62147 000 000	CW	(GJK-HOL)
M12	7931	8-4-2013	Mon	1820	257 1 1989 65 41909	CW	(FN)
M12	7931	8-4-2013	Mon	1820	257 1 1989 65 41909 (repeat of 1800z on 9176kHz) 62147 000 000	CW	(GJK-HOL)
M12	6904	8-4-2013	Mon	1840	257 1 1989 65 41909	CW	(FN)
M12	9176	8-4-2013	Mon	1900	257 1 1283 85 29340	CW	(FN)
M12	7931	8-4-2013	Mon	1920	257 1 1283 85 29340	CW	(FN)
M12	6904	8-4-2013	Mon	1940	257 1 1283 85 29340	CW	(FN)
M12	6904	8-4-2013	Mon	1940	257 1 1283 85 29340 14522 72210 52542 07115 25447 000 000	CW	(GJK-HOL)
M12	9060	9-4-2013	Tue	1131	lp 687 687 687 into then 5FGs	CW	(LG2)
M12	10343	9-4-2013	Tue	1830	124 124 124 1 (R) 6073 66 6073 66 msg 000 000	CW	(Q-HOL)
M12	10343	9-4-2013	Tue	1830	124 1 6073 66 53389 40488 21276 86004 36858 55386 000 000	CW	(GJK-HOL)
M12	10343	9-4-2013	Tue	1830	124 1 6073 66 53389	CW	(FN)
M12	9264	9-4-2013	Tue	1850	124 1 6073 66 53389	CW	(FN)
M12	9264	9-4-2013	Tue	1850	124 1 6073 66 53389 40488 21276 86004 36858 ... 13392 23983 45390 10627 55386 000 000	CW	(MPJ/Q)
M12	9264	9-4-2013	Tue	1854	i/p 55386 000	CW	(GJK-HOL)
M12	8116	9-4-2013	Tue	1910	124 124 124 1 (R) 6073 66 6073 66 msg 000 000	CW	(Q-HOL)
M12	8116	9-4-2013	Tue	1910	124 1 6073 66 53389 (repeat of 1830z 10343kHz) 55386 000 000	CW	(GJK-HOL)
M12	8116	9-4-2013	Tue	1910	124 1 6073 66 53389	CW	(FN)
M12	13918	10-4-2013	Wed	1500	991 1 826 203 43039	CW	(FN)
M12	13918	10-4-2013	Wed	1500	991 1	CW	(HFD)
M12	13918	10-4-2013	Wed	1500	991 1 826 203 43039 55056 21946 45792 07772 98036 000 000	CW	(GJK-HOL)
M12	12218	10-4-2013	Wed	1520	991 1 826 203 43039 (repeat of 1500z 13918kHz) ... 98036 000 000	CW	(GJK-HOL)
M12	12218	10-4-2013	Wed	1520	991 1	CW	(HFD)
M12	12218	10-4-2013	Wed	1520	991 1 826 203 43039 (repeat of 1500z 13918kHz) ... 98036 000 000	CW	(GJK/MPJ)
M12	12218	10-4-2013	Wed	1520	991 1 826 203 43039	CW	(FN)
M12	10748	10-4-2013	Wed	1540	991 1 826 203 43039 (repeat of 1500z 13918kHz) ... 98036 000 000	CW	(GJK-HOL)
M12	10748	10-4-2013	Wed	1540	991 1	CW	(HFD)
M12	10748	10-4-2013	Wed	1540	991 1 826 203 43039	CW	(FN)
M12	8047	10-4-2013	Wed	1700	463 1 6390 91 33677 87470 82562 92667 04732 30624 000 000	CW	(GJK-HOL)
M12	8047	10-4-2013	Wed	1700	463 1 6390 91 33677	CW	(FN)
M12	6802	10-4-2013	Wed	1720	463 1 6390 91 33677	CW	(FN)
M12	6802	10-4-2013	Wed	1724	i/p 30624 000 000	CW	(GJK-HOL)

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M12	5788	10-4-2013	Wed	1740	463 1 6390 91 33677	CW	(FN)
M12	10343	10-4-2013	Wed	1800	124 124 124 1 (R) 6568 82 6568 82 msg 000 000	CW	(Q-HOL)
M12	9264	10-4-2013	Wed	1820	124 124 124 1 (R) 6568 82 6568 82 msg 000 000	CW	(Q-HOL)
M12	11435	10-4-2013	Wed	1830	938 1 6836 70 11136	CW	(FN)
M12	14879	10-4-2013	Wed	1830	845 1 3074 193 59662	CW	(FN)
M12	8116	10-4-2013	Wed	1840	124 124 124 1 (R) 6568 82 6568 82 msg 000 000	CW	(Q-HOL)
M12	13479	10-4-2013	Wed	1850	845 1 3074 193 59662 75110 09838 57961 70961 (audio lost at 1859z)	CW	(GJK-HOL)
M12	13479	10-4-2013	Wed	1850	845 1 3074 193 59662	CW	(FN)
M12	10598	10-4-2013	Wed	1850	938 1 6836 70 11136	CW	(FN)
M12	9327	10-4-2013	Wed	1910	938 1 6836 70 11136 39320 ...56 87179 85084 73236 000 000	CW	(GJK-HOL)
M12	11579	10-4-2013	Wed	1910	845 1 3074 193 59662	CW	(FN)
M12	9327	10-4-2013	Wed	1910	938 1 6836 70 11136	CW	(FN)
M12	6793	10-4-2013	Wed	2100	785 000	CW	(GJK-HOL)
M12	6793	10-4-2013	Wed	2100	785 785 785 000	CW	(GJK/Q)
M12	6793	10-4-2013	Wed	2100	785 0	CW	(HFD)
M12	6793	10-4-2013	Wed	2100	785 785 785 000	CW	(FN)
M12	11469	10-4-2013	Wed	2110	441 1 8475 125 17617 31195 55571 31288 85232 75690 000 000	CW	(GJK/Q)
M12	11469	10-4-2013	Wed	2110	441 1 8475 125 17617 31195 55571 31288 85232 75690 000 000	CW	(GJK-HOL)
M12	11469	10-4-2013	Wed	2110	441 1 8475 125 17617	CW	(FN)
M12	5893	10-4-2013	Wed	2120	785 0	CW	(HFD)
M12	5893	10-4-2013	Wed	2120	785 000	CW	(GJK-HOL)
M12	5893	10-4-2013	Wed	2120	785 785 785 000	CW	(GJK/Q)
M12	5893	10-4-2013	Wed	2120	785 785 785 000	CW	(FN)
M12	10469	10-4-2013	Wed	2130	441 1 8475 125 17617 (repeat of 2110z on 11469kHz) 75690 000 000	CW	(GJK-HOL)
M12	10469	10-4-2013	Wed	2130	441 1 8475 125 17617 (repeat of 2110z on 11469kHz) 75690 000 000	CW	(GJK/Q)
M12	10469	10-4-2013	Wed	2130	441 1 8475 125 17617	CW	(FN)
M12	9169	10-4-2013	Wed	2150	441 1 8475 125 17617 (repeat of 2110z on 11469kHz) 75690 000 000	CW	(GJK/Q)
M12	9169	10-4-2013	Wed	2150	441 1 8475 125 17617 (repeat of 2110z on 11469kHz) 75690 000 000	CW	(GJK-HOL)
M12	9169	10-4-2013	Wed	2150	441 1 8475 125 17617	CW	(FN)
M12	7484	11-4-2013	Thu	0630	402 0	CW	(HFD)
M12	7484	11-4-2013	Thu	0630	402 402 402 000	CW	(FN)
M12	8084	11-4-2013	Thu	0650	402 0	CW	(HFD)
M12	8084	11-4-2013	Thu	0650	402 402 402 000	CW	(FN)
M12	9176	11-4-2013	Thu	1700	257 3796 96 23707 49724 73563 12666 29578 ... 87364 69775 25436 (05436?) 05663 15741 000 000	CW	(MPJ)
M12	10343	11-4-2013	Thu	1700	124 1 4600 72 69451	CW	(FN)
M12	9176	11-4-2013	Thu	1700	257 1 3796 96 23707	CW	(FN)
M12	7931	11-4-2013	Thu	1720	257 1 3796 96 23707 49734 .3563 12666 2...8 15841 000 000	CW	(GJK-HOL)
M12	7931	11-4-2013	Thu	1720	257 1 3796 96 23707	CW	(FN)
M12	9264	11-4-2013	Thu	1720	124 1 4600 72 69451	CW	(FN)
M12	8116	11-4-2013	Thu	1740	124 1 4600 72 69451 82851 48891 11803 54409 82503 000 000	CW	(GJK-HOL)
M12	8116	11-4-2013	Thu	1740	124 1 4600 72 69451	CW	(FN)
M12	6904	11-4-2013	Thu	1740	257 1 3796 96 23707	CW	(FN)
M12	10343	11-4-2013	Thu	1800	124 1 4987 98 93905	CW	(FN)
M12	9264	11-4-2013	Thu	1820	124 1 4987 98 93905	CW	(FN)
M12	9264	11-4-2013	Thu	1820	124 1 4987 98 9905 12553 .4504 97226 29... 000 000	CW	(GJK-HOL)
M12	8116	11-4-2013	Thu	1840	124 1 4987 98 93905	CW	(FN)
M12	9176	11-4-2013	Thu	1900	257 1 5264 64 74024	CW	(FN)
M12	7931	11-4-2013	Thu	1920	257 1 5264 64 74024	CW	(FN)
M12	6904	11-4-2013	Thu	1940	257 1 5264 64 74024	CW	(FN)
M12	10343	12-4-2013	Fri	1800	124 1 6568 82 86822 58215 99363 71629 18241 11986 000 000	CW	(GJK-HOL)
M12	10343	12-4-2013	Fri	1800	124 1 6568 82 86822	CW	(FN)
M12	9264	12-4-2013	Fri	1820	124 1 6568 82 86822	CW	(FN)
M12	8116	12-4-2013	Fri	1840	124 1 6568 82 86822	CW	(FN)
M12	11469	13-4-2013	Sat	2110	441 1 8475 125 17617	CW	(FN)
M12	10469	13-4-2013	Sat	2130	441 1 8475 125 17617	CW	(FN)
M12	9169	13-4-2013	Sat	2150	441 1 8475 125 17617	CW	(FN)
M12	9169	13-4-2013	Sat	2150	441 1 8475 125 17617 31195 55591 31288 85232 75690 000	CW	(GJK-HOL)
M12	14879	14-4-2013	Sun	1830	845 1 3074 193 59662	CW	(FN)
M12	13479	14-4-2013	Sun	1850	845 1 3074 193 59662	CW	(FN)
M12	11579	14-4-2013	Sun	1910	845 1 3074 193 59662	CW	(FN)
M12	5792	15-4-2013	Mon	0430	796 796 796 000	CW	(FN)

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M12	6992	15-4-2013	Mon	0450	796 796 796 000	CW	(FN)
M12	14964	15-4-2013	Mon	1300	991 1 2272 191 14541	CW	(FN)
M12	13972	15-4-2013	Mon	1320	991 1 2272 191 14541	CW	(FN)
M12	12164	15-4-2013	Mon	1340	991 1 2272 191 14541	CW	(FN)
M12	12162	15-4-2013	Mon	1600	546 1 4715 99 61352	CW	(FN)
M12	11566	15-4-2013	Mon	1620	546 1 4715 99 61352	CW	(FN)
M12	10711	15-4-2013	Mon	1640	546 1 4715 99 61352	CW	(FN)
M12	9176	15-4-2013	Mon	1700	257 1 8545 79 67555	CW	(FN)
M12	7931	15-4-2013	Mon	1720	257 1 8545 79 67555	CW	(FN)
M12	6904	15-4-2013	Mon	1740	257 1 8545 79 67555	CW	(FN)
M12	9176	15-4-2013	Mon	1800	257 1 1341 61 53980	CW	(FN)
M12	7931	15-4-2013	Mon	1820	257 1 1341 61 53980	CW	(FN)
M12	6904	15-4-2013	Mon	1840	257 1 1341 61 53980	CW	(FN)
M12	9176	15-4-2013	Mon	1900	257 1 7578 92 26260	CW	(FN)
M12	7931	15-4-2013	Mon	1920	257 1 7578 92 26260	CW	(FN)
M12	6904	15-4-2013	Mon	1940	257 1 7578 92 26260	CW	(FN)
M12	10343	16-4-2013	Tue	1830	124 1 8959 66 09644	CW	(FN)
M12	9264	16-4-2013	Tue	1850	124 1 8959 66 09644	CW	(FN)
M12	8116	16-4-2013	Tue	1910	124 1 8959 66 09644	CW	(FN)
M12	13918	17-4-2013	Wed	1500	991 1 2272 191 14541	CW	(FN)
M12	12218	17-4-2013	Wed	1520	991 1 2272 191 14541	CW	(FN)
M12	10748	17-4-2013	Wed	1540	991 1 2272 191 14541	CW	(FN)
M12	8047	17-4-2013	Wed	1700	463 1 4817 94 78432	CW	(FN)
M12	6802	17-4-2013	Wed	1720	463 1 4817 94 78432	CW	(FN)
M12	5788	17-4-2013	Wed	1740	463 1 4817 94 78432	CW	(FN)
M12	11435	17-4-2013	Wed	1830	938 1 5079 53 72046	CW	(FN)
M12	14879	17-4-2013	Wed	1830	845 845 845 000	CW	(FN)
M12	10598	17-4-2013	Wed	1850	938 1 5079 53 72046	CW	(FN)
M12	13479	17-4-2013	Wed	1850	845 845 845 000	CW	(FN)
M12	9327	17-4-2013	Wed	1910	938 1 5079 53 72046	CW	(FN)
M12	6793	17-4-2013	Wed	2100	785 785 785 000	CW	(FN)
M12	11469	17-4-2013	Wed	2110	441 441 441 000	CW	(FN)
M12	5893	17-4-2013	Wed	2120	785 785 785 000	CW	(FN)
M12	10469	17-4-2013	Wed	2130	441 441 441 000	CW	(FN)
M12	7484	18-4-2013	Thu	0630	402 0	CW	(HFD)
M12	8084	18-4-2013	Thu	0650	402 0	CW	(HFD)
M12	10343	19-4-2013	Fri	1800	124 1 7917 76 26736	CW	(FN)
M12	9264	19-4-2013	Fri	1820	124 1 7917 76 26736	CW	(FN)
M12	8116	19-4-2013	Fri	1840	124 1 7917 76 26736	CW	(FN)
M12	11469	20-4-2013	Sat	2110	441 441 441 000	CW	(FN)
M12	10469	20-4-2013	Sat	2130	441 441 441 000	CW	(FN)
M12	14879	21-4-2013	Sun	1830	845 845 845 000	CW	(FN)
M12	13479	21-4-2013	Sun	1850	845 845 845 000	CW	(FN)
M12	5792	22-4-2013	Mon	0430	796 796 796 000	CW	(FN)
M12	6992	22-4-2013	Mon	0450	796 796 796 000	CW	(FN)
M12	14964	22-4-2013	Mon	1300	991 1 6841 73 93137	CW	(FN)
M12	13972	22-4-2013	Mon	1320	991 1 6841 73 93137	CW	(FN)
M12	12164	22-4-2013	Mon	1340	991 1 6841 73 93137	CW	(FN)
M12	12162	22-4-2013	Mon	1600	546 1 2685 80 32564	CW	(FN)
M12	11566	22-4-2013	Mon	1620	546 1 2685 80 32564	CW	(FN)
M12	10711	22-4-2013	Mon	1640	546 1 2685 80 32564	CW	(FN)
M12	9176	22-4-2013	Mon	1700	257 1 8373 80 54524	CW	(FN)
M12	7931	22-4-2013	Mon	1720	257 1 8373 80 54524	CW	(FN)
M12	6904	22-4-2013	Mon	1740	257 1 8373 80 54524	CW	(FN)
M12	9176	22-4-2013	Mon	1800	257 1 4603 55 47046	CW	(FN)
M12	7931	22-4-2013	Mon	1820	257 1 4603 55 47046	CW	(FN)
M12	6904	22-4-2013	Mon	1840	257 1 4603 55 47046	CW	(FN)
M12	9176	22-4-2013	Mon	1900	257 1 1710 72 46680	CW	(FN)
M12	7931	22-4-2013	Mon	1920	257 1 1710 72 46680	CW	(FN)
M12	6904	22-4-2013	Mon	1940	257 1 1710 72 46680	CW	(FN)
M12	6793	24-4-2013	Wed	2100	785 1 9157 75 34953	CW	(FN)
M12	11469	24-4-2013	Wed	2110	441 1 5585 15....	CW	(FN)

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M12	5893	24-4-2013	Wed	2120	785 1 9157 75 34953	CW	(FN)
M12	4593	24-4-2013	Wed	2140	785 1 9157 75 34953	CW	(FN)
M12	9176	25-4-2013	Thu	1700	257 1 3157 91 99520	CW	(FN)
M12	10343	25-4-2013	Thu	1700	124 1 6297 77 95704	CW	(FN)
M12	7931	25-4-2013	Thu	1720	257 1 3157 91 99520	CW	(FN)
M12	9264	25-4-2013	Thu	1720	124 1 6297 77 95704	CW	(FN)
M12	6904	25-4-2013	Thu	1740	257 1 3157 91 99520	CW	(FN)
M12	8116	25-4-2013	Thu	1740	124 1 6297 77 95704	CW	(FN)
M12	10343	25-4-2013	Thu	1800	124 1 7331 70 76217	CW	(FN)
M12	9264	25-4-2013	Thu	1820	124 1 7331 70 76217	CW	(FN)
M12	8116	25-4-2013	Thu	1840	124 1 7331 70 76217	CW	(FN)
M12	9176	25-4-2013	Thu	1900	257 1 6499 53 28060	CW	(FN)
M12	7931	25-4-2013	Thu	1920	257 1 6499 53 28060	CW	(FN)
M12	6904	25-4-2013	Thu	1940	257 1 6499 53 28060	CW	(FN)
M12	10343	26-4-2013	Fri	1800	124 1 8813 76 50746	CW	(FN)
M12	9264	26-4-2013	Fri	1820	124 1 8813 76 50746	CW	(FN)
M12	8116	26-4-2013	Fri	1840	124 1 8813 76 50746	CW	(FN)
M12	11469	27-4-2013	Sat	2110	441 1 6425 83 38650	CW	(FN)
M12	10469	27-4-2013	Sat	2130	441 1 6425 83 38650	CW	(FN)
M12	9169	27-4-2013	Sat	2150	441 1 6425 83 38650	CW	(FN)
M12	14879	28-4-2013	Sun	1830	845 1 8063 99 05060	CW	(FN)
M12	13479	28-4-2013	Sun	1850	845 1 8063 99 05060	CW	(FN)
M12	11579	28-4-2013	Sun	1910	845 1 8063 99 05060	CW	(FN)
M12	9176	29-4-2013	Mon	1700	257 1 w/ 5fg's 000	CW	(JBL)
M12	7931	29-4-2013	Mon	1720	257 1 5fg's 000	CW	(JBL)
M14	8120	9-4-2013	Tue	0700	362 00000	CW	(HS2)
M14	5380	9-4-2013	Tue	1835	... 87610 87610 46414 46414 = = 6T9 6T9 143 153 00000	CW	(BCI)
M14	5464	10-4-2013	Wed	1920	537 110 15 = = 28391 37237 39103 47234 17436 27453 = = 110 15 00000	CW	(GJK-HOL)
M14	4588	10-4-2013	Wed	1920	218 0 MCW E06 sked!!!	CW	(HFD)
M14	5464	10-4-2013	Wed	1920	537 110 15 = = 28391 37237 39103 47234 17436 27453 = = 110 15 00000	CW	(GJK/MPJ)
M14	5380	12-4-2013	Fri	1833	818 (R) 629 629 108 108 = = 57215 53723 67909 92154 37081 89453 (Cont'd) 629 629 108 108 00000	CW	(JPL-Sib)
M18	4073	3-4-2013	Wed	1927	0027 0027 0027 ...	CW	(FN)
M18	4073	5-4-2013	Fri	1840	... 0144 0144 0144 ...	CW	(FN)
M18	8145	13-4-2013	Sat	0531	0931 0931 ...	CW	(JPL-Sib)
M18	4073	13-4-2013	Sat	0558	0958 0958 ...	CW	(JPL-Sib)
M18	4073	18-4-2013	Thu	2039	0039 0039 0040 0040 0040 etc	CW	(AB)
M18	4073	20-4-2013	Sat	2017	0117 0117 0117 0117 0118 0118 etc.	CW	(AB)
M18	4073	21-4-2013	Sun	1832	Russian Mil time marker 0132 0132 0132 etc.	CW	(AB)
M18	4073	22-4-2013	Mon	1941	2345 2345 2346 2346 2346 etc.	CW	(AB)
M18	4073	23-4-2013	Tue	2004	0108 0108 etc.	CW	(JPL-FNL)
M18	4073	23-4-2013	Tue	2038	0142 0142 0142 0143 etc.	CW	(AB)
M18	4073	24-4-2013	Wed	1830	2334 2335 2335 2335 etc.	CW	(AB)
M18	4073	26-4-2013	Fri	2012	0023 0023 0024 0024 0024 etc.	CW	(AB)
M21	4191.5	24-3-2013		2152	PVO	CW	(BCI)
M21	6821.5	5-4-2013	Fri	1854	Russian Air Defence 99?2255?9?????	CW	(MPJ)
M21	4391	7-4-2013	Sun	2046	Russian Air Defence =99234?70?????	CW	(LG2)
M21	5872	9-4-2013	Tue	2055	PVO =990055?78?????	CW	(JPL-Sib)
M21	7988.5	10-4-2013	Wed	1451	PVO plots 1192475254550	CW	(RD)
M21	4391	10-4-2013	Wed	2308	=990308?70?????	CW	(JPL-Sib)
M21	3313	10-4-2013	Wed	2313	=990313?70?????	CW	(JPL-Sib)
M21	10210	13-4-2013	Sat	1348	PVO =99?1748?9????? =99?1750?9????? =99?1752?9?????	CW	(JPL-Sib)
M21	5848	13-4-2013	Sat	2125	PVO =990125?78?????	CW	(JPL-Sib)
M21	4391	20-4-2013	Sat	2122	Russian Air Defense =990122?70?????	CW	(AB)
M21	4391	26-4-2013	Fri	2110	PVO =990001?70?????	CW	(AB)
M22	2680	1-4-2013	Mon	0032	4XZ IDF/Israeli Navy Haifa	CW	(LG2)
M22	6607	2-4-2013	Tue	1715	4XZ 5LGs	CW	(evan)
M22	4594	2-4-2013	Tue	2332	4XZ IDF/Israeli Navy Haifa "VVV VVV DE 4XZ 4XZ" into encrypted traffic	CW	(LG2)
M22	4331	3-4-2013	Wed	0045	VVV DE 4XZ 4XZ BT BT AR NW QTC 1 NR 29	CW	(GJK-HOL)
M22	6607	3-4-2013	Wed	1650	VVV DE 4XZ = =	CW	(GJK-HOL)
M22	6379	3-4-2013	Wed	1750	VVV DE 4XZ = =	CW	(GJK-HOL)
M22	6607	5-4-2013	Fri	1618		CW	(GJK-HOL)

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M22	4595	5-4-2013	Fri	1836	4XZ	CW	(GJK-HOL)
M22	6607	8-4-2013	Mon	0044	4XZ: Israeli Navy "VVV DE 4XZ 4XZ" 4331//4595//6607 kHz	CW	(JBL)
M22	4331	8-4-2013	Mon	0044	4XZ: Israeli Navy "VVV DE 4XZ 4XZ" 4331//4595//6607 kHz	CW	(JBL)
M22	4595	8-4-2013	Mon	0044	4XZ: Israeli Navy "VVV DE 4XZ 4XZ" 4331//4595//6607 kHz	CW	(JBL)
M22	6379	9-4-2013	Tue	2210	4XZ: IDF/Israeli Navy Haifa	CW	(LG2)
M22	6607	12-4-2013	Fri	1652	VVV DE 4XZ = (repeated)	CW	(GJK-HOL)
M22	6607	12-4-2013	Fri	1736	4XZ: Navy Haifa 5L message after QTC 1 NR 852 = = NR 852 DA V TW1J 022121 OJ1E GR 23 =	CW	(PPA)
M22	6379	12-4-2013	Fri	1751	VVV DE 4XZ = (repeated)	CW	(GJK-HOL)
M22	4331	12-4-2013	Fri	1828	VVV DE 4XZ = (repeated)	CW	(GJK-HOL)
M22	4595	12-4-2013	Fri	1857	VVV DE 4XZ = (repeated)	CW	(GJK-HOL)
M22	4331	19-4-2013	Fri	1841	4XZ - Haifa	CW	(AB)
M22	6607	20-4-2013	Sat	2107	4XZ: Israeli Navy Haifa. VVV DE 4XZ followed by messages	CW	(AB)
M22	4595	20-4-2013	Sat	2126	4XZ: Israeli Navy msg in progress	CW	(AB)
M22	4331	21-4-2013	Sun	1848	4XZ Haifa. VVV DE 4XZ 4XZ = = 2860//4331//4595//6379//6607 kHz	CW	(AB)
M22	6607	21-4-2013	Sun	1848	4XZ Haifa. VVV DE 4XZ 4XZ = = 2860//4331//4595//6379//6607 kHz	CW	(AB)
M22	4595	21-4-2013	Sun	1848	4XZ Haifa. VVV DE 4XZ 4XZ = = 2860//4331//4595//6379//6607 kHz	CW	(AB)
M22	6379	21-4-2013	Sun	1848	4XZ Haifa. VVV DE 4XZ 4XZ = = 2860//4331//4595//6379//6607 kHz	CW	(AB)
M22	2860	21-4-2013	Sun	1848	4XZ Haifa. VVV DE 4XZ 4XZ = = 2860//4331//4595//6379//6607 kHz	CW	(AB)
M22	6607	22-4-2013	Mon	1956	4XZ Haifa. VVV DE 4XZ 4XZ = = 2860//4331//4595//6379//6607 kHz	CW	(AB)
M22	6379	22-4-2013	Mon	1956	4XZ Haifa. VVV DE 4XZ 4XZ = = 2860//4331//4595//6379//6607 kHz	CW	(AB)
M22	4595	22-4-2013	Mon	1956	4XZ Haifa. VVV DE 4XZ 4XZ = = 2860//4331//4595//6379//6607 kHz	CW	(AB)
M22	2860	22-4-2013	Mon	1956	4XZ Haifa. VVV DE 4XZ 4XZ = = 2860//4331//4595//6379//6607 kHz	CW	(AB)
M22	4331	22-4-2013	Mon	1956	4XZ Haifa. VVV DE 4XZ 4XZ = = 2860//4331//4595//6379//6607 kHz	CW	(AB)
M22	6379	23-4-2013	Tue	2151	4XZ: ISR Haifa Naval VVV DE 4XZ	CW	(VL)
M22	2860	23-4-2013	Tue	2152	4XZ: ISR Haifa Naval VVV DE 4XZ	CW	(VL)
M22	4331	23-4-2013	Tue	2153	4XZ: ISR Haifa Naval VVV DE 4XZ	CW	(VL)
M22	4595	23-4-2013	Tue	2155	4XZ: ISR Haifa Naval VVV DE 4XZ	CW	(VL)
M22	6607	23-4-2013	Tue	2157	4XZ: ISR Haifa Naval VVV DE 4XZ	CW	(VL)
M22	6607	26-4-2013	Fri	1900	4XZ: Israel navy Haifa vvv de 4XZ	CW	(BvR)
M23	7668	2-4-2013	Tue	1700	747 747 call for 5 minutes	CW	(PPA)
M24	8116	13-4-2013	Sat	1815	818 629 108 == 23398	CW	(FN)
M24	5410	27-4-2013	Sat	1830	818 403 116 = 47365	CW	(FN)
M32	7041	9-3-2013		1935	1JXK 1JXK 1JXK de 9T2Z 9T2Z K	CW	(IARUMS)
M32	7041	12-3-2013		1904	GE6C GE6C GE6C de XGNC XGNC K. 8JOC 8JOC 8JOC de XGNC XGNC K	CW	(IARUMS)
M32	7583	26-3-2013		0657	Russian Mil: "KHDG DE 9OVE K R K. T86V DE 9OVE K R K"	CW	(BCI)
M32	3197	27-3-2013		2027	Russian Mil: IQDE	CW	(BCI)
M32	3218.5	27-3-2013		2029	Russian Mil: YR8Y wkg D88Z	CW	(BCI)
M32	3348	27-3-2013		2057	Russian Mil: BZTH wkg YGOS	CW	(BCI)
M32	10243	29-3-2013		0744	Russian Mil: "LN8F DE 9STW K QTC K 9STW O6927 2911 5316MR = IA@SZQ@SIWNI SDEWA TIZSM WVULR GKYUT PODOS QYUYG"	CW	(BCI)
M32	5472	30-3-2013		1604	Russian mil. L6E7 QTC K. L6E7 303 60 30 1850 303 = EUCh6 = AAAAA HYuChPQ AXZZA JUNShSh EXYKC etc. SShYuLY WKKDZ K	CW	(GJK)
M32	7961	2-4-2013	Tue	1808	GRI8: Russian Mil. TTT FMKEKE WYÄUÖ PWPÄR 5T5 EPTAQLNK E to DL9?	CW	(LG2)
M32	3282	2-4-2013	Tue	2014	H5VZ 450 882 2300 450 BT 064 BT 11111 2..13 16787 36924 74086 55799	CW	(GJK-HOL)
M32	3334	2-4-2013	Tue	2021	YT6V DE BA3D K BA3D ZBR ZJR ZHA ZJF ZJM ZHB QSU 1 QYT 4 ZUD ZUD K (BA3D) OK AS	CW	(GJK-HOL)
M32	3379	2-4-2013	Tue	2025	FSF2 DE KSA3 133 41 3 0023 133 BT ZPN FM 088501 FOR 1511Z 0 864 BT HUTJT FÜLÖM	CW	(GJK-HOL)
M32	3379	2-4-2013	Tue	2035 DE FSF2 retransmits mgs 133 previously sent by KSA3	CW	(GJK-HOL)
M32	3379	2-4-2013	Tue	2044	B670 823 13 3 0039 823 BT ZCC 864 BT 11111 26513 66150 28455 04129 03691 2734. .	CW	(GJK-HOL)
M32	3326.5	3-4-2013	Wed	0002	K5CL wrkg XMJN 2K6G P8D5 2K6G	CW	(GJK-HOL)
M32	3197	3-4-2013	Wed	0007	ZSC9 wrkg 7LWV IJZO JAOT 8JM5 MCZA 8W1A SIYZ	CW	(GJK-HOL)
M32	3348	3-4-2013	Wed	0012	ZO9Y .TNF JYTU SN6B MLJ8 6JNX 4ANE	CW	(GJK-HOL)
m32	6928	3-4-2013	Wed	1614	OPTJ ZBR ZQY ZGE K //6844 OPTJ DE ZI8Z ZBB ZQY ZHG ZHP ZQE .HY QSU . QYT 6 K	CW	(GJK-HOL)
M32	7964	3-4-2013	Wed	1709	3XJN DE GRI5 QTC 867 223 2048 867 = 992 = PPPPP YLOOC ZEP?Z BO.HT ÄIKJT ...	CW	(GJK-HOL)
M32	7964	3-4-2013	Wed	1755	GRIH: Russian mil. Duplex net, calling 4D9L 1JE6 and 7LN5	CW	(PPA)
M32	6871	3-4-2013	Wed	1810	XXX CHEM 87257 GEKSAMIN 4536 6296 K	CW	(GJK-HOL)
M32	6871	3-4-2013	Wed	1841	XXX CHEM 12696 SEMÄNOSEC 4235 4481 K	CW	(GJK-HOL)

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M32	6828	3-4-2013	Wed	1926	OPTJ ZOF ZQJ ZDO ZOL ZIJ ZEL QSW 3 K //6844 wrkg P64I	CW	(GJK-HOL)
M32	3379	3-4-2013	Wed	2020	B67O QTC 093 45 4 00.5 093 = ZNK 385 = DDDDD ITIEW GYJGC PRPRW K /KSA3	CW	(GJK-HOL)
M32	3348	3-4-2013	Wed	2113	MLJ8 DE ZO9Y 885 19 4 0102 885 = 169 = P P P P P PEDIJ ZESZN ?VHGR KPXD K ...	CW	(GJK-HOL)
M32	3365	3-4-2013	Wed	2139	9ZTN 554 52 4 0035 554 = 190 943 241 = DDDDD EKÜCJ Z?BPH ... KGHGI K	CW	(GJK-HOL)
M32	3299	3-4-2013	Wed	2200	HFKF wrkg D4KN LOI5 UEMK N69L 8LTW .MT.	CW	(GJK-HOL)
M32	3294	3-4-2013	Wed	2202	MTI2 wrkg 8DE. TNSK 8EII OSI8	CW	(GJK-HOL)
M32	3197	3-4-2013	Wed	2204	ZSC9 wrkg 8JMS MCZA 8WIA SIYZ FOXY OESQ	CW	(GJK-HOL)
M32	3282	5-4-2013	Fri	0007	DCX8 working S8G7 ZQP6 J6QW WQWU VAA8 ML68	CW	(GJK-HOL)
M32	3326.5	5-4-2013	Fri	0013	K5CL wrkg P8D6 2I5V VMJN	CW	(GJK-HOL)
M32	3294	5-4-2013	Fri	0029	8EII DE MTI2 387 .850 420 387 = 359 = P P P P P ÄNRPÜ SIKSS DPLÜH ...	CW	(GJK-HOL)
M32	6928	5-4-2013	Fri	1719	MXWM in 5F tfc //6844kHz P64I Z18Z	CW	(GJK-HOL)
M32	3348	5-4-2013	Fri	1832	ZO9Y working MLJ8 6JNX 6.P6	CW	(GJK-HOL)
M32	7964	5-4-2013	Fri	1919	GRI5 working 3XJN OWP4 ZOGA 4D9L 1JE6 7LN5 5I6E(CQ c/s?)	CW	(GJK-HOL)
M32	7041	5-4-2013	Fri	1923	7NWN: Russian Mil "YDGJ de 7NWN QTA 103 K". Outstn replies on 6339 kHz: "7NWN de YDGJ OK QTA 103 K"	CW	(MPJ)
M32	3326.5	5-4-2013	Fri	2000	K5CL P8DS	CW	(GJK-HOL)
M32	3382	5-4-2013	Fri	2005	TY7V working 7K3V XO.U ME3N Y.S9 Z71O 7SNB	CW	(GJK-HOL)
M32	3379	5-4-2013	Fri	2045	KSA5 working FSF2 PL7F 4T1J CD2W	CW	(GJK-HOL)
M32	3294	5-4-2013	Fri	2108	8EII DE MTI2 697 1.6 0059 697 = 028 = P P P P P	CW	(GJK-HOL)
M32	7685	6-4-2013	Sat	0350	Russian mil. Selcall followed by Russian operator with 123 terminata roj priyom and QSY 7679	CW	(PPA)
M32	5104	6-4-2013	Sat	0519	XYTN: Russian mil. net control,duplex radio check with JYI1	CW	(PPA)
M32	5514	7-4-2013	Sun	1900	4Y2G: Russian Mil. NCS exchanges QSAs with at least TS1Z, L8JM and C4HI.	CW	(MPJ)
M32	7964	7-4-2013	Sun	2027	Russian Mil. i.p.: ... de G28F 511 16 17 2302 511 = 604 = P P P P P ChWChFL DIIHZ YRUUÜ ChECUS ... WXMxB JXNc ChWChFL DIIHZ PUPÄE 131 RPT AL QLN K.	CW	(MPJ)
M32	10683	9-4-2013	Tue	1420	XXX RGT77 86792 BENZID 7128 9368 K	CW	(GJK-HOL)
M32	7852	9-4-2013	Tue	1431	NARBIT 4499 9763 XXX XXX WLSN WLHN ?3.33 17152 13595 P.MORAN 3150 0622 DYMOPROWOD 4760 9593 MONALXBIT 4499 9763 K	CW	(JPL-Sib)
M32	7520	9-4-2013	Tue	1433	95.0/ 72883 SANAksariJ 2437 0144 SUNA 2478 5875 K	CW	(JPL-Sib)
M32	7852	9-4-2013	Tue	1438	XXX WLHN WLHN 84320 78993 FOND 1634 4261 RONVA 6612 4867	CW	(JPL-Sib)
M32	7852	9-4-2013	Tue	1440	XXX XXX WLHN WLHN 84320 78993 FOND 1634 4261 RONVA 6612 4867 K	CW	(JPL-Sib)
M32	7520	9-4-2013	Tue	1441	12753 TERSE NX 7598 0128	CW	(JPL-Sib)
M32	7520	9-4-2013	Tue	1442	XXX XXX LOMO LOMO 12753 TERSE NX 75980128 K	CW	(JPL-Sib)
M32	6771	9-4-2013	Tue	1444	XXX WLHN 41822 26885 89754 MENDOCIT 954 9961 NONET 4G.3I 2872 K ONEFERM.A 8620	CW	(GJK-HOL)
M32	7852	9-4-2013	Tue	1444	NONET 4031 2871 KO.EFERMA 8620 2853 K	CW	(JPL-Sib)
M32	7852	9-4-2013	Tue	1446	XXX XXX G5CX G5CX F2ET F2ET 70950 56..4 MENI.ELLA .648 9148	CW	(JPL-Sib)
M32	7852	9-4-2013	Tue	1448	XXX XXX G5CX G5CX F2ET F2ET 70950 56684 MENILELLA .648 9148 K	CW	(JPL-Sib)
M32	6771	9-4-2013	Tue	1448	XXX G5CX F2ET 70950 56684 MENILELLA 1648 9148 K	CW	(GJK-HOL)
m32	10683	9-4-2013	Tue	1520	XXX W6BY 49801 O?METKI 6929 5709 K OMMELX 1804 9172 K	CW	(GJK-HOL)
M32	22864	9-4-2013	Tue	1621	XXX XXX RGT77 RGT77 46311 10362 BOLÄQIJ 8037 6678 GEMATOLIZ 9278 8980 K	CW	(LG2)
M32	22864	9-4-2013	Tue	1642	Ip TETKI 69295 72 04 9172 K	CW	(LG2)
M32	5163	9-4-2013	Tue	1853	Russian Mil.	CW	(BCI)
M32	4397	9-4-2013	Tue	2114	XXX XXX E3.K E41K 793.. SEKWOJA 8049 2151 K	CW	(JPL)
M32	3326.5	11-4-2013	Thu	0008	K5CL wrkg (2I5V) P8DS 2KBD comms checks	CW	(GJK-HOL)
M32	3365	11-4-2013	Thu	0012	4FS3 wrkg ANWA FXAI KTAN comms checks	CW	(GJK-HOL)
M32	3294	12-4-2013	Fri	0008	TQFI DE MCYK 184 19 12 0358 184 = ZRT 8.4 = P P P P P MLEGQ AWPAT 817 K	CW	(GJK-HOL)
M32	3282	12-4-2013	Fri	0022	XWGF wrkg. 8STG BDJL MSXZ KMJH comms. checks //????	CW	(GJK-HOL)
M32	12606	12-4-2013	Fri	0511	Russian Mil: YI5V wrkg 8LTY	CW	(BCI)
M32	8512	12-4-2013	Fri	0530	ZNYC DE M4WF 397 25 12 0930 397 = 118 = UGAFH FKLKL VFUAU OEEIL GVPRP ... WPWEE	CW	(GJK-HOL)
M32	14376	12-4-2013	Fri	1046	i.p 45540 41..4 76470 67416 13 525 33765 47..6 122.. 6123. ...1 431. 07065 0.547 70725 ..672 67.36 6.4..	CW	(JPL-Sib)
M32	7964	12-4-2013	Fri	1719	AH2T 208 23 12 2102 208 = ZTA 631 = P P P P P GOHYV SVEXR XLWTH ..JKA AWPao	CW	(GJK-HOL)
M32	7964	12-4-2013	Fri	2134	Russian Mil: PA9J PA9J PA9J DE AH2T AH2T K R K. Also called TJH3, TUTR, PCYZ	CW	(BCI)
M32	7964	13-4-2013	Sat	1701	AH2T wrkg DS8F LSB5 PA9J TJH3 PCYZ SI6E(CQ) (o/s reportedly on 6957 - nil hrd)	CW	(GJK-HOL)
M32	3379	13-4-2013	Sat	1823	3REC wrkg FTH3 JMXA 2Q.4	CW	(GJK-HOL)
M32	3361	13-4-2013	Sat	2058	SNJV: Russian Mil NCS ends circular Nr 006 18 14 0035 006 = 571 (5LGs). Asks	CW	(MPJ)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
					R 006 ? from 3VXX LPDR ASNR TMQP 1MTJ SCX9 HNMM 2F4T. 2F4T & LPDR are to read back whole message (QXY 006 RPT AL K). Duplex net. QSX not found.		
M32	5794	13-4-2013	Sat	2150	Russian Military/Naval. Enciphered Morse sked in progress: HXNÜZUNY OÖUFQ ...	CW	(MPJ)
M32	3324	13-4-2013	Sat	2230	Tentative Russian Mil. 8SFU DE V5LT K //A. 8SFU K //B. R K //A. 7I6D de V5LT //A. ... R K //B. (see N&O 187)	CW	(JPL-Sib)
M32	6981	15-4-2013	Mon	1450	OLH9 DE QYT6 QTC 610 16 15 1905 610 = 661 = VK.FH MTSPZ LHERH BEZHO RDOCE ...	CW	(GJK-HOL)
M32	5514	15-4-2013	Mon	1913	Russian Mil. RYF2 DE IEYO QSA3 QSA?	CW	(PPA)
M32	10987	16-4-2013	Tue	1057	Russian Mil. XY4X QTC ZZA AR. XY4X QTC ZZA AR. S7LW DE IQQP K. 5HQM DE IQQP K. J2ET DE IQQP K. Q6JP DE IQQP K. CUMJ DE IQQP K. OKEJ DE IQQP K. QRH5 DE IQQP K	CW	(JPL-Sib)
M32	14376	17-4-2013	Wed	0541	Russian Mil. ONKX wkg THSD	CW	(BCI)
M32	18017	17-4-2013	Wed	1243	XXX XXX then into T600 mode	CW	(LG2)
M32	18017	17-4-2013	Wed	1253	XXX XXX WEGI WEGI 44359 89071 WESTFALIÄ 5438 4252 K	CW	(LG2)
M32	9069	18-4-2013	Thu	1056	XXX XXX RGT77 RGT77 42080 62153 TR.MBOWKA 7000 7614 DEFEKTORKA 6827 9065 K	CW	(JPL-Sib)
M32	9069	18-4-2013	Thu	1058	RDL RDL RDL 96580 72457 96580 72457 96580 72457 K	CW	(JPL-Sib)
M32	6996	19-4-2013	Fri	1937	NK8O: Russian Mil. 156-group msg in progress: AHYSX DXEDG RLWYO USVKZ HOGÖy ... L__NB FWLHN ÄOÄTY K. NK8O RPT K. NK8O AS.	CW	(MPJ)
M32	7961	19-4-2013	Fri	2220	AH2T clg LSB5, GHEJ, P9WT, TJH3, TUTR, PCYZ	CW	(LG2)
M32	10623	20-4-2013	Sat	1107	Russian Mil. JI9E DE CALZ QLW QSA ? QXS AR. WPCJ DE CALZ QKW QSA ? (see N&O 187)	CW	(JPL-Sib)
M32	13953	20-4-2013	Sat	1425	NBET: Russian mil. AKLO AKLO QTC AR NBET NBET 200 34 20 1815 200 = ZHE 940 = OLGQD	CW	(PPA)
M32	10988	22-4-2013	Mon	1058	Russian Mil. MML5 DE APAI R 027? K. BJXY DE APAI R 027? K. STGV DE APAI R 027? K. W13D DE APAI R 027? K. LGXQ DE APAI R 027? K	CW	(JPL-Sib)
M32	8696	22-4-2013	Mon	1116	Russian Mil. QSA 1 QAA 1 K. FJND DE HKTC QSV K	CW	(JPL-Sib)
M32	9346	23-4-2013	Tue	1956	Russian Mil. RDL 67_74 78705 67574 ... 67574 K. Then UUU XXX and at least 3 T-600 messages	CW	(MPJ)
M32	4051	23-4-2013	Tue	2004	XEPI DE HD2N K. R K. TPAG DE HD2N K. GOLA DE HD2N K. R K. FBOO DE HD2N K. R K. F5KA DE HD2N K	CW	(JPL-FNL)
M32	3261	23-4-2013	Tue	2040	TNKL: Russian Mil out stations answering apparent comms check with Call K: G1HM, FUSJ, TNKL, NGSJ & QT7H.	CW	(MPJ)
M32	7641	24-4-2013	Wed	0536	Russian Mil: 5PT6 wkg LSUS	CW	(BCI)
M32	7641	24-4-2013	Wed	0551	Russian Mil: 7FO8 wkg 7UZO	CW	(BCI)
M32	9297	24-4-2013	Wed	0551	Russian Mil: YMGM wkg 6HQ9	CW	(BCI)
M32	5243.5	24-4-2013	Wed	0657	zeb5 de tg8f qtc k	CW	(WP3)
M32	3348	25-4-2013	Thu	1850	Russian Mil: XAIW	CW	(BCI)
M32	3365	25-4-2013	Thu	1851	Russian Mil: EJRS	CW	(BCI)
M32	5407	28-4-2013	Sun	1857	W... DE ORIA QTC K. ORIA 284 19 29 2246 284 = 159 = PPPPP (Cont'd)	CW	(JPL-Sib)
M32	7791	30-4-2013	Tue	1040	6YYX DE GPNC K. FOR QRJ? K. R K. KRGN DE GPNC K. VYTB DE GPNC K. QSA 2 QSA? K. R K. 2LX5 DE GPNC K. KRGN DE GPNC K	CW	(JPL-Sib)
M32	5293	30-4-2013	Tue	1610	KJGR DE QN08 EEE. KJGR DE QN8F QSA 2 K. OK QSA 3 R K	CW	(JPL-FNL)
M32a	5881	2-4-2013	Tue	1719	RMP: Russian Navy Baltic Fleet HQ Kalinigrad ip plain text wx rpt to REO	CW	(LG2)
M32a	3192	2-4-2013	Tue	2318	RMP: Russian Navy Baltic Fleet HQ Kaliningrad	CW	(LG2)
M32a	4079	4-4-2013	Thu	0300	Russian Navy. REO DE RMP QTC. 295 1 53 4 0600 295 = SML = PROGNOZ POGODY DO 09 ÖASOW 05 AP etc.	CW	(TR2)
M32a	4079	4-4-2013	Thu	0310	Russian Navy. REO REO DE RMP	CW	(TR2)
M32a	4079	4-4-2013	Thu	0434	Russian Navy. RHC86 DE RMP QSA1 QSX 4109 QWH 3235.5	CW	(TR2)
M32a	4079	4-4-2013	Thu	0510	Russian Navy. RHC86 DE RMP QSA1 QSX 5232 QWH 4326	CW	(TR2)
M32a	9145	4-4-2013	Thu	0618	Russian Navy. VVV RIS96 DE RIW QSA?	CW	(TR2)
M32a	9145	4-4-2013	Thu	0632	Russian Navy. RGV82 DE RIW QSA? RBEZ DE RIW QSA3. RBEZ DE RIW QRU	CW	(TR2)
M32a	9145	4-4-2013	Thu	0632	Russian Navy. RGV82 DE RIW QSA3. RGV82 DE RIW QSA?	CW	(TR2)
M32a	11418	5-4-2013	Fri	1740	RMP	CW	(GJK-HOL)
M32a	5881	9-4-2013	Tue	1720	RMP: Russian Navy, Kaliningrad. Extended weather forecast	CW	(LG2)
M32a	5775	10-4-2013	Wed	2319	RHQ33 DE RCV QSW 1 AR (CW	(JPL-Sib)
M32a	4378	11-4-2013	Thu	0622	RMWT: Russian Navy clg RJD69 (Baltiysk Naval base) "rjd69 de rmwt qsa? qtc k"	CW	(RP-MD)
M32a	12464	11-4-2013	Thu	0759	RHL80: Russian Navy unid RUS 0759 CW rcv de rhl80 qyt4 qsx 12794 k qyt4 qwh8330 k - qyt4 qsx 9988 k - qyt4 qsx 9192 k	CW	(RP-MD)
M32a	12464	11-4-2013	Thu	0805	RHI99: Russian Navy "rcv de rhi99 qsa? k qsa3 qyt4 qsa? k"	CW	(RP-MD)
M32a	12464	11-4-2013	Thu	1204	RKO81: Russian Navy AO Lena "rcv de rko81 332 20 11 1600 332 = for rjh45 rjd38 rje73 = 11121 99367 10262 41798 20101 10270 40119 54000 70200	CW	(RP-MD)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
					82181 22200 00170 20000 30000 88000 80000 11016 = rko81 k		
M32a	12464	11-4-2013	Thu	1217	RCRE: Russian Navy "riw de rcrc"	CW	(RP-MD)
M32a	12464	11-4-2013	Thu	1222	RKA80: Russian Navy "riw de rka80 ok qyt4 qwh 8326 qsx 9500/11727 fm raa k"	CW	(RP-MD)
M32a	12464	11-4-2013	Thu	1359	RGV82: Russian Navy "riw de rgv82 qsa? k"	CW	(RP-MD)
M32a	6827	11-4-2013	Thu	2100	RIT: Russian Navy HQ Severomorsk RUS 2100 CW rlo de rit qtc 991 34 12 0058 991 = Radioprognoz	CW	(RP-MD)
M32a	9145	12-4-2013	Fri	1603	RGV82 DE RIW K	CW	(GJK-HOL)
M32a	8345	12-4-2013	Fri	1807	RKO81: Russian navy warship 5F message to RCV	CW	(PPA)
M32a	9145	15-4-2013	Mon	1651	RMC99 DE RIW K (calls only)	CW	(GJK-HOL)
M32a	8345	18-4-2013	Thu	1804	RKO81: Russian Navy AO Lena "rcv de rko81 817 20 18 2200 817 = for rjh45 rjd38 rje73 = 18181 99360 10153 41998 23001 10220 40172 57020 70200 82012 22200 00180 20000 30000 88000 80000 18016 = + rko81 k"	CW	(WP3)
M32a	10543	18-4-2013	Thu	1951	RCV: Navy Sevastopol. VVV RHL80 DE RCV QSA?	CW	(PPA)
M32a	11418	19-4-2013	Fri	1852	RMP: Navy Kaliningrad clg RKO81	CW	(PPA)
M32a	5086	19-4-2013	Fri	2004	RMP: Kaliningrad Naval Radio. Ends enciphered Morse sked with RKA80: QDLWYBOBPMAMDUIAD RKA80 de RMP SK K and gone.	CW	(MPJ)
M32a	4886	19-4-2013	Fri	2011	RMP: Kaliningrad Naval Radio. Ends enciphered Morse sked with RJL99: MLONDÜ... RJL99 de RMP K. OK? K. R K and gone	CW	(MPJ)
M32a	4115	21-4-2013	Sun	1130	Russian Navy. rmp de rmdt 229 18 21 1515 229 = for rjh45 rjd38 reg98 = 21121 99547 10156 4//98 10705 10060 40211 54005 7//// 8//// 22252 00030 2//// 3//// 21014 = rmdt k	CW	(WP3)
M32a	8345	21-4-2013	Sun	1804	Russian Navy AO Lena. rcv de rko81 417 20 21 2200 417 = for rjh45 rjd38 rje73 = 21181 99343 10325 41698 43403 10180 40092 54000 70311 84200 22223 00180 29902 399// 88000 80000 21016 = + rko81 k	CW	(WP3)
M32a	8345	22-4-2013	Mon	1805	Russian Navy AO Lena. rcv de rko81 512 20 22 2200 512 = for rjh45 rjd38 rje73 = 22181 99350 10351 41698 12004 10200 40106 51006 70121 81200 22212 00185 29901 399// 88000 80000 22016 = + rko81 k	CW	(WP3)
M32a	11000	24-4-2013	Wed	1805	Russian Navy HQ Moscow. rhq33 de riw qyt4 qwh 8623/12668 qsx 8338/12374 k	CW	(WP3)
M32a	8345	24-4-2013	Wed	1805	Russian Navy AO Lena. rcv de rko81 898 20 24 2200 898 = for rjh45 rjd38 rje73 = 24181 99363 10351 41998 22805 10210 40186 56006 70200 82011 22200 00190 29901 30000 88000 80000 24016 = + rko81 k	CW	(WP3)
M32a	8345	25-4-2013	Thu		RIR96: Russian Navy vessel Azov (151) rcv de dir96 confirming xxx msgs from rcv	CW	(WP3)
M32a	11000	27-4-2013	Sat	0901	RIW: Navy HQ Moscow RUS "QYT4"	CW	(PPA)
M32a	4195	28-4-2013	Sun	0118	RIT de RGR35 QYT4 QSA2 K	CW	(Alan)
M32a	7861	28-4-2013	Sun	1905	Russian Navy. RFH2 DE RAL2 QSA ? K. RDU2 DE RAL2 QSA ? K (see N&O 187)	CW	(JPL-Sib)
M32a	10544	28-4-2013	Sun	2059	RGV82 DE RCV QYT 4 QSX 10492 K. RGV82 DE RCV K. RCV AS 2	CW	(JPL-Sib)
M32a	6912	30-4-2013	Tue	1829	RBIZ: Russian Warship. "RCV de RBIZ QTC K. RBIZ de RCV QRV K. RBIZ 685 17 30 2200 685 = FOR RJE73 RJH45 = 30181 99350 ... 88000 30014 = + RBIZ K. RCV QSL 685 K. RBIZ OK QRU K". Simplex net.	CW	(MPJ)
M32a	6912	30-4-2013	Tue	1838	RBIZ: Russian Warship 1838 CW RCV de RBIZ QYT4 QSX 5472/5472 K.	CW	(MPJ)
M32b	8816	16-4-2013	Tue	0655	Russian Naval Air Transport "rjf94 rcb de 04105 qto 0647 qrd XLLV XMKK qah 5800 qbd 0500 k - qqm XLLV 0906 sk"	CW	(WP3)
M32b	8816	16-4-2013	Tue	0735	Russian Naval Air Transport "rjf94 rjc38 de 26910 qqI ULWC 0733 qbg 5500 k - qay XLPB 0830 qbd 3100 k - qqI ULPE 0920 qbd 2300 k - qqI XLMF 1005 qre XLMV 1045 k - qqm XLMV 1046 sk"	CW	(WP3)
M32b	8816	16-4-2013	Tue	1440	Russian Naval Air Transport "rjf94 rcb de 04105 qto 1430 qrd XMKK XLLV qah 5500 qbd 0500 k qth 5910 2138 qtr 1600 qah 5500 qbd 0400 k - qqm XMKK 1728 sk"	CW	(WP3)
M32b	8816	18-4-2013	Thu	0716	42322: Russian Naval Air Transport "rjf94 rcb de 42322 qto 0658 qrd XLLV XMKK qre 0930 qah 5800 qbd 4400 k - qth 5911 2142 qtr 0811 qal XLLV 0915 qah 5800 qbd 3200 k - qqm XLLV 0916 sk"	CW	(WP3)
M32b	8816	18-4-2013	Thu	0733	26910: Russian Naval Air Transport "rjf94 rjc38 de 26910 qto 0730 qrd XRRC XLWF qbd 4900 qre 1140 k - qth 5622 3726 qtr 0825 qbd 3800 k - qth 5223 3856 qtr 0925 qbg 5800 k - qth 4932 4026 qtr 1015 qre XRRC 1110 k -- qqm XRRC 1108 sk"	CW	(WP3)
M32b	8816	18-4-2013	Thu	0810	10710: Russian Naval Air Transport "rjf94 rjc38 de 10710 qto 0800 qrd URKA XLMV qre 1340 qbd 1880 k - qth 6456 3429 qtr 0901 qbg 7000 k - qqI ULWC 1004 qbg 7300 k - qth 5510 3747 qtr 1058 qbk 7600 qbd 12200 k - qth 5047 4035 qtr 1157 qbk 7600 qbd 10800 k qth 4539 3919 qtr 1303 qbd 8600 qbg 7600 k"	CW	(WP3)
M32b	8816	18-4-2013	Thu	1037	42322: Russian Naval Air Transport "rjf94 rcb de 42322 qto 1032 qrd XUMO XLLV qre 1215 qah 5800 qbd 4400 k - qqI UUWR 1133 qal XUMO 1211 qah 5800 qbd 3500 k - qqm XUMO 1218 sk"	CW	(WP3)
M32b	8816	18-4-2013	Thu	1550	26910: Russian Naval Air Transport "rjf94 rjc38 de 26910 qto 1545 qrd XUMO XRRC qbd 5000 qre 1845 k - qth 5345 3830 qtr 1750 qre XUMO 1840 k - qqm	CW	(WP3)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
					XUMO 1833 sk"		
M32b	8816	20-4-2013	Sat	0640	Russian Naval Air Transport. rjf94 rjc38 de 10710 qto 0630 qrd XRKE URKA qre 0705 qbd 14500 k - qqm XRKE 0702 sk	CW	(WP3)
M32b	8816	20-4-2013	Sat	0715	Russian Naval Air Transport. rjf84 rcb de 42322 qto 0700 qrd XLLV XUMO qre 0900 qah 5500 qbd 4200 k - qql UUWR 0800 qal XLLV 0900 qah 5500 qbd 3300 k - qqm XLLV 0912 sk	CW	(WP3)
M32b	8816	20-4-2013	Sat	0724	Russian Naval Air Transport. rjf94 rjc38 de 26910 qto 0710 qrd XLWF XUMO qbd 4400 qre 0840 k - qqm XLWF 0823 sk	CW	(WP3)
M32b	8816	20-4-2013	Sat	1130	Russian Naval Air Transport. rjf94 rjc38 de 10710 qto 1124 qrd XUMO XRKE qre 1400 qbd 13500 k - qth 5106 3937 qtr 1229 qbg 7300 k - qre XUMO 1335 k - qqm XUMO 1338 sk)	CW	(WP3)
M32b	8816	20-4-2013	Sat	1540	Russian Naval Air Transport. rjf94 rjc38 de 10710 qto 1530 qrd XLMV XUMO qre 1900 qbd 13800 k - qql ULWC 1624 qbg 6700 k - qth 6456 3429 qtr 1735 qbg 6700 qre XLMV 1840 k - qqm XLMV 1839 sk	CW	(WP3)
M32b	8816	22-4-2013	Mon	0175	Russian Naval Air Transport. rjf94 rjc38 de 26910 qto 0705 qrd XLMV XLAA qbd 5400 qre 0900 k - qth 6708 3357 qtr 0815 qre XLMV 0900 k - qqm XLMV 0903 sk	CW	(WP3)
M32b	8816	22-4-2013	Mon	0550	Russian Naval Air Transport. rjf94 rcb de 42322 qto 0537 qrd XLOO XMKK qre 0900 qah 5800 qbd 4200 k - qth 5822 2043 qtr 0936 qah 5800 qbd 3800 k	CW	(WP3)
M32b	8816	22-4-2013	Mon	0715	Russian Naval Air Transport. rjf94 rjc38 de 10712 qto 0700 qrd XLMV ULAA qre 0830 qbd 11500 k - qth 6727 3247 qtr 0758 qbg 6000 k - qqm XLMV 0832 sk	CW	(WP3)
M32b	8816	22-4-2013	Mon	0952	Russian Naval Air Transport. rjf94 rcb de 42320 qto 0908 qrd XLLP XMKK qah 5800 qth 5719 2005 qtr 0950 qbd 0440 k - qth 6001 2728 qtr 1105 qah 5800qal XLLP 1133 qbd 0320 k - qqm XLLP 1131 sk	CW	(WP3)
M32b	8816	22-4-2013	Mon	1010	Russian Naval Air Transport. rjf94 rjc38 de 26910 qto 1000 qrd XLWF XLMV qbd 5200 qre 1300 k - qay XLPB 1200 qre XLWF 1300 k - qqm XLWF 130	CW	(WP3)
M32b	8816	22-4-2013	Mon	1402	Russian Naval Air Transport. rjf94 rcb de 42320 to 1300 qrd XMKK XLLP qah 5500 qth 5941 2404 qtr 1400 qbd 0430 k - qth 5714 2003 qtr 1505 qah 5500 qal XMKK 1555 qbd 0340 k - qqm XMKK 1550 sk	CW	(WP3)
M32b	8816	22-4-2013	Mon	1430	Russian Naval Air Transport. rjf94 rjc38 de 26916 qto 1420 qrd XRKE XLWF qbd 5400 qre 1830 k - qth 5552 3655 qtr 1522 qbg 6700 k - qth 5148 3713 qtr 1625 qbd 2800 k - qth 4856 4025 qtr 1725 qre XRKE 1820 k - qqm XRKE 1823 sk	CW	(WP3)
M32b	8816	23-4-2013	Tue	0757	Naval air transport. rjf94 rcb de 04105 qto 0747 qrd XLLV XMKK qah 5800 qbd 0520 k - qth 5933 2314 qtr 0912 qah 5800 qal XLLV 1004 qbd 0400 k - qqm XLLV 1018 sk	CW	(WP3)
M32b	8816	23-4-2013	Tue	1642	Naval air transport. rjf94 rcb de 04105 qqm XUMO 1640 sk	CW	(WP3)
M32b	8816	24-4-2013	Wed	1805	Russian Naval Air Transport. rjf94 rjc38 de 10712 qto 1408 qrd XRRC XLLP qre 1750 qbd 14700 k - qth 5631 3455 qtr 1502 qbg 7600 - qth 5106 3937 qtr 1610 qbg 7600 qre XRRC 1735 k - qre XRRC 1710 k - qqm XRRC 1703 sk	CW	(WP3)
M32b	8816	24-4-2013	Wed	1805	Russian Naval Air Transport. rjf94 rcb de 04105 qto 1146 qrd XMKK XLLV qah 5500 qbd 0520 k - qth 5750 2023 qtr 1353 qah 5500 qal XMKK 1455 qbd 0300 k - qqm XMKK 1449 sk	CW	(WP3)
M32b	8816	24-4-2013	Wed	1805	Russian Naval Air Transport. rjf94 rcb de 04105 qto 0806 qrd XLLV XUMO qah 5500 qbd 0330 k - qth 5809 3422 qtr 0914 qah 5500 qal XLLV 1010 qbd 0230 k - qqm XLLV 1019 sk	CW	(WP3)
M32b	8816	24-4-2013	Wed	1805	Russian Naval Air Transport. rjf94 rjc38 de 10712 qto 0941 qrd XLLP XLMV qre 1220 qbd 13500 k - qth 6112 3222 qtr 1140 qbg 6700 qre XLLP 1210 k - qqm XLLP 1215 sk	CW	(WP3)
M32c	5620	9-4-2013	Tue	1800	Russian Air Force W-Markers. Also at 1840, 1900 and 1920 UTC	CW	(Tom)
M32c	8170	9-4-2013	Tue	2110	Russian AF. Very weak. HAFL DE ? (Garbled call sign) = 026 144 081 477 006 528 K	CW	(Tom)
M32c	5620	9-4-2013	Tue	2140	Russian AF. W-markers	CW	(Tom)
M32c	8029	9-4-2013	Tue	2140	Russian AF. W-markers	CW	(Tom)
M32c	8029	15-4-2013	Mon	1140	Russian AF. W-markers	CW	(WP3)
M32c	8170	15-4-2013	Mon	1700	Russian AF wkg AF station on 8092 kHz	CW	(Tom)
M32c	8029	15-4-2013	Mon	1700	Russian AF wkg AF station on 8170 kHz	CW	(Tom)
M32c	8029	15-4-2013	Mon	1720	Russian AF. W-markers	CW	(Tom)
M32c	8029	15-4-2013	Mon	1741	TRL5: Russian AF	CW	(Tom)
M32c	8170	15-4-2013	Mon	1741	Russian AF: C- and K-markers	CW	(Tom)
M32c	8170	18-4-2013	Thu	1222	MMWD DE QDIH K (1224z) TRL5 DE QDIH K (1225z) QDIH DE TRL5 K. MMWD DE QDIH QTC K (1229z) A8DO DE QDIH BLIND = 868 798 790 031 019 456 797 622 904 856 101 158 = 868 798 790 031 019 456 797 622 904 856 101 158 K	CW	(TR2)
M32c	8029	18-4-2013	Thu	1240	Russian AF. W-markers	CW	(Tom)
M32c	8029	18-4-2013	Thu	1300	Russian AF. W-markers	CW	(TR2)
M32c	8170	18-4-2013	Thu	1310	A8DO A8DO DE QDIH (1311z) TRL5 DE QDIH QTC K (1314z) TRL5 DE QDIH = 868 798 790 031 019 456 797 622 904 856 101 158 K	CW	(TR2)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
M32c	8170	18-4-2013	Thu	1314	Russian AF. TRL5 DE QDIH = 868 798 790 031 019 456 797 622 904 856 101 158 K	CW	(TR2)
M32c	8029	18-4-2013	Thu	1315	Russian AF. QDIH DE TRL5 = 868 798 790 031 019 456 797 622 904 856 101 158 K	CW	(TR2)
M32c	8170	18-4-2013	Thu	1315	QDIH BLIND = 868 798 790 031 019 456 797 622 904 856 101 158 = 868 798 790 031 019 456 797 622 904 856 101 158 K. TRL5 DE QDIH BLIND 645 456 222 592 904 908 609 620 = 645 456 222 592 904 908 609 620 K	CW	(TR2/Tom)
M32c	8029	18-4-2013	Thu	1320	Russian AF: TRL5 QTA QLX QCM K	CW	(Tom)
M32c	8070	20-4-2013	Sat	0439	REA: Russian Air Force. Duplex. RNM2 RNM2 DE REA QSA? REA OK QSA4 ZOR K	CW	(PPA)
M42	4181	25-3-2013		2144	Russian Gov/Intel. Mark after every 50th group	Baudot 50/500	(BCI)
M42	16320	1-4-2013	Mon	0150	Russian Intel. Id 0x3f	FSK 200/1000	(Dan)
M42	12122	1-4-2013	Mon	0703	Russian diplo	CROWD-36	(PPA)
M42	14880	1-4-2013	Mon	0800	Russian diplo	CROWD-36	(PPA)
M42	16320	2-4-2013	Tue	0150	Russian Intel. Id 0xff	FSK 200/1000	(Dan)
M42	20574	2-4-2013	Tue	1402	Russian Intel, Moscow	FSK 200/1000	(MCO)
M42	16320	3-4-2013	Wed	0150	Russian Intel.	FSK 200/1000	(Dan)
M42	18476	3-4-2013	Wed	1235	Russian Intel, Moscow. Null msg	FSK 200/1000	(MCO)
M42	16320	4-4-2013	Thu	0150	Russian Intel. Id 0xa5	FSK 200/1000	(Dan)
M42	16321	4-4-2013	Thu	0201	Russian Intel, Moscow	FSK 200/1000	(MCO)
M42	163452	4-4-2013	Thu	1105	Russian diplo	CROWD-36	(LG2)
M42	15643	4-4-2013	Thu	1302	Russian diplo, Moscow clg "RAP" on link 50101	Baudot 75/500	(MCO)
M42	7992	4-4-2013	Thu	1742	Russian intel	FSK 200/1000	(PPA)
M42	9186	4-4-2013	Thu	1900		FSK 200/500	(HFD)
M42	6989	4-4-2013	Thu	1910		FSK 200/500	(HFD)
M42	5127	4-4-2013	Thu	1920		FSK 200/500	(HFD)
M42	17471	5-4-2013	Fri	0001	Russian Intel, Moscow 5FGs offline crypto	FSK 200/500	(MCO)
M42	16320	5-4-2013	Fri	0150	Russian Intel. Id 0xaf	FSK 200/1000	(Dan)
M42	18206	6-4-2013	Sat	1200		FSK 200/500	(HFD)
M42	16159	6-4-2013	Sat	1210		FSK 200/500	(HFD)
M42	14551	6-4-2013	Sat	1220		FSK 200/500	(HFD)
M42	14421	8-4-2013	Mon	0106	Russian Gov/Intel. 5FGs offline crypto	Baudot 200/500	(MCO)
M42	16320	8-4-2013	Mon	0150	Russian Intel.	FSK 200/1000	(Dan)
M42	16118	8-4-2013	Mon	0955	Russian diplo	CROWD-36	(FN)
M42	16320	9-4-2013	Tue	0150	Russian Intel.	FSK 200/1000	(Dan)
M42	13979	9-4-2013	Tue	1213	Russian diplo	CROWD-36	(LG2)
M42	16320	10-4-2013	Wed	0150	Russian Intel. Id 0xaa	FSK 200/1000	(Dan)
M42	16320	11-4-2013	Thu	0150	Russian Intel.	FSK 200/1000	(Dan)
M42	16320	12-4-2013	Fri	0150	Russian Intel.	FSK 200/1000	(Dan)
M42	16320	15-4-2013	Mon	0150	Russian Intel. Id 0x36	FSK 200/1000	(Dan)
M42	16320	16-4-2013	Tue	0150	Russian Intel.	FSK 200/1000	(Dan)
M42	7549	16-4-2013	Tue	0707	ROK2: Russian Gov. Comms ends with "priyom" and counting	USB	(LG2)
M42	16320	17-4-2013	Wed	0150	Russian Intel. Id 0x3e	FSK 200/1000	(Dan)
M42	16320	18-4-2013	Thu	0150	Russian Intel.	FSK 200/1000	(Dan)
M42	10595	18-4-2013	Thu	0656	RKD48: Russian Gov. Encrypted tfc	FSK 100/500	(LG2)
M42	10704.7	18-4-2013	Thu	0707	RBY70: Russian Gov. Yekaterinburg. Idling and sporadic bursts of traffic	FSK 100/1000	(LG2)
M42	16320	19-4-2013	Fri	0150	Russian Intel	FSK 200/1000	(Dan)
M42	12196	20-4-2013	Sat	1820	Russian Gov/Intel. Null message 00000+++++++162)5761	Baudot 187.5/500	(PPA)
M42	16320	22-4-2013	Mon	0150	Russian Intel. Id 0x36	FSK 200/1000	(Dan)
M42	16320	24-4-2013	Wed	0150	Russian Intel.	FSK 200/1000	(Dan)
M42	16320	26-4-2013	Fri	0150	Russian Intel.	FSK 200/1000	(Dan)
M42	16320	29-4-2013	Mon	0150	Russian Intel. Id 0xa	FSK 200/1000	(Dan)
M42	14473	29-4-2013	Mon	1615	Russian Gov/Intel NT9P/K4MT net	FSK 50/500	(linkz)
M42	16320	30-4-2013	Tue	0150	Chinese Mil.	FSK 200/1000	(Dan)
M42	20574	30-4-2013	Tue	1400	Russian Intel.	FSK 200/1000	(linkz)
M42	18469	30-4-2013	Tue	1410	Russian Intel.	FSK 200/1000	(linkz)
M42	16311	30-4-2013	Tue	1420	Russian Intel.	FSK 200/1000	(linkz)
M42	18509	30-4-2013	Tue	2110	Russian Intel.	FSK 200/1000	(linkz)
M42	16231	30-4-2013	Tue	2120	Russian Intel.	FSK 200/1000	(linkz)
M42	9265	30-4-2013	Tue	2300	Russian Intel.	FSK 200/1000	(linkz)
M42	7869	30-4-2013	Tue	2310	Russian Intel.	FSK 200/1000	(linkz)
M42	5353	30-4-2013	Tue	2320	Russian Intel.	FSK 200/1000	(linkz)
M42a	13371	5-4-2013	Fri	1419	'AA'-Type Station 1419 CW ... Ä 67432 Ä R. 98292 Ä A. VVVs 3 K. 3 K. VVVs 2 K. CW		(MPJ)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
M42a	10184	23-4-2013	Tue	0743	GRU HFDF net VVV 3K VVV 3K VVV 3K	CW	(BCI)
M45	4556.1	2-4-2013	Tue	1816	ip	CW	(Q-HOL)
M45	4956.1	2-4-2013	Tue	1816	ip	CW	(Q-HOL)
M45	4553.9	4-4-2013	Thu	1808	In progress, not readable ... 51730 26489 _7892 08961 ... 4 MHz freq not checked	CW	(MPJ)
M45	4556	9-4-2013	Tue	1806	i.p.	CW	(Q-HOL)
M45	4956.5	11-4-2013	Thu	1802	In progress ... 26489 07892 08961 14471 37258 ... 21284 99796 89886 49860 82183 = = 231 30 000. Freqs: 4556.15 4957.3 4953.9 & 4956.5 kHz	CW	(MPJ)
M51	5453	1-4-2013	Mon	1718	ip 5LGs	CW	(LG2)
M51	4440.5	11-4-2013	Thu	0611	nr 46 a 11 0071200 1985	CW	(RP-MD)
M51	8016	15-4-2013	Mon	1554	NR 88 A 15 17:56:09 1985 = OXMLQ (cont'd)	CW	(GJK)
M51	8016	15-4-2013	Mon	1741	French military intel Favieres F. 5L msg after 14 a 15 17:35:57 1985 =	CW	(PPA)
M51	6820	18-4-2013	Thu	0613	slow morse practice	CW	(LG2)
M51	7535	20-4-2013	Sat	1713	NR 54 A 16 19:13:57 1985 BT MMPCI ... IFZZC BT	CW	(Spec)
M51	7535	20-4-2013	Sat	1720	NR 55 A 16 19:20:05 1985 BT JJOON ... GMIXO BT	CW	(Spec)
M51	7535	20-4-2013	Sat	1726	NR 56 A 16 19:26:20 1985 BT LEEBT ... NYHMI BT	CW	(Spec)
M51	7535	20-4-2013	Sat	1732	NR 57 A 16 19:32:33 1985 BT QZVTT ... JMNCF BT	CW	(Spec)
M51	7535	20-4-2013	Sat	1738	NR 58 A 16 19:38:44 1985 BT VJSXC ... IASER BT	CW	(Spec)
M51	7535	20-4-2013	Sat	1744	NR 59 A 16 19:44:53 1985 BT SFGJN ... HKILG BT	CW	(Spec)
M51	7535	20-4-2013	Sat	1751	NR 60 A 16 19:51:08 1985 BT UCNZJ ... HOQGD BT	CW	(Spec)
M51	7535	20-4-2013	Sat	1757	NR 61 A 16 19:57:25 1985 BT AKPLJ ... PYQA0 BT	CW	(Spec)
M51	5828.5	26-4-2013	Fri	1825	5FGS	CW	(BvR)
M51	5902.5	26-4-2013	Fri	1840	5FGS	CW	(BvR)
M51a	6825	1-4-2013	Mon	0846	FAV22 Coded text lesson	CW	(LG2)
M51a	6825	5-4-2013	Fri	1303	FAV22 exercise in clear	CW	(ML4)
M89	10180	1-4-2013	Mon	0334	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10321	1-4-2013	Mon	0339	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	10779	1-4-2013	Mon	0341	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10180	1-4-2013	Mon	0914	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5801	1-4-2013	Mon	0914	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10321	1-4-2013	Mon	0916	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	10326	1-4-2013	Mon	0917	AR QSL ? K. (see N&O 187)	CW	(JPL)
M89	10779	1-4-2013	Mon	0930	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	5500	1-4-2013	Mon	1255	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	1-4-2013	Mon	1255	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	4590	1-4-2013	Mon	1258	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	1-4-2013	Mon	1300	/3198/3111/04/01/2130/887/A/7/88/85/56 AR	CW	(JPL)
M89	3797	1-4-2013	Mon	1309	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	1-4-2013	Mon	1309	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	5230	1-4-2013	Mon	1312	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	1-4-2013	Mon	1312	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3330	1-4-2013	Mon	1314	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	5230	1-4-2013	Mon	1637	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	4474	1-4-2013	Mon	1643	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	3330	1-4-2013	Mon	1701	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	5583	1-4-2013	Mon	1703	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	5525	1-4-2013	Mon	1707	764D DA4U .75D 5T.. T.54 5NU .6UA (see N&O 187)	CW	(JPL)
M89	5230	1-4-2013	Mon	1952	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	3642	1-4-2013	Mon	1952	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3330	1-4-2013	Mon	1954	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	4512	1-4-2013	Mon	1956	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	4474	1-4-2013	Mon	1958	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //5583	CW	(JPL)
M89	5583	1-4-2013	Mon	1958	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //4474	CW	(JPL)
M89	5588	2-4-2013	Tue	0957	MSG NR 008 CK 301 44 0402 1800 =	CW	(JPL)
M89	4225	2-4-2013	Tue	1034	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	2-4-2013	Tue	1034	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	8789	2-4-2013	Tue	1035	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	10779	2-4-2013	Tue	1035	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	4512	2-4-2013	Tue	1037	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	8101	2-4-2013	Tue	1122	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	2-4-2013	Tue	1122	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //8101	CW	(JPL)
M89	10518	2-4-2013	Tue	1124	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
M89	7769	2-4-2013	Tue	1137	= TD36 476U DU7A 3DT5 DTN4 D754 UTN5 (Cont&Ed)	CW	(JPL)
M89	3300	2-4-2013	Tue	1228	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	4225	2-4-2013	Tue	1229	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	2-4-2013	Tue	1229	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	7607	2-4-2013	Tue	1231	V WITN (x3) DE GNXG (x2) (Cont'd) //3725	CW	(JPL)
M89	3725	2-4-2013	Tue	1231	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	4512	2-4-2013	Tue	1233	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	2-4-2013	Tue	1233	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	10180	2-4-2013	Tue	1235	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //8101	CW	(JPL)
M89	5500	2-4-2013	Tue	1515	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	2-4-2013	Tue	1515	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	3725	2-4-2013	Tue	1517	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	7607	2-4-2013	Tue	1517	V WITN (x3) DE GNXG (x2) (Cont'd) //3725	CW	(JPL)
M89	3797	2-4-2013	Tue	1518	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	2-4-2013	Tue	1518	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3300	2-4-2013	Tue	1519	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	5500	2-4-2013	Tue	2126	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	2-4-2013	Tue	2126	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	3725	2-4-2013	Tue	2128	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	7607	2-4-2013	Tue	2128	V WITN (x3) DE GNXG (x2) (Cont'd) //3725	CW	(JPL)
M89	3797	2-4-2013	Tue	2130	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	2-4-2013	Tue	2130	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3642	2-4-2013	Tue	2132	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	3300	2-4-2013	Tue	2134	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	5583	2-4-2013	Tue	2229	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //5583	CW	(JPL)
M89	4474	2-4-2013	Tue	2229	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //5583	CW	(JPL)
M89	10779	3-4-2013	Wed	0218	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10640	3-4-2013	Wed	0220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	3-4-2013	Wed	0220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //10640	CW	(JPL)
M89	10180	3-4-2013	Wed	0232	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5801	3-4-2013	Wed	0232	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10518	3-4-2013	Wed	0234	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	10507	3-4-2013	Wed	0236	R QSL 1037 K K. OK QSL 1037 K. OK. NR 8003/EX 1039 RMKS .773 TO 0778 K K. OK = QY2C DE RSA. AR K. OK OK	CW	(JPL)
M89	10779	3-4-2013	Wed	0244	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10640	3-4-2013	Wed	1020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	3-4-2013	Wed	1020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //10640	CW	(JPL)
M89	5500	3-4-2013	Wed	1026	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	4512	3-4-2013	Wed	1028	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	3-4-2013	Wed	1028	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	5588	3-4-2013	Wed	1030	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	10180	3-4-2013	Wed	1105	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5801	3-4-2013	Wed	1105	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	4860	3-4-2013	Wed	1620	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	3-4-2013	Wed	1620	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	5500	3-4-2013	Wed	1626	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	4512	3-4-2013	Wed	1628	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	7607	3-4-2013	Wed	1630	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	4590	3-4-2013	Wed	1630	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	3330	3-4-2013	Wed	1630	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	7602	3-4-2013	Wed	1920	V DKG6 DKG6 DKG6 de 3A7D 3A7D	CW	(FN)
M89	6840	3-4-2013	Wed	1923	VVV Q2M Q2M Q2M de NYZ NYZ	CW	(FN)
M89	5500	3-4-2013	Wed	2028	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	4590	3-4-2013	Wed	2030	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	7607	3-4-2013	Wed	2030	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	4512	3-4-2013	Wed	2032	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	3-4-2013	Wed	2032	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3642	3-4-2013	Wed	2034	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	3330	3-4-2013	Wed	2036	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	8110	8-4-2013	Mon	0838	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	7582	8-4-2013	Mon	0838	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	10779	8-4-2013	Mon	0840	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
M89	8789	8-4-2013	Mon	0840	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	5801	8-4-2013	Mon	0857	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	8-4-2013	Mon	0857	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	10518	8-4-2013	Mon	0902	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	5588	8-4-2013	Mon	0953	MSG NR 032 CK 301 44 0408 1830 = (see N&O 187)	CW	(JPL)
M89	6840	8-4-2013	Mon	1020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //10640	CW	(JPL)
M89	10640	8-4-2013	Mon	1020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	5500	8-4-2013	Mon	1053	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	8-4-2013	Mon	1053	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	8789	8-4-2013	Mon	1054	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	10779	8-4-2013	Mon	1054	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	4512	8-4-2013	Mon	1055	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	3642	8-4-2013	Mon	1321	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	8-4-2013	Mon	1321	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	4474	8-4-2013	Mon	1324	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //5583	CW	(JPL)
M89	5583	8-4-2013	Mon	1324	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //4474	CW	(JPL)
M89	3330	8-4-2013	Mon	1628	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	7607	8-4-2013	Mon	1752	V WITN (x3) DE GNXG (x2) (Cont'd) //3725	CW	(JPL)
M89	3725	8-4-2013	Mon	1752	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	10180	9-4-2013	Tue	0245	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5801	9-4-2013	Tue	0245	VV HR SVC GA (see N&O 187)	CW	(JPL)
M89	10518	9-4-2013	Tue	0304	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	8743	9-4-2013	Tue	0314	NA73 N? TAU4 N4? N373 TAU4 N566 T566 N564 (see N&O 187)	CW	(JPL)
M89	10779	9-4-2013	Tue	0329	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	8789	9-4-2013	Tue	0331	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	10779	9-4-2013	Tue	0331	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	8110	9-4-2013	Tue	0333	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	7582	9-4-2013	Tue	0333	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	7582	9-4-2013	Tue	0929	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	8110	9-4-2013	Tue	0929	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	8789	9-4-2013	Tue	0931	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	10779	9-4-2013	Tue	0931	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	10180	9-4-2013	Tue	0934	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	5588	9-4-2013	Tue	0937	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	10640	9-4-2013	Tue	1020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	9-4-2013	Tue	1020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //10640	CW	(JPL)
M89	5801	9-4-2013	Tue	1022	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	9-4-2013	Tue	1022	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	10518	9-4-2013	Tue	1024	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	4474	9-4-2013	Tue	1410	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	3642	9-4-2013	Tue	1412	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	7602	9-4-2013	Tue	1412	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3330	9-4-2013	Tue	1414	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	7602	9-4-2013	Tue	1556	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	9-4-2013	Tue	1556	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	11158	9-4-2013	Tue	1848	V RXP7 RXP7 RXP7 DE CZT2 CZT2	CW	(PPA)
M89	4225	9-4-2013	Tue	2035	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	9-4-2013	Tue	2035	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	7602	9-4-2013	Tue	2037	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	9-4-2013	Tue	2037	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	4590	9-4-2013	Tue	2039	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	9-4-2013	Tue	2041	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	9-4-2013	Tue	2041	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3330	9-4-2013	Tue	2042	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	5801	10-4-2013	Wed	0249	99 19 0410 10.. = 13.9 TO 1.89 1090 (see N&O 187)	CW	(JPL)
M89	10180	10-4-2013	Wed	0249	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5588	10-4-2013	Wed	1019	6T54 DNT6 N536 43AT (Cont'd) II = 5465	CW	(JPL)
M89	10779	10-4-2013	Wed	1039	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	10-4-2013	Wed	1041	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	10180	10-4-2013	Wed	1042	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	8101	10-4-2013	Wed	1048	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	10-4-2013	Wed	1048	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //8101	CW	(JPL)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
M89	10518	10-4-2013	Wed	1050	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	7841	10-4-2013	Wed	1059	.5A3 7U6N AR K (see N&O 187)	CW	(JPL)
M89	7607	10-4-2013	Wed	1113	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	6840	10-4-2013	Wed	1520	VVV (x3) Q2M DE NYZ (x2) QSA ? K	CW	(JPL)
M89	4590	10-4-2013	Wed	1529	In tfc: ... 2330 RMKS 1478 TO 052. 0868 0839 0851 02.8 0808 0398 0698 1474 1498 .497 0529 0869 =	CW	(JPL)
M89	7607	10-4-2013	Wed	1529	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	5550	10-4-2013	Wed	1541	43TA 6455 T757 (see N&O 187)	CW	(JPL)
M89	10779	10-4-2013	Wed	2325	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	8789	10-4-2013	Wed	2325	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	5583	10-4-2013	Wed	2330	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //4474	CW	(JPL)
M89	4474	10-4-2013	Wed	2330	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //5583	CW	(JPL)
M89	10779	11-4-2013	Thu	0226	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	8789	11-4-2013	Thu	0226	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	10180	11-4-2013	Thu	0230	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5801	11-4-2013	Thu	0230	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10779	11-4-2013	Thu	0931	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	5588	11-4-2013	Thu	0933	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	10180	11-4-2013	Thu	0937	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5801	11-4-2013	Thu	0937	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	11518	11-4-2013	Thu	0947	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	5588	11-4-2013	Thu	1008	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	3330	11-4-2013	Thu	1228	707/7.0/2100/23../D 615. AR = 67.07/0.9./2100/23.6 NR/615. AR = 6.07/PT7970/2100/237NR/6157 AR	CW	(JPL)
M89	7607	11-4-2013	Thu	1234	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	4590	11-4-2013	Thu	1234	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	4512	11-4-2013	Thu	1236	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	4474	11-4-2013	Thu	2308	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //5583	CW	(JPL)
M89	5583	11-4-2013	Thu	2308	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //4474	CW	(JPL)
M89	8789	11-4-2013	Thu	2311	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	10779	11-4-2013	Thu	2311	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	5230	11-4-2013	Thu	2316	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	6840	11-4-2013	Thu	2320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //10640	CW	(JPL)
M89	10640	11-4-2013	Thu	2320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	10779	12-4-2013	Fri	0237	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	10518	12-4-2013	Fri	0239	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	10180	12-4-2013	Fri	0242	3A7D in tfc: VV SVC GA NR 062 1100 RMKS 1329 TO 1205 = (see N&O 187)	CW	(JPL)
M89	6876	12-4-2013	Fri	0319	F8UO in chat: R R QSL 112 EEE (see N&O 187)	CW	(JPL)
M89	5588	12-4-2013	Fri	1013	XW6W in tfc: AN43 3UN3 UAN7 37N3 DU7T 3656 4N75 (Cont'd) II = 5465	CW	(JPL)
M89	8789	12-4-2013	Fri	1026	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	10779	12-4-2013	Fri	1026	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	4512	12-4-2013	Fri	1029	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	5801	12-4-2013	Fri	1039	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	12-4-2013	Fri	1039	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	11321	12-4-2013	Fri	1043	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	5801	12-4-2013	Fri	1302	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	12-4-2013	Fri	1302	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5828	12-4-2013	Fri	1304	In tfc: AR QSL ? K //A ... K//B R RPT 3W = 7UU EEEE RPT 3W UA5D UA5D K (see N&O 187)	CW	(JPL)
M89	10180	12-4-2013	Fri	1333	3A7D in tfc: = COMM /22.5/LZ97.9.NR 1147/1190 AR QSL ? HR WK NR 110	CW	(JPL)
M89	5583	12-4-2013	Fri	1404	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //4474	CW	(JPL)
M89	4474	12-4-2013	Fri	1404	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //5583	CW	(JPL)
M89	5432	12-4-2013	Fri	1408	In tfc: NR 01 CK 300 11 0412 2100 = (see N&O 187)	CW	(JPL)
M89	4590	12-4-2013	Fri	1642	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	7607	12-4-2013	Fri	1642	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	4512	12-4-2013	Fri	1643	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	12-4-2013	Fri	1643	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3300	12-4-2013	Fri	1644	T346 4TD6 T54D 75D3 5763 (see N&O 187)	CW	(JPL)
M89	5230	12-4-2013	Fri	1710	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	3300	12-4-2013	Fri	1715	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	6840	12-4-2013	Fri	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	12-4-2013	Fri	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
M89	7607	12-4-2013	Fri	1839	V WITN (x3) DE GNXG (x2) (repeated)	CW	(GJK-HOL)
M89	5585	12-4-2013	Fri	1912	*V FT7Y (x3) DE UE3G* (x2) (Cont'd) //4474	CW	(JPL)
M89	4474	12-4-2013	Fri	1912	*V FT7Y (x3) DE UE3G* (x2) (Cont'd) //5585	CW	(JPL)
M89	5230	12-4-2013	Fri	1925	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	12-4-2013	Fri	1925	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	10180	13-4-2013	Sat	0537	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10518	13-4-2013	Sat	0539	V FT7Y (x3) DE UE3G (x2) (Cont'd)	CW	(JPL)
M89	10180	13-4-2013	Sat	1211	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5801	13-4-2013	Sat	1211	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	4474	13-4-2013	Sat	1358	V FT7Y (x3) DE UE3G (x2) (Cont'd) //5583	CW	(JPL)
M89	5583	13-4-2013	Sat	1358	V FT7Y (x3) DE UE3G (x2) (Cont'd) //4474	CW	(JPL)
M89	3642	13-4-2013	Sat	1400	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	13-4-2013	Sat	1400	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //4474	CW	(JPL)
M89	6466	13-4-2013	Sat	1410	V 3A7D (x3) DE UMX1 (x2) (Cont'd)	CW	(JPL)
M89	6840	13-4-2013	Sat	1620	VVV (x3) Q2M DE NYZ (x2) QSA ? K	CW	(JPL)
M89	5230	13-4-2013	Sat	1625	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //4474	CW	(JPL)
M89	3642	13-4-2013	Sat	1625	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	4512	13-4-2013	Sat	1652	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	4590	13-4-2013	Sat	1654	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3642	13-4-2013	Sat	1656	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	13-4-2013	Sat	1656	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //4474	CW	(JPL)
M89	5588	13-4-2013	Sat	1659	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	5588	13-4-2013	Sat	1949	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	4590	13-4-2013	Sat	1952	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	13-4-2013	Sat	1954	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	3642	13-4-2013	Sat	2101	V DLG7 DE 3A7D (looped)	CW	(GJK-RUS)
M89	10180	14-4-2013	Sun	1138	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5801	14-4-2013	Sun	1138	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10368	14-4-2013	Sun	1141	In tfc: 6A6A 4N6A	CW	(JPL)
M89	10518	14-4-2013	Sun	1147	V FT7Y (x3) DE UE3G (x2) (Cont'd)	CW	(JPL)
M89	7607	14-4-2013	Sun	1158	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	6840	14-4-2013	Sun	1620	VVV (x3) Q2M DE NYZ (x2) QSA ? K	CW	(JPL)
M89	4512	14-4-2013	Sun	1652	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	5500	14-4-2013	Sun	2205	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	14-4-2013	Sun	2205	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	3330	14-4-2013	Sun	2208	In tfc mostly unreadable: MSG NR .. CK ..	CW	(JPL)
M89	7607	14-4-2013	Sun	2214	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	5230	14-4-2013	Sun	2223	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	14-4-2013	Sun	2223	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	4474	14-4-2013	Sun	2227	V FT7Y (x3) DE UE3G (x2) (Cont'd) //10518	CW	(JPL)
M89	10518	14-4-2013	Sun	2227	V FT7Y (x3) DE UE3G (x2) (Cont'd) //4474	CW	(JPL)
M89	8110	15-4-2013	Mon	0303	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	7582	15-4-2013	Mon	0303	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	10180	15-4-2013	Mon	0308	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10518	15-4-2013	Mon	0314	V FT7Y (x3) DE UE3G (x2) (Cont'd)	CW	(JPL)
M89	6840	15-4-2013	Mon	0320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //10640	CW	(JPL)
M89	10640	15-4-2013	Mon	0320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	8110	15-4-2013	Mon	0932	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	7582	15-4-2013	Mon	0932	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	5588	15-4-2013	Mon	0933	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	10779	15-4-2013	Mon	0934	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10180	15-4-2013	Mon	0939	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10518	15-4-2013	Mon	0942	V FT7Y (x3) DE UE3G (x2) (Cont'd)	CW	(JPL)
M89	5500	15-4-2013	Mon	1355	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	15-4-2013	Mon	1355	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	7607	15-4-2013	Mon	1357	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	15-4-2013	Mon	1359	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	3330	15-4-2013	Mon	1400	7/1031/2230/237NR/6157 AR = 67807/1031/2230/237NR/6157 AR = 67807/1031/2230/237NR/6157 AR	CW	(JPL)
M89	5500	15-4-2013	Mon	2015	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	15-4-2013	Mon	2015	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	7607	15-4-2013	Mon	2016	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
M89	4512	15-4-2013	Mon	2017	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	3330	15-4-2013	Mon	2018	V 8CPZ (x3) DE XW6W (x2) (Cont'd)	CW	(JPL)
M89	6840	15-4-2013	Mon	2020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	15-4-2013	Mon	2020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	7602	15-4-2013	Mon	2026	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	15-4-2013	Mon	2026	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	5583	15-4-2013	Mon	2032	V FT7Y (x3) DE UE3G (x2) (Cont'd) //4474	CW	(JPL)
M89	4474	15-4-2013	Mon	2032	V FT7Y (x3) DE UE3G (x2) (Cont'd) //5583	CW	(JPL)
M89	6848	15-4-2013	Mon	2057	Tfc: DT7N D46A D437 3.3T N56 EEEEE ?N56A II I 2P = (see N&O 187)	CW	(JPL)
M89	10180	16-4-2013	Tue	1041	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10180	16-4-2013	Tue	1041	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10779	16-4-2013	Tue	1043	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10720	16-4-2013	Tue	1045	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	10998	16-4-2013	Tue	1047	In tfc: AR HR WK NR 43 (Silent 1048z)	CW	(JPL)
M89	7607	16-4-2013	Tue	1115	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10640	16-4-2013	Tue	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	16-4-2013	Tue	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K //10640	CW	(JPL)
M89	5500	16-4-2013	Tue	1403	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	16-4-2013	Tue	1403	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	7607	16-4-2013	Tue	1406	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	16-4-2013	Tue	1408	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	3330	16-4-2013	Tue	1410	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4474	16-4-2013	Tue	1507	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	5557	16-4-2013	Tue	1510	In tfc: NR 043/CKK CK 121 12 0416 1300 RMKS .98. TO 56. EEE RMKS 5984 TO 5617 K K (see N&O 187)	CW	(JPL)
M89	4225	16-4-2013	Tue	1940	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	7607	16-4-2013	Tue	1942	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	16-4-2013	Tue	1943	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	3330	16-4-2013	Tue	1944	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3642	16-4-2013	Tue	1945	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10255	17-4-2013	Wed	0010	In tfc: AR K. OK U MSG GA K //A (see N&O 187)	CW	(JPL)
M89	10779	17-4-2013	Wed	0317	V AITN (x3) DE GNXG (x2) (Cont'd) Note: Sending AITN vice WITN	CW	(JPL)
M89	10640	17-4-2013	Wed	0320	VVV (x3) Q2M DE NYZ (x2) QSA ? K	CW	(JPL)
M89	10180	17-4-2013	Wed	0329	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5801	17-4-2013	Wed	0329	In tfc: 9/1284 AR. QSL ? HR NR 110.	CW	(JPL)
M89	10518	17-4-2013	Wed	0334	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	10998	17-4-2013	Wed	0337	In tfc: 54TA 354T A7U3 N3U6 6NTA U ? 5DUN 7AD5 763D 37DN (Contd) AR	CW	(JPL)
M89	5588	17-4-2013	Wed	0934	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3330	17-4-2013	Wed	1056	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	10180	17-4-2013	Wed	1110	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5801	17-4-2013	Wed	1110	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10518	17-4-2013	Wed	1112	CZT2 in tfc: U73D 74NA T6AD A566 D63N 4A37 5DNU (Contd) AR QSL ? HR WK NR 12 K	CW	(JPL)
M89	7607	17-4-2013	Wed	1410	V WITN (x3) DE GNXG (x2) (Cont'd) Note: roundslip back to normal	CW	(JPL)
M89	3797	17-4-2013	Wed	1413	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	5230	17-4-2013	Wed	1421	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	17-4-2013	Wed	1421	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5583	17-4-2013	Wed	1422	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //4474	CW	(JPL)
M89	4474	17-4-2013	Wed	1422	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //5583	CW	(JPL)
M89	7607	17-4-2013	Wed	1757	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3797	17-4-2013	Wed	1758	V H2FL (x3) DE DRV8 (x2)(Cont'd)	CW	(JPL)
M89	3330	17-4-2013	Wed	1759	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5583	17-4-2013	Wed	2003	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //4474	CW	(JPL)
M89	4474	17-4-2013	Wed	2003	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //5583	CW	(JPL)
M89	3642	17-4-2013	Wed	2004	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	17-4-2013	Wed	2004	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	7607	17-4-2013	Wed	2007	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	7607	17-4-2013	Wed	2009	V WITN de GNXG	CW	(MPJ)
M89	3300	18-4-2013	Thu	0651	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	10998	18-4-2013	Thu	1005	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	5809	18-4-2013	Thu	1048	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	18-4-2013	Thu	1048	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)

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M89	7607	18-4-2013	Thu	1647	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	4590	18-4-2013	Thu	1647	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	3797	18-4-2013	Thu	1649	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	3642	18-4-2013	Thu	1653	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	18-4-2013	Thu	1653	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	18-4-2013	Thu	1923	V DKG6 de 3A7D (loop)	CW	(MPJ-Sib)
M89	5801	19-4-2013	Fri	0257	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	19-4-2013	Fri	0257	VV HR SVC GA. NR 074 1100 RMKS 1329 TO 1185 = (see N&O 187)	CW	(JPL)
M89	10518	19-4-2013	Fri	0308	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	10779	19-4-2013	Fri	0934	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	5588	19-4-2013	Fri	0937	V VV EEE GA GA CQ D. 9567 TO 1769/6157//EEEE T M = = (see N&O 187)	CW	(JPL)
M89	10180	19-4-2013	Fri	0943	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	5588	19-4-2013	Fri	1037	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3300	19-4-2013	Fri	1106	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4512	19-4-2013	Fri	1328	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	19-4-2013	Fri	1328	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3300	19-4-2013	Fri	1330	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	7607	19-4-2013	Fri	1336	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3642	19-4-2013	Fri	1338	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	19-4-2013	Fri	1338	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	7607	19-4-2013	Fri	1629	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	19-4-2013	Fri	1630	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	19-4-2013	Fri	1630	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	5230	19-4-2013	Fri	1631	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	19-4-2013	Fri	1631	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230 PL	CW	(JPL)
M89	3300	19-4-2013	Fri	1632	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5421	19-4-2013	Fri	1634	In tfc: 5A5T 4N7N 7A3A UDT3 UU5T D564 6UD5 ANAT 5U5D 6475 A7N3 634T (see N&O 187)	CW	(JPL)
M89	10988	20-4-2013	Sat	1122	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	10180	21-4-2013	Sun	1034	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //8198 New frequency for 3A7D	CW	(JPL)
M89	8198	21-4-2013	Sun	1034	V DKG6 (x3) DE 3A7D (x2) (Cont'd) New frequency for 3A7D //10180	CW	(JPL)
M89	10779	21-4-2013	Sun	1042	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10998	21-4-2013	Sun	1044	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	4474	21-4-2013	Sun	1848	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //10998	CW	(JPL)
M89	10998	21-4-2013	Sun	1848	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //4474	CW	(JPL)
M89	7698	21-4-2013	Sun	1859	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7506 New frequency for 3A7D. Spurious??	CW	(JPL)
M89	7506	21-4-2013	Sun	1859	V DKG6 (x3) DE 3A7D (x2) (Cont'd) New frequencies for 3A7D	CW	(JPL)
M89	7607	21-4-2013	Sun	1900	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3642	21-4-2013	Sun	1910	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7698 and 7506	CW	(JPL)
M89	10180	22-4-2013	Mon	1046	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10518	22-4-2013	Mon	1054	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	7607	22-4-2013	o	1332	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	5566	22-4-2013	Mon	1614	V RXP7 (x3) DE CZT3 (x2) CZT2 callsign has been changed to CZT3. This is also a new frequency for this station.	CW	(JPL)
M89	3642	22-4-2013	Mon	1617	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	22-4-2013	Mon	1617	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	5801	23-4-2013	Tue	0230	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	23-4-2013	Tue	0230	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	10518	23-4-2013	Tue	0233	V RXP7 (x3) DE CZT3 (x2) (Cont'd)	CW	(JPL)
M89	5556	23-4-2013	Tue	1101	In tfc. See N&O 187	CW	(JPL)
M89	5588	23-4-2013	Tue	1136	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5500	23-4-2013	Tue	1139	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	7607	23-4-2013	Tue	1143	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	4512	23-4-2013	Tue	1145	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	23-4-2013	Tue	1145	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	10180	23-4-2013	Tue	1147	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5801	23-4-2013	Tue	1147	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	5555	23-4-2013	Tue	1149	In tfc: 4746 437D 6ND4 A5T6 NNUA 55ND 3N74 U54N 7N6U (see N&O 187)	CW	(JPL)
M89	3330	23-4-2013	Tue	1210	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5801	23-4-2013	Tue	1225	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	23-4-2013	Tue	1225	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)

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M89	10542	23-4-2013	Tue	1227	In tfc. See N&O 187	CW	(JPL)
M89	10518	23-4-2013	Tue	1236	V RXP7 (x3) DE CZT3 (x2) (Cont'd)	CW	(JPL)
M89	7607	23-4-2013	Tue	1243	In tfc: COMM/213./LZ852A8/1473/1178 AR. AGN. NR 138 2045 RMKS 1270 TO 1178/1497 = COMM /2130/LZ...2A8/1473/1178 AR. HR WK NR 1.	CW	(JPL)
M89	5566	23-4-2013	Tue	2013	V RXP7 (x3) DE CZT3 (x2) (Cont'd) //4474	CW	(JPL)
M89	4474	23-4-2013	Tue	2013	V RXP7 (x3) DE CZT3 (x2) (Cont'd) //5566	CW	(JPL)
M89	7607	23-4-2013	Tue	2030	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3642	23-4-2013	Tue	2030	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	3642	23-4-2013	Tue	2050	V DKG6 (x3) DE 3173 (x2) (Cont'd)	CW	(JPL)
M89	5588	24-4-2013	Wed	1009	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	10779	24-4-2013	Wed	1013	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	(JPL)
M89	7607	24-4-2013	Wed	1013	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	(JPL)
M89	5555	24-4-2013	Wed	1016	In chat. See N&O 187	CW	(JPL)
M89	10180	24-4-2013	Wed	1226	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5801	24-4-2013	Wed	1226	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10305	24-4-2013	Wed	1228	V RXP7 (x3) DE CZT3 (x2) (Cont'd) //10498	CW	(JPL)
M89	10498	24-4-2013	Wed	1228	V RXP7 (x3) DE CZT3 (x2) (Cont'd) //10305	CW	(JPL)
M89	4512	24-4-2013	Wed	1549	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	24-4-2013	Wed	1549	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3330	24-4-2013	Wed	1551	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5230	24-4-2013	Wed	1718	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	24-4-2013	Wed	1718	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	6840	24-4-2013	Wed	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	24-4-2013	Wed	1720	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	3330	24-4-2013	Wed	2138	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4512	24-4-2013	Wed	2140	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	24-4-2013	Wed	2140	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4590	24-4-2013	Wed	2144	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10779	25-4-2013	Thu	0209	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10180	25-4-2013	Thu	0214	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	6840	25-4-2013	Thu	0220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //10640	CW	(JPL)
M89	10640	25-4-2013	Thu	0220	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	10779	25-4-2013	Thu	0935	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10180	25-4-2013	Thu	0937	In chat: N636 U733 U5NT ADUT 4D6U 45T5 4NUN NT36 54TT 3UAD (see N&O 187)	CW	(JPL)
M89	10180	25-4-2013	Thu	0943	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10518	25-4-2013	Thu	0954	V RXP7 (x3) DE CZT3 (x2) (Cont'd)	CW	(JPL)
M89	5588	25-4-2013	Thu	1001	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5555	25-4-2013	Thu	1102	In chat: VV 9 V // K3TT = U7T. VN3D T7U3 .. (Cont'Ed) AR QSL? QSL? K. QSL 0930 K. MSG NR 1 CK .3 .. 04	CW	(JPL)
M89	5555	25-4-2013	Thu	1209	===== .37D 5U74 T7U3 56NA 4NTU 6U37 A4UT 673T (Cont'Ed) AR	CW	(JPL)
M89	10518	25-4-2013	Thu	1500	V RXP7 (x3) DE CZT3 (x2) (Cont'd)	CW	(JPL)
M89	7699	25-4-2013	Thu	1513	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	3330	25-4-2013	Thu	1725	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4512	25-4-2013	Thu	1726	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	25-4-2013	Thu	1726	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	5230	25-4-2013	Thu	1729	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	7602	25-4-2013	Thu	1729	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	3725	25-4-2013	Thu	1732	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3725	25-4-2013	Thu	1735	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	7602	25-4-2013	Thu	1736	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	4590	25-4-2013	Thu	2018	V WITN (x3) DE GNXG (x2) (Cont'd) //3725	CW	(JPL)
M89	3725	25-4-2013	Thu	2018	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	6840	25-4-2013	Thu	2020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4860	25-4-2013	Thu	2020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	7602	25-4-2013	Thu	2025	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	25-4-2013	Thu	2025	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	3330	25-4-2013	Thu	2026	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4512	25-4-2013	Thu	2027	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	25-4-2013	Thu	2027	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	10999	26-4-2013	Fri	1040	In tfc: 4FGs NIL SK NIL SK (Silent - 1042z)	CW	(JPL)
M89	10640	26-4-2013	Fri	1120	VVV (x3) Q2M DE NYZ (x2) QSA ? K	CW	(JPL)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
M89	10518	26-4-2013	Fri	1126	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	5801	26-4-2013	Fri	1130	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	26-4-2013	Fri	1130	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	3797	26-4-2013	Fri	1255	V H2FL (x3) DE DRV8 (x2) UGT COMM BT 234/.8.8/3119/3122/.. /2.. /21.0/88/.. AR (see N&O 187) //4512	CW	(JPL)
M89	4512	26-4-2013	Fri	1255	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	7607	26-4-2013	Fri	1312	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3330	26-4-2013	Fri	1314	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3642	26-4-2013	Fri	1320	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	26-4-2013	Fri	1320	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3797	26-4-2013	Fri	1530	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	26-4-2013	Fri	1530	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3330	26-4-2013	Fri	1532	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5230	26-4-2013	Fri	1534	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	26-4-2013	Fri	1534	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	7607	26-4-2013	Fri	1536	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3330	26-4-2013	Fri	1912	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3797	26-4-2013	Fri	1914	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	26-4-2013	Fri	1914	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	7607	26-4-2013	Fri	1915	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10180	27-4-2013	Sat	0202	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5801	27-4-2013	Sat	0202	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10466	27-4-2013	Sat	0204	In tfc: UTD5 T53N A5T. 7DUA 7D.. (Cont'd) AR K. 7ATN AR K. R RPT GA? U. GA? R U . GA? GA	CW	(JPL)
M89	10779	27-4-2013	Sat	0210	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	5588	27-4-2013	Sat	0951	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	10779	27-4-2013	Sat	0952	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	10180	27-4-2013	Sat	0959	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	5588	27-4-2013	Sat	1012	2SLC with msg: CQ 63 LMS 9567 TO 1716/6157 = UGT COMM BT 67807/1716/2000/117NR/9567 AR = 67807/1716/2000/117NR/9567 AR = 67807/1716/2000/117NR/9567 AR	CW	(JPL)
M89	4225	27-4-2013	Sat	2042	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	4512	27-4-2013	Sat	2044	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	27-4-2013	Sat	2044	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	7607	27-4-2013	Sat	2046	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	4590	27-4-2013	Sat	2046	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	3300	27-4-2013	Sat	2049	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3642	27-4-2013	Sat	2052	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	7602	27-4-2013	Sat	2052	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	10180	28-4-2013	Sun	0958	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	5801	28-4-2013	Sun	0958	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10456	28-4-2013	Sun	1001	In tfc: R GA K. R RPT 53 .. (see N&O 187)	CW	(JPL)
M89	10518	28-4-2013	Sun	1002	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	10779	28-4-2013	Sun	1004	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	5500	28-4-2013	Sun	1111	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	3300	28-4-2013	Sun	1113	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4512	28-4-2013	Sun	1113	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	4860	28-4-2013	Sun	1320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	6840	28-4-2013	Sun	1320	VVV (x3) Q2M DE NYZ (x2) QSA ? K //4860	CW	(JPL)
M89	4512	28-4-2013	Sun	1326	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	28-4-2013	Sun	1326	DRV8 in tfc: 3828/04/.. /215./851/A/85/57 AR. UGT COMM = 234/344./3828/04/2./2155/851/A/85/5. AR	CW	(JPL)
M89	3300	28-4-2013	Sun	1330	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5230	28-4-2013	Sun	1334	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3642	28-4-2013	Sun	1334	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	10518	28-4-2013	Sun	1338	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	7777	28-4-2013	Sun	1344	In tfc: R = 5N35 AR K. R R. R BT A BT A46D AR K (see N&O 187)	CW	(JPL)
M89	6762	28-4-2013	Sun	1402	In tfc: R R R. R QSA 1 U QSY. QSA 1 U QSY 3.38 K. VV VV (see N&O 187)	CW	(JPL)
M89	3642	28-4-2013	Sun	1748	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	28-4-2013	Sun	1748	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	4474	28-4-2013	Sun	1751	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	4474	28-4-2013	Sun	1810	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //10518	CW	(JPL)
M89	10518	28-4-2013	Sun	1810	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //4474	CW	(JPL)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
M89	5500	28-4-2013	Sun	2045	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	28-4-2013	Sun	2045	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	4512	28-4-2013	Sun	2047	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	4590	28-4-2013	Sun	2049	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	(JPL)
M89	7607	28-4-2013	Sun	2049	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	(JPL)
M89	3642	28-4-2013	Sun	2052	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	28-4-2013	Sun	2052	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3300	28-4-2013	Sun	2053	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4474	28-4-2013	Sun	2101	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //10518	CW	(JPL)
M89	10518	28-4-2013	Sun	2101	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //4474	CW	(JPL)
M89	4474	28-4-2013	Sun	2327	V RXP7 de CZT2 (loop)	CW	(MPJ)
M89	4225	29-4-2013	Mon	1003	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	5588	29-4-2013	Mon	1005	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	10518	29-4-2013	Mon	1010	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	5801	29-4-2013	Mon	1014	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	29-4-2013	Mon	1014	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	6840	29-4-2013	Mon	1020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //10640	CW	(JPL)
M89	10640	29-4-2013	Mon	1020	VVV (x3) Q2M DE NYZ (x2) QSA ? K //6840	CW	(JPL)
M89	5588	29-4-2013	Mon	1151	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4512	29-4-2013	Mon	1153	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3797	29-4-2013	Mon	1153	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	7607	29-4-2013	Mon	1155	GNXG in tfc: 19..LZ25/A8/1473/1.04 AR. AGN. NR 173 2002 RMKS 2478 TO 1004/14.8 - COMM./ = COMM./204L/L72./A8/1474/1004 AR. QSL? HR WK NR 36 K	CW	(JPL)
M89	4225	29-4-2013	Mon	1832	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5500	29-4-2013	Mon	1832	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	3300	29-4-2013	Mon	1834	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3797	29-4-2013	Mon	1835	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4512	29-4-2013	Mon	1835	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	7607	29-4-2013	Mon	1836	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3642	29-4-2013	Mon	1837	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	5230	29-4-2013	Mon	1837	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	5555	29-4-2013	Mon	1843	In tfc: DU75 U4DA T..4 AUD3 DN3N 64NA (Cont'Ed) AR	CW	(JPL)
M89	10518	29-4-2013	Mon	1852	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //4474	CW	(JPL)
M89	4474	29-4-2013	Mon	1852	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //10518	CW	(JPL)
M89	5500	30-4-2013	Tue	1009	QV5B in tfc: NR 10/CCK CK 1537 04300 430 RMKS 3893 TO 5EEEE (see N&O 187) //4225	CW	(JPL)
M89	4225	30-4-2013	Tue	1009	QV5B in tfc: NR 10/CCK CK 1537 04300 430 RMKS 3893 TO 5EEEE (see N&O 187) //5500	CW	(JPL)
M89	5588	30-4-2013	Tue	1028	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3797	30-4-2013	Tue	1030	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	5230	30-4-2013	Tue	1034	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	10180	30-4-2013	Tue	1034	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	10518	30-4-2013	Tue	1036	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	5500	30-4-2013	Tue	1249	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4225	30-4-2013	Tue	1249	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	4512	30-4-2013	Tue	1251	DRV8 in tfc: 88../.5/57 AR. UGT COMM = 234/3.12/3828/04/30/2120/888/A/85/57 AR //3797	CW	(JPL)
M89	3797	30-4-2013	Tue	1251	DRV8 in tfc: 88../.5/57 AR. UGT COMM = 234/3.12/3828/04/30/2120/888/A/85/57 AR //4512	CW	(JPL)
M89	7607	30-4-2013	Tue	1255	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3300	30-4-2013	Tue	1257	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4474	30-4-2013	Tue	1617	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //10518	CW	(JPL)
M89	10518	30-4-2013	Tue	1617	V RXP7 (x3) DE CZT2 (x2) (Cont'd) //4474	CW	(JPL)
M89	6840	30-4-2013	Tue	1620	VVV (x3) Q2M DE NYZ (x2) QSA? K	CW	(JPL)
M89	4225	30-4-2013	Tue	2002	V 7NPE (x3) DE BQV5B (x2) (Cont'd) //5500 Having problems with round slip	CW	(JPL)
M89	5500	30-4-2013	Tue	2002	V 7NPE (x3) DE BQV5B (x2) (Cont'd) //4225 Having problems with round slip	CW	(JPL)
M89	7607	30-4-2013	Tue	2007	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	(JPL)
M89	3300	30-4-2013	Tue	2009	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3797	30-4-2013	Tue	2011	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	6840	30-4-2013	Tue	2320	VVV (x3) Q2M DE NYZ (x2) QSA? K //10640	CW	(JPL)
M89	10640	30-4-2013	Tue	2320	VVV (x3) Q2M DE NYZ (x2) QSA? K //6840	CW	(JPL)
M89	7582	30-4-2013	Tue	2325	V 7NPE (x3) DE BQV5B (x2) (Cont'd) //8110 Having problems with round slip	CW	(JPL)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
M89	8110	30-4-2013	Tue	2325	V 7NPE (x3) DE BQV5B (x2) (Cont'd) //7582 Having problems with round slip	CW	(JPL)
M97	10375	12-4-2013	Fri	1456	SD81 SN70	CW	(AB-Sib)
MX	4325.9	2-4-2013	Tue	2226	Beacon "R"	CW	(JPL-Sib)
MX	16332.3	4-4-2013	Thu	1236	Beacon "K"	CW	(JPL-Sib)
MX	16332	10-4-2013	Wed	1629	Russian Navy Beacon D Odessa	CW	(LG2)
MX	16332	10-4-2013	Wed	1630	Russian Navy Beacon C Moscow	CW	(LG2)
MX	10871.8	10-4-2013	Wed	1907	Russian Navy Beacon P Kaliningrad	CW	(LG2)
MX	10817.9	10-4-2013	Wed	1907	Russian Navy Beacon S Severnomorsk	CW	(LG2)
MX	10872	10-4-2013	Wed	1907	Russian Navy Beacon C Moscow	CW	(LG2)
MX	10871.7	10-4-2013	Wed	1907	Russian Navy Beacon D Odessa	CW	(LG2)
MX	10871.8	12-4-2013	Fri	0400	Beacon "D" Russian Navy	CW	(HS)
MX	10872	12-4-2013	Fri	0400	Beacon "C" Russian Navy	CW	(HS)
MX	5619.5	12-4-2013	Fri	1407	Beacon "V"	CW	(JPL-Sib)
MX	6917.5	12-4-2013	Fri	1827	Beacon "L"	CW	(AB)
MX	8497.8	12-4-2013	Fri	1827	Beacon "L"	CW	(AB)
MX	16331.7	14-4-2013	Sun	1646	Beacon "D" Odessa/Sevastopol	CW	(MPJ)
MX	16332	14-4-2013	Sun	1647	Beacon "C" Moscow	CW	(MPJ)
MX	4084	18-4-2013	Thu	2042	Beacon "V"	CW	(AB)
MX	6917.5	18-4-2013	Thu	2042	Beacon "L"	CW	(AB)
MX	4325.9	18-4-2013	Thu	2045	Beacon "R"	CW	(AB)
MX	4150	18-4-2013	Thu	2047	Beacon "V"	CW	(AB)
MX	8497.8	18-4-2013	Thu	2053	Beacon "L"	CW	(AB)
MX	4150	19-4-2013	Fri	1846	Beacon "V"	CW	(AB)
MX	4084	19-4-2013	Fri	1846	Beacon "V"	CW	(AB)
MX	13527.8	20-4-2013	Sat	0727	Beacon "P"	CW	(LG2)
MX	16331.7	20-4-2013	Sat	0727	Beacon "D"	CW	(LG2)
MX	8494.7	20-4-2013	Sat	0738	Beacon "D"	CW	(AB)
MX	10871.7	20-4-2013	Sat	0738	Beacon "D"	CW	(AB)
MX	16332.3	20-4-2013	Sat	0738	Beacon "K"	CW	(AB)
MX	8495.3	20-4-2013	Sat	0738	Beacon "K"	CW	(AB)
MX	7039.3	20-4-2013	Sat	0738	Beacon "K"	CW	(AB-CA)
MX	16332	20-4-2013	Sat	0738	Beacon "C"	CW	(AB)
MX	10872	20-4-2013	Sat	0738	Beacon "C"	CW	(AB)
MX	16331.7	20-4-2013	Sat	0738	Beacon "D"	CW	(AB)
MX	8495	20-4-2013	Sat	0738	Beacon "C"	CW	(AB)
MX	10871.8	20-4-2013	Sat	0738	Beacon "P"	CW	(AB)
MX	10871.9	20-4-2013	Sat	0738	Beacon "S"	CW	(AB)
MX	8494.8	20-4-2013	Sat	0738	Beacon "P"	CW	(AB)
MX	8494.9	20-4-2013	Sat	0738	Beacon "S"	CW	(AB)
MX	4150	20-4-2013	Sat	2026	Beacon "V"	CW	(AB)
MX	4325.9	20-4-2013	Sat	2026	Beacon "R"	CW	(AB)
MX	6917.5	21-4-2013	Sun	0537	Beacon "L"	CW	(AB)
MX	16332.3	21-4-2013	Sun	0537	Beacon "K"	CW	(AB)
MX	8495	21-4-2013	Sun	1826	Beacon "C" Moscow	CW	(AB)
MX	8494.7	21-4-2013	Sun	1826	Beacon "D" Sevastopol	CW	(AB)
MX	8494.8	21-4-2013	Sun	1826	Beacon "P" Kaliningrad	CW	(AB)
MX	8494.7	21-4-2013	Sun	1826	Beacon "S" Severomorsk	CW	(AB)
MX	6917.5	21-4-2013	Sun	1826	Beacon "L" St Petersburg	CW	(AB)
MX	8497.8	21-4-2013	Sun	1826	Beacon "L" St Petersburg	CW	(AB)
MX	4150	21-4-2013	Sun	1834	Beacon "V" Khiva	CW	(AB)
MX	4325.9	21-4-2013	Sun	1834	Beacon "R" Izhevsk	CW	(AB)
MX	16332.2	21-4-2013	Sun	2115	Beacon "F"	CW	(DMNZ)
MX	16332	21-4-2013	Sun	2115	Beacon "C"	CW	(DMNZ)
MX	6917.5	21-4-2013	Sun	2326	Beacon "L" Sankt Peterburg	CW	(MPJ)
MX	8497.8	22-4-2013	Mon	1943	Beacon "L"	CW	(AB)
MX	6917.5	22-4-2013	Mon	1943	Beacon "L"	CW	(AB)
MX	4150	22-4-2013	Mon	1944	Beacon "V"	CW	(AB)
MX	4325.9	22-4-2013	Mon	1945	Beacon "R"	CW	(AB)
MX	16332	23-4-2013	Tue	0828	Beacon "C"	CW	(LG2)
MX	4084	23-4-2013	Tue	1903	Beacon "V"	CW	(AB)
MX	4325.9	23-4-2013	Tue	1907	Beacon "R"	CW	(AB)
MX	4150	23-4-2013	Tue	2002	Beacon "V"	CW	(AB)

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MX	4150	23-4-2013	Tue	2040	Beacon "V"	CW	(AB)
MX	5153.7	23-4-2013	Tue	2140	Beacon "D" Sevastopol	CW	(VL)
MX	5153.8	23-4-2013	Tue	2140	Beacon "P" Kaliningrad	CW	(VL)
MX	8497.8	24-4-2013	Wed	1833	Beacon "L" sending LLLLL followed by 4 dashes	CW	(AB)
MX	6715.5	24-4-2013	Wed	1833	Beacon "L" sending LLLLL followed by 4 dashes	CW	(AB)
MX	8497.8	25-4-2013	Thu	0429	Beacon "L" sending "LLLLL" followed by 4 dashes	CW	(AB)
MX	4084	26-4-2013	Fri	2011	Beacon "V"	CW	(AB)
MX	4150	26-4-2013	Fri	2011	Beacon "V"	CW	(AB)
MX	5156.8	26-4-2013	Fri	2016	Beacon "L"	CW	(AB)
MX	8497.8	26-4-2013	Fri	2016	Beacon "L"	CW	(AB)
MX	6917.5	26-4-2013	Fri	2016	Beacon "L"	CW	(AB)
MX	4325.9	26-4-2013	Fri	2057	Beacon "R"	CW	(AB)
MX	13527.7	27-4-2013	Sat	1013	Beacon "D"	CW	(AB)
MX	13527.8	27-4-2013	Sat	1013	Beacon "P"	CW	(AB)
MX	13518.3	27-4-2013	Sat	1013	Beacon "K"	CW	(AB)
MX	13527.9	27-4-2013	Sat	1013	Beacon "S"	CW	(AB)
MX	13528	27-4-2013	Sat	1013	Beacon "C"	CW	(AB)
MX	4150	27-4-2013	Sat	2130	Beacon "V"	CW	(AB)
MX	4084	27-4-2013	Sat	2130	Beacon "V"	CW	(AB)
MX	13528.4	28-4-2013	Sun	0539	Beacon "M"	CW	(AB-CA)
MX	13528.3	28-4-2013	Sun	0539	Beacon "K"	CW	(AB-CA)
MX	13528.2	28-4-2013	Sun	0539	Beacon "F"	CW	(AB-CA)
MX	10872.3	28-4-2013	Sun	0539	Beacon "K"	CW	(AB-CA)
MX	5153.7	28-4-2013	Sun	2230	Beacon "D" Odessa/Sevastopol	CW	(MPJ)
MX	5153.9	28-4-2013	Sun	2231	Beacon "S" Severomorsk	CW	(MPJ)
MX	4325.95	28-4-2013	Sun	2310	Beacon "R" Izhevsk	CW	(MPJ)
MX	4557.7	28-4-2013	Sun	2310	Beacon "D" Odessa/Sevastopol	CW	(MPJ)
MX	4150	29-4-2013	Mon	2156	Beacon "V" Khiva	CW	(AB)
MX	4084	29-4-2013	Mon	2156	Beacon "V" Khiva	CW	(AB)
MX	4325.9	29-4-2013	Mon	2200	Beacon "R" Izhevsk	CW	(AB)
MX	8497.8	29-4-2013	Mon	2200	Beacon "L" St Petersburg	CW	(AB)
MX	5156.8	29-4-2013	Mon	2200	Beacon "L" St Petersburg	CW	(AB)
MX	6917.5	29-4-2013	Mon	2200	Beacon "L" St Petersburg	CW	(AB)
MX	9495.3	30-4-2013	Tue	1217	Beacon "K"	CW	(AB-HK)
MX	10872.4	30-4-2013	Tue	1217	Beacon "M"	CW	(AB-HK)
MX	13518.4	30-4-2013	Tue	1217	Beacon "M"	CW	(AB-HK)
MX	13528.2	30-4-2013	Tue	1217	Beacon "F"	CW	(AB-HK)
MX	13528.3	30-4-2013	Tue	1217	Beacon "K"	CW	(AB-HK)
OLO32	77463.6	4-4-2013	Thu	2153	Bezpecnostní informacní služba (BIS) coded message	FEC 100	(LG2)
OLO32	6945	7-4-2013	Sun	2211	Bezpecnostní informacní služba (BIS)	FEC 100	(LG2)
OLO32	6945	9-4-2013	Tue	2223	Czech Intelligence	FEC	(LG2)
OLO32	6956	15-4-2013	Mon	2214	Czech Intel. Encrypted traffic only uses 99999 as separator	FEC	(LG2)
RAv	11360	2-4-2013	Tue	1244	Korsar (Russian AF, Pskov) w/78809 (IL-76MD) who reports landing at Voronezh w/fuel 16 tons	USB	(RP-MD)
RAv	11360	2-4-2013	Tue	1257	Korsar w/86572 (IL-62M) who reports landing at unid location	USB	(RP-MD)
RAv	11360	2-4-2013	Tue	1259	Aircraft 75676 (poss IL-18E) w/Chkalov reports landing at Kaliningrad at 1345 MSK w/fuel 61 tons	USB	(RP-MD)
RAv	11360	2-4-2013	Tue	1310	Aircraft 85505 (TU-154B) reporting departure from Chkalov at 1430 MSK and landing at Mozdok at 16?? w/2 hrs fuel remaining	USB	(RP-MD)
RAv	11360	2-4-2013	Tue	1430	Korsar clg 86842 (IL-76M) w/no response	USB	(RP-MD)
RAv	11360	2-4-2013	Tue	1510	Korsar w/78809 (IL-76MD) who reports landing at Kubinka at 1908 MSK w/fuel 15 tons	USB	(RP-MD)
RAv	11360	2-4-2013	Tue	1522	Korsar w/86842 (IL-76M) who reports departure from unid location at 1855 MSK and ETA Pskov at 2155 MSK	USB	(RP-MD)
RAv	11360	2-4-2013	Tue	1530	Korsar w/76639 (IL-76MD) who reports 1 hr flt w/fuel 27 tons--next point Kazachok	USB	(RP-MD)
RAv	6685	2-4-2013	Tue	1540	Korsar w/76741 (IL-76) who reports departure from Voronezh at 1520 MSK and ETA unid location of 1620 MSK	USB	(RP-MD)
RAv	11360	2-4-2013	Tue	1609	Korsar w/76615 (IL-76) who reports landing at Chkalov at 1905 MSK w/fuel 90 tons	USB	(RP-MD)
RAv	11360	3-4-2013	Wed	0735	Russian Air Force. KORSAR works 76639 (IL76), only KORSAR heard	USB	(TR2)
RAv	11360	3-4-2013	Wed	0747	Russian Air Force. Aircraft 76639 with posrep, mentions Mozdok	USB	(TR2)
RAv	11360	3-4-2013	Wed	0758	Russian Air Force. KORSAR radio checks with aircraft 78776 (IL76)	USB	(TR2)

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RAv	11360	5-4-2013	Fri	1205	Russian AF Aircraft 75676 (IL-18E): clg Chkalovskiy. 75676 reports departure from unid location and ETA landing at Chkalovskiy at 1305 MSK.	USB	(RP-MD)
RAv	11360	5-4-2013	Fri	1218	Russian AF Aircraft 78840 (IL-76MD): clg Chkalovskiy w/no response. Unheard stn responds and 78840 reports departure from Arkadiy	USB	(RP-MD)
RAv	6885	8-4-2013	Mon	2252	Korsar w/78845 (IL-76MD) reporting passing point (?Arbov?) and landing at Ulan Ude at 2345 MSK w/fuel 40 tons.	USB	(RP-MD)
RAv	11360	9-4-2013	Tue	1157	Korsar clg 76599 (IL-76MD) no response. Also w/Klarnetist	USB	(RP-MD)
RAv	11360	9-4-2013	Tue	1223	Korsar w/76639 (IL-76MD) reporting departure from Dorozhniy w/fuel 67 tons.	USB	(RP-MD)
RAv	11360	9-4-2013	Tue	1229	Korsar w/Proselok confirming 76613 (IL-76MD) landing at Kadril w/fuel 44 tons	USB	(RP-MD)
RAv	11360	9-4-2013	Tue	1300	Korsar in comms checks w/Polis, Davlenie, Proselok, & Klarnetist	USB	(RP-MD)
RAv	11360	9-4-2013	Tue	1543	Korsar w/86842 (IL-76MD) reporting landing at Pskov at 1843 MSK	USB	(RP-MD)
RAv	6685	9-4-2013	Tue	2128	Korsar w/76776 (IL-76MD) reporting departure from Garbala (unid). At 2305 76776 calls Korsar and reports landing at Sochi at 0158 MSK	USB	(RP-MD)
RAv	11360	11-4-2013	Thu	1213	Chakhalovsij w/86572 (IL-62M)	USB	(RP-MD)
RAv	11360	11-4-2013	Thu	1213	Korsar w/76613 (IL-76MD) reports departure from (missed) at 1915 MSK and next is Buntar w/fuel 46 tons	USB	(RP-MD)
RAv	11360	11-4-2013	Thu	1213	Korsar & Davlenie w/76733 reporting departure from Gabala (spelled) at 1850 MSK w/fuel 39 tons--next is Sochi.	USB	(RP-MD)
RAv	11360	11-4-2013	Thu	1213	Korsar w/76818 (IL-76TD) reporting landing at Novosibirsk at 1456 MSK w/fuel 67 tons	USB	(RP-MD)
RAv	11360	11-4-2013	Thu	1213	Korsar (Russian AF, Pskov) w/76733 (IL-76MD) reporting passing point (?ROSA?) at alt 2700 mtrs w/fuel 45 tons	USB	(RP-MD)
RAv	11360	12-4-2013	Fri	1210	Korsar relaying to Proselok that 78816 (IL-76MD) departed Orenburg at 1435 MSK w/fuel 70 tons	USB	(RP-MD)
RAv	11360	12-4-2013	Fri	1253	Korsar w/78818 (IL-76MD)	USB	(RP-MD)
RAv	11360	12-4-2013	Fri	1302	Korsar comms checks w/Davlenie, Polis, Klarnetist & Proselok	USB	(RP-MD)
RAv	6685	17-4-2013	Wed	1800	Korsar in comms checks w/Klarnetist, Polis, Davlenie	USB	(RP-MD)
RAv	8090	18-4-2013	Thu		Nabor w/56769 passing encoded msg 457/414/244/857/480/756/856/527	USB	(RP-MD)
RAv	8090	18-4-2013	Thu	0618	Aircraft 50271 worked with NABOR	USB	(ASh)
RAv	8090	18-4-2013	Thu	0627	Aircraft 56732 worked with NABOR	USB	(ASh)
RAv	8090	18-4-2013	Thu	0720	Possible TU95s 50271 and 56732 calls NABOR	USB	(TR2)
RAv	8090	18-4-2013	Thu	0933	TU95 50271 calls TU95 56769: 457 833 262 573 709 857 666 263 TU95 50271 repeats: 457 833 262 573 709 857 666 263	USB	(TR2)
RAv	8090	18-4-2013	Thu	1105	Presumed TU95 50271: 659 48? 591 545 823 704. Presumed TU95 50271: 457 414 232	USB	(TR2)
RAv	8090	18-4-2013	Thu	1110	Nabor wkg w/50721 (Russian AF TU-95), 56769 (Russian AF TU-95) & 56732 (Russian AF TU-95)	USB	(RP-MD)
RAv	8090	18-4-2013	Thu	1209	TU95 50271 calls NABOR. 1214 UTC: TU95 56769 calls NABOR. TU95 50271: 847 456 637 892 300 856 759 798 503 622 201 158	USB	(TR2)
RAv	8090	18-4-2013	Thu	1216	TU95 50271 calls TU95 56769: 645 529 222 898 904 508 759 798 503 622 609 620	USB	(TR2)
RAv	11360	18-4-2013	Thu	1247	Korsar w/unid acft (call missed-prob IL-76) reporting departure from Quartet and landing at Dorozhniy w/fuel 24 tons	USB	(RP-MD)
RAv	8090	18-4-2013	Thu	1253	TU95 50271 calls TU95 56769 868 529 856 905 ??? 508 019 798 503 622 609 771 645 456 537 526 294 622 615 698 503 622 609 094	USB	(TR2)
RAv	11360	18-4-2013	Thu	1257	Korsar w/76747 (IL-76MD) reporting 30 min flt departing from Quartet according to plan. Fuel 32 tons	USB	(RP-MD)
RAv	8090	18-4-2013	Thu	1258	TU95 50271: ?? Group 50. TU95 50271 calls TU95 56769: ?? TU95 50271: Roger 630 622. TU95 50271 calls TU95 56769: Radiogram ?? group 771 group 616	USB	(TR2)
RAv	11360	18-4-2013	Thu	1300	Korsar w/76740 (IL-76MD) reporting landing at Dorozhniy at 1358 MSK	USB	(RP-MD)
RAv	8090	18-4-2013	Thu	1312	TU95 50271 calls SHPORA. TU95 50271 calls TU95 56769: Radiogram 457 414 262 857 480 756 856 527	USB	(TR2)
RAv	8090	18-4-2013	Thu	1312	50721 (TU-95) clg Shpora. No response. 50721 w/56769 (TU-95) passing encoded msg: 457/414/244/857/480/756/856/527	USB	(RP-MD)
RAv	8090	18-4-2013	Thu	1313	TU95 50271 calls TU95 56769: I'm repeating Radiogram 457 414 262 857 480 756 856 527	USB	(TR2)
RAv	8090	18-4-2013	Thu	1350	TU95 50271 calls TU95 56769: I'm sending message 457 944 262 218 503 966 020 691	USB	(TR2)
RAv	8090	18-4-2013	Thu	1638	Nabor w/unid acft	USB	(RP-MD)
RAv	8090	18-4-2013	Thu	1757	Russian AF: 50271 calls SHPORA, NABOR "RAZDEL 457 110 262 456 126 458 970 876 966 679 351 684"	USB	(ASh)
RAv	8090	18-4-2013	Thu	1807	Russian AF: 50271 calls NABOR "RAZDEL 299 340. Please, transmit to SHPO-RA"	USB	(ASh)

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RAv	11360	19-4-2013	Fri	1101	Korsar w/76516 (IL-76MD) reporting finish work and will land in 46 mins	USB	(RP-MD)
RAv	11360	19-4-2013	Fri	1443	Korsar w/76634 (IL-76MD) reporting landing at Chakalovskij.	USB	(RP-MD)
RAv	11360	19-4-2013	Fri	1516	Chakalovskij w/unid stn (call missed) about acft landing at Chakalovskij	USB	(RP-MD)
RAv	11360	19-4-2013	Fri	1519	Korsar w/76648 (IL-76MD) reporting departure from Kazachok at 1901 MSK.	USB	(RP-MD)
RAv	11360	19-4-2013	Fri	1625	Korsar w/76612 (IL-76MD) reporting departure from point Quartet according to plan OTP w/fuel 35 tons.	USB	(RP-MD)
RAv	11360	22-4-2013	Mon	1156	Korsar w/76612 (IL-76MD) reporting altitude 1900 mtrs fuel 43 tons & next is Kanatnij (unid)	USB	(RP-MD)
RAv	11354	22-4-2013	Mon	1202	Korsar radio checks w/Proselok, Davlenie, Polis	USB	(RP-MD)
RAv	11360	25-4-2013	Thu	1135	Korsar w/76649 (IL-76MD) reporting departure on 1 hr flt at alt 2800 mtrs w/fuel 40 tons	USB	(RP-MD)
RAv	11360	25-4-2013	Thu	1205	Korsar w/78817 (IL-76MD) reporting departure from KHEDR & fuel 55 tons	USB	(RP-MD)
RAv	11360	26-4-2013	Fri	1107	Korsar w/76613 (IL-76MD). Korsar can't hear flt info.	USB	(RP-MD)
RAv	11360	26-4-2013	Fri	1114	Korsar w/76743 (IL-76MD) reporting departure from (missed) flying at alt 2000 mtrs w/fuel 45 tons. Next is Eisk	USB	(RP-MD)
RAv	11360	26-4-2013	Fri	1123	Korsar w/76741 (IL-76MD) reporting departure from Pskov at 1200 MSK w/fuel 54 tons.	USB	(RP-MD)
RAv	11360	26-4-2013	Fri	1422	Korsar w/76726 (IL-76MD) reporting landing at ??NT (first part missed) at 1819 MSK. Korsar relays info to Davlenie	USB	(RP-MD)
RAv	11360	26-4-2013	Fri	1536	Korsar w/82040 (Russian AF AN-124). reporting passing (? T-4?) at 1534 w/fuel 59 tons.	USB	(RP-MD)
RAv	11360	29-4-2013	Mon	1121	Korsar w/76714 (IL-76MD) reporting completion of work and fuel is 54 tons	USB	(RP-MD)
RAv	11360	29-4-2013	Mon	1147	Korsar w/76746 (IL-76MD) confirming control point is (?PRIMA?) and alt is 2400 mtrs	USB	(RP-MD)
RAv	11360	29-4-2013	Mon	1150	Korsar w/76604 (IL-76MD). reporting 1 hr flt w/fule 39 tons. Korsar has much trouble hearing acft.	USB	(RP-MD)
RAv	11360	29-4-2013	Mon	1235	Acft 76748 (IL-76MD) calling Davlenie w/no response. Korsar responds & 76748 reports departure from KVARTET at 1616 MSK w/fuel 30 tons. ETA landing at (missed) is 1735 MSK. At 1806 76648 reporting departure from RASPIKA at 2125 MSK w/fuel 42 tons, 12 tons cargo and 30 passangers. Landing at Migalovo.	USB	(RP-MD)
RAv	11360	29-4-2013	Mon	1247	Korsar w/76743 (IL-76MD) reporting departure from KVARTET at alt 2500 mtrs.	USB	(RP-MD)
RAv	11360	29-4-2013	Mon	1425	Korsar USB calling 78818 (IL-76MD) w/no response. Davlenie also calling 78818 w/no response. Korsar calls Klarinetist asking if they have comms w/78818. Aft4r many calls by Korsar w/no response both Proselok and Davlenie try calling 78818	USB	(RP-MD)
RAv	11360	29-4-2013	Mon	1432	Korsar: 1432 USB w/78894 (IL-76MD) reporting departure from (missed) at 1800 MSK and ETA landing at Eisk of 1940 MSK. Fuel remaining 47 tons. At 1536 Korsar confirms that 78894 landed at Eisk at 1933 MSK w/fuel 30 tons.	USB	(RP-MD)
RAv	11360	29-4-2013	Mon	1543	Acft 78778 (IL-76MD): 1543 USB calling Korsar. Klarinetist responds and 78778 reports 1 hour flt time w/fuel 37 tons. Klarinetist relays flt info to Proselok.	USB	(RP-MD)
RAv	11360	29-4-2013	Mon	1544	Korsar: 1544 USB w/76726 (IL-76MD) reporting departure from (missed) w/56 passangers & fuel 60 tons. Next is Pechora.	USB	(RP-MD)
RAv	11360	29-4-2013	Mon	1739	Korsar: 1739 USB w/76764 (IL-76MD) reporting fuel 25 tons and passing point NAMUK (spelled). Info relayed to Davlenie.	USB	(RP-MD)
RAv	11360	30-4-2013	Tue	1208	Korsar w/78794 (IL-76MD) reporting ETA landing at Yerevan at 1700 MSK.	USB	(RP-MD)
RAv	6685	30-4-2013	Tue	2023	Korsar Davlenie w/76748 (IL-76) reporting landing at KVARTET (Taganrog AB) at 0017 MSK w/fuel 19 tons.	USB	(RP-MD)
RMv	5620	12-4-2013	Fri	2232	Russian Mil. Setting up a radio net. c/s heard VALIK-17 and SHTORA-79	USB	(AB)
RMv	11365	18-4-2013	Thu	1219	Parada (O/M Russian) w/Bageta/Paketa (O/M Russian) w/radio checks and test counts	USB	(RP-MD)
RNAV	11354	5-4-2013	Fri	1313	Priboy w/26909 (Navy AN-26) reporting departure from (?Eisk?) and ETA for landing at Ostafevo at 1500 MSK w/fuel 5000 kgs. At 1408 26909 reports passing (Kanon) at 5500 mtrs w/fuel 4000 kgs.	USB	(RP-MD)
RNAV	11354	5-4-2013	Fri	1315	Priboy: w/26945 (Russian Navy AN-26)	USB	(RP-MD)
RNAV	11354	9-4-2013	Tue	1214	Priboy & Novator w/75095 closing out comms	USB	(RP-MD)
RNAV	11354	9-4-2013	Tue	1548	Priboj w/04104 (Russian Navy AN-26)	USB	(RP-MD)
RNAV	11354	9-4-2013	Tue	1617	Priboj w/10697 reporting passing unid point & ETA landing at Novosibirsk at 1950 MSK	USB	(RP-MD)
RNAV	11354	9-4-2013	Tue	1621	Priboj w/78973 reporting landing at Severomorsk at 1700 MSK w/fuel 16 tons.	USB	(RP-MD)
RNAV	11354	9-4-2013	Tue	1630	Priboj w/75497 reporting passing point (?Roschino?) at alt 2500 mtrs w/fuel Priboj and Monolog exchange flt info for 75497	USB	(RP-MD)
RNAV	11354	11-4-2013	Thu	1258	Priboj w/04104 (Russian Navy AN-26) reporting departure from Pushkino and ETA landing at Kaliningrad (time missed) w/fuel 5000 kgs.	USB	(RP-MD)
RNAV	8816	11-4-2013	Thu	1258	42322: Russian Naval Air Transport rjf94 rcb de 42322 qto 1300 qrd XMKK	USB	(RP-MD)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
					XLLP qre 1555 qah 5500 qbd 4900 k - qay EETT 1402 qah 5500 qbd 3900 k - qay EVRR 1508 qal XMKK 1547 qah 5500 qbd 2800 k - qqm XMKK 1552 sk		
RNAv	8816	11-4-2013	Thu	1258	26910: Russian Naval Air Transport rjf94 rjc38 de 26910 qto 0610 qrd XLAA XLMV qbd 4900 qre 0800 k	USB	(RP-MD)
RNAv	8816	11-4-2013	Thu	1258	42322: Russian Naval Air Transport rjf94 rcb de 42322 qqf UUWR 0801 qal XLLP 0856qah 5500 qbd 3700 k - qqm XLLP 0859 sk	USB	(RP-MD)
RNAv	11354	11-4-2013	Thu	1258	Priboj (Air Transports Central Sector, Moscow) w/26909 (Russian Navy AN-26) reporting departure from (missed) at 1149 MSK and landing at Ostafyevo at 1430 MSK w/fuel 5000 kgs. Priboj relays flt info to Novator (Air Transports Northern Sector, Murmansk). At 1350 26909 reports passing BUTRI at 1345 MSK at alt 5500 mtrs w/fuel 4000 kgs	USB	(RP-MD)
RNAv	8816	11-4-2013	Thu	1258	26910: Russian Naval Air Transport rjf94 rjc38 de 26910 qto 0910 qrd XLMV XLAA qbd 5200 qre 1100 k - qqm XLMV 1100 sk	USB	(RP-MD)
RNAv	11354	16-4-2013	Tue	1145	Priboj w/75081 (poss TU-22M) reporting passing (?ABELU?) at 1135 MSK at alt 4600 mtrs w/fuel 13500 kgs. ETA landing at (missed) 1435 MSK. Priboj relays info to Novator (Air Transports Northern Sector, Murmansk). At 1533 75081 calls both Priboj & Novator w/no response. At 1543 76081 reports position as 6707N/3701W at alt 7300 mtrs w/fuel 11000 kgs. ETA landing at Severomorsk-3 is 1625 MSK. At 1620 75081 reports landing at Severomorsk at 1625	USB	(RP-MD)
RNAv	11354	16-4-2013	Tue	1216	Priboj w/26899 (Russian Navy AN-26) reporting departure from Anapa at 1210 MSK w/fuel 5500 kgs flying at alt 5200 mtrs and ETA landing at Eisk 1300 MSK	USB	(RP-MD)
RNAv	11254	17-4-2013	Wed	1153	Priboj w/46548 (Russian Navy AN-24RV) reporting landing at Ostafyevo w/fuel 3000 kgs. Priboj confirms flt info w/Novator	USB	(RP-MD)
RNAv	11354	18-4-2013	Thu	1207	Priboj w/26945 (Russian Navy AN-26) reporting departure from Anapa at 1155 MSK & landing at Rostov 1310 MSK w/fuel 4900 kgs	USB	(RP-MD)
RNAv	11354	18-4-2013	Thu	1428	Priboj w/26945 reporting departure from Rostov at 1409 MSK and landing at Anapa at 1550 MSK w/fuel 3000 kgs. 26945 requests info be relayed to Kraket	USB	(RP-MD)
RNAv	11354	19-4-2013	Fri	1057	Priboj w/46548 (Russian Navy AN-26) reporting departure from Ostafyevo 1040 MSK and landing at Krasnodar at 1355 MSK at alt 5500 mtrs w/fuel 4600 kgs. Priboj relays info to Novator (Air Transports Northern Sector, Murmansk).(2013/04/19 RP-MD)	USB	(RP-MD)
RNAv	11354	19-4-2013	Fri	1123	Priboj w/26955 (prob Russian Navy AN-26) reporting departure from Rostov at 1110 MSK and landing at Anapa at 1200 MSK. At 1115 26955 reports actual landing at Anapa as 1215 MSK	USB	(RP-MD)
RNAv	11354	19-4-2013	Fri	1230	Priboj w/46548 (Russian Navy AN-26) w/position report 4077N/?30E alt 5700 mtrs w/fuel 3300 kgs	USB	(RP-MD)
RNAv	11354	22-4-2013	Mon	1200	Priboj w/26645 (Russian Navy AN-26) closing out comms.	USB	(RP-MD)
RNAv	11354	22-4-2013	Mon	1305	Priboj w/10696 (Russian Navy AN-12) reporting departure from Rostov at 1752 MSK and ETA Novosibirsk at 1740 MSK w/fuel 17 tons	USB	(RP-MD)
RNAv	11354	25-4-2013	Thu	1154	Priboj w/26895 (Russian Navy AN-26) reporting passing point NOVRO at 1050 MSK and ETA landing at Severomorsk-3 at 1200 MSK. Altitude 5700 mtrs & fuel 4000 kgs. Priboj relays flt info to Novator	USB	(RP-MD)
RNAv	11354	29-4-2013	Mon	1104	Priboj w/26900 (Russian Navy AN-26) reporting landing at Eisk at (time missed) & fuel 3000 kgs. Priboj relays info to Novator (Air Transports Northern Sector, Murmansk). At 1735 26900 reports departing Voronezh at 1730 MSK w/fuel 5400 kgs. ETA landing at Ostafyevo 1855 MSK	USB	(RP-MD)
RNAv	11354	29-4-2013	Mon	1104	Priboj w/26945 (Russian Navy AN-26) reporting landing at Ryzan at 1200 MSK. At 1302 25945 reports departure from Ryzan at 1455 MSK w/fuel 5000 kgs. ETA landing at Anapa is 1635 MSK.	USB	(RP-MD)
S06	5127	1-4-2013	Mon	1905	349 0	AM	(HFD)
S06	5890	2-4-2013	Tue	1759	162 162 162 00000	USB	(Q-HOL)
S06	5890	2-4-2013	Tue	1800	286 0	AM	(HFD)
S06	8177	6-4-2013	Sat	1600	764 958 32 00634 14533 68335 ... 47265 34367 13983 958 32 00000	AM	(Spec)
S06	8173	6-4-2013	Sat	1600	764 958 32 = 00634	AM	(HFD)
S06	8173	6-4-2013	Sat	1600	764 958 32 00634 14533 68335 ... 47265 34367 13983 958 32 00000	AM	(Avare)
S06	4977	6-4-2013	Sat	1900	319 0	AM	(HFD)
S06	6874	6-4-2013	Sat	1900	857 857 857 00000	AM	(HS2)
S06	6874	6-4-2013	Sat	1900	857 0	AM	(HFD)
S06	5912	6-4-2013	Sat	2000	157 157 157 00000	USB	(Q-HOL)
S06	5912	6-4-2013	Sat	2000	857 0	AM	(HFD)
S06	4019	6-4-2013	Sat	2000	319 0	AM	(HFD)
S06	13440	8-4-2013	Mon	1815	116 0	AM	(HFD)
S06	13440	8-4-2013	Mon	1815	116 116 116 00000	AM	(HS2)
S06	13440	8-4-2013	Mon	1815	116 00000	USB	(GJK-HOL)
S06	5784	8-4-2013	Mon	1900	349 0	AM	(HFD)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
S06	5784	8-4-2013	Mon	1900	349 349 349 00000	AM	(HS2)
S06	5784	8-4-2013	Mon	1900	349 00000	USB	(GJK-HOL)
S06	11105	8-4-2013	Mon	1915	116 00000	USB	(GJK-HOL)
S06	11105	8-4-2013	Mon	1915	116 0	AM	(HFD)
S06	5890	9-4-2013	Tue	1801	216 216 216 00000	USB	(Q-HOL)
S06	9225	11-4-2013	Thu	0830	480 913 40 29604 26043 90696 ... 05871 95713 54413 913 40 00000	AM	(Avare)
S06	9225	11-4-2013	Thu	0830	480 913 40 29604 26043 90696 ... 05871 95713 54413 913 40 00000	AM	(Spec)
S06	5127	11-4-2013	Thu	1905	349 349 349 00000	AM	(GJK-HOL)
S06	5127	11-4-2013	Thu	1905	349 0	AM	(HFD)
S06	5784	18-4-2013	Thu	1900	349 0	AM	(HFD)
S06	8177	20-4-2013	Sat	1600	764 958 32 00634 14533 68335 ... 47265 34367 13983 958 32 00000	AM	(Spec)
S06	6879	20-4-2013	Sat	1900	857 857 857 00000	AM	(FN)
S06	5919	20-4-2013	Sat	2000	897 00000	USB	(Spec)
S06	5784	22-4-2013	Mon	1900	349 0	AM	(HFD)
S06	5823	27-4-2013	Sat	1930	426 0	AM	(HFD)
S06c	16303	26-9-2007		1454	110001 (R4)	AM	(KK2)
S06c	14363	14-4-2013	Sun	1500	Sending 11007 for 4 minutes	AM	(GL)
S06s	7605	3-4-2013	Wed	0820	471 263 5 16744 96234 48310 98273 95331 263 5 00000	USB	(HS2)
S06s	9255	3-4-2013	Wed	0830	471 263 5 16744 96234 48310 98273 95331 263 5 00000	USB	(HS2)
S06s	7795	5-4-2013	Fri	0601	196 204 5 06123 22536 88280 84116 53718 204 5 00000	USB	(HS2)
S06s	7516	5-4-2013	Fri	0603	934 934 934 00000	USB	(HS2)
S06s	8695	5-4-2013	Fri	0611	196 204 5 06123 22536 88280 84116 53718 204 5 00000	USB	(HS2)
S06s	8529	5-4-2013	Fri	0620	934 934 934 00000	USB	(HS2)
S06s	9078	5-4-2013	Fri	0630	934 934 934 00000	USB	(HS2)
S06s	9457	5-4-2013	Fri	0640	934 934 934 00000	USB	(HS2)
S06s	10148	5-4-2013	Fri	0650	934 934 934 00000	USB	(HS2)
S06s	9225	5-4-2013	Fri	0830	480 251 40 25259 82385 ... 35975	USB	(HS2)
S06s	12140	5-4-2013	Fri	0930	516 943 7 60386 03009 81413 94073 83531 94063 05371 943 7 00000	USB	(HS2)
S06s	10350	6-4-2013	Sat	1200	254 973 6 16945 80744 86200 84706 42227 61736 973 6 00000	USB	(HS2)
S06s	8520	6-4-2013	Sat	1210	254 973 6 16945 80744 86200 84706 42227 61736 973 6 00000	USB	(HS2)
S06s	8173	6-4-2013	Sat	1600	764 958 32 00634 14533 ... 13983	AM	(HS2)
S06s	14580	8-4-2013	Mon	0900	872 935 6 45279 ... 00000	USB	(FN)
S06s	13165	8-4-2013	Mon	1011	i.p.	USB	(ML4)
S06s	11460	8-4-2013	Mon	1210	831 924 5 18264 57468 09128 45683 92287 924 5 00000	USB	(HS2)
S06s	5760	9-4-2013	Tue	0700	374 268 5 46062 68672 97478 39685 30485 268 5 00000	USB	(HS2)
S06s	5760	9-4-2013	Tue	0700	374 286 5 = 46062	USB	(HFD)
S06s	6930	9-4-2013	Tue	0710	374	USB	(HFD)
S06s	6930	9-4-2013	Tue	0715	374 268 5 46062 68672 97478 39685 30485 268 5 00000	USB	(HS2)
S06s	7425	9-4-2013	Tue	0730	427 903 5 21767 53672 11834 81022 35903 903 5 00000	USB	(HS2)
S06s	11560	9-4-2013	Tue	0740	427 903 5 21767 53672 11834 81022 35903 903 5 00000	USB	(HS2)
S06s	11635	9-4-2013	Tue	0800	352 901 6 05899 50387 45847 23013 89758 52343 901 6 00000	USB	(HS2)
S06s	10420	9-4-2013	Tue	0810	352 901 6 05899 50387 45847 23013 89758 52343 901 6 00000	USB	(HS2)
S06s	7245	9-4-2013	Tue	1510	537 281 6 87675 4532. 56412 6.543 .0884 12118 281 6 00000 (weak)	AM	(GJK-HOL)
S06s	7795	12-4-2013	Fri	0600	196 204 5 06123 22536 88280 84116 53718 204 5 00000	USB	(GJK-HOL)
S06s	8695	12-4-2013	Fri	0610	196 204 5 06123 (repeat of 0600z on 7795kHz) (carrier on freq and a singe *196*	USB	(GJK-HOL)
S06s	14080	16-4-2013	Tue	0600	438 257 6 = 13577	USB	(HFD)
S06S	12355	16-4-2013	Tue	0610	438	USB	(HFD)
S06s	9249	22-4-2013	Mon	0850	328 328 328 00000	USB	(FN)
S11a	5815	3-4-2013	Wed	1020	221/00	USB	(HS2)
S11a	7317	5-4-2013	Fri	0915	484/00	USB	(HS2)
S11a	9960	5-4-2013	Fri	1020	426/00	USB	(Spec)
S11a	5815	6-4-2013	Sat	1020	221/00	USB	(HS2)
S11a	5815	6-4-2013	Sat	1020	221/00	USB	(Spec)
S11a	16112	8-4-2013	Mon	1015	475/38 53155 ... 60632	USB	(Spec)
S11a	16112	8-4-2013	Mon	1015	475/38 V 53144 07400 ... 60632	USB	(HS2)
S11a	7317	9-4-2013	Tue	0915	484/00	USB	(HS2)
S11a	9960	9-4-2013	Tue	1020	426/00	USB	(Spec)
S11a	16112	15-4-2013	Mon	1015	475/00	USB	(Spec)
S11a	7317	16-4-2013	Tue	0915	484/00	USB	(Spec)
S11a	9960	23-4-2013	Tue	1020	426/00	USB	(Spec)
S11a	9960	26-4-2013	Fri	1020	426/00	USB	(HS2)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
S21	4454	2-4-2013	Tue	1842	454 (R) 231 231 30 30 msg 231 231 30 30 000 //4854	USB	(Q-HOL)
S21	4854	2-4-2013	Tue	1842	454 (R) 231 231 30 30 msg 231 231 30 30 000 //4454	USB	(Q-HOL)
S21	4854	9-4-2013	Tue	1842	454 (R) 231 231 30 30 msg 231 231 30 30 000 //4454	AM	(Q-HOL)
S21	4854	9-4-2013	Tue	1842	454 231 30 92524 36375 64209 88899 41067 82183 231 30 000 //4454	USB	(GJK-HOL)
S21	4854	9-4-2013	Tue	1842	454 231 30 92524 ... 82183 231 30 000	USB	(Spec)
S21	4454	9-4-2013	Tue	1842	454 (R) 231 231 30 30 msg 231 231 30 30 000 //4854	AM	(Q-HOL)
S21	4454	11-4-2013	Thu	1842	//4854kHz 454 231 30 92524 36375 64209 88899 41067 82183 231 30 000	USB	(GJK-HOL)
S21	4854	11-4-2013	Thu	1842	454 231 30 92524 ... 82183 231 30 000	USB	(Spec)
S21	4454	11-4-2013	Thu	1842	454 231 30 92524 36375 64209 88899 41067 82183 231 30 000 //4854 kHz	USB	(GJK)
S28	4625	2-4-2013	Tue	0455	MDZhB VEROGRAFIN 1510 Priyom	USB	(AB-EST)
S28	4625	3-4-2013	Wed	0732	Raz, dva, tri, raz, dva, tri (123 123) ya Revizor. Vozduh 30 25 76 618 75 852 13 / 33 20 77 78	USB	(AB/Avare/JM 5)
S28	4625	4-4-2013	Thu	1400	MDZhB PERLOVICA 4188	USB	(AB/JM5)
S28	4625	8-4-2013	Mon	0131	The Buzzer	USB	(JBL)
S28	4625	9-4-2013	Tue	1413	MDZhB 31 417 SVEKLOVITsA 47 23 24 71	USB	(AB/Avare)
S28	4625	9-4-2013	Tue	1426	MDZhB 82 851 KVARTsIT 91 19 71 27	USB	(AB/Avare)
S28	4625	9-4-2013	Tue	1446	MDZhB 30 517 KVARTIRNIK 05 72 88 04	USB	(AB/Avare)
S28	4625	9-4-2013	Tue	1506	MDZhB 71 346 AVANTYurIST 10 18 54 50	USB	(AB/Avare)
S28	4625	9-4-2013	Tue	1509	MDZhB 81 346 AVANTYurIST 10 18 54 50	USB	(AB/Avare)
S28	4625	9-4-2013	Tue	1521	MDZhB 06 512 AVANSOVYJ 29 20 13 32	USB	(AB/Avare)
S28	4625	9-4-2013	Tue	1530	MDZhB 11 468 EVANGELIST 70 43 61 40 KVADRATOR 77 85 90 68 ABShTRIKh 96 16 48 25	USB	(AB/Avare)
S28	4625	11-4-2013	Thu	0825	MDZhB 59 213 OBTURATOR 05 73 02 17 Priyom	USB	(Avare)
S28	4625	11-4-2013	Thu	0827	MDZhB 73 662 OBTOPAN 86 07 39 92 Priyom	USB	(Avare)
S28	4625	11-4-2013	Thu	0832	MDZhB 05 243 SBROShYeNNYJ 16 45 54 84 Priyom	USB	(Avare)
S28	4625	11-4-2013	Thu	1110	MDZhB 17 345 SBODRYGA 10 72 63 81 Priyom	USB	(Avare)
S28	4625	11-4-2013	Thu	1150	MDZhB 75 989 OBLom 45 99 25 66 priyom	USB	(Avare)
S28	4625	11-4-2013	Thu	1158	MDZhB 71 787 OBIDA 25 94 92 57 priyom	USB	(Avare)
S28	4625	11-4-2013	Thu	1207	MDZhB 92 285 OBZhIMOChNYJ 97 49 94 14 priyom	USB	(Avare)
S28	4625	11-4-2013	Thu	1313	MDZhB 15 182 OBYeZ'YANNIK 48 24 94 70 Priyom	USB	(Avare)
S28	4625	11-4-2013	Thu	1315	MDZhB 92 285 OBZhIMOCHNYJ 97 49 94 14 Priyom (same at 1210z)	USB	(Avare)
S28	4625	11-4-2013	Thu	1321	MDZhB 54 586 HAYATEL' 74 40 52 79 FAYaNIT 02 31 08 05 BASHMACHNIK 28 41 90 67 Priyom	USB	(Avare)
S28	4625	11-4-2013	Thu	1323	MDZhB 03 468 MAHILIS 70 60 61 71 NAHILA 02 41 44 66 NASTOKS 68 05 35 63 KAFIZMA 35 75 23 82 Priyom	USB	(Avare)
S28	4625	15-4-2013	Mon	0829	MDZhB 58 791 LAUDANUM 02 23 11 08 Priyom	USB	(AB-EST)
S28	4625	15-4-2013	Mon	0832	MDZhB 28 862 NAUGOLNIK 64 21 38 74 Priyom	USB	(AB-EST)
S28	4625	15-4-2013	Mon	1024	MDZhB 26 286 LATYSh 30 48 72 73 Priyom	USB	(AB/Avare)
S28	4625	15-4-2013	Mon	1038	MDZhB 05 287 ZATYChKA 98 47 18 96 Priyom	USB	(AB/Avare)
S28	4625	15-4-2013	Mon	1213	MDZhB 63 905 GATEROL 51 08 20 16 Priyom	USB	(AB-EST)
S28	4625	15-4-2013	Mon	1216	MDZhB 83 009 PATRUBEN 69 03 28 50 Priyom	USB	(AB-EST)
S28	4625	15-4-2013	Mon	1218	MDZhB 13 843 MATROSKA 29 66 92 06 Priyom	USB	(AB-EST)
S30	3756	8-4-2013	Mon	0142	The Pip	CW	(JBL)
S30	5448	25-4-2013	Thu	0426	The Pip	CW	(AB)
S32	3828	8-4-2013	Mon	0144	Squeaky Wheel	USB	(JBL)
S32	3828	9-4-2013	Tue	1829	Al'fa45 96753 41302 19668 52477 39291 ABYeTcYeDARIJ 4261 2956 Priyom	USB	(Avare)
S32	3828	9-4-2013	Tue	1859	Al'fa45 49093 07726 53859 41107 08872 VOTRA 5974 6136 Priyom	USB	(Avare)
S32	3828	10-4-2013	Wed	1726	Al'fa45 58562 95403 56475 02110 28544 TARITARU 6266 7754 Priyom	USB	(Avare)
S32	3828	10-4-2013	Wed	1726	Al'fa45 58562 95403 56475 02110 28544 TARITAU 6266 7754 Priyom	USB	(Avare)
S32	3828	10-4-2013	Wed	1741	Al'fa45 31954 51301 21648 62586 71913 PIKSAL 7354 0572 Priyom	USB	(Avare)
S32	3828	10-4-2013	Wed	1741	Al'fa45 31954 51301 21648 62586 71913 PIKSAL7354 0572 Priyom	USB	(Avare)
SDN	10575	16-4-2013	Tue	1945	Sudanese diplo	Pactor-1	(linkz)
SK01	10345	12-4-2013	Fri	0631	I/P (at least 13 bursts + 5F Spanish voice groups until OTA at 0654z) (not decod	AM	(GJK-HOL)
SO1	11530	29-4-2013	Mon	2320	V2a / S01: 2320 1 V2a group operating between S01 digital bursts, 2325 dead air	AM	(MT2)
V13	7688	13-4-2013	Sat	0500	New Star #4. Tune followed by coded messages	USB	(AB-HK)
V13	7688	14-4-2013	Sun	0500	New Star #4. Tune followed by coded messages	USB	(AB-HK)
V13	7688	14-4-2013	Sun	0600	New Star #4. Tune followed by coded messages	USB	(AB-HK)
V13	7654	14-4-2013	Sun	0700	New Star #3. Tune followed by coded messages	USB	(AB-HK)
V13	7688	17-4-2013	Wed	0600	New Star #4. Tune and coded messages	USB	(AB-HK)
V13	7688	28-4-2013	Sun	0514	New Star in progress	USB	(AB-HK)

enigma	Freq.	date	day	UTC	remarks	mode	contributor
V13	7688	30-4-2013	Tue	0500	New Star #4. Tune followed by coded messages	USB	(AB-HK)
V13	7688	30-4-2013	Tue	1200	New Star #4. Tune followed by coded messages	USB	(AB-HK)
V13	7688	30-4-2013	Tue	1300	New Star #4. Tune followed by coded messages	USB	(AB-HK)
VC03	18988	9-4-2013	Tue	0630	Chinese Numbers. Female operator repeating each number twice. See N&O 187	LSB	(NC)
X06	11438	2-4-2013	Tue	1540	Mazielka. Sequence: 532614	USB	(FN)
X06	14405	3-4-2013	Wed	0640	Mazielka. Sequence: 256341	USB	(FN)
X06	16103	6-4-2013	Sat	1400	Mazielka. Sequence: 231654 (Russian MFA, Moscow)	USB	(MCO)
X06	16117	8-4-2013	Mon	0943	Mazielka. Sequence: 463125	USB	(FN)
X06	20604	12-4-2013	Fri	1009	Mazielka. Sequence: 256134	USB	(EW)
X06	12149	16-4-2013	Tue	0919	Mazielka. Sequence: 154263	USB	(Spec)
X06	9288	25-4-2013	Thu	0943	Mazielka. Sequence: 356412	USB	(HS2)
X06	10653	25-4-2013	Thu	0949	Mazielka. Sequence: 356412	USB	(HS2)
X06	14863	25-4-2013	Thu	1000	Mazielka. Sequence: 615243	USB	(HS2)
X06	9288	26-4-2013	Fri	0940	Mazielka. Sequence: 356412	USB	(HS2)
X06	12105	28-4-2013	Sun	1740	Mazielka. Sequence: 145632	USB	(tING)
X06	8171	28-4-2013	Sun	1806	Mazielka. Sequence: 145623	USB	(FN)
XPA	10943	2-4-2013	Tue	1900	msg	MFSK	(HFD)
XPA	10943	2-4-2013	Tue	1901	922 922 922 000 (R) 03232 00001 00000 10140	MFSK	(Q-HOL)
XPA	10243	2-4-2013	Tue	1920	msg	MFSK	(HFD)
XPA	10243	2-4-2013	Tue	1920	922 922 922 000 (R) 03232 00001 00000 10140	MFSK	(Q-HOL)
XPA	9243	2-4-2013	Tue	1940	msg	MFSK	(HFD)
XPA	10943	9-4-2013	Tue	1900	922 922 922 1 (R) msg	MFSK	(Q-HOL)
XPA	10243	9-4-2013	Tue	1920	922 922 922 1 (R) msg	MFSK	(Q-HOL)
XPA	10243	9-4-2013	Tue	1921	i/p	USB	(GJK-HOL)
XPA	9243	9-4-2013	Tue	1940	922 922 922 1 (R) msg	MFSK	(Q-HOL)
XPA	10244	11-4-2013	Thu	1920	922 922 922 1 => 07878 00213	MFSK	(PPA)
XPA	10243	11-4-2013	Thu	1920	MsgStrt 99999996666626666666 4444444444 66662226666699229922992 1992299229922119	USB	(GJK-HOL)
XPA2	12137	7-4-2013	Sun	1946	i.p.	MFSK	(LG2)
XSL	6417	12-3-2013		1803	Japan Maritime Self-Defense Force	QPSK 1500	(PPA)
XSL	8588	2-4-2013	Tue	1851	Japanese Navy	QPSK 1500	(LG2)
XSL	8588	4-4-2013	Thu	1719	Japanese Navy	QPSK 1500	(LG2)
XSL	8312.5	4-4-2013	Thu	1747	Japan Maritime Self-Defense Force	QPSK 2500	(PPA)



My very first radio. It is a Philips transistor radio with Long Wave and Medium Wave, ca 1966.

I listened to offshore stations like Radio Veronica as often as I could 😊

CONTRIBUTORS

AB	Ary Boender, Netherlands	JPL	JPL, Ontario, Canada
AB-CA	Ary Boender via remote rx in California, USA	JPL-FNL	JPL via remote rx Finland
AB-EST	Ary Boender via remote rx Estonia	JPL-HK	JPL via GlobalTuners Hong Kong
AB-HK	Ary Boender via remote rx Hong Kong	JPL-Sib	JPL via remote rx Siberia
AB-SIB	Ary Boender via remote rx Siberia	JS4	John Spicer, CA, USA
AIK	Douglas, Israel	KK2	Kristian K, Central Europe
Alan	Alan Witt	LAU	Laurence
AS3	Arch Stanton, AUS	LG2	Les G, UK
ASh	Alex Shmel, Russia	linkz	Linkz, S.E. France
Avare	Avare	MCO	Mike Chace-Ortiz, PA, USA
BCA	Brandon Longo, CA, USA	MG	Manolis, Greece
BCI	Bruno Casula, Italy	ML4	Michel Lacroix, France
BvR	Bert van Rij, Netherlands	MPJ	Jim, SW England
Dan	Daniel, Argentina	MPJ-Sib	Jim via remote rx Siberia
DAU	DougAU, AL, USA	MT2	Mark Taylor, WI, USA
DMNZ	Dallas McKenzie, New Zealand	NC	Nick Carrigan, WA, USA
E2601	Emilio, Mexico	OSc	Ohio Scan, Ohio, USA
Evan	Evan Bench	PPA	Peter Poelstra, Netherlands
EW	Eddy Waters, Australia	Q-HOL	Chief via remote rx in The Netherlands
FN	Fritz Nusser, Switzerland	RD	Richard Dillman
GJK-HOL	Jim KC via websdr HOL	RP-MD	Ron, MD, USA
GJK-RUS	Jim KC via remote rx Russia	Spec	The Spectre 3000, UK
GL	Gilles Letourneau, Canada	TB2	Tim Bucknall, UK
HFD	Hans-Friedrich Dumrese, Germany	Tom	Tom, Lincs, UK
HS	Hugh Stegman, USA	TR2	Tony, UK
HS2	Hans Snekvik, W. Europe	VL	Vincent Lecler, France
IARUMS	IARU Monitoring Service	WP3	Wolfgang Palmberger
JBL	Jack Lambert. Canada	YM	Yves-Marie, France

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