

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	59
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 #178, July 2012

Editor: Ary Boender email: [ary@luna.nl](mailto: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>

July was not a very exciting month. We received less logs and “numbers news” than usually. Therefore an extra big THANKS to all the dxers who did share their logs!!!

## VOICE STATIONS



### **E11, E11a, E11c**

8102 kHz, 31-07, 2000 UTC: 757/2000/00

Avare recorded the transmission. The recording can be found on the N&O website.

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### **E25**

9450 kHz, 11-07, 1215 UTC:

Song 85 835..Message, Rebeat, EOM EOT

9450 kHz, 21-07, 0941 UTC:

YL. 950 30 5841 0276 1764 5036 9428 4940 9451 0287 4006 3719 2513 7030 9356 4581  
0167 0680 5573 9027 6379 2971 0764 3497 1135 8807 3040 7972 3010 0759 5764 2628

6140 kHz, 21-07, 0951 UTC:

YL. 950 30 5841 0276 1764 5036 9428 4940 9451 0287 4006 3719 2513 7030 9356 4581  
0167 0680 5573 9027 6379 2971 0764 3497 1135 8807 3040 7972 3010 0759 5764 2628

6140 kHz, 25-07, 1028 UTC:

YL. 675 7? (Hard to copy)

9450 kHz, 30-07, 1205 UTC:

tone 752 ... 752 tone MSG ... RBT ... EOM tone

9450 kHz, 30-07, 1213 UTC:

song 835 ... 835 MSG 9999 repeated continiously RBT... EOM EOT

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### **G06**

6887 kHz, 12-07, 1830 UTC:

842 209 15

53821 10638 32987 60153 27493 25401 36272 42819 06491 29104

64729 26194 36291 37290 43261

209 15 00000

Thanks to Avare for the log and the recording, which is available from our website.

---



## S28 - The Buzzer

Mode: USB  
Frequency: 4625 kHz

Just like last month there were only a few control ("reskript") messages this month. Unfortunately the remote link from Estonia has not been working for a part of the month. Therefore I was not able to hear the station myself during most of the days. Please note the word *Priyom* in several repeats. On 25 and 26 July there were also differences in the message and its repeat.

12-07, 0600 UTC: MDZhB 94 480 Skrtuten' 35 49 18 18  
MDZhB 51 868 Ukruplenie 91 85 02 66  
MDZhB 45 066 Balanus ?? 93 85 36

19-07, 0703 UTC: MDZhB 67 904 Palavan 66 62 63 16  
MDZhB 93 490 Balabola 10 97 55 70

19-07, 1041 UTC: MDZhB 61 540 Laksogen 74 50 48 38  
MDZhB 51 395 Saks 41 55 07 17

19-07, 1247 UTC: MDZhB 05 653 Pakan 65 53 27 38

23-07, 1453 UTC: MDZhB 76 629 Kajnozoj 53 73 04 92

23-07, 1602 UTC: MDZhB 46726 Bajlent 91 00 23 23

25-07, 1327 UTC: MDZhB 19 803 Khaylard 19 83 93 37 **Rajela** 41 81 50 83  
Repeat: MDZhB 19 803 Khaylard 19 83 93 37 **Gajela** 41 81 50 83

26-07, 0840 UTC: MDZhB 95 046 KAIK 24 51 15 36 LAZUTChIK 04 62 57 87

26-07, 0842 UTC: MDZhB 74 503 FAZULINA 38 05 38 48

26-07, 1222 UTC: MDZhB 84 699 BAZhENJE 14 **04** 56 86  
Repeat: MDZhB 84 699 BAZhENJE 14 **05** 56 86 *Priyom*

26-07, 1224 UTC: MDZhB 79 567 RAZLOZhKA 47 88 22 30  
Repeat: MDZhB 79 567 RAZLOZhKA 47 88 22 30 *Priyom*

26-07, 1226 UTC: MDZhB 80 702 RAZBURA 79 01 67 52

26-07, 1332 UTC: MDZhB 55 262 VAZhDENIE 20 11 73 86 NAJEZDNYJ 39 59 08 02  
Repeat: MDZhB 55 262 VAZhDENIE 20 11 73 86 NAJEZDNYJ 39 59 08 02 *Priyom*



## S30 - The Pip

Modes: CW (Pip), USB (messages)  
Frequencies: 3756 kHz (night), 5448 kHz (day)

5448 kHz, 25-07, 1338 UTC: weather msg for 8S1Shch

*8S1SHCH Prognoz pogody 27 iyulya Severnykh raionakh Respubliki Adyghei ozhidayut'sya chrezvychainaya pozharoopasnost' 5 klassa, svyazi s dozhdymi 28 iyulya v otdel'nykh raionakh Krasnodarskogo kraya i Respublikakh Severnogo Kavkaza sokhranit'sya opasnost' skhoda selevykh potokov i opolzneye, chrezvychainaya pozharoopasnost' sokhranit'sya v Stavropol'skom, Krasnodarskom krayakh, Rostovskoi, Volgogradskoi oblastiakh i Respubliki Kalmykii. Priyom*

*8S1SCH Weather July 27 In the Northern districts of the Republic of Adygea extreme fire danger class 5 is expected. Due to the rain on July 28 some districts of the Krasnodar Territory and the Northern Caucasus remain dangerous with mudflows and landslides, extreme fire danger will remain in Stavropol, Krasnodar Krai, Rostov and Volgograd regions and the Republic of Kalmykia. Over.*

5448 kHz, 26-07, 0903 UTC: 8S1Shch 52 976 KYRIYa 74 65 96 83 *Priyom*

Both logged by Avare.



## S5292

Frequency: 5292 kHz  
Mode: CW + USB

5292 kHz, 26-07, 0857 UTC: XXX XXX WLHN WLHN 9O117 WYVLTNIK O214 7548 K  
5292 kHz, 26-07, 0900 UTC: XXX G5CX G5CX F2ET F2ET 89733 24185 TETEREW 49O4 7742 K

---



## Other Russian military stations

Frequency: various  
Mode: USB / voice

AnEur mailed me a number of his old Russian military logs. Thanks for that. Except for S28, S30, S32 and S6930 the majority of the Russian military logs are in CW, so it is a welcome addition to the logs. See also M21c.

4424 kHz, 16-04-2012, 2114 UTC:	Russian Mil: "Zhargon-45" "Kinose-27".
6256 kHz, 29-10-2009, 1149 UTC:	Russian Mil: "Gvazdika", "Sotnik", "Volgodonsk-130"
5353 kHz, 29-10-2009, 0830 UTC:	Russian Mil: "Okola-40", "Palata-73", "Tuman-01"
5210 kHz, 29-10-2009	Russian Mil: "Berkut-24", "Fakel-42"
4350 kHz, 07-06-2009, 1200 UTC:	Russian Mil: "Vaga-53, ya Soyuz-28, kak slyshite menya, priyom". "Start-820, ya Soyuz-28, slyshu vas na poltora balla, do svyazi, pryom"
5178 kHz, 12-06-2009, 0740 UTC:	Russian Mil: Marevo-29", "Siren'-40", "Taiga-38"
4668 kHz, 12-06-2009, 0935 UTC:	Russian Mil: "Bukser-27", "Yava-35", "Bufet-82"

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## *V13 - New Star Broadcasting Station*

### 星星廣播電台 Xīngxīng guǎngbò diàntái

Station #3 has daily transmissions on 9276 kHz at 0700 and 0800 UTC.

Station #4 has daily transmissions on 11430 kHz at 0500, 0600, 1200 and 1300 UTC.

I have uploaded a recording of a full 32 minutes transmission of the station. The recording was made by Tomonori Izumi. Thanks my friend !

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## *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, 5393, 5700, 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, 8000, 8025, 8170, 9000, 9169, 9192, 9290, 9340, 10508 kHz.

4343 kHz, 18-07, 1644 UTC  
4343 kHz, 21-07, 1029 UTC + 1218 UTC  
6858 kHz, 21-07, 1202 UTC + 1438 UTC

6858 kHz, 22-07, 0806 UTC  
4343 kHz, 22-07, 1525 UTC + 1816 UTC  
4343 kHz, 27-07, 1528 UTC  
6858 kHz, 28-07, 1032 UTC  
6858 kHz, 29-07, 0513 + 0604 + 0707 + 0812 UTC  
4343 kHz, 29-07, 1304 UTC

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## MORSE STATIONS



**MX**

### Russian Military beacons

Reported beacons:

European Cluster Beacons: D, P, S, C, A, L

Asian Cluster Beacons: F, K, M

V - 7027.5 kHz

15-07: Defective beacon on 8494.8 kHz sending random letters "E N N G W W A I E E" etc.

22-07: Beacon "L" showed up on 7039.2 kHz. It used to be on 7041.8 kHz

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**M12**

Freq.	date	UTC	remarks
10843	1-7-2012	1830	828 000
9243	1-7-2012	1850	828 000
6857	2-7-2012	0430	850 000
7557	2-7-2012	0450	850 000
13972	2-7-2012	1300	944 1 673 89 90152
13472	2-7-2012	1320	944 1 673 89 90152
11472	2-7-2012	1340	944 1 673 89 90152
12162	2-7-2012	1600	546 1
12162	2-7-2012	1600	546 1 1347 73 59468
11566	2-7-2012	1620	546 1 1347 73 59468
11561	2-7-2012	1620	546 1
10711	2-7-2012	1640	546 1 1347 73 59468
10711	2-7-2012	1640	546 1
9176	2-7-2012	1700	257 1 4236 70 43644
9176	2-7-2012	1700	257 1
7931	2-7-2012	1720	257 1 4236 70 43644
7931	2-7-2012	1720	257 1
6904	2-7-2012	1740	257 1 4236 70 43644
6904	2-7-2012	1740	257 1
9176	2-7-2012	1800	257 1 7569 66 30029
7931	2-7-2012	1820	257 1 7569 66 30029

Freq.	date	UTC	remarks
6904	2-7-2012	1840	257 1 7569 66 30029
9176	2-7-2012	1900	257 1 1076 81 25174
7931	2-7-2012	1920	257 1 1076 81 25174
6904	2-7-2012	1940	257 1 1076 81 25174
10343	3-7-2012	1830	124 1 1733 55 95573
9264	3-7-2012	1850	124 1 1733 55 95573
8116	3-7-2012	1910	124 1 1733 55 95573
14492	4-7-2012	1500	944 1
14492	4-7-2012	1500	944 1 673 89 90152
13392	4-7-2012	1520	944 1
13392	4-7-2012	1520	944 1 673 89 90152
11092	4-7-2012	1540	944 1
11092	4-7-2012	1540	944 1 673 89 90152
8047	4-7-2012	1700	463 1 2226 41 49639
6802	4-7-2012	1720	463 1 2226 41 49639
5788	4-7-2012	1740	463 1 2226 41 49639
10843	4-7-2012	1830	828 1 634 195 74425
11435	4-7-2012	1830	938 1 5713 52 20709
10598	4-7-2012	1850	938 1 5713 52 20709
9243	4-7-2012	1850	828 1 634 195 74425
7843	4-7-2012	1910	828 1 634 195 74425

Freq.	date	UTC	remarks
9327	4-7-2012	1910	938 1 5713 52 20709
9379	4-7-2012	2100	398 000
9379	4-7-2012	2100	398 0
14869	4-7-2012	2110	851 1 189 167 28657
7979	4-7-2012	2120	398 000
7979	4-7-2012	2120	398 0
13569	4-7-2012	2130	851 1 189 167 28657
12169	4-7-2012	2150	851 1 189 167 28657
7984	5-7-2012	0630	911 000
9184	5-7-2012	0650	911 000
13926	5-7-2012	1310	919 0
12126	5-7-2012	1330	919 0
10343	5-7-2012	1700	124 1
9176	5-7-2012	1700	257 1 4894 79 96455
10343	5-7-2012	1700	124 1 3865 80 22353
9264	5-7-2012	1720	124 1 3865 80 22353
9264	5-7-2012	1720	124 1
7931	5-7-2012	1720	257 1 4894 79 96455
6904	5-7-2012	1740	257 1 4894 79 96455
8116	5-7-2012	1740	124 1 3865 80 22353
8116	5-7-2012	1740	124 1
10343	5-7-2012	1800	124 1 2775 72 12854
9264	5-7-2012	1820	124 1 2775 72 12854
8116	5-7-2012	1840	124 1 2775 72 12854
9176	5-7-2012	1900	257 1 7811 53 81435
7931	5-7-2012	1920	257 1 7811 53 81435
6904	5-7-2012	1940	257 1 7811 53 81435
10343	6-7-2012	1800	124 1
10343	6-7-2012	1800	124 1 9296 77 55688
9264	6-7-2012	1820	124 1
9243	6-7-2012	1820	124 1 9296 77 55688
8116	6-7-2012	1840	124 1 9296 77 55688
10843	8-7-2012	1830	828 1 634 195 74425
9243	8-7-2012	1850	828 1 634 195 74425
7843	8-7-2012	1910	828 1 634 195 74425
6857	9-7-2012	0430	850 000
7557	9-7-2012	0450	850 000
13972	9-7-2012	1300	944 1 794 103 67616
13972	9-7-2012	1300	944 1
13472	9-7-2012	1320	944 0
13472	9-7-2012	1320	944 1 794 103 67616
11472	9-7-2012	1340	944 0
11472	9-7-2012	1340	944 1 794 103 67616
12162	9-7-2012	1600	546 1 7033 84 62829
11566	9-7-2012	1620	546 1 7033 84 62829
10711	9-7-2012	1640	546 1 7033 84 62829
9176	9-7-2012	1700	257 1 9300 72 54084
7931	9-7-2012	1720	257 1 9300 72 54084
6904	9-7-2012	1740	257 1 9300 72 54084
9176	9-7-2012	1800	257 1 8316 69 28755
7931	9-7-2012	1820	257 1 8316 69 28755
6904	9-7-2012	1840	257 1 8316 69 28755
9176	9-7-2012	1900	257 1 6915 46 72571

Freq.	date	UTC	remarks
7931	9-7-2012	1920	257 1 6915 46 72571
6904	9-7-2012	1940	257 1 6915 46 72571
10343	10-7-2012	1830	124 1 4842 64 62716
9264	10-7-2012	1850	124 1 4842 64 62716
8116	10-7-2012	1910	124 1 4842 64 62716
14492	11-7-2012	1500	944 1 794 103 67616
13392	11-7-2012	1520	944 1 794 103 67616
11092	11-7-2012	1540	944 1 794 103 67616
8047	11-7-2012	1700	463 1 2538 92 57888
6802	11-7-2012	1720	463 1 2538 92 57888
5788	11-7-2012	1740	463 1 2538 92 57888
5788	11-7-2012	1745	ip
11435	11-7-2012	1830	938 1 4137 70 98781
10843	11-7-2012	1830	828 000
10598	11-7-2012	1850	938 1 4137 70 98781
9243	11-7-2012	1850	828 000
9327	11-7-2012	1910	938 1 4137 70 98781
9327	11-7-2012	1910	938(x3) 1
9379	11-7-2012	2100	398 000
14869	11-7-2012	2110	851 000
7979	11-7-2012	2120	398 000
13569	11-7-2012	2130	851 000
7984	12-7-2012	0630	911 000
9184	12-7-2012	0650	911 000
10343	12-7-2012	1700	124 1 2615 77 55343
9264	12-7-2012	1720	124 1 2615 77 55343
8116	12-7-2012	1740	124 1 2615 77 55343
10343	12-7-2012	1800	124 1 9824 100 93914
9264	12-7-2012	1820	124 1 9824 100 93914
8116	12-7-2012	1840	124 1 9824 100 93914
9176	12-7-2012	1900	257 1 4340 60 44729
7931	12-7-2012	1920	257 1 4340 60 44729
6904	12-7-2012	1940	257 1 4340 60 44729
10343	13-7-2012	1800	124 1 7621 91 45726
9264	13-7-2012	1820	124 1 fast 5FGs 45726 45726 ... 73481 71347 000 000
9264	13-7-2012	1820	124 1 7621 91 45726
8116	13-7-2012	1840	124 1 7621 91 45726
14869	14-7-2012	2110	951 000
13369	14-7-2012	2130	951 000
10843	15-7-2012	1830	828 000
9243	15-7-2012	1850	828 000
6857	16-7-2012	0430	850 000
7557	16-7-2012	0450	850 000
13972	16-7-2012	1300	944 1 810 167 16751
13472	16-7-2012	1320	944 1 810 167 16751
11472	16-7-2012	1340	944 1 810 167 16751
12162	16-7-2012	1600	546 1 3272 80 89965
11566	16-7-2012	1620	546 1 3272 80 89965
10711	16-7-2012	1640	546 1 3272 80 89965
9176	16-7-2012	1700	257 1 5683 79 77615
7931	16-7-2012	1720	257 1 5683 79 77615
6904	16-7-2012	1740	257 1 5683 79 77615

Freq.	date	UTC	remarks
9176	16-7-2012	1800	257 1 1109 40 33249
7931	16-7-2012	1820	257 1 1109 40 33249
6904	16-7-2012	1840	257 1 1109 40 33249
9176	16-7-2012	1900	257 1 5188 94 00261
7931	16-7-2012	1920	257 1 5188 94 00261
6904	16-7-2012	1940	257 1 5188 94 00261
10343	17-7-2012	1830	124 1 3829 69 90996
9264	17-7-2012	1850	124 1 3829 69 90996
8116	17-7-2012	1910	124 1 3829 69 90996
8116	17-7-2012	1915	In traffic ... 32265 29310 ...02195 70194 000 000
14492	18-7-2012	1500	944 1 810 167 16751
13392	18-7-2012	1520	944 1 810 167 16751
11092	18-7-2012	1540	944 1 810 167 16751
8047	18-7-2012	1700	463 1 8462 56 44223
6802	18-7-2012	1720	463 1 8462 56 44223
5788	18-7-2012	1740	463 1 8462 56 44223
10843	18-7-2012	1830	828 1 366 163 41943
11435	18-7-2012	1830	938 1 2267 51 51366
9243	18-7-2012	1850	828 1 366 163 41943
10598	18-7-2012	1850	938 1 2267 51 51366
7843	18-7-2012	1910	828 1 366 163 41943
9327	18-7-2012	1910	938 1 2267 51 51366
9379	18-7-2012	2100	398 1 946 119 84581
14869	18-7-2012	2110	851 000
7979	18-7-2012	2120	398 1 946 119 84581
13569	18-7-2012	2130	851 000
10343	19-7-2012	1700	124 1 5132 71 37190
9176	19-7-2012	1700	257 1 4960 60 77011
7931	19-7-2012	1720	257 1 4960 60 77011
9264	19-7-2012	1720	124 1 5132 71 37190
6904	19-7-2012	1740	257 1 4960 60 77011
8116	19-7-2012	1740	124 1 5132 71 37190
10343	19-7-2012	1800	124 1 4698 62 34584
9264	19-7-2012	1820	124 1 4698 62 34584
8116	19-7-2012	1840	124 1 4698 62 34584
9176	19-7-2012	1900	257 1 5000 54 64959
7931	19-7-2012	1920	257 1 5000 54 64959
6904	19-7-2012	1940	257 1 5000 54 64959
10343	20-7-2012	1800	124 1 2566 88 32194
9264	20-7-2012	1820	124 1 2566 88 32194
8116	20-7-2012	1840	124 1 2566 88 32194
13926	21-7-2012	1310	919 000
12126	21-7-2012	1330	919 000
14869	21-7-2012	2110	851 000
13569	21-7-2012	2130	851 000
10843	22-7-2012	1830	828 1 366 163 41943
9243	22-7-2012	1850	828 1 366 163 41943
7843	22-7-2012	1910	828 1 366 163 41943

Freq.	date	UTC	remarks
6857	23-7-2012	0430	850 000
7557	23-7-2012	0450	850 000
13972	23-7-2012	1300	944 1 372 309 61889
13472	23-7-2012	1320	944 1 372 309 61889
11472	23-7-2012	1340	944 1 372 309 61889
12162	23-7-2012	1600	546 1 3053 95 57905
11566	23-7-2012	1620	546 1 3053 95 57905
10711	23-7-2012	1640	546 1 3053 95 57905
9176	23-7-2012	1700	257 1 1929 80 00381
7931	23-7-2012	1720	257 1 1929 80 00381
6904	23-7-2012	1740	257 1 1929 80 00381
9176	23-7-2012	1800	257 1 5556 44 44971
7931	23-7-2012	1820	257 1 5556 44 44971
6904	23-7-2012	1840	257 1 5556 44 44971
9176	23-7-2012	1900	257 1 9668 50 38865
7931	23-7-2012	1920	257 1 9668 50 38865
6904	23-7-2012	1940	257 1 9668 50 38865
14492	25-7-2012	1500	944 1 232 309 61889
13392	25-7-2012	1520	944 1 232 309 61889
11092	25-7-2012	1540	944 1 232 309 61889
8047	25-7-2012	1700	463 1 1997 73 55458
6802	25-7-2012	1720	463 1 1997 73 55458
5788	25-7-2012	1740	463 1 1997 73 55458
10843	25-7-2012	1830	828 1 876 139 72327
11435	25-7-2012	1830	938 1 5823 59 27750
9243	25-7-2012	1850	828 1 876 139 72327
10598	25-7-2012	1850	938 1 5823 59 27750
9327	25-7-2012	1910	938 1 5823 59 27750
7843	25-7-2012	1910	828 1 876 139 72327
9379	25-7-2012	2100	398 000
14869	25-7-2012	2110	851 000
7979	25-7-2012	2120	398 000
13569	25-7-2012	2130	851 000
7984	26-7-2012	0630	911 000
9184	26-7-2012	0650	911 000
10343	26-7-2012	1700	124 1 3112 73 95825
9176	26-7-2012	1700	257 1 8670 54 71856
9264	26-7-2012	1720	124 1 3112 73 95825
7931	26-7-2012	1720	257 1 8670 54 71856
8116	26-7-2012	1740	124 1 3112 73 95825
6904	26-7-2012	1740	257 1 8670 54 71856
10343	26-7-2012	1800	124 1 2068 55 87246
9264	26-7-2012	1820	124 1 2068 55 87246
8116	26-7-2012	1840	124 1 2068 55 87246
9176	26-7-2012	1900	257 1 6575 51 44000
7931	26-7-2012	1920	257 1 6575 51 44000
6904	26-7-2012	1940	257 1 6575 51 44000



## M14

10425 kHz, 09-07, 1640 UTC: t58 (x3) 318 318 27t 27t == ....  
 10754 kHz, 11-07, 1702 UTC: i.p. 54247==7t6 7t6 23 23 ttttt  
 9073 kHz, 11-07, 1730 UTC: 975 (R3) 7t6 7t6 23 23==93548...  
 8169 kHz, 17-07, 1638 UTC: i.p. == 832 832 17 17  
 9075 kHz, 19-07, 1740 UTC: i.p. == 238 238 58 58 ttttt

---



## M18

M18 was active on 4503 kHz in July.

08-07, 1942 UTC: 0042 0042 0042  
 09-07, 2037 UTC: 0001 0001 0002  
 10-07, 2058 UTC: 0403 0403 0404

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## *M21 + variants*

### *Russian Air Defence Forces*

### *Во́йска ПВО Voyska PVO*

#### M21

Id "0": 3246, 5221.5 kHz  
 Id "8": 9222 kHz  
 Id "?": 4791, 7166 kHz  
 No id: 4789 kHz =991607????????

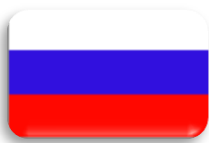
#### M21c

During the past years PVO has been using 4510 kHz (+/- 2 kHz) and several other frequencies for its voice transmissions. The transmissions are live and most of the time the operator is female. I included a couple of logs that I found in old log files and a few from AnEur who sent some of his old Russian military logs. A very nice sample can be found on <http://soundcloud.com/roslislav-onoshko/4510khz-mesagge-by-snn>

4508 kHz, 20-10-2010, 0418 UTC: Russian Air Defense. YL voice, live transmission  
 4508 kHz, 20-10-2010, 1911 UTC: Russian Air Defense. YL voice, live transmission  
 4510 kHz, 04-03-2009, 0830 UTC: Russian Air Defense "Zebra-21", "Tselina-16", "Skirda-77"  
 5620 kHz, 23-06-2011, 2222 UTC: Russian Air Defense: "53-й - 15, 59-й - 09, 61 - 600, 53-й - 15, 53-й за 11, 53-й - 15, 45-й за 12, 53-й - 15, 43-й за 12, 53-й - 15, 35-й за 14, 53-й - 15, 39-й за 16, 61-й за 11600, 53-й - 15, 32-й за 16, 53-й - 75, 69-й на втором, 56-й за 15, 0054 otvet'te 545khkhkhkhkhkhkh"  
 2995 kHz, 16-02-2012, 1615 UTC: Russian Air Defense: "54ya 154 176, 60ya 150 098, 42ya 211 160, 44ya 270 170, 45ya 221 360"  
 4467 kHz, 30-05-2012, 2106 UTC: Russian Air Defense. Male voice, live transmission  
 4510 kHz, 03-07-2012, 1920 UTC: Russian Air Defense. YL voice, live transmission  
 4510 kHz, 10-07-2012, 1120 UTC: Russian Air Defense. YL voice, live transmission

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

### 4441 kHz

17-07, 2036 UTC: LDBO: Russian Military Bcast 2036 CW LDBO QTC 560 24 18 0030 560 = ZYS 863 = EUGEJ  
PPPPP VNGJV ... HXJCZ ÄIPWP 560 = Repeats msg AR.

---

### 7005 kHz

22-07, 2218 UTC: RGT77: Russian Military. Ends 13-group bcast: ... QHChTF ChPUTR WEPÄE = K.  
23-07, 2035 UTC: RGT77: Russian Military Bcast "RGT77 225 = KDKVÄ KYNPT LSMÖÄ JLPFJ PAHOÖ PIJGÖ SKWLÜ  
JPUXK RNCMCh JZQOJ ÄXChJL WTChGI OPUIE WEPÄE = K"

---

### 8136 kHz

05-07, 0740 UTC XXX RDL RDL 53167 37625 k

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### 8138 kHz

Jay reports two Russian military networks on 8138 kHz and 13964 kHz (outstations on 14384 kHz)

01-07, 2005 UTC: L7LA de MZG5 K.  
MZG5 ZPY ZWV ZWY ZWH ZWW ZWB QSW3 K

06-07, 2033 UTC: VE1i de MZG5 QTC K  
MZG5 038 29 7 0030 038 =  
FM 359 826 FOR 564 835 728 =  
ShMNHE BFVWQ MNVShQ...LG PUPWT  
RPT AL QLN K 2038z  
VE1i DE MZG5 K QTC K  
MZG5 127 27 7 0100 127 =  
FM 359 826 FOR 564 835 728 =  
WXPKN ShDXQC GOeICOe...LG PUPWE  
RPT AL QLN K 2106z

09-07, 2006 UTC: VE1i DE BPIP K  
BPIP ZPY ZWV ZTM ZWH ZWW ZTY QRR3 K

09-07, 2010 UTC: DTNA DE BPIP K  
BPIP ZJH ZCV ZZM ZTO ZCW ZZY QSU1 QYT6 QSU6 K

09-07, 2020 UTC: L7LA DE MZG5 K  
MZG5 ZPN ZWB ZLM ZZB ZWJ ZLY QSW3 K

11-07, 2003 UTC: DULA DE LD6P K  
LD6P ZTB ZGE ZBX ZRX ZGT ZRI QSU1 QYT4 ZAR ZAR K

11-07, 2009 UTC: X4SU DE HQ5E K  
HQ5E ZSD ZBE ZBA ZBB ZBT ZBG QRR3 K

11-07, 2020 UTC: DULA DE HQ5E K. HQ5E ZSO Z.L ZQE ZVI ZBZ ZQH QSW3 K

13-07, 2011 UTC: DULA DE HQ5E K. HQ5E ZSD ZBE ZBA ZBB ZBT ZBG QRR3 K OK AS

17-07, 1611 UTC: DULA de HQFE K.

17-07, 2011 UTC: 4K4R de HQ5E K. ZSD ZBE ZBL ZBB ZBT ZBA QSU1 QYT6 QSU6 K. HQ5E R K. OK AS K.

---

### 10535 kHz

01-07, 1536 UTC: XXX XXX WEGI WEGI 63944 28192 WESYLXGA 8603 3773  
01-07, 1543 UTC: U U U XXX XXX RGT77 RGT77 25642 31816 BESOWSKIJ 7177 3556  
01-07, 1601 UTC: XXX XXX RDL RDL 36629 30833 GIPERKINEZ 4043 1620  
01-07, 1610 UTC: XXX XXX RDL RDL 36629 30833 GIPERKINEZ 4043 1620. Repeat of 1601 UTC

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### 22612 kHz

02-07, 1430 UTC: "... 6KYF 6KYF 6LCG 6LCG 6LCU 6LCU 6LSV 6LSV 6LJK 6LJK 6LZM 6LZM 6MCI 6MCI 6MIO 6MIO 6MOU 6MOU 6MOX 6MOX 6MPQ 6MPQ ...."

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## ***M32a*** ***Russian Navy*** ***Voyenno-Morskoy Flot Rossii***

### 8345 kHz

18-07, 0605 UTC: RKO81: Russian Navy Tanker Lena traffic to RIT RKO81 848 20 18 1000 848 = FOR RJD38 RJH74 RJH45 = 18061 99548 10125 41597 62809 10150 40106 54006 70222 8652/ 22253 00150 20305 30000 88000 80000 18016 = + RKO81 K  
17-07, 1925 UTC: RGZ58: Russian Navy vessel OP-chat.  
20-07, 1205 UTC: RKO81: Russian Navy Ship Lena qtc to rmp rko81 935 21 20 1600 935 = for rid38 rjh45 rjh74 = 20121 99534 10035 41598 53305 10200 40132 52010 70111 8553/ 22253 00150 29901 328// 40402 88000 80000 20017 = + rko81  
20-07, 0605 UTC: RKO81: Russian Navy Ship Lena rmp de RKO81 qsa? qtc k rko81 776 21 20 1001 776 = for rid38 rjh74 rjh45 = 20061 99541 100047 41597 7320 10140 40106 52030 70322 .....40403 88000 80000 20017 = + rko81  
23-07, 1804 UTC: RKO81: Russian Navy Ship Lena qtc to riw 841 21 23 2200 841 = for rjd38 rjh45 rjh74 = 23181 99406 70102 41597 63512 10230 40126 57010 70222 8653/ 22243 00180 29902 316// 40606 88000 80000 23017 = + rko81 k  
23-07, 1810 UTC: RCJE: Russian Navy qtc to rcv 935 19 23 2200 935 = sml for rjh45 rje73 = 23181 9935810275 41998 03210 10260 40081 53025 70200 80000 22272 00260 299// 330// 88000 23015 = + rcje k  
30-07, 0606 UTC: RKO81: Russian Navy Ship Lena qtc to rmp rko81 340 21 30 1000 340 = for rjd38 rjh45 rje73 = 30061 99432 1009 41598 63604 10180 40186 54000 70311 8652/ 22213 00190 29901 333// 40304 88000 80000 30017 = + rko81 k  
30-07, 0616 UTC: RBES: Russian Navy qtc to rmp 181 16 30 1001 181 = sml for rh38 rjh45 rjh74 = 30061 99432 70097 43398 63205 10220 40230 54000 70211 83200 22212 30011 = + rbes k  
30-07, 1804 UTC: RKO81: Russian Navy Ship Lena qtc to rmp rko81 179 21 30 2200 179 = for rjd38 rjh45 rje73 = 30181 99449 70088 41798 23104 10260 41193 54000 70100 82121 22213 00180 29901 336// 40304 88000 80000 30017 = + rko81 k

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### 9248 kHz

17-07, 2010 UTC: RGZ59: Russian Warship wkg RCV-HQBSF Sevastopol. Setting up simplex encrypted link. ZDZ? ZKM and enters cipher MLVMKLVKKML...

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### 12464 kHz

07-07, 0722 UTC: RDND: Russian Navy "qso riw qsu1 qwh 12239 qsx 13086"  
07-07, 0825 UTC: RGZ59: Russian Navy clg RCV (ans on 19201) "ok qap k"  
07-07, 0838 UTC: RCJE: Russian Navy "qso rcv ok qap k"

09-07, 0632 UTC: RKO81: Russian Navy Tanker Lena "clg RIW qsa? K"  
 09-07, 0735 UTC: RLD69: Russian Navy "qso RIW qsu1 sk ..... 1018z qrr3 sk"  
 10-07, 0710 UTC: RMUW: Russian Navy "rcv de rmuw qsa? qtc k rmuw 571 48 10 1105 571 = sml = 86739 68148 ..... 10046 = + rmuw k"  
 10-07, 0739 UTC: RBES: Russian Navy "riw de rbes ok qsu1 qwh 12260 qsx 13086 k"  
 20-07, 0714 UTC: RMYZ: Russian Navy clg rcv qsa? qtc k 861 20 20 1113 861 = rkt = 58354 45507 ... 42556 20018 = + rmyz k )  
 20-07, 0715 UTC: RCJG: Russian Navy clg rcv qsa? qtc k rcjg 233 3 20 1110 233 = ... 01040 20002 = + rcjg k - 0725z qsa? qtc k rcjg 372 21 20 1120 372 = 87206 61167 ... 12600 20020 = + rcjg k  
 20-07, 0724 UTC: RMUW: Russian Navy qso rcv qsl 186 k 2012-07-20 (wp3)  
 20-07, 0729 UTC: RFH70: Russian Navy qso rcv qyt4 qsx 9852/15544 k - qyt4 sk - qsl 186 k -  
 20-07, 0736 UTC: RMPV: Russian Navy clg rit qsa3 qru k  
 20-07, 0815 UTC: RGZ59: Russian Navy clg rcv qsa2 k qsl 186 no k 0824z qsl 186 qru k  
 20-07, 0816 UTC: RCV: Russian Navy qtc to rgz59 rcv 186 28 20 1002 186 = rkt = 11111 08751 44170 ...  
 20-07, 0810 UTC: RGR70: Russian Navy qso rcv qsl ?? fm raa k  
 20-07, 1140 UTC: RGZ58: Russian Navy tfc to rcv: rgz58 390 ?? 20 1520 390 = sml = mmmmm eimäü grölf ...  
 20-07, 1149 UTC: RHY47: Russian Navy riw de rhy47 qsa? k  
 20-07, 1214 UTC: RCJE: Russian Navy qtc to rcv 194 19 20 1600 3 sml for rjh45 rje73 = 20121 99349 10346 41897 52307 10324 40073 51021 70318 86122 22252 00274 29901 32320 88000 20015 = + rcje k

For more logs, see the Logs Section.



**M32b**  
**Russian Naval Aviation**  
**Aviatsiya Voenno-morskogo Flota Rossii**

**8816 kHz**

30-07, 0830 UTC: 42003: Russians Naval Air Transport qtc to rcb rjf94 - 42003 qto 0824 qrd XLLV XMWB qah 5200 qbd 0530 k - qth 5820 2040 qtr 0915 qah 5200 qbd 0430 k - qth 6958 2606 qtr 1000 qah 5100 qal XLLV 1045 qbd 0330 k - qqm XLLV 1048 k - qto 1325 qrd XMWB XLLV qah 5500 qbd 0500 k - qth 5933 2310  
 30-07, 1803 UTC: 52255: Russian Naval Air Transport RUS 1803 CW qtc to rjf94 rjc38 52255 qto 1755 qrd XLMV XLAA qbd 4700 qre 1955 - 2012-07-30 (wp3)

**11354 kHz**

23-07, 1845 UTC: Russian YL in contact with unid (unheard) aircraft



**M32c**  
**Russian Air Force**  
**Voyenno-vozdushnye sily Rossii**

Jay supplied a lot of tactical flash messages.

**13479 kHz**

03-07, 0614 UTC: REA4 REA4 = 03060 73842 94660 83201 10051 86530 73842 85660 83303 10068 85530 = REA4 K  
 13-07, 0716 UTC: XXX XXX REA4 REA4 70028 OKREST 7985 8319  
 13-07, 0722 UTC: XXX XXX REA4 REA4 73232 OKTAMETIL 5352 5633 'EKTAZIYa 6138 1794

13-07, 0733 UTC: XXX XXX JUE4 JUE4 40777 SKREBOK 0103 5317  
 13-07, 0735 UTC: XXX XXX REA4 REA4 26893 OKRAS 7178 0632  
 13-07, 0741 UTC: XXX XXX REA4 REA4 62354 SKOTNICA 6888 6152  
 13-07, 0759 UTC: XXX XXX JUE4 JUE4 46427 IMAGO 0268 9083 GLUZG 0715 3388  
 13-07, 0802 UTC: XXX XXX MJUR MJUR 65033 SKOPLennyJ 3624 7187 ILUZEYa 1115 7476  
 13-07, 0809 UTC: XXX XXX REA4 REA4 32372 PLYuMAVNYJ 8044 8386 ALTYYNN..(?altynnik) 2179 5537  
 13-07, 0811 UTC: XXX XXX REA4 REA4 81188 ILXMENX 1396 3917  
 13-07, 0817 UTC: XXX XXX REA4 REA4 94054 ALXDRIN 0685 5597  
 13-07, 0821 UTC: XXX XXX REA4 REA4 65488 GLUShNYaK 6589 0332  
 13-07, 0841 UTC: XXX XXX REA4 REA4 95921 GLUShENX 9028 4011  
 20-07, 0635 UTC: XXX XXX REA4 REA4 2.000 ..RKINAL 1024 3829 GROT 4108 6916  
 20-07, 0642 UTC: XXX XXX REA4 REA4 95722 KOVSyrXE 3697 9881  
 20-07, 0652 UTC: XXX XXX REA4 REA4 54109 SUSLIK 2137 0793  
 20-07, 0654 UTC: XXX XXX REA4 REA4 07471 ASTROFIZIK 1975 9403  
 20-07, 0656 UTC: Strategic message to JUE4 and MJUR.  
 XXX XXX JUE4 JUE4 MJUR MJUR 93832 050 = DDDDD ZNSZN XChChRV DLLRG XChChXV \  
 DLLRG XChChXV DLLRG FUeJChK PALAch YMDDU AY.JT RUGPI PK.SK (qsa2 qsb) .... WP.Y K  
 20-07, 0706 UTC: XXX XXX REA4 REA4 18291 AJDYKULX 3752 6625 ALLOHOL 5449 8878  
 20-07, 0709 UTC: XXX XXX REA4 REA4 18315 ANDRENA 55594261 TODORTIT 2864 3585  
 20-07, 0712 UTC: XXX XXX REA4 REA4 39815 BRABRAK 9609 4175  
 20-07, 0719 UTC: XXX XXX JUE4 JUE4 04145 SLOUFOKS 5344 0898  
 20-07, 0725 UTC: XXX XXX REA4 REA4 'EKONOMIAe 5424 7933  
 20-07, 0750 UTC: XXX XXX REA4 REA4 52174 HLOR'ETAN 5464 7139  
 20-07, 0756 UTC: XXX XXX REA4 REA4 49311 WKLINENIE 4906 7324  
 20-07, 0801 UTC: XXX XXX REA4 REA4 65953 SKIAGIT 6911 0656  
 20-07, 0837 UTC: XXX XXX REA4 REA4 74977 SKWOREOeNYJ 2667 0905

*A note from Trond:*

*Recently there have been some interesting posts of REA4 messages (Russian strategic Air / 37th Air Army) by Jay and others. Here is a list of frequencies in use by their outlet at Kostino, mil units # 23452, 66213. (56.0158N 39.400E) The tx site east of Pochinki 55.2598N 39.5095E, is believed to be longer in use.*

*Modes: F1B 50/1000 revs, FSK morse/1000 on the higher frequencies and OOK 50/sec idle, A1A morse on the lower frequencies.*

*2721, 2737, 2807, 3375, 3476, 3530, 3531, 4170, 4179, 4357, 4379, 4451, 4521, 4706, 5157, 5157.9, 5158, 5293, 6321.5, 6827, 6830, 6934, 6978, 7018, 7044, 7050, 7054, 7076, 7319, 7320, 7353, 7515.5, 7559, 7559.5, 7659, 7785.5, 7940, 7942, 7959, 7999, 8190, 8533, 8585, 8586, 8810, 9073, 9151, 9194, 10442, 10673, 10816, 11072, 11408, 11409, 11470, 11760, 11848, 12173, 12315, 12337, 12732, 12734.2, 12736, 13479, 13576, 14092, 14508 16856, 23961 kHz.*

*These transmissions do (at times) go out on a number of // frequencies, but as the transmissions are directional not all of them are // receivable at a given rx site.*

*Some well known // combinations:*

2721 // 5157	4521 // 6978	8810 // 7018
2737 // 4179, 7018	4521 // 6979	9193 // 8585
3530 // 4357, 7959	4531 // 6978	10673 // 5293
3531 // 4357, 7959	5157.9 // 2721	11409 // 12736
4170 // 3737, 3735, 7018	6827 // 7999	11848 // 8192
4357 // 3530, 7959	7559 // 3530, 4357	12736 // 11408

*Tune in and have fun. If you know of other frequencies in use, please share !*

Best regards,

Trond Jacobsen  
Hvaler archipelago, SE Norway  
59.0333N 11.0333E JO59MA

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**M51 / FAV22**  
**8<sup>ème</sup> Régiment de**  
**Transmission**

6918 kHz, 31-07, 1809 UTC:

= NR 60 J 31 20:09:57 1984 =  
FIAWU WRKQV RPIUS YPISG LOWWG YYEBH XGAAM PZGUY ASTEO VWGLZ  
FCXQL MKPQW BBGBM DZUFK KEUKL XKSAF WQLQU HJOVC QEOMW JTTCE  
WUKRV URPHU PHDUE NJFIF BKIDR PLRFV ZDEJF CGSFP MPNCV UDWRO  
PQVEA NXSES QEHRB KXGLV ZBCFJ IUZDO RUWJF CETQO XGAPX MIRXE  
EUYQX DCYFP XDXXL VOUGX FHVGR TQXNH HAJDB UNDGA NUITW FDWMS  
RQOMW YCGHA XTRAH GGNIO ZSJNH HULHI XFZIL CGOEO VKPBD SNNPN  
NAWKU UREPS TFYPS AMMZO BBDJN NIRWE DDAQC RAKLO BQZTD CJKZM  
KOCBD YHYKR KIYLP VGEQE NHUCX GEUQV BFMIA UWTJK CRNCD BTORT  
LRXUC OZIDR CGRHR UVHGA ZOPTY KVHTC ALONR ECSFN HRLJL TAASR  
LTDIS CNDHD TCOIK EVERT CSFQI MWYBG FULNP CSEOB QHMTD UPANH  
= NR 61 J 31 20:16:06 1984 =

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**M89**  
**Chinese military**

VVV Q2M Q2M Q2M DE NYZ NYZ QSA? k  
V 7NPE 7NPE 7NPE DE QV5B QV5B  
V DKG6 DKG6 DKG6 DE 3A7D 3A7D  
V GKVZ GKVZ GKVZ DE Q7NW Q7NW  
V RXP7 RXP7 RXP7 DE CZT2 CZT2  
V H2FL H2FL H2FL DE DRV8 DRV8  
V WITN WITN WITN DE GNXG GNXG

V HJ4I HJ4I HJ4I DE YI4K YI4K  
V OPN9 OPN9 OPN9 DE GYVR GYVR  
V 8UPT 8UPT 8UPT DE SAY7 SAY7  
V OQP8 OQP8 OQP8 DE TYPT TYPT  
V YMN5 YMN5 YMN5 DE USSS USSS  
V HHU6 HHU6 HHU6 DE GP2Q GP2Q

Other stations: BVZV, BJ7A, KB4A, 2WYR, UVQ, 61BO

---

## Messages:

4590//7607 kHz, 08-07, 1310 UTC:

NR 32 221. RMKS 5312 TO 5497 BT  
5342 BT  
COMM. /2.00/NZ2MI0 .2/53.2 5497  
AR QSL?  
HR WK NR .4

---

5500//4225 kHz, 15-07, 2113 UTC:

VVV UGT COMM BT 9450/0540/G65/4319 AR  
V UGT COMM BT 9450/0540/G65/4319 AR

---

4590//7607 kHz, 10-07, 1151 UTC:

NR 040 1945 RMKS 5312/5483/5343 BT  
COMM/2030/LZ22 M62/5312/5483  
AR QSL ?  
HR WK NR GA 36 VHV R HRC GA

NR 59 2000 RMKS 5312 TO 5597/5342 BT  
COMM/2045/LZ22 .A2/531./5597  
AR QSL ?  
HR WK NR GA 16

---

5801//10180 kHz, 23-07, 0227 UTC:

UGT COMM msg sent  
V DKG6 DKG6 DE 3A7D 3A7D

---

8013 kHz, 27-07, 0014 UTC:

MSG NR 1042\* CK 75 42 0827 0815 BT (X2)  
AUUN U356 ... (Cont'd) (Machine sent)  
AR  
L L  
.. 74  
AU34 56.. AU34 56.. (Hand sent)  
456

---

8013 kHz, 27-07, 1217 UTC:

AAR  
HA15 DE JFSQ K  
R R  
MRR VVV UVQ DE 61BO K K  
R QSA 2 K  
OK QSA 2 K  
R HR WK NR 404 K  
OK HR WK NR 72 K  
R AS  
HR MSG GA K  
GA  
7G NR 1243 CK 30 42 0720 EEE  
NR 1243 CK 30 42 0727 2040 K  
RPT  
NR 1243 CK 30 42 0727 2040  
RR OK GA  
R BT BT  
7AAN DN4. 73D7 U436 5UD6 D7NA UN74 .TNT T3.U TT... (Cont'd)  
AR  
OK QSL 2043 QSL 2043 K  
MSG NR GA K  
MSG NR 0623 NR 0623 CK 30 42 .727 2043 = K  
OK MSG BT  
7AAN DN46 73D7 U436 5UD6 A7NA UN74 EEE T33U TTUT A675  
6NA5 DT37 AD3N U755 545D 37DN N35U T737 76T5 NTUT  
U6DU 47AT 45AU DA5T ..N 6DNA N544 63DU AN63 AR AR  
QSL ? K  
R QSL 2046 K  
OK OK  
SK SK SK MEB GB

5230 kHz, 18-07, 1142 UTC (Started at group T36N a total of 8 times!)

743U5 .4U7N 3D5DA7U5U347T6NAD7U543T6N45 T3N6 5D3N 6TAD 7UA4 TA45 6  
AR 3: AN43 6UT5 6TN3 A7D4 57A4 6TD5 47N3 U3N7 DA6T 457U 5DTA 5T6U  
A4N3 6D3N 6NT5 U34A D5N7 6TDA 43.. 54.. 534T 6NDA 7U6A TDN3 457U  
DA6N 54U7 T6DA T5U7 436N DA3N 7U5TA 46U 7N3D 6T43 43T5 34N7  
D56T 7N6U D6UA UT75 A..3 34AN ..... N7AD 6UAD 5T34 6T5D 3N47 DA7N  
6TU5 NA4 D3TA 7U45 6N74 N7DA U7T5 ST? 436U 3T54 6N54 6N3T DAU7  
45TA 6D3N AD.. 6U3.. D7N ...  
BT BT (This is a second station. Does not seem to be working this station)  
44TU 3456 MIDNT T36N  
VV BT T36N 7UAD 5?  
VV BT T36N 7U  
VV BT T36N 7UAD 546N U7DA T345 6NT7 43U5 D.T6 4AU7 T3D5 DA.U 3? 5U.4 7T6N  
AD7U 543T 6N45  
VV B T T36N 7UAD 546N U7DA T345 6NT7 43U5 DAT6 4AU7N3D5 DA7U 5U34 7T6N  
AD7U V? 3T 6N V5T3 N65D 3N6... (1152Z)  
VV BT T36N 7UAD 546N U7DA T345 6NT7 43U5 DAT6 4AU7 N3D5 DA7U 5U34 7T6N  
AD7U  
VV BT T36N 7UAD 546N U7DA T345 6NT7 43U5 DAT6 4A (1155z)  
VV BT T36N 7UAD 546N U7DA T445 6NT7 43U5 DAT6 4AU7 N3D5 DA7U 5U (1156z)  
VVV BT VV BT T36N 7UAD 546N U7DA T345 6NT7 43U5 DAT6 4AU7 N3D5 ? DA7U 5U34  
7.6N AD7U 5.? 543T .N45 T3N6 ? D3N6 .7UA4 TA45 6NAD 7N3U 3D74 5D6T 4A7U  
AN43 6UT5 6TN3 U7D5 57A. BT D547 N3U3 NGD. 6T45 7U5D TA5T DEUA ..N3 6D3N  
NINT 5U34 AD5N 7TST DA43 7U53 4T6N DA,... TDN3 ? 457U DA6N 54U7 T5DA T5U7  
436N DA3N 7U5T T46U 7N3D 6T43 4.? 43T5 3.? 34N7 D56T 7N6U D.UA UT75 ....  
34AN 6UT5 N7AD 6.AD 5T34 6T5D 3N47 DA7N 6TU5 NA43 D3TA 7.45 6N7.EEEEE  
4 4 4 4  
N7DA U7T5 4VT V36U.. T546 N53D 6N.T NU74 5TA6 D3NA D7U 6U34 AD7N 5T7U D3N6  
A.54 IIII  
345 67DNT AU34 567D N...  
.345 67DN TA.. 67D NT  
VV BT T36N 7UAD 546N U7DA T345 6NT7 43U5 DAT. 4AU7 N3D5 DA7U 5U34 7T6N  
AD7U  
543T 6N45 T3N6 5D3N 6TAD 7AA4 TA45 6NAD 7N3U 3D74 5D6T 4A7U AN43 6UT5 DTN.  
U7D5 57A. .TD5 47N3 U3N7 DA6T 457U 5DTA 5T6U A.N3 6D3N 6NT5 U34A D5N7 6TD.  
437U 534T 6NDA 7U6A TDN. 457U DA6. 54UN T6DA T5U7 .36N DA3N 7U5T A46U 7N3D  
NIT.343T634 N7 D5DT 7N6. 6? D6UA UT75 A43D 34.6 .T5N7A. ? N7A. 6UAD5 .W4T.D  
3N47 DA7T 6TU5 NA43 D.TA 7U45 .N74 N7DA U7T5 .? 436W 3T54 6N54 6N3T DA.745..  
6D3N AD7U 6U34. D7N 5T7? D3NT AT54 IIIII  
VV BT  
VV BTT VV BT VV BT  
T36N 7A ???  
VV BT T36N A  
T36N 7UAD 546N U7DA T345 6NT7 43U5 DAT6 4AU7 N3D5 DA7U 5U34 7T6N  
AD7U 5.3T 6N45 T3N6 5D3N 6TA. 7UA.? 7UA4 TA45 6NAD 7N3U 3.74 5D..  
VV BT T36N 7UAD 546 NU7D A..456NT7 43U5. DAT6 4AU7 N3D5 DA7U 5U34 7T6N  
A.7U EE 43T6 N45T 3N65 D3N 6TAD 7UA4 TA45 6NAD 7.3U 3D74 5D6T 4A7U A.43  
6.T5 6TN3 U7D5 57A4 6TD5 .7N3 U3N7 DA6T 457U 5DTA 5T6. A4N3 6D3N .NT5  
U34A D5N7 6TDA 437U 53.T 6NDA 7U6A TDN3 457U DADE? DA6N 5EE 4U7 T5DA  
T4U7 436N DA3N 7U5T A46. 7N.T ? 7N3D 6T43 43T5 34N7 D56T 7NDU 6? D6UA UT75  
A43D UU  
..XQ DE F6..QSA ? QSA 3 K (This seems to be yet a 3rd station  
OK

---

8013 kHz, 26-07, 0040 UTC:  
(In chat – Both stations on the same freq!)

HR 7G GA K  
R GA  
R R  
AS  
R R GA  
7G NR 1233 CK 30 42 0726 2043 RMKS 4553 TO 432 SY K  
Y K  
R R  
RR 7G G...  
R GA  
R R BT BT  
.5DU 7UDT 57U3 AD5D 475N 634U 5A6T 5UA6 A5UN 6AN5  
4NUD D45T TNA5 UD34 UNN3 ANDU AT6D N5TD 6TUN 5A3N  
546U 53U7 4A63 AD4T A6TD 7U64 43UN 7364 UAD3 3465  
AR  
QSL ? K

3297 kHz, 30-07, 0950 UTC:

MSG GA  
K K K K K K  
FM 5M E  
QIE QSL .1111 K  
R  
HR HR MSG k K  
DU7U HILHRGHR M HR ME 7.A FM 7A FM AI. NU4 NU4 DU5E  
/////////////////  
U 'e eh c//1N . . E AADADADU3U3U3 BT  
33 DE PE WPPPPP.PPPP.. AR AR AR AR AR AR AR  
..TU DF N.  
K K WWWKKWWKKWKKWK EE BT  
E E 13UD63AD6DE  
EITN AA N AANANANA..ANNANNANNANPPXE 5 NRE7UE 5 E  
HR NR 124 K. HR NR 124 TT TT .. DDEDE DE BBBBN  
QSL QSL QSL 1234 K  
GA GA GA GA GA GA GA  
UUMU MU U U MSG GA UMSG . 73  
FM A E U MSG AGA UMSG A K  
U MS A GA K  
US UMS E 7U MSG GA U MSG GA U MSG GA K  
R R  
U 120 MGA K  
124 M GA R E  
X X QS. N QSY 80 NR 182 K  
R R K K RAIR R  
H HD HR NR 124 K  
R R U MSG GA K  
R R U 120 GR GA K =

R RPT 26W K  
R R RPT 26W  
BT K BT 198IO.  
R RPT 2AEEEE RPT 26W K  
R R RPT 26W BT 7U64 K  
R RPT 26W K  
R AS AS  
VV  
V V UH  
QSL ? K  
R RPT 26W K  
R R GA  
RPT 26W K (0100z)  
K K

7607 kHz, 28-07, 1259 UTC:

NT3D AT53 N.4D 7A64 F.3N ND64 .5D3 UT36 573N N6U. . AR QSL ?  
HR WK NR ..  
.. 28 21.5 RMKS 3WAUM TO 6678 6298 53.8 5.68 BT  
.. QRW 6Z02 6292 5342 QRW L16 1200 .P 531ND C  
QSL ?  
HR WK NR GA 16 VVV  
HR SVC GA NR .1.. 1.5 RMKS 5312 TO 6904/.42 BT  
COMM/2200/L.220.2/.312/6904 AR  
QSL ?  
HR WK NR GA16  
V WITN WITN WITN DE GNXG GNXG

8013 kHz, 27-07, 0211 UTC:

VVVV  
BT V (Cont'd)  
MSG NR 1043\* CK 75 .2 ..7 1015  
MSG NR 1043 CK 75 42 0727 101. =  
73.T A.DT TU4N 46TA N755 UD6D 4AND 6DT. D.35 75NU  
7N4N T.34 AN47 T5N7 75AT... (Cont'd)  
AR AR

## VARIOUS MODES

### M42 & X06



#### Modes:

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

### Russian Government & Intelligence



11123 kHz, 05-07, 1900 UTC:	Russian Gov/Intel. Mode: Baudot 200Bd/500Hz
9117 kHz, 05-07, 1910 UTC:	Russian Gov/Intel. Mode: Baudot 200Bd/500Hz
6830 kHz, 05-07, 1920 UTC:	Russian Gov/Intel. Mode: Baudot 200Bd/500Hz
10688 kHz, 06-07, 1630 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
7992 kHz, 06-07, 1640 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
5913 kHz, 06-07, 1650 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
11122 kHz, 06-07, 1730 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
9068 kHz, 06-07, 1740 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz

6791 kHz, 06-07, 1750 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
11154 kHz, 07-07, 0820 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
13497 kHz, 07-07, 0810 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
15963 kHz, 07-07, 0800 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
11154 kHz, 08-07, 0820 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
13497 kHz, 08-07, 0810 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
15963 kHz, 08-07, 0800 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
10688 kHz, 12-07, 1630 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
7992 kHz, 12-07, 1640 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
5913 kHz, 12-07, 1650 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
11121 kHz, 12-07, 1730 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
9068 kHz, 12-07, 1740 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
6791 kHz, 12-07, 1750 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
9206 kHz, 12-07, 2030 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
11129 kHz, 12-07, 2020 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
13494 kHz, 12-07, 2010 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
11124 kHz, 12-07, 1900 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
9117 kHz, 12-07, 1910 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
6830 kHz, 12-07, 1920 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
9192 kHz, 13-07, 1035 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
11140 kHz, 13-07, 1025 UTC:	Russian Gov/Intel. Mode: Baudot 200Bd/500Hz
9189 kHz, 13-07, 0720 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
11159 kHz, 13-07, 0713 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
11055 kHz, 14-07, 0615 UTC:	RMA2: Russian Gov. Link to RGK2. Mode: Baudot 50Bd/500Hz
11122 kHz, 14-07, 1730 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
9068 kHz, 14-07, 1740 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
6791 kHz, 14-07, 1750 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
10688 kHz, 14-07, 1630 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
7992 kHz, 14-07, 1640 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
5913 kHz, 14-07, 1650 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
12227 kHz, 24-07, 1549 UTC:	Russian Gov. (tent): DOBV de KRUG QSY 34965 QSY 34965 K
14651 kHz, 20-07, 1412 UTC:	Mazielka. Sequence: 215346
16115 kHz, 20-07, 1410 UTC:	Mazielka. Sequence: 215346
11122 kHz, 21-07, 1612 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
12187 kHz, 21-07, 1220 UTC:	Russian Gov/Intel. Mode: Baudot 200Bd/500Hz
11473 kHz, 21-07, 1120 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
13594 kHz, 21-07, 1110 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
15988 kHz, 21-07, 1100 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
13497 kHz, 21-07, 0810 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
15964 kHz, 21-07, 0800 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
8176 kHz, 24-07, 2020 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
12211 kHz, 21-07, 2020 UTC:	Russian Intel. Mode: FSK 200Bd/1000Hz
10815 kHz, 25-07, 0853 UTC:	Mazielka. Sequence: 412356
10253.5 kHz, 25-07, 0900 UTC:	Russian Diplo. Mode: CROWD-36 //11522.5 kHz
11522.5 kHz, 25-07, 0900 UTC:	Russian Diplo. Mode: CROWD-36 //10253.5 kHz
12227 kHz, 25-07, 1103 UTC:	Russian Gov. (tent). KXI9 K. 3BKY de KXI9 QTC K. KXI9 098 49 25 1830 098 = 840 = MMLOE BEChÄ ... ZFHYJ WTPRU K.
12227 kHz, 25-07, 1509 UTC:	Russian Gov. (tent). K4MT de NT9P K. QSA4 QRU? K. BK BK QRV K. R 883 1512 K. NIL K. R K.
12227 kHz, 26-07, 1358 UTC:	Russian Gov. (tent). .... de KXI9 K.
12227 kHz, 26-07, 1501 UTC:	VTO_ de KXI9 QTC K. KXI9 552 50 26 1850 552 = 065 = WMPRL MÄHUM ... PPOSI WYPRI K.
12227 kHz, 26-07, 1515 UTC:	Russian Gov. (tent). PDG_ de 9WPH QTC K. 9WPH 112 _1 26 1900 112 = 395 = 55555 17__ ..
12227 kHz, 26-07, 1531 UTC:	Russian Gov. (tent). K4MT de NT9P ZVP (QSV) K. BK QRV K. BK QSY 85872 K. CFM SLV (QSX) K.K4MT de NT9P QSY 96854 K. QSA3 ZVP. BK QRV K. R 888 1546 K. NIL K. SK.
11123 kHz, 26-07, 1900 UTC:	Russian Intel. Mode: FSK 200Bd/500z. 00000+++++++162)5761
9117 kHz, 26-07, 1910 UTC:	Russian Intel. Mode: FSK 200Bd/500z. 00000+++++++162)5761
6828 kHz, 26-07, 1920 UTC:	Russian Intel. Mode: FSK 200Bd/500z. 00000+++++++162)5761



Trond comments about Jim's 12227 kHz logs:

*"I see KXI9 is not using Moscow time, match the observations at this end that at least one of the outstations is located east of the Ural. The NT9P id is also a fixed one, heard working K4MT on at least 6786, 7790, 7935, 8058, 9201, 9206, 9296 kHz.*

*This net is also observed with F1B ITA2 50/500 RTTY with =50= and =100= separators. The RTTY part is also observed on these frequencies: 3884, 4032, 4819, 5424, 5461, 5751, 5845, 6772, 6773, 6776, 6785, 6838, 7512, 8058, 8067, 9043, 9072, 9201, 9206, 9234, 9296, 9964, 10874, 14907 kHz.*

Another comment comes from Jay:

*12227 kHz is the outpost frequency of main frequency 13396 kHz. I heard call sign WEGI after XXX XXX in this network too so it is an important net.*

Thanks for the logs and comments everyone.



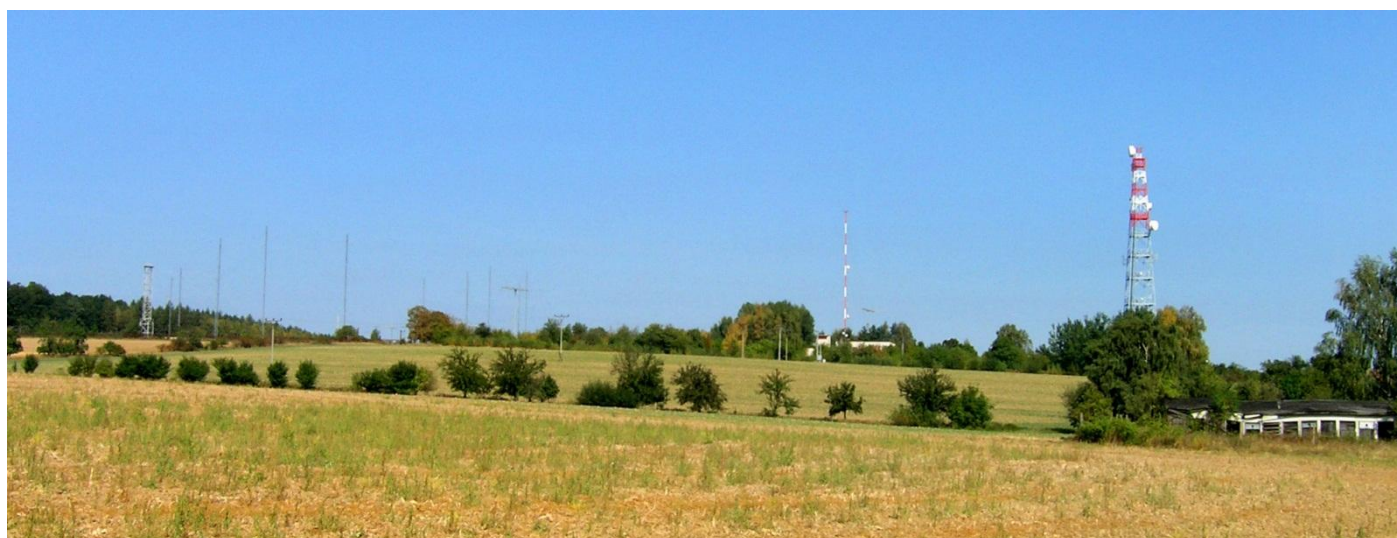
***XSL a.k.a. Slot Machine  
Japan Maritime Self-Defense Force  
海上自衛隊 Kaijō Jieitai***

Copied on 4153, 4231.5, 6250, 6417, 6445, 8313, 8588, 8703.5 kHz.  
Mode: 1500Bd QPSK

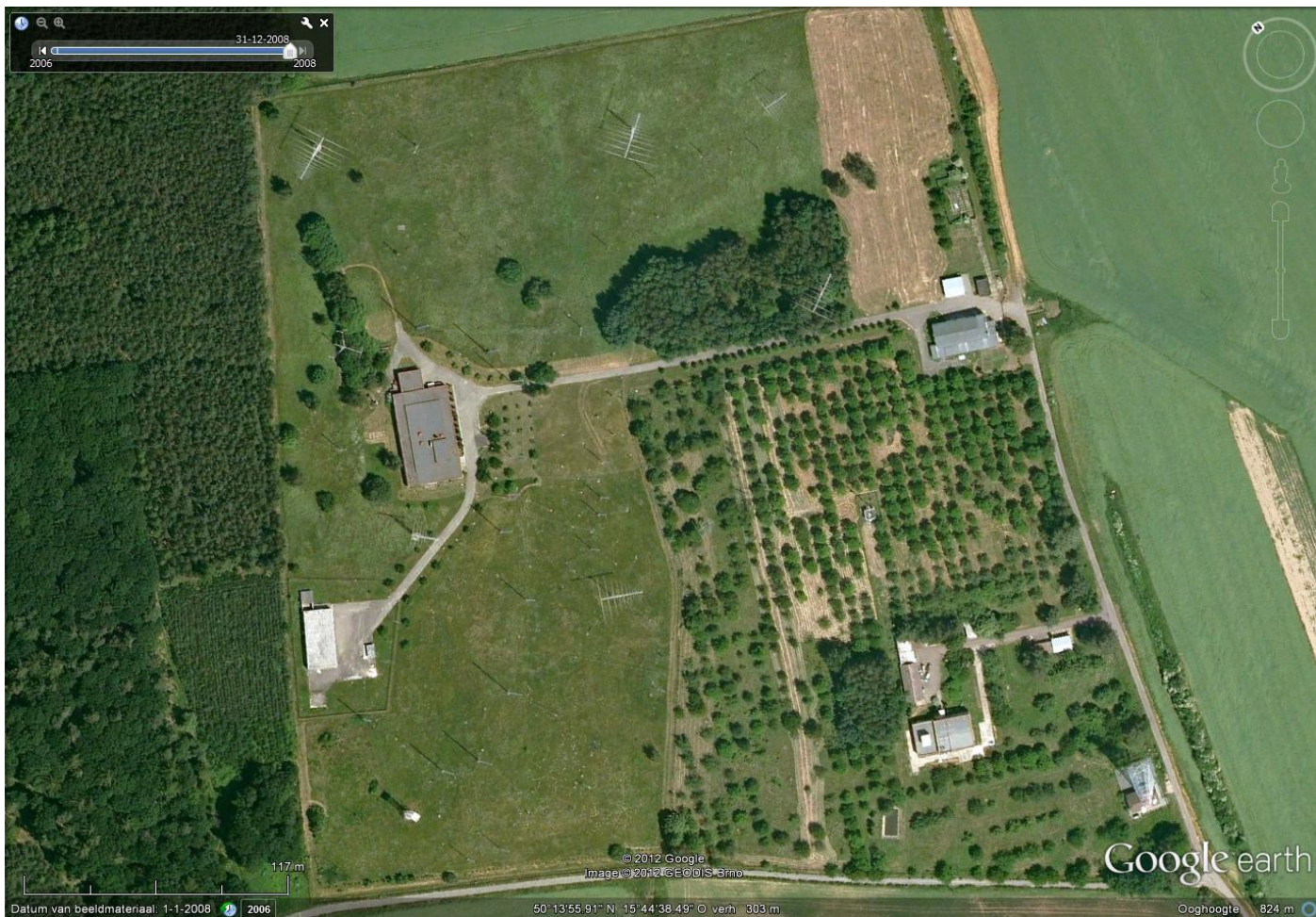


**Czech MFA**

Nice pictures of the now defunct MFA (Ministry of Foreign Affairs) transmitter site near Stěžery-Charbuzice.  
Coordinates: 50° 13' 32.80" N, 15° 44' 26.20" E



Picture © Packa



Picture © Google Earth



## **Egyptian diplomatic stations**

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

11056.7 kHz, 08-07, 1926 UTC: MFA Cairo. Selcall TVVX (Algiers) followed by ATU-A traffic. Mode: SITOR-A  
 11034.7 kHz, 08-07, 1949 UTC: Unid Egyptian diplo. Mode: SITOR-A

## **UTILITY ROUND-UP**



## **Pirates**

6996 kHz, 12-07, 2340 UTC: the infamous Italian pirate: HWK7 sending plain text Italian religious messages.





## **Unid time signal station**

The "Italcable" time signal station on 10000 kHz is still on the air. At the end of June the station was off the air for a short time but returned.

Andy Lawendel reported that the first e-mail QSLs are being received for e-mail reports sent on June 25<sup>th</sup>. Paper QSLs will also be issued. The QSL gave the following details:

- Plessey transmitter
  - Coordinates: N43° 54' 48" E010° 17' 44"
  - Authorization number: 354616/LOR (Licenza Operatore Radio), so it appears to be legit after all.
- 



## **Jammers**

The Voice of the Broad Masses, Eritrea is heavily being jammed by Ethiopia. Frequencies: 7100, 7105, 7115, 7120, 7160, 7165, 7175, 7180, 7185, 7190, 7195 kHz. The station is moving all the time to get rid of the white noise jammer.

The Vietnamese siren jammer was heard on 9920, 11605, 12075, 18112.5 kHz. It is jamming the Voice of Free Asia.

The infamous Chinese Firedrake appeared on a lot of frequencies including 7130, 7180, 7185, 7365, 7445, 7515, 9355, 9455, 9495, 9530, 9555, 9670, 9680, 9905, 9930, 10135, 11520, 11550, 11600, 11765, 11785, 11925, 11975, 12145, 13625, 13715, 13725, 13830, 14260, 15510, 17330, 17550, 17555, 17560, 17685, 18160, 21660 kHz.

Cuba jammed Radio Marti on 7230 and 7365 kHz.

According to various news sources North Korea has jammed South Korean GPS signals for passenger aircraft, ships, and in-car navigation for roughly a week in late April and early May. South Korea experienced similar electronic attacks in March 2011, and in August and December of 2010.

North Korean noise jammers have been reported this month on 3912, 3985, 4450, 4557, 6003, 6015, 6060, 6230, 6300, 6348, 6518, 6600 kHz. I have uploaded a recording of this jammer to the N&O website.

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## **FITSat-1 / Niwaka**

FITSAT-1 (NIWAKA) is a cubesat made by the Fukuoka Institute of Technology. Sometime in September, it will be launched from the ISS. The satellite will be launched to test a tiny high-speed transmitter capable of sending a 480 x 640 jpeg image in six seconds. The satellite's beacon will transmit on 437.250 MHz in Morse. Telemetry will be sent in 1200Bd AX.25 packet on 437.445 MHz while the pictures will be transmitted on 5.84GHz.

The most interesting part however is a LED experiment. Described by its creators as follows "NIWAKA has another experimental mission to test the possibility of optical communication by satellite. It will actually twinkle as an artificial star. NIWAKA's high power LEDs will be driven with 200W pulses to produce extremely bright flashes.

These, we hope, will be observable by the unaided eye or with small binoculars. The LEDs will also be driven in PCM mode. This light will be received by a photo-multiplier equipped telescope linked to the 5.8GHz parabolic antenna.

Below shows how NIWAKA will write messages in the night sky with Morse code as:



Source: Fukuoka Institute of Technology <http://www.fit.ac.jp/~tanaka/fitsat.shtml>



## *Intelligence news*

Hmm, spy catching is popular these days 😊

### Turkey breaks up major military espionage ring.

Turkish newspaper *Hurriyet Daily News* reported on July 9 that 51 active-duty soldiers from over twelve cities have been implicated in a major espionage ring involving Turkey's military. Following a series of raids on July 7, at least 40 people were detained and four others were taken into custody. The raids were in response to an investigation launched in 2009, regarding war craft radar locations in Turkey, illegal surveillance, as well as wiretapping of military officers.

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### Belarus announces arrest of alleged Lithuanian spy ring members

By IAN ALLEN | [intelNews.org](http://intelNews.org) |

The government of Belarus has announced the arrest of an espionage ring allegedly operating out of the Lithuanian embassy in Belarusian capital Minsk. It appears that the alleged ring consisted of at least one Lithuanian embassy official, identified only as "Mr. F" in Belarusian state documents, as well as an undisclosed number of Belarusian nationals. A brief statement published on the website of the Belarusian State Security Committee, the KGB, said that the Lithuanian official, who is said to be a military attaché at the embassy, was arrested along with several Belarusian members of the alleged spy ring. The arrests reportedly took place soon after members of the spy ring were caught in the act of exchanging information; the KGB press office added that

“electronic equipment” and “spy gadgets” of an undisclosed nature were confiscated from the arrestees. Little is known at this point about the precise focus of the accused spies; the KGB claims that they were “engaged in efforts to gain information in the military sphere”. Media reports from Minsk suggest that the activities of the alleged ring were particularly focused on bilateral security arrangements between Belarus and Russia. Belarus, a former Soviet republic, is today one of Russia’s staunchest allies in Europe; since 1994, the country has been ruled by Russophile President Alexander Lukashenko, who often accuses other former Soviet republics—including Lithuania— of stooping to the West. Relations between Belarus and Lithuania, with which it shares a 680 km- long border, have been especially tense since 2004, when the Baltic country joined the European Union and the North Atlantic Treaty Organization. Specifically, Minsk regularly accuses Vilnius of operating as a proxy of the United States and of offering clandestine support to the anti-Lukashenko opposition inside Belarus. The Lithuanian Ministry of Foreign Affairs statement the charges by the Belarusian government as “not true” and said that they “do not contribute to [the] improvement of bilateral relations” between the two countries. The Lithuanian diplomat is expected to be declared *persona non grata* by Belarus authorities, whereas the Belarusian members of the alleged ring face up to 15 years in prison, if convicted.

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#### [Ukraine jails North Koreans in missile espionage case](#)

By JOSEPH FITSANAKIS | intelNews.org |

A court in Ukraine has jailed two North Korean citizens on charges of trying to obtain secret technical information about missile engines. A Ukrainian government official said on Monday that the North Koreans had each been sentenced to eight years in prison, and that “they will serve their sentence in Ukraine”. Speaking to Russian-language Ukrainian daily Segodnya, the official said that Ukrainian authorities had expected that Pyongyang would request extradition of its two citizens, but that the North Korean government’s reaction had been “passive”. According to the paper, the two convicted men, who have not been named, were employed by the North Korean trade mission in Belarusian capital Minsk. It was from there that, several months ago, they arrived by train to Kiev, where they tried —unsuccessfully— to recruit a number of locals as informants. One of the latter tipped off Ukrainian authorities, who placed the two North Koreans under surveillance. Eventually, the two suspects were arrested in a rented garage in the Ukrainian city of Dnipropetrovsk, while photographing technical documents with a pair of handheld miniature digital cameras. The Segodnya report stated that the documents consisted of doctoral dissertations, marked ‘confidential’, which described highly technical methods of designing effective solid- and liquid-fuel supply systems for missile engines. Some of the documents concerned the technical specifications of computer software to assist in the design of missile fuel supply systems, said the paper. The confidential documents had reportedly been taken from the Yuzhnoye Design Bureau, a cornerstone of the Soviet —and now the Ukrainian— space industry, which in the early 1960s developed the R-16 (known in the West as SS-7), the first inter-continental ballistic missile (ICBM) successfully deployed by the Soviet Union. In the late 1960s, Yuzhnoye built the R-36 ICBM (known in the West as SS-18), which formed the basis of the Soviet Union’s nuclear delivery arsenal. Ukrainian media reports suggest that the alleged espionage efforts by the two North Koreans were closely linked to Pyongyang’s nuclear weapons program, and that the stolen documents could have significantly augmented North Korea’s position in its geopolitical power-struggle with South Korea and the United States. The report in the Segodnya daily said that the two men had pled guilty during their trial and that their lawyer had not appealed the court’s sentence.

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#### [Taiwan ex-colonel nabbed for spying for China.](#)

By IAN ALLEN | intelNews.org |

Cheng Lin-feng, a retired Lieutenant Colonel in the Taiwanese army, and civilian Tsai Teng-han, were taken in by Taiwanese police last week on suspicion of spying for China. Cheng was allegedly recruited by Chinese intelligence when he travelled to the mainland to do business, Taiwan’s Ministry of National Defense said in a statement, adding that he had been investigated ever since a tip-off in 2009. A court spokesman said that details of case will be held until the investigation is completed.

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## ***Intelligence profile:*** **Bangladesh**



### ***BACKGROUND***

Europeans began to set up trading posts in the area of Bangladesh in the 16th century; eventually the British came to dominate the region and it became part of British India. In 1947, West Pakistan and East Bengal (both primarily Muslim) separated from India (largely Hindu) and jointly became the new country of Pakistan. East Bengal became East Pakistan in 1955, but the awkward arrangement of a two-part country with its territorial units separated by 1,600 km left the Bengalis marginalized and dissatisfied. East Pakistan seceded from its union with West Pakistan in 1971 and was renamed Bangladesh. A military-backed, emergency caretaker regime suspended parliamentary elections planned for January 2007 in an effort to reform the political system and root out corruption. In contrast to the strikes and violent street rallies that had marked Bangladeshi politics in previous years, the parliamentary elections finally held in late December 2008 were mostly peaceful and Sheikh HASINA Wajed was elected prime minister. About a third of this extremely poor country floods annually during the monsoon rainy season, hampering economic development.

### ***GENERAL***

Country name: Gana Prajatantri Bangladesh (People's Republic of Bangladesh)  
Short name: Bangladesh  
Former names: East Bengal, East Pakistan  
Capital: Dhaka  
7 Divisions: Chittagong, Dhaka, Khulna, Rajshahi, Rangpur, Sylhet

### ***MILITARY BRANCHES***

Bangladesh Defense Force: Bangladesh Army (Sena Bahini), Bangladesh Navy (Noh Bahini, BN), Bangladesh Air Force (Biman Bahini, BAF)

#### **Related MOD departments:**

- Bangladesh Space Research and Remote Sensing Organization
- Military Land and Cantonment Directorate
- Bangladesh Meteorological Department
- Bangladesh Survey Department
- Cipher Directorate
- Armed Forces Medical College
- Military Institute of Science and Technology
- Military Medical Services Directorate
- Bangladesh Armed Forces Board
- Directorate of Public Relations
- The National Defence College

- Bangladesh National Cadet Core Department
  - Defense Intelligence Directorate (DGFI)
  - Armed Forces Medical Institute
  - Defence Services Staff College
- 

## **SECURITY & INTELLIGENCE AGENCIES**

Police Special Branch

Directorate General of Forces Intelligence

Directorate General of National Security Intelligence

Special Security Forces

Bangladesh Institute of International and Strategic Studies (BIISS)

Paramilitary Forces:

- Bangladesh Rifles (Border Guard)
  - Bangladesh Ansars
  - Bangladesh Coast Guard
  - 1st Para Commando Battalion
  - Bangladesh Village Defence Party
- 

**The National Security Intelligence**, also known as the Directorate-General of National Security Intelligence is the primary intelligence agency responsible for internal security (including internal political affairs), foreign intelligence and counterintelligence. It reports directly to the Prime Minister of Bangladesh and is administered from the Prime Minister's Office.

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**The Special Branch (SB)** of the Bangladesh Police also operates an intelligence wing. Major responsibilities of this branch are to meet up any intelligence required from government, registration and control of foreigners, perform verification role, give protection to the VIPs & VVIPs, intelligence gathering, immigration controls etc. It reports directly to the Prime Minister of Bangladesh. The SB Rapid Action Battalion is an elite anti-crime and anti-terrorism unit. It consists of members of Bangladesh Police, Bangladesh Army, Bangladesh Navy, Bangladesh Air Force, Border Guard Bangladesh and Bangladesh Ansar. It was formed on 26 March 2004. They counter actions of groups like the Harkat-ul-Jihad-al Islami Bangladesh, Jagrata Muslim Janata Bangladesh, Jama'atul Mujahideen Bangladesh, Purba Bangla Communist Party, and the Islami Chhatra Shibir.

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**The Directorate General of Forces Intelligence (DGFI)** is the main military intelligence agency, responsible for intelligence gathering for all military purposes. The DGFI also includes subdivisions specifically serving the Bangladeshi Army, the Bangladeshi Navy and the Bangladeshi Air Force, but the agency itself is distinct and unified for all military intelligence functions.

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**The Special Security Force (SSF)** was formed on the 15th of June, 1986 by the President. Originally it was named "Presidential Security Force" but later with the introduction of the parliamentary government system in Bangladesh the protection force was renamed as the Special Security Force (SSF) on the 27th of September 1997. Its headquarter is located at the Prime Minister's Office. Its principal mission is the protection of the President, Ministers and other government people.

SSF is organised in to four bureaus:

Operation and Protection Bureau, Intelligence Bureau, Logistics Bureau, Training Bureau

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**Bangladesh Institute of International and Strategic Studies (BIISS)** is a statutory and autonomous institution

established on 25 June, 1978 by the Government of Bangladesh. The Institute was established with aim of the undertaking and promoting research and deliberation on international affairs, security and developmental issues. The Institute is also expected to advance knowledge and understanding of contemporary international and strategic issues in national and regional perspectives.

The BISS structure includes the following divisions:

- Defence Studies
  - Non-traditional Security Studies
  - International Studies
  - Strategic Studies
  - Peace and Conflict Studies
  - Administrative Wing
  - Library and Documentation Centre
  - Support Services
- 

**The Border Guard Bangladesh** (formerly known as Bangladesh Rifles) is the oldest uniformed force in Bangladesh. It is a paramilitary force under the Ministry of Home Affairs of Bangladesh. It is primarily responsible for the border security of the country.

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**The Bangladesh Ansar** (also known as the Ansar Bahini) is a disciplined force for the preservation of internal security and law enforcement in Bangladesh. It is administered by the Home Ministry of the Government of Bangladesh. The Ansar are charged with maintaining law and order.

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**The Village Defence Party** (VDPs) is a law enforcement force in Bangladesh, organised in distinct units at the level of individual villages and urban towns. It is administered by the Home Ministry of the central Government of Bangladesh. Domestic security is its main objective.

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#### ***SOURCES / RELATED WEBSITES / FURTHER INFORMATION***

<http://www.bdmilitary.com>

<http://www.army.mil.bd>

<http://www.baf.mil.bd>

<http://www.bdmilitary.com>

<http://www.bangladeshnavy.org>

<http://www.mha.gov.bd>

<http://www.bangladesh.gov.bd>

<http://www.sparrso.gov.bd>

<http://www.biiss.org>

<http://www.satp.org>

Library of Congress Country Studies

<http://lcweb2.loc.gov/frd/cs/bdtoc.html>

CIA World Factbook

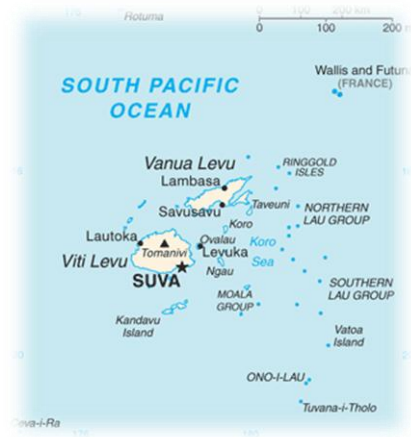
<https://www.cia.gov/library/publications/the-world-factbook/geos/bg.html>

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## Intelligence profile:

### Fiji



#### BACKGROUND

Fiji became independent in 1970 after nearly a century as a British colony. Democratic rule was interrupted by two military coups in 1987 caused by concern over a government perceived as dominated by the Indian community (descendants of contract laborers brought to the islands by the British in the 19th century). The coups and a 1990 constitution that cemented native Melanesian control of Fiji led to heavy Indian emigration; the population loss resulted in economic difficulties, but ensured that Melanesians became the majority. A new constitution enacted in 1997 was more equitable. Free and peaceful elections in 1999 resulted in a government led by an Indo-Fijian, but a civilian-led coup in May 2000 ushered in a prolonged period of political turmoil. Parliamentary elections held in August 2001 provided Fiji with a democratically elected government led by Prime Minister Laisenia QARASE. Re-elected in May 2006, QARASE was ousted in a December 2006 military coup led by Commodore Voreqe BAINIMARAMA, who initially appointed himself acting president but in January 2007 became interim prime minister. Since taking power BAINIMARAMA has neutralized his opponents, crippled Fiji's democratic institutions, and refused to hold elections.

#### GENERAL

Country name: Matanitu ko Viti (Republic of Fiji)  
Short name: Viti (Fiji)  
Capital: Suva  
4 divisions Central, Eastern, Northern, Western  
1 dependency Rotuma

#### MILITARY

Republic of Fiji Military Forces (RFMF): Land Forces, Naval Forces

#### INTELLIGENCE & SECURITY AGENCIES

Fiji Intelligence Services (FIS)  
National Security Council  
Fiji Financial Intelligence Unit (FIU)  
Fiji Army Intelligence Corps  
Fiji Police Special Branch  
Fiji Islands Revenue and Customs Authority (FIRCA)

The *Fiji Intelligence Services (FIS)* is a former intelligence agency of the Republic of the Fiji Islands. Its official purpose is "to handle national security matters". It was established in 1988 and incorporated both criminal and military intelligence. The FIS was abolished in 1999 and plans were launched to revive it in 2008 but it did not happen. In early 2010 the Bainimarama government announced it would create a National Intelligence Agency to replace the FIS. This new Agency would have similar functions to the FIS. It would protect Fiji's borders and

protect Fiji against the increasing global threat of terrorism. Both the FIS and the new agency still did not emerge at the time of writing (April 2012).

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The **National Security Council** is the Republic of Fiji's National Security Council. It was established in 1990, through the Fiji Intelligence Service Decree, by the interim government which followed the 1987 coups d'état. The NSC comprises the Prime Minister (PM), Minister of Defense, Security and Immigration, Attorney General and Minister for Justice, Minister of Finance and National Planning, and the Minister of Foreign Affairs, International Cooperation and Civil Aviation. The police and the RFMF attend the NSC meeting through invitation.

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The **Fiji Islands Revenue and Customs Authority (FIRCA)** is responsible for border control. The Immigration Department, which is responsible for the administration of immigration functions. Following the National Security and Defence Review in 2004, border management and control functions at the major ports and airports of Fiji were transferred to the Customs Department. After the 9/11 event, and the rapid increase in people and drug trafficking, identity fraud, money laundering, prostitution, and illegal immigrants, there was an urgent need to strengthen the capabilities of the Departments to ensure that it performed its core roles and functions effectively.

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The **Fiji Financial Intelligence Unit (FIU)** is a specialised agency created to collect, analyse and disclose financial information and intelligence. The Fiji FIU was established by the Financial Transactions Reporting Act of 2004. Fiji FIU in its intelligence role provides information to Government Law Enforcement Agencies and revenue agencies. It is responsible for:

- The effective performance of all of the functions, duties and powers of the FIU pursuant to the FTR Act.
  - Developing and implementing strategies for money laundering prevention and compliance.
  - Handling and processing information obtained from financial institutions concerning suspicious, cash, electronic, terrorist financing and border currency transactions intelligence that might be intended for money laundering and other serious offences.  
Exchanging money laundering information with domestic and foreign counterpart agencies.
  - Providing assistance to investigations conducted by domestic and foreign law enforcement agencies.
  - Establishing and compiling databases concerning money laundering intelligence.
  - Identifying criminally derived assets and tainted properties.
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The **Fiji Police Force** is responsible for the maintenance of law and order, preservation of peace, protection of life and property, the prevention and detection of crime and the enforcement of all laws it is directly charged with. The Force is having to contend with a difficult law and order situation, with the growth in more serious crime and the emergence of transnational crime such as drug running and money laundering. The Police Force comprises its Headquarters, Special Branch, CID - Criminal Investigation Department, Traffic Control Division, and Training Department.

The **Special Branch** unit of the Fiji Police Force is classed as one of the best intelligence unit in the Asia Pacific region. Similar to their Commonwealth counterparts, the Fijian Special Branch deals with matters of national security. They facilitate Interpol, Counter Terrorism, surveillance, Anti-espionage and VIP Protection units. The unit's name has changed to the Fiji Police Intelligence Bureau on 2009.

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#### **SOURCES / RELATED WEBSITES / FURTHER INFORMATION**

- CIA World Factbook
- Wikipedia
- Lowry, R. W., Firth, S. and Vitusagavulu, J (2004) "National Security and Defence Review: Safeguarding Peace and Prosperity", Ministry of Home Affairs, Government of Fiji.
- 2002 Taskforce Reports – for the preparation of the Draft SDP 2003-2005, Report by the Law and Order Taskforce. National Planning Office
- Draft Sustainable Economic and Empowerment Development Strategy 2007-2011, Government of Fiji

- Dr Steven Ratuva – Briefing Paper for Forum Security Committee – University of the South Pacific, 15th June 2005
- Draft White Paper – 2005 - A Safer and Prosperous Fiji - National Security & Defense Review Implementation Project – Ministry of Home Affairs, Immigration, and National Disaster Management
- 2006 Annual Plan – Australia – Fiji Law and Justice Sector Program
- Natural Disaster Management Act & National Disaster Management Plan – A New Beginning October 2005 – National Disaster Management Office

Fiji Financial Intelligence Unit

Fiji Police

Fiji Military Forces

Fiji Government

National Council for Building a Better Fiji (NCBBF)

<http://www.fijifiu.gov.fj/>

<http://www.police.gov.fj/>

<http://www.rfmf.mil.fj/>

<http://www.fiji.gov.fj/>

<http://www.fijipeople charter.com.fj>

## ***Intelligence profile:*** ***Singapore***



### **BACKGROUND**

Singapore was founded as a British trading colony in 1819. It joined the Malaysian Federation in 1963 but separated two years later and became independent. Singapore subsequently became one of the world's most prosperous countries with strong international trading links (its port is one of the world's busiest in terms of tonnage handled) and with per capita GDP equal to that of the leading nations of Western Europe.

### **GENERAL**

Country name: Republic of Singapore

Short name: Singapore

Capital: Singapore

### **MILITARY**

Singapore Armed Forces: Army, Navy, Air Force (includes Air Defense)

### **INTELLIGENCE & SECURITY AGENCIES**

Internal Security Department

Security and Intelligence Division

Police Intelligence Department

### ***Internal Security Department***

ISD is an agency of the Government of Singapore under the hierarchy of the Ministry of Home Affairs. It was formerly part of the Ministry of the Interior and Defence until it was split in 11 August, 1970. ISD was first established as the Special Branch in 1948 by the British colonial government. In 1963, it became part of the Malaysian Special Branch when Singapore joined the Malayan Federation. After Singapore gained independence, Internal Security Department was formally established on 17 February 1966.

It is the task of the ISD to confront and address these security issues and latent threats. In order to do so, the ISD has both intelligence collection and executive functions. It collects and analyses intelligence and presents its assessments and policy recommendations to the Government. It also investigates and where necessary takes direct action in relation to the defined security threats of terrorism or politically motivated violence, foreign subversion, espionage and communal extremism.

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The ***Security and Intelligence Division*** is an external intelligence agency of the Ministry of Defence of Singapore responsible for gathering and analysing intelligence related to the external security of Singapore. It is highly secretive as most of its personnel are known only to the high-ranking government and military officials. Most of its agents, recruited from civil service and some with military experience, work in branches of the government and in civilian organizations with relations to the government as fronts for their cover such as the Ministry of Foreign Affairs, Ministry of Defence, Singapore Airlines and the Singapore Tourism Board. Its Director reports directly to the Minister of Defence and the Prime Minister.

The SID shares a similar background to its domestic counterpart, the ISD. The primary intelligence organ since the colonial era was the Malaysian Special Branch. With the independence of Singapore, the Ministry of Interior and Defence was directed to reorganize and consolidate all intelligence capabilities in January 1966. SID was subsequently established in February 1966.

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### ***Police Intelligence Department***

The PID started its roots as the Criminal Intelligence Unit (CIU) of the Criminal Investigation Department on 1 April 1973 to support CID's investigations. To reap greater synergies and for better intelligence collation across the entire SPF, the CIU was revamped and upgraded to a division of CID in October 1988; and subsequently to a full-fledged Department on 28 Mar 1996. That marked the tremendous progress of the unit over the years; reflecting the value and contribution of intelligence in SPF's fight against crimes. More significantly, the re-organisation symbolised the importance of intelligence alongside Investigation and operations.

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### ***SOURCES / RELATED WEBSITES / FURTHER INFORMATION***

Wikipedia

CIA World Factbook

Internal Security Department <http://www.mha.gov.sg>

Police <http://www.spf.gov.sg/>

Government <http://www.sgdi.gov.sg/>

Ministry of Defense <http://www.mindef.gov.sg>

Ministry of Home Affairs <http://www.mha.gov.sg>

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## LOGS SECTION

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
2815	18-7-2012	2359	M22	4XZ IDF/Israeli Navy Haifa	CW	Wed	(LG2)
2857	20-7-2012	2259	M22	4XZ IDF/Israeli Navy Haifa	CW	Fri	(LG2)
2995	16-2-2012	1615	M21c	54ya 154 176, 60ya 150 098, 42ya 211 160, 44ya 270 170, 45ya 221 360	USB		(AnEur)
3246	6-7-2012	2053	M21	Russian Air Defence =990055??0????? Clock fast //5221.5 kHz	CW	Fri	(MPJ)
3297	7-7-2012	1318	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Sat	(JPL-HK)
3297	7-7-2012	1558	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Sat	(JPL-HK)
3297	8-7-2012	1232	M89	In tfc - 4 fig cut nr - V GKVZ (x3) DE Q7NW (x2)	CW	Sun	(JPL-HK)
3297	8-7-2012	1439	M89	V GKVZ (x3) DE Q7NW (x2)	CW	Sun	(JPL-HK)
3297	8-7-2012	2043	M89	V GKVZ (x3) DE Q7NW (x2)	CW	Sun	(JPL-HK)
3297	9-7-2012	1317	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Mon	(JPL-HK)
3297	9-7-2012	1540	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Mon	(JPL-HK)
3297	9-7-2012	2029	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Mon	(JPL-HK)
3297	10-7-2012	1200	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Tue	(JPL-HK)
3297	10-7-2012	1715	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Tue	(JPL-HK)
3297	10-7-2012	2056	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Tue	(JPL-HK)
3297	12-7-2012	1620	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Thu	(JPL-HK)
3297	15-7-2012	1817	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Sun	(JPL-HK)
3297	15-7-2012	2053	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Sun	(JPL-HK)
3297	16-7-2012	1427	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Mon	(JPL-HK)
3297	16-7-2012	2030	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Mon	(JPL-HK)
3297	18-7-2012	1143	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Wed	(JPL-HK)
3297	18-7-2012	1556	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Wed	(JPL-HK)
3297	18-7-2012	1854	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Wed	(JPL-HK)
3297	18-7-2012	1952	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Wed	(JPL-HK)
3297	19-7-2012	1347	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Thu	(JPL-HK)
3297	19-7-2012	2129	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Thu	(JPL-HK)
3297	20-7-2012	1246	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Fri	(JPL-HK)
3297	21-7-2012	1250	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Sat	(JPL-HK)
3297	21-7-2012	1458	M89	in traffic. 4FGs	CW	Sat	(AB)
3297	21-7-2012	1827	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Sat	(JPL-HK)
3297	21-7-2012	2129	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Sat	(JPL-HK)
3297	22-7-2012	1241	M89	In tfc 4 fig cut nr. AR V GKVZ (x3) DE Q7NW (x2)	CW	Sun	(JPL-HK)
3297	22-7-2012	2027	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Sun	(JPL-HK)
3297	23-7-2012	1936	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Mon	(JPL-HK)
3297	23-7-2012	2058	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Mon	(JPL-HK)
3297	24-7-2012	1842	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Tue	(JPL-HK)
3297	24-7-2012	2029	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Tue	(JPL-HK)
3297	26-7-2012	1212	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Thu	(JPL-HK)
3297	26-7-2012	1333	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Thu	(JPL-HK)
3297	26-7-2012	1738	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Thu	(JPL-HK)
3297	26-7-2012	2049	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Thu	(JPL-HK)
3297	27-7-2012	1151	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Fri	(JPL-HK)
3297	27-7-2012	1441	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Fri	(JPL-HK)
3297	28-7-2012	2126	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Sat	(JPL-HK)
3297	29-7-2012	1430	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Sun	(JPL-HK)
3297	29-7-2012	1743	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Sun	(JPL-HK)
3297	30-7-2012	0950	M89	MSG GA. K K K K K K. FM 5M E QIE QSL .1111 K. R.	CW	Mon	(JPL-HK)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
HR HR MSG k K. DU7U HILHRGHRHR M HR ME 7.A FM 7A FM AI. NU4 NU4 DU5E //////////////////////////////////							
3297	30-7-2012	1541	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Mon	(JPL-HK)
3297	30-7-2012	1739	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Mon	(JPL-HK)
3642	15-7-2012	1647	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	Sun	(JPL-HK)
3642	16-7-2012	1429	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	Mon	(JPL-HK)
3642	18-7-2012	1558	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	Wed	(JPL-HK)
3642	21-7-2012	2130	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	Sat	(JPL-HK)
3642	28-7-2012	1951	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	Sat	(JPL-HK)
3797	8-7-2012	1301	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	Sun	(JPL-HK)
3797	8-7-2012	1442	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	Sun	(JPL-HK)
3797	9-7-2012	1315	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	Mon	(JPL-HK)
3797	9-7-2012	1543	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	Mon	(JPL-HK)
3797	21-7-2012	1502	M89	V H2FL H2FL H2FL DE DRV8 DRV8	CW	Sat	(AB)
3797	21-7-2012	1830	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	Sat	(JPL-HK)
4153	16-7-2012	2017	XSL	Japanese Navy a.k.a. Slot Machine	QPSK 1500bd	Mon	(AB-HK)
4225	7-7-2012	1314	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sat	(JPL-HK)
4225	7-7-2012	1556	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sat	(JPL-HK)
4225	8-7-2012	1235	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Sun	(JPL-HK)
4225	8-7-2012	1435	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Sun	(JPL-HK)
4225	8-7-2012	2039	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Sun	(JPL-HK)
4225	9-7-2012	1309	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Mon	(JPL-HK)
4225	9-7-2012	1536	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Mon	(JPL-HK)
4225	9-7-2012	2028	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Mon	(JPL-HK)
4225	10-7-2012	1147	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Tue	(JPL-HK)
4225	10-7-2012	1147	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Tue	(JPL-HK)
4225	10-7-2012	1709	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Tue	(JPL-HK)
4225	10-7-2012	1709	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Tue	(JPL-HK)
4225	10-7-2012	2051	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Tue	(JPL-HK)
4225	13-7-2012	1049	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Fri	(JPL-HK)
4225	13-7-2012	2249	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Fri	(JPL-HK)
4225	15-7-2012	1815	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Sun	(JPL-HK)
4225	15-7-2012	2049	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Sun	(JPL-HK)
4225	15-7-2012	2109	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Sun	(JPL-HK)
4225	15-7-2012	2113	M89	VVV UGT COMM BT 9450/0540/G65/4319 AR. V UGT COMM BT 9450/0540/G65/4319 AR //5500	CW	Sun	(JPL-HK)
4225	16-7-2012	1425	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Mon	(JPL-HK)
4225	16-7-2012	2026	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Mon	(JPL-HK)
4225	26-7-2012	0939	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Thu	(JPL-HK)
4225	26-7-2012	1210	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Thu	(JPL-HK)
4225	26-7-2012	1329	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Thu	(JPL-HK)
4225	26-7-2012	1734	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Thu	(JPL-HK)
4225	26-7-2012	2045	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Thu	(JPL-HK)
4225	26-7-2012	2154	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Thu	(JPL-HK)
4225	28-7-2012	1037	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Sat	(JPL-HK)
4225	28-7-2012	1117	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Sat	(JPL-HK)
4225	28-7-2012	1257	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Sat	(JPL-HK)
4225	28-7-2012	1947	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Sat	(JPL-HK)
4225	28-7-2012	2117	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Sat	(JPL-HK)
4225	29-7-2012	1406	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sun	(JPL-HK)



Freq.	date	UTC	enigma	remarks	mode	day	Contr.
4225	29-7-2012	1739	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	Sun	(JPL-HK)
4231.5	16-7-2012	2017	XSL	Japanese Navy a.k.a. Slot Machine	QPSK 1500bd	Mon	(AB-HK)
4331	7-7-2012	0008	M22	4XZ IDF/Israeli Navy Haifa transmits five letter groups	CW	Sat	(LG2)
4343	18-7-2012	1644	VC01	Chinese Robot in progress	LSB	Wed	(AB-HK)
4343	21-7-2012	1029	VC01	Chinese Robot in progress	USB	Sat	(AB-HK)
4343	21-7-2012	1218	VC01	Chinese Robot in progress	USB	Sat	(AB-HK)
4343	22-7-2012	1525	VC01	Chinese Robot in progress. Also at 1816 UTC	USB	Sun	(AB-HK)
4343	27-7-2012	1528	VC01	Chinese Robot in progress	USB	Fri	(AB-HK)
4343	28-7-2012	1212	VC01	Chinese Robot	USB	Sat	(AB-HK)
4343	29-7-2012	1304	VC01	Chinese Robot in progress	USB	Sun	(AB-HK)
4441	17-7-2012	2036	M32	LDBO: Russian Mil. "LDBO QTC 560 24 18 0030 560 = CW ZYS 863 = EUGEJ PPPPP VNGJV ... HXJCZ ÄIPWP 560 = Repeats msg AR.		Tue	(MPJ)
4467	30-5-2012	2106	M21c	Russian Air Defense. Male voice, live transmission	USB		(RSRu)
4503	8-7-2012	1942	M18	0042 0042 0042 ....	CW	Sun	(FN)
4503	9-7-2012	2037	M18	0001 0001 (In Progress - sending Time strings - Long zero)	CW	Mon	(JPL-HK)
4503	10-7-2012	2058	M18	0403 0403 time strings	CW	Tue	(JPL-HK)
4508	20-10-2010	0418	M21c	Russian Air Defense. YL voice, live transmission	USB		(SWL1409)
4508	20-10-2010	1911	M21c	Russian Air Defense. YL voice, live transmission	USB		(SWL1409)
4510	4-3-2009	0830	M21c	Russian Air Defense: "Zebra-21", "Tselina-16", "Skir-da-77"	USB		(AnEur)
4510	3-7-2012	1920	M21c	Russian Air Defense. YL voice, live transmission	USB	Tue	(SNN)
4510	10-7-2012	1120	M21c	Russian Air Defense. YL voice, live transmission	USB	Tue	(AnEur)
4512	8-7-2012	1301	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	Sun	(JPL-HK)
4512	8-7-2012	1442	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	Sun	(JPL-HK)
4512	9-7-2012	1315	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	Mon	(JPL-HK)
4512	9-7-2012	1543	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	Mon	(JPL-HK)
4512	10-7-2012	1202	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	Tue	(JPL-HK)
4512	18-7-2012	1559	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	Wed	(JPL-HK)
4512	18-7-2012	1855	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	Wed	(JPL-HK)
4512	18-7-2012	1954	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	Wed	(JPL-HK)
4512	21-7-2012	1830	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	Sat	(JPL-HK)
4512	26-7-2012	1216	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	Thu	(JPL-HK)
4512	29-7-2012	1428	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	Sun	(JPL-HK)
4512	29-7-2012	1746	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	Sun	(JPL-HK)
4590	7-7-2012	1320	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Sat	(JPL-HK)
4590	7-7-2012	1602	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Sat	(JPL-HK)
4590	8-7-2012	1310	M89	(In tfc) V WITN (x3) DE GNXG (x2) //7607	CW	Sun	(JPL-HK)
4590	8-7-2012	1437	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Sun	(JPL-HK)
4590	8-7-2012	2041	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Sun	(JPL-HK)
4590	9-7-2012	1312	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Mon	(JPL-HK)
4590	9-7-2012	1538	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Mon	(JPL-HK)
4590	9-7-2012	2031	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Mon	(JPL-HK)
4590	10-7-2012	1150	M89	V WITN (x3) DE GNXG (x2) (Cont'd) 2 Msg sent at 1151z. See N&O 178. //7607	CW	Tue	(JPL-HK)
4590	10-7-2012	1713	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Tue	(JPL-HK)
4590	10-7-2012	2054	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Tue	(JPL-HK)
4590	15-7-2012	1825	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Sun	(JPL-HK)
4590	15-7-2012	2051	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Sun	(JPL-HK)
4590	16-7-2012	1426	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Mon	(JPL-HK)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
4590	16-7-2012	2028	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Mon	(JPL-HK)
4590	18-7-2012	1554	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Wed	(JPL-HK)
4590	19-7-2012	1345	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Thu	(JPL-HK)
4590	19-7-2012	2127	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Thu	(JPL-HK)
4590	20-7-2012	1244	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Fri	(JPL-HK)
4590	20-7-2012	2214	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Fri	(JPL-HK)
4590	21-7-2012	1826	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Sat	(JPL-HK)
4590	21-7-2012	2128	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Sat	(JPL-HK)
4590	22-7-2012	2025	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Sun	(JPL-HK)
4590	23-7-2012	1102	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Mon	(JPL-HK)
4590	23-7-2012	1934	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Mon	(JPL-HK)
4590	23-7-2012	2056	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Mon	(JPL-HK)
4590	26-7-2012	1218	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Thu	(JPL-HK)
4590	26-7-2012	1331	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Thu	(JPL-HK)
4590	26-7-2012	1736	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Thu	(JPL-HK)
4590	26-7-2012	2047	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Thu	(JPL-HK)
4590	26-7-2012	2155	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Thu	(JPL-HK)
4590	27-7-2012	1439	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Fri	(JPL-HK)
4590	28-7-2012	1459	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Sat	(JPL-HK)
4590	28-7-2012	1949	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Sat	(JPL-HK)
4590	28-7-2012	2118	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Sat	(JPL-HK)
4590	29-7-2012	1526	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Sun	(JPL-HK)
4590	29-7-2012	1741	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Sun	(JPL-HK)
4590	30-7-2012	1539	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Mon	(JPL-HK)
4590	30-7-2012	1737	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Mon	(JPL-HK)
4625	12-7-2012	0600	S28	MDZhB 51 868 UKRUPLENIE 91 85 02 66	USB	Thu	(Avare)
4625	12-7-2012	0600	S28	MDZhB 94 480 SKRUTEN' 35 49 18 18	USB	Thu	(Avare)
4625	12-7-2012	0600	S28	MDZhB 45 066 BALANUS ?? 93 85 36	USB	Thu	(Avare)
4625	19-7-2012	0903	S28	MDZhB 67 904 Palavan 66 62 63 16 MDZhB 93 490 Balabola 10 97 55 70	USB	Thu	(JM5)
4625	19-7-2012	1041	S28	MDZhB 61 540 LAKSOGEN 74 50 48 38 MDZhB 51 395 SAKS 41 55 07 17	USB	Thu	(Avare)
4625	19-7-2012	1247	S28	MDZhB 05 653 PAKAN 65 53 27 38	USB	Thu	(Avare)
4625	23-7-2012	1453	S28	MDZhB 76 629 Kajnozoj 53 73 04 92	USB	Mon	(AB-EST)
4625	23-7-2012	1602	S28	MDZhB 46726 Bajlent 91 00 23 23	USB	Mon	(AB-EST)
4625	25-7-2012	1327	S28	MDZhB 19 803 HAJLARD 19 83 93 37 RAJYeLA 43 81 50 83	USB	Wed	(AB-EST)
4625	25-7-2012	1327	S28	MDZhB 19 803 HAJLARD 19 83 93 37 RAJYeLA 43 81 50 83	USB	Wed	(Avare)
4625	26-7-2012	0840	S28	MDZhB 95 046 KAIK 24 51 15 36 LAZUTCHIK 04 62 57 87	USB	Thu	(AB-EST)
4625	26-7-2012	0840	S28	MDZhB 95 046 KAIK 24 51 15 36 LAZUTCHIK 04 62 57 87	USB	Thu	(Avare)
4625	26-7-2012	0842	S28	MDZhB 74 503 FAZULINA 38 05 38 48	USB	Thu	(AB-EST)
4625	26-7-2012	0842	S28	MDZhB 74 503 FAZULINA 38 05 38 48	USB	Thu	(Avare)
4625	26-7-2012	1222	S28	MDZhB 84 699 BAZHENJE 14 04 56 86 Repeat: MDZhB 84 699 BAZHENJE 14 05 56 86 Priyom	USB	Thu	(AB-EST)
4625	26-7-2012	1224	S28	MDZhB 79 567 RAZLOZhKA 47 88 22 30 Repeat: MDZhB 79 567 RAZLOZhKA 47 88 22 30 Priyom	USB	Thu	(AB-EST)
4625	26-7-2012	1226	S28	MDZhB 80 702 RAZBURA 79 01 67 52	USB	Thu	(AB-EST)
4625	26-7-2012	1332	S28	MDZhB 55 262 VAZhDENIE 20 11 73 86 NAJEZDNYJ 39 59 08 02 Repeat: MDZhB 55 262 VAZhDENIE 20	USB	Thu	(AB-EST)



Freq.	date	UTC	enigma	remarks	mode	day	Contr.
11 73 86 NAJEZDNYJ 39 59 08 02 Priyom							
4789	25-7-2012	1207	M21	=991607???????	CW	Wed	(Avare)
4791	11-7-2012	0338	M21	ip	CW	Wed	(FMB)
4798	7-7-2012	0013	M32	S7WG Russian Mil messages to UHTG/UXTG	CW	Sat	(LG2)
4860	8-7-2012	1320	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Sun	(JPL-HK)
4860	9-7-2012	1320	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Mon	(JPL-HK)
4860	10-7-2012	1719	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Tue	(JPL-HK)
4860	15-7-2012	1820	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Sun	(JPL-HK)
4860	15-7-2012	2120	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Sun	(JPL-HK)
4860	16-7-2012	1420	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Mon	(JPL-HK)
4860	20-7-2012	2220	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Fri	(JPL-HK)
4860	21-7-2012	2120	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Sat	(JPL-HK)
4860	22-7-2012	2019	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Sun	(JPL-HK)
4860	22-7-2012	2220	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Sun	(JPL-HK)
4860	24-7-2012	1419	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Tue	(JPL-HK)
4860	24-7-2012	2019	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Tue	(JPL-HK)
4860	24-7-2012	2119	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Tue	(JPL-HK)
4860	26-7-2012	2220	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Thu	(JPL-HK)
4860	27-7-2012	1320	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Fri	(JPL-HK)
4860	27-7-2012	1520	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Fri	(JPL-HK)
4860	28-7-2012	2120	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Sat	(JPL-HK)
4896.1	6-7-2012	2012	M01	714 76 (rptd) = ..091 15647 15647 59754 ..... 15218 ...	CW	Fri	(MPJ)
5101	17-7-2012	2319	M32a	RFX41: Russian Navy vessel wkg RCV	CW	Tue	(ALF)
5220	7-7-2012	0022	M21	PVO	CW	Sat	(LG2)
5221.5	6-7-2012	2004	M21	Russian Air Defence =990006??0?????	CW	Fri	(MPJ)
5230	7-7-2012	1600	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Sat	(JPL-HK)
5230	8-7-2012	1441	M89	V DKG6 (x3) DE 3A7D (x2)	CW	Sun	(JPL-HK)
5230	15-7-2012	1647	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	Sun	(JPL-HK)
5230	15-7-2012	1819	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Sun	(JPL-HK)
5230	15-7-2012	2055	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Sun	(JPL-HK)
5230	16-7-2012	1429	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	Mon	(JPL-HK)
5230	18-7-2012	1142	M89	In tfc - Hand Sent û 743U5 .4U7N 3D5 DA7U 5U34 7T6N AD7U 543T 6N45 T3N6 5D3N 6TAD 7UA4 TA45 etc (see N&O 178)	CW	Wed	(JPL-HK)
5230	18-7-2012	1558	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	Wed	(JPL-HK)
5230	18-7-2012	1952	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Wed	(JPL-HK)
5230	21-7-2012	2130	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	Sat	(JPL-HK)
5230	23-7-2012	1938	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Mon	(JPL-HK)
5230	26-7-2012	1740	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Thu	(JPL-HK)
5230	28-7-2012	1456	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Sat	(JPL-HK)
5230	28-7-2012	1951	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	Sat	(JPL-HK)
5230	29-7-2012	1432	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Sun	(JPL-HK)
5230	29-7-2012	1745	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Sun	(JPL-HK)
5230	30-7-2012	1544	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Mon	(JPL-HK)
5230	30-7-2012	1741	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Mon	(JPL-HK)
5278	28-7-2012	1451	M89	V GKVZ (x3) DE Q7NW (x2) (Cont'd)	CW	Sat	(JPL-HK)
5292	26-7-2012	0857	S5292	XXX XXX WLHN WLHN 9O117 WYVLTNIK O214 7548 K	CW	Thu	(Avare)
5292	26-7-2012	0900	S5292	XXX G5CX G5CX F2ET F2ET 89733 24185 TETEREW 49O4 7742 K	CW	Thu	(Avare)
5419	10-7-2012	1907	M51	FAV22: CSTEI Favières via Vernon NR 70 J 10	CW	Tue	(MPJ)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
21:06:45 1984 BT OFYQL RGJCA ...							
5424	6-7-2012	1910	M51	CSTEI Bcast NR 67 J 06 21:09:18 1984 BT METDO XEXFY ... //7823 kHz	CW	Fri	(MPJ)
5424	6-7-2012	2040	M51	ip	CW	Fri	(FMB)
5448	26-7-2012	0903	S30	8S1Shch 52 976 KYRIYa 74 65 96 83 Priyom	USB	Thu	(Avare)
5448	26-7-2012	1338	S30	weather msg for 8S1Shch	USB	Thu	(Avare)
5500	7-7-2012	1314	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sat	(JPL-HK)
5500	7-7-2012	1556	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sat	(JPL-HK)
5500	8-7-2012	1235	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	Sun	(JPL-HK)
5500	8-7-2012	1435	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	Sun	(JPL-HK)
5500	8-7-2012	2039	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	Sun	(JPL-HK)
5500	12-7-2012	1107	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Thu	(JPL-HK)
5500	12-7-2012	1351	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Thu	(JPL-HK)
5500	13-7-2012	1049	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	Fri	(JPL-HK)
5500	13-7-2012	2249	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	Fri	(JPL-HK)
5500	15-7-2012	1815	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	Sun	(JPL-HK)
5500	15-7-2012	2049	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	Sun	(JPL-HK)
5500	15-7-2012	2109	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	Sun	(JPL-HK)
5500	15-7-2012	2113	M89	VVV UGT COMM BT 9450/0540/G65/4319 AR. V UGT COMM BT 9450/0540/G65/4319 AR //4225	CW	Sun	(JPL-HK)
5500	16-7-2012	1425	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	Mon	(JPL-HK)
5500	16-7-2012	2026	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	Mon	(JPL-HK)
5500	18-7-2012	1140	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Wed	(JPL-HK)
5500	18-7-2012	1552	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Wed	(JPL-HK)
5500	18-7-2012	1850	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Wed	(JPL-HK)
5500	18-7-2012	1949	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Wed	(JPL-HK)
5500	19-7-2012	1143	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Thu	(JPL-HK)
5500	19-7-2012	1343	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Thu	(JPL-HK)
5500	19-7-2012	2125	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Thu	(JPL-HK)
5500	19-7-2012	2309	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Thu	(JPL-HK)
5500	20-7-2012	2212	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Fri	(JPL-HK)
5500	21-7-2012	0939	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sat	(JPL-HK)
5500	21-7-2012	1107	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sat	(JPL-HK)
5500	21-7-2012	1253	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sat	(JPL-HK)
5500	21-7-2012	1453	M89	V 7NPE 7NPE 7NPE DE QV5B QV5B	CW	Sat	(AB)
5500	21-7-2012	1825	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sat	(JPL-HK)
5500	21-7-2012	2126	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sat	(JPL-HK)
5500	22-7-2012	1042	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sun	(JPL-HK)
5500	22-7-2012	1235	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sun	(JPL-HK)
5500	22-7-2012	2018	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sun	(JPL-HK)
5500	22-7-2012	2211	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sun	(JPL-HK)
5500	23-7-2012	1931	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Mon	(JPL-HK)
5500	23-7-2012	2054	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Mon	(JPL-HK)
5500	23-7-2012	2251	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Mon	(JPL-HK)
5500	24-7-2012	1053	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Tue	(JPL-HK)
5500	24-7-2012	1225	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Tue	(JPL-HK)
5500	24-7-2012	1352	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Tue	(JPL-HK)
5500	24-7-2012	1835	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Tue	(JPL-HK)
5500	24-7-2012	2025	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Tue	(JPL-HK)
5500	24-7-2012	2117	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Tue	(JPL-HK)
5500	25-7-2012	1012	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Wed	(JPL-HK)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
5500	25-7-2012	2142	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Wed	(JPL-HK)
5500	27-7-2012	1145	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Fri	(JPL-HK)
5500	27-7-2012	1437	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Fri	(JPL-HK)
5500	27-7-2012	2241	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Fri	(JPL-HK)
5500	28-7-2012	1037	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	Sat	(JPL-HK)
5500	28-7-2012	1117	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	Sat	(JPL-HK)
5500	28-7-2012	1257	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	Sat	(JPL-HK)
5500	28-7-2012	1947	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	Sat	(JPL-HK)
5500	28-7-2012	2117	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	Sat	(JPL-HK)
5500	29-7-2012	1524	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sun	(JPL-HK)
5500	29-7-2012	1739	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	Sun	(JPL-HK)
5500	30-7-2012	1537	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Mon	(JPL-HK)
5500	30-7-2012	1735	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Mon	(JPL-HK)
5620	23-6-2011	2222	M21c	Russian Air Defense: "53-ii - 15, 59-yi - 09, 61 - 600, 53-ii - 15, 53-ii za 11, 53-ii - 15, 45-yi za 12", etc.	USB		(AnEur)
5731	6-7-2012	2130	E06	315-521/15=91234	AM	Fri	(HFD)
5752	13-7-2012	2023	M21	Russian Air Defence =990023??0?????	CW	Fri	(MPJ)
5788	4-7-2012	1740	M12	463 1 2226 41 49639	CW	Wed	(FN)
5788	11-7-2012	1740	M12	463 1 2538 92 57888	CW	Wed	(FN)
5788	11-7-2012	1745	M12	ip	CW	Wed	(FMB)
5788	18-7-2012	1740	M12	463 1 8462 56 44223	CW	Wed	(FN)
5788	25-7-2012	1740	M12	463 1 1997 73 55458	CW	Wed	(FN)
5800	4-7-2012	0654	SK01	Transmissions every 5 minutes (0700, 0705, 0715, etc)		Wed	(KC2TTK)
5800	5-7-2012	0553	M08a	Tx began at 0559, ended around 0635	CW	Thu	(KC2TTK)
5800	8-7-2012	0600	M08a	Callups 73722 84402 07841; first groups 228?2 2??0? 00?70 (respective to callups). No SK01 after. Off at 6:51z.	CW	Sun	(BCA)
5800	20-7-2012	0559	M08a	Begin, very faint signal; transmitter toggled on and off a few times	CW	Fri	(KC2TTK)
5800	20-7-2012	0602	M08a	Faint; sounded as if SK01 was transmitting simultaneously	CW	Fri	(KC2TTK)
5801	9-7-2012	1318	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Mon	(JPL-HK)
5801	9-7-2012	1542	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Mon	(JPL-HK)
5801	9-7-2012	2031	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Mon	(JPL-HK)
5801	10-7-2012	1711	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Tue	(JPL-HK)
5801	19-7-2012	1349	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Thu	(JPL-HK)
5801	19-7-2012	1401	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	Thu	(JPL-HK)
5801	20-7-2012	1248	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	Fri	(JPL-HK)
5801	21-7-2012	1455	M89	V DKG6 DKG6 DKG6 DE 3A7D 3A7D	CW	Sat	(AB)
5801	21-7-2012	1829	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Sat	(JPL-HK)
5801	22-7-2012	1239	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	Sun	(JPL-HK)
5801	26-7-2012	1335	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	Thu	(JPL-HK)
5801	28-7-2012	1318	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	Sat	(JPL-HK)
5853	8-7-2012	0700	V02a	began early with 210 "uno"s, began callups, then changed to 5883 kHz in the middle of the second round of allups.	AM	Sun	(BCA)
5855	1-7-2012	0004	SK01	SK01-like sound of RDFT postamble tone	AM	Sun	(KC2TTK)
5855	1-7-2012	0415	SK01	SK01-like sound of RDFT postamble tone	AM	Sun	(KC2TTK)
5883	5-7-2012	0651	V02a	Faint, carrier off at 07:45	AM	Thu	(KC2TTK)
5883	7-7-2012	0700	V02a	DGI	AM	Sat	(rusl)
5883	7-7-2012	0717	V02a	..... 73732 LG 25807	AM	Sat	(Dan)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
5883	8-7-2012	0700	V02a	a continuation of the above; callups 20582 33011 46341, first groups 68473 ????? 70253 (relative to callups). End with "final"s at 7:41, off at 7:42.	AM	Sun	(BCA)
5883	20-7-2012	0655	M08a		CW	Fri	(KC2TTK)
5883	20-7-2012	0659	V02a	No "ATENCION", faint	AM	Fri	(KC2TTK)
5883	20-7-2012	0695	V02a	Faint, missed ATENCION	AM	Fri	(KC2TTK)
5883	20-7-2012	0700	V02a	ATENCION ***** *****, faint signal, strong QRM	AM	Fri	(KC2TTK)
5890	7-7-2012	0800	V02a	DGI	AM	Sat	(rusl)
5893	30-7-2012	0800	v2a		AM	Mon	(400)
5895	27-7-2012	0243	M51	ip	CW	Fri	(FMB)
5898	2-7-2012	0800	V02a	Atencion 62451 74782 87111 LG 02841	AM	Mon	(Dan)
5898	4-7-2012	0606	SK01	Transmissions every 5 minutes		Wed	(KC2TTK)
5898	5-7-2012	0500	M08a	Transmission ended around 0583	CW	Thu	(KC2TTK)
5898	5-7-2012	0746	V02a	ATENCIÓN 45111 67741 72761	AM	Thu	(KC2TTK)
5898	8-7-2012	0500	M08a	missed callups. "Normal" transmission. No SK01 after. Off at 5:55z	CW	Sun	(BCA)
5898	8-7-2012	0800	V02a	callups same as 7:00z (20582 33011 46341), first groups 01572 72384 76430 (relative to callups). 2 minutes before I heard a pair of "uno"s.	AM	Sun	(BCA)
5898	8-7-2012	0800	V02	Atencion 20582 33011 46341 LG 42210	AM	Sun	(Dan)
5898	9-7-2012	0800	V02a	Atencion 27082 30421 43742 LG 83843	AM	Mon	(Dan)
5898	10-7-2012	0800	M08a	Atencion 34871 47212 51532 LG missed	CW	Tue	(Dan)
5898	12-7-2012	0800	V02a	Atencion 05341 18661 22002 LG 25234	AM	Thu	(Dan)
5898	20-7-2012	0505	M08a	IP, faint	CW	Fri	(KC2TTK)
5898	20-7-2012	0524	M08a	IP	CW	Fri	(KC2TTK)
5898	20-7-2012	0538	M08a	SKSK (end of transmission)	CW	Fri	(KC2TTK)
5898	20-7-2012	0552	SK01	IP	RDFT	Fri	(KC2TTK)
5898	20-7-2012	0757	V02a	"Uno", then dead air	AM	Fri	(KC2TTK)
5898	20-7-2012	0759	V02a	ATENCIÓN 5?62 6*281 ***22 ("?" could be "0" or "5")	AM	Fri	(KC2TTK)
5898	20-7-2012	0800	V02a	unreadable	AM	Fri	(Dan)
5898	20-7-2012	0800	V02a	ATENCION 72232 85551 07881	AM	Fri	(KC2TTK)
5898	20-7-2012	0842	V02a	FINAL FINAL FINAL	AM	Fri	(KC2TTK)
5898	20-7-2012	0849	M08a	Burst of M08a	CW	Fri	(KC2TTK)
5898	22-7-2012	0800	V02a	Atencion 72232 85551 07881 LG 67186	USB	Sun	(Dan)
5898	23-7-2012	0800	V02a	Atencion 68761 80401 03822	AM	Mon	(Dan)
5898	24-7-2012	0800	V02a	Atencion 200?? 32661 45102 LG 2260? -	AM	Tue	(Dan)
5898	27-7-2012	0800	V02a	Atencion 30651 43082 56311 LG 05308	AM	Fri	(Dan)
5898	29-7-2012	0800	V02a	Atencion 21032 34352 57681 LG 84680	AM	Sun	(Dan)
5898	30-7-2012	0800	V02a	Atencion 24711 37132 41461 LG 077?4	AM	Mon	(Dan)
5898	31-7-2012	0800	V02a	Atencion 43571 55321 77642 LG 58056	AM	Tue	(Dan)
5905	1-7-2012	0004	V02a	V02a-like Tx, faded/disappeared by 04:40Z; V02a-like Tx resumed in full voice	AM	Sun	(KC2TTK)
5905	1-7-2012	0429	V02a	V02a-like Tx, faded/disappeared by 04:40Z; V02a-like Tx resumed in full voice	AM	Sun	(KC2TTK)
5905	1-7-2012	0434	V02a	Atención	AM	Sun	(KC2TTK)
5905	20-7-2012	0407	V02a	Begin, no "ATENCION"	AM	Fri	(KC2TTK)
5905	20-7-2012	0410	SK01		RDFT	Fri	(KC2TTK)
5905	20-7-2012	0412	V02a	IP	AM	Fri	(KC2TTK)
5905	20-7-2012	0413	SK01		RDFT	Fri	(KC2TTK)
5905	20-7-2012	0430	V02a	IP	AM	Fri	(KC2TTK)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
5905	20-7-2012	0434	V02a	IP	AM	Fri	(KC2TTK)
5905	20-7-2012	0435	SK01	IP	RDFT	Fri	(KC2TTK)
5905	20-7-2012	0439	SK01		RDFT	Fri	(KC2TTK)
5905	25-7-2012	0415	SK01	appears to be stuck in a transmission loop	RDFT	Wed	(KC2TTK)
5913	6-7-2012	1650	M42	Russian Intel.	FSK 200/1000	Fri	(FMB)
5947	7-7-2012	0927	SK01	ended at 9:27z, moved traffic to the 9063 carrier.	RDFT	Sat	(BCA)
6140	21-7-2012	0951	E25	950 30 5841 0276 1764 5036 9428 4940 9451 0287 4006 3719 2513 7030 9356 4581 0167 0680 5573 9027 6379 2971 0764 3497 1135 8807 3040 7972 3010 0759 5764 2628	AM	Sat	(MG)
6250	16-7-2012	2017	XSL	Japanese Navy a.k.a. Slot Machine	QPSK 1500bd	Mon	(AB-HK)
6398	16-7-2012	2204	M22	4XZ IDF/Israeli Navy Haifa	CW	Mon	(LG2)
6417	16-7-2012	2017	XSL	Japanese Navy a.k.a. Slot Machine	QPSK 1500bd	Mon	(AB-HK)
6445	16-7-2012	2017	XSL	Japanese Navy a.k.a. Slot Machine	QPSK 1500bd	Mon	(AB-HK)
6524	3-7-2012	1535	M03	798/00	CW	Tue	(HFD)
6773	21-7-2012	0944	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //8040	CW	Sat	(JPL-HK)
6773	21-7-2012	1109	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //8040	CW	Sat	(JPL-HK)
6773	22-7-2012	1051	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	Sun	(JPL-HK)
6773	22-7-2012	2215	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //8040	CW	Sun	(JPL-HK)
6773	26-7-2012	2159	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //8040	CW	Thu	(JPL-HK)
6773	27-7-2012	1153	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	Fri	(JPL-HK)
6773	28-7-2012	1045	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	Sat	(JPL-HK)
6773	28-7-2012	1126	M89	Sending UGT COMM msg - mostly U/R + V H2FL (x3) DE DRV8 (x2)	CW	Sat	(JPL-HK)
6773	30-7-2012	1045	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	Mon	(JPL-HK)
6783	28-7-2012	1935	S06	843 0	AM	Sat	(HFD)
6791	6-7-2012	1750	M42	Russian Intel.	FSK 200/1000	Fri	(FMB)
6802	4-7-2012	1720	M12	463 1 2226 41 49639	CW	Wed	(FN)
6802	11-7-2012	1720	M12	463 1 2538 92 57888	CW	Wed	(FN)
6802	18-7-2012	1720	M12	463 1 8462 56 44223	CW	Wed	(FN)
6802	25-7-2012	1720	M12	463 1 1997 73 55458	CW	Wed	(FN)
6828	26-7-2012	1920	M42	Russian Intel. 00000+++++++162)5761	FSK200/500	Thu	(FMB)
6830	5-7-2012	1920	M42	Russian Gov/Intel.	Baudot 200/500	Thu	(FMB)
6830	12-7-2012	1900	M42	Russian Gov/Intel.	Baudot 200/500	Thu	(FMB)
6830	12-7-2012	1900	M42	Russian Gov/Intel.	Baudot 200/500	Thu	(FMB)
6840	8-7-2012	0020	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //10640	CW	Sun	(JPL-HK)
6840	8-7-2012	1320	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Sun	(JPL-HK)
6840	9-7-2012	0220	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //10640	CW	Mon	(JPL-HK)
6840	9-7-2012	1320	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Mon	(JPL-HK)
6840	10-7-2012	1220	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //10640	CW	Tue	(JPL-HK)
6840	10-7-2012	1719	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Tue	(JPL-HK)
6840	12-7-2012	1120	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //10640	CW	Thu	(JPL-HK)
6840	13-7-2012	2320	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //10640	CW	Fri	(JPL-HK)
6840	15-7-2012	1820	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Sun	(JPL-HK)
6840	15-7-2012	2120	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Sun	(JPL-HK)
6840	16-7-2012	1420	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Mon	(JPL-HK)
6840	19-7-2012	2320	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //10640	CW	Thu	(JPL-HK)
6840	19-7-2012	2330	M89	(In chat HR NR 416.. R7 K.. DR NR.16 K etc	CW	Thu	(JPL-HK)
6840	20-7-2012	2220	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Fri	(JPL-HK)
6840	21-7-2012	0220	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5)	CW	Sat	(JPL-HK)
6840	21-7-2012	1120	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //10640	CW	Sat	(JPL-HK)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
6840	21-7-2012	1825	M89	v v v Q2M Q2M Q2M de NYZ NYZ	CW	Sat	(FN)
6840	21-7-2012	2120	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Sat	(JPL-HK)
6840	22-7-2012	0320	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5)	CW	Sun	(JPL-HK)
6840	22-7-2012	0420	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //10640	CW	Sun	(JPL-HK)
6840	22-7-2012	1120	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //10640	CW	Sun	(JPL-HK)
6840	22-7-2012	2019	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Sun	(JPL-HK)
6840	22-7-2012	2220	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Sun	(JPL-HK)
6840	23-7-2012	0219	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //10640	CW	Mon	(JPL-HK)
6840	24-7-2012	1419	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Tue	(JPL-HK)
6840	24-7-2012	2019	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Tue	(JPL-HK)
6840	24-7-2012	2119	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Tue	(JPL-HK)
6840	25-7-2012	1020	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //10640	CW	Wed	(JPL-HK)
6840	26-7-2012	0120	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //10640	CW	Thu	(JPL-HK)
6840	26-7-2012	0919	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //10640	CW	Thu	(JPL-HK)
6840	26-7-2012	2220	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Thu	(JPL-HK)
6840	27-7-2012	1320	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Fri	(JPL-HK)
6840	27-7-2012	1520	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Fri	(JPL-HK)
6840	28-7-2012	1120	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //10640	CW	Sat	(JPL-HK)
6840	28-7-2012	2120	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //4860	CW	Sat	(JPL-HK)
6840	29-7-2012	1420	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //10640	CW	Sun	(JPL-HK)
6840	30-7-2012	1020	M89	V V V (x3) Q2M DE NYZ (x2) QSA ? K (R5) //10640	CW	Mon	(JPL-HK)
6855	2-7-2012	0300	V2a	Via PA3FWM receiver. Missed callups. Poorly modulated. IP.	AM	Mon	(BCA)
6857	2-7-2012	0430	M12	850 000	CW	Mon	(FN)
6857	9-7-2012	0430	M12	850 000	CW	Mon	(FN)
6857	16-7-2012	0430	M12	850 000	CW	Mon	(FN)
6857	23-7-2012	0430	M12	850 000	CW	Mon	(FN)
6858	21-7-2012	1202	VC01	Chinese Robot in progress	LSB	Sat	(JPL-HK)
6858	21-7-2012	1215	VC01	Chinese Robot in progress. Also at 1438 UTC	LSB	Sat	(AB-HK)
6858	22-7-2012	0806	VC01	Chinese Robot in progress	LSB	Sun	(AB-HK)
6858	28-7-2012	1032	VC01	Chinese Robot	LSB	Sat	(AB-HK)
6858	29-7-2012	0513	VC01	Chinese Robot in progress. Also at 0604 + 0707 + 0812 UTC	LSB	Sun	(AB-HK)
6887	12-7-2012	1830	G06	842 209 15 53821 10638 32987 60153 27493 25401 36272 42819 06491 29104 64729 26194 36291 37290 43261 209 15 00000	AM	Thu	(Avare)
6904	2-7-2012	1740	M12	257 1 4236 70 43644	CW	Mon	(FN)
6904	2-7-2012	1740	M12	257 1	CW	Mon	(HFD)
6904	2-7-2012	1840	M12	257 1 7569 66 30029	CW	Mon	(FN)
6904	2-7-2012	1940	M12	257 1 1076 81 25174	CW	Mon	(FN)
6904	5-7-2012	1740	M12	257 1 4894 79 96455	CW	Thu	(FN)
6904	5-7-2012	1940	M12	257 1 7811 53 81435	CW	Thu	(FN)
6904	9-7-2012	1740	M12	257 1 9300 72 54084	CW	Mon	(FN)
6904	9-7-2012	1840	M12	257 1 8316 69 28755	CW	Mon	(FN)
6904	9-7-2012	1940	M12	257 1 6915 46 72571	CW	Mon	(FN)
6904	12-7-2012	1940	M12	257 1 4340 60 44729	CW	Thu	(FN)
6904	16-7-2012	1740	M12	257 1 5683 79 77615	CW	Mon	(FN)
6904	16-7-2012	1840	M12	257 1 1109 40 33249	CW	Mon	(FN)
6904	16-7-2012	1940	M12	257 1 5188 94 00261	CW	Mon	(FN)
6904	19-7-2012	1740	M12	257 1 4960 60 77011	CW	Thu	(FN)
6904	19-7-2012	1940	M12	257 1 5000 54 64959	CW	Thu	(FN)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
6904	23-7-2012	1740	M12	257 1 1929 80 00381	CW	Mon	(FN)
6904	23-7-2012	1840	M12	257 1 5556 44 44971	CW	Mon	(FN)
6904	23-7-2012	1940	M12	257 1 9668 50 38865	CW	Mon	(FN)
6904	26-7-2012	1740	M12	257 1 8670 54 71856	CW	Thu	(FN)
6904	26-7-2012	1940	M12	257 1 6575 51 44000	CW	Thu	(FN)
6918	31-7-2012	1809	M51	= NR 60 J 31 20:09:57 1984 =	CW	Tue	(Avare)
6947	13-7-2012	2238	M51	FAV22 CSTEI Favieres transmits five letter groups	CW	Fri	(LG2)
6949	13-7-2012	2003	M51	BT NR 40 J 10 22:02:48 1984 BT WUIQG OTAEV ...	CW	Fri	(MPJ)
6983	21-7-2012	1605	S06	134 0	AM	Sat	(HFD)
6983	28-7-2012	1605	S06	134 0	AM	Sat	(HFD)
7005	23-6-2012	1844	M32	Russian Mil. 5LGs = K	CW		(IARUMS)
7005	24-6-2012	1709	M32	Russian Mil. RGT77 259 = 5LGs = K	CW		(IARUMS)
7005	29-6-2012	1844	M32	Russian Mil. RGT77 733 = 5LGs = K	CW		(IARUMS)
7005	30-6-2012	1709	M32	Russian Mil. RGT88 544 = 5LGs = K	CW		(IARUMS)
7005	22-7-2012	2218	M32	RGT77: Russian Mil "... QHChTF ChPUTR WEPÄE = K"	CW	Sun	(MPJ)
7005	23-7-2012	2035	M32	RGT77: Russian Mil "RGT77 225 = KDKVÄ KYNPT LSMÖÄ JLPFJ PAHOÖ PIJGÖ SKWLÜ JPUXK RNCMch JZQOJ ÄXChJL WTChGI OPUIE WEPÄE = K"	CW	Mon	(MPJ)
7027.5	29-6-2012	2012	MX	Beacon "V"	CW		(IARUMS)
7027.5	22-7-2012	0100	MX	Beacon "V"	CW	Sun	(CK)
7038.7	22-7-2012	0100	MX	Beacon "D"	CW	Sun	(CK)
7038.9	22-7-2012	0100	MX	Beacon "S"	CW	Sun	(CK)
7039.2	22-7-2012	0100	MX	Beacon "L"	CW	Sun	(CK)
7039.2	22-7-2012	0731	MX	Beacon "L"	CW	Sun	(AB)
7039.2	22-7-2012	1535	MX	Beacon "L"	CW	Sun	(AB)
7039.2	22-7-2012	2206	MX	Beacon L, Skt Peterburg	MX	Sun	(MPJ)
7039.2	28-7-2012	0617	MX	Beacon "L"	CW	Sat	(AB)
7039.2	29-7-2012	0540	MX	Beacon "L"	CW	Sun	(AB)
7043	17-7-2012	0830	S06	427 427 427 00000	AM	Tue	(FN)
7082	28-6-2012	----	M32a	Russian Navy: RMW46	CW		(IARUMS)
7166	30-6-2012	1850	M21	PVO, time-stamp	CW		(IARUMS)
7437	12-7-2012	0430	E07a	411 1-30704-538/77 =12210	AM	Thu	(HFD)
7473	4-7-2012	2020	E07a	147 0	AM	Wed	(HFD)
7557	2-7-2012	0450	M12	850 000	CW	Mon	(FN)
7557	9-7-2012	0450	M12	850 000	CW	Mon	(FN)
7557	16-7-2012	0450	M12	850 000	CW	Mon	(FN)
7557	23-7-2012	0450	M12	850 000	CW	Mon	(FN)
7579	4-7-2012	1325	M08a	5F msgs	CW	Wed	(N2UHC)
7582	8-7-2012	0015	M89	V 7NPE (x3) DE QV5B (x2)	CW	Sun	(JPL-HK)
7582	8-7-2012	0536	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	Sun	(JPL-HK)
7582	9-7-2012	0213	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	Mon	(JPL-HK)
7582	13-7-2012	0240	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	Fri	(JPL-HK)
7582	14-7-2012	2342	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sat	(JPL-HK)
7582	30-7-2012	0943	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	Mon	(JPL-HK)
7606	21-7-2012	1453	M89	V WITN WITN WITN DE GNXG GNXG	CW	Sat	(AB)
7607	7-7-2012	1320	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Sat	(JPL-HK)
7607	7-7-2012	1602	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Sat	(JPL-HK)
7607	8-7-2012	1310	M89	(In tfc) V WITN (x3) DE GNXG (x2) //4590 NR 32 221. RMKS 5312 TO 5497 BT 5342 BT COMM. /2.00/NZ2MIO .2/53.2 5497 AR QSL? HR WK NR .4	CW	Sun	(JPL-HK)
7607	8-7-2012	1437	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Sun	(JPL-HK)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
7607	8-7-2012	2041	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Sun	(JPL-HK)
7607	9-7-2012	1312	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Mon	(JPL-HK)
7607	9-7-2012	1538	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Mon	(JPL-HK)
7607	9-7-2012	2031	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Mon	(JPL-HK)
7607	10-7-2012	1150	M89	V WITN (x3) DE GNXG (x2) (Cont'd) 2 Msg sent at 1151z. See N&O 178. //4590	CW	Tue	(JPL-HK)
7607	10-7-2012	1713	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Tue	(JPL-HK)
7607	10-7-2012	2054	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Tue	(JPL-HK)
7607	12-7-2012	1109	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Thu	(JPL-HK)
7607	13-7-2012	1957	M89	V WITN de GNXG.	CW	Fri	(MPJ)
7607	13-7-2012	2252	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Fri	(JPL-HK)
7607	15-7-2012	1825	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Sun	(JPL-HK)
7607	15-7-2012	2051	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Sun	(JPL-HK)
7607	16-7-2012	1426	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Mon	(JPL-HK)
7607	16-7-2012	1612	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Mon	(JPL-HK)
7607	16-7-2012	2028	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Mon	(JPL-HK)
7607	18-7-2012	1142	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Wed	(JPL-HK)
7607	18-7-2012	1554	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Wed	(JPL-HK)
7607	18-7-2012	1852	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Wed	(JPL-HK)
7607	18-7-2012	1951	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Wed	(JPL-HK)
7607	19-7-2012	1145	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Thu	(JPL-HK)
7607	19-7-2012	1345	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Thu	(JPL-HK)
7607	19-7-2012	2127	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Thu	(JPL-HK)
7607	20-7-2012	1244	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Fri	(JPL-HK)
7607	20-7-2012	1925	M89	v WITN WITN WITN de GNXG GNXG	CW	Fri	(FN)
7607	20-7-2012	2214	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Fri	(JPL-HK)
7607	21-7-2012	1108	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Sat	(JPL-HK)
7607	21-7-2012	1254	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Sat	(JPL-HK)
7607	21-7-2012	1826	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Sat	(JPL-HK)
7607	21-7-2012	2128	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Sat	(JPL-HK)
7607	22-7-2012	1237	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Sun	(JPL-HK)
7607	22-7-2012	2025	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //7607	CW	Sun	(JPL-HK)
7607	22-7-2012	2212	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Sun	(JPL-HK)
7607	23-7-2012	1102	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Mon	(JPL-HK)
7607	23-7-2012	1934	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Mon	(JPL-HK)
7607	23-7-2012	2056	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Mon	(JPL-HK)
7607	23-7-2012	2253	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Mon	(JPL-HK)
7607	24-7-2012	1355	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Tue	(JPL-HK)
7607	24-7-2012	1837	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Tue	(JPL-HK)
7607	24-7-2012	2027	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Tue	(JPL-HK)
7607	24-7-2012	2125	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Tue	(JPL-HK)
7607	25-7-2012	2144	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Wed	(JPL-HK)
7607	26-7-2012	1218	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Thu	(JPL-HK)
7607	26-7-2012	1331	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Thu	(JPL-HK)
7607	26-7-2012	1736	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Thu	(JPL-HK)
7607	26-7-2012	2047	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Thu	(JPL-HK)
7607	26-7-2012	2155	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Thu	(JPL-HK)
7607	27-7-2012	1147	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Fri	(JPL-HK)
7607	27-7-2012	1439	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Fri	(JPL-HK)
7607	27-7-2012	2243	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Fri	(JPL-HK)
7607	28-7-2012	1130	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Sat	(JPL-HK)



Freq.	date	UTC	enigma	remarks	mode	day	Contr.
7607	28-7-2012	1259	M89	NT3D AT53 N.4D 7A64 F.3N ND64 .5D3 UT36 573N N6U. . AR QSL ? HR WK NR ..	CW	Sat	(JPL-HK)
7607	28-7-2012	1459	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Sat	(JPL-HK)
7607	28-7-2012	1949	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Sat	(JPL-HK)
7607	28-7-2012	2118	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Sat	(JPL-HK)
7607	29-7-2012	1408	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Sun	(JPL-HK)
7607	29-7-2012	1526	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Sun	(JPL-HK)
7607	29-7-2012	1741	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Sun	(JPL-HK)
7607	30-7-2012	1539	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Mon	(JPL-HK)
7607	30-7-2012	1737	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //4590	CW	Mon	(JPL-HK)
7627	23-7-2012	1915	M51	FAV22: French CSTEI Favières/Vernon BT NR 29 J 23 21:16:13 1984 BT LCIJT VIIIMT ... //7844 kHz	CW	Mon	(MPJ)
7627	24-7-2012	0416	M51	ip	CW	Tue	(FMB)
7630	26-7-2012	0940	S06s	314	USB	Thu	(HFD)
7664	30-7-2012	----	M32a	RIW: Russian Navy clg RMSB qsa? k	CW	Mon	(WP3)
7689	19-7-2012	0038	M32	RGT77 Russian High Command	CW	Thu	(LG2)
7727	25-7-2012	1320	M03	548/38 = 27863 24036	CW	Wed	(FN)
7823	6-7-2012	1743	M51	ip	CW	Fri	(FMB)
7823	6-7-2012	1910	M51	CSTEI Bcast NR 67 J 06 21:09:18 1984 BT METDO XEXFY ... //5424 kHz	CW	Fri	(MPJ)
7823	7-7-2012	0443	M51	ip	CW	Sat	(FMB)
7843	4-7-2012	1910	M12	828 1 634 195 74425	CW	Wed	(FN)
7843	8-7-2012	1910	M12	828 1 634 195 74425	CW	Sun	(FN)
7843	18-7-2012	1910	M12	828 1 366 163 41943	CW	Wed	(FN)
7843	22-7-2012	1910	M12	828 1 366 163 41943	CW	Sun	(FN)
7843	25-7-2012	1910	M12	828 1 876 139 72327	CW	Wed	(FN)
7844	23-7-2012	1915	M51	FAV22: French CSTEI Favières/Vernon BT NR 29 J 23 21:16:13 1984 BT LCIJT VIIIMT ... //7627 kHz	CW	Mon	(MPJ)
7846	24-7-2012	0416	M51	ip	CW	Tue	(FMB)
7884	7-7-2012	1930	S06	843 0	AM	Sat	(HFD)
7931	2-7-2012	1720	M12	257 1 4236 70 43644	CW	Mon	(FN)
7931	2-7-2012	1720	M12	257 1	CW	Mon	(HFD)
7931	2-7-2012	1820	M12	257 1 7569 66 30029	CW	Mon	(FN)
7931	2-7-2012	1920	M12	257 1 1076 81 25174	CW	Mon	(FN)
7931	5-7-2012	1720	M12	257 1 4894 79 96455	CW	Thu	(FN)
7931	5-7-2012	1920	M12	257 1 7811 53 81435	CW	Thu	(FN)
7931	9-7-2012	1720	M12	257 1 9300 72 54084	CW	Mon	(FN)
7931	9-7-2012	1820	M12	257 1 8316 69 28755	CW	Mon	(FN)
7931	9-7-2012	1920	M12	257 1 6915 46 72571	CW	Mon	(FN)
7931	12-7-2012	1920	M12	257 1 4340 60 44729	CW	Thu	(FN)
7931	16-7-2012	1720	M12	257 1 5683 79 77615	CW	Mon	(FN)
7931	16-7-2012	1820	M12	257 1 1109 40 33249	CW	Mon	(FN)
7931	16-7-2012	1920	M12	257 1 5188 94 00261	CW	Mon	(FN)
7931	19-7-2012	1720	M12	257 1 4960 60 77011	CW	Thu	(FN)
7931	19-7-2012	1920	M12	257 1 5000 54 64959	CW	Thu	(FN)
7931	23-7-2012	1720	M12	257 1 1929 80 00381	CW	Mon	(FN)
7931	23-7-2012	1820	M12	257 1 5556 44 44971	CW	Mon	(FN)
7931	23-7-2012	1920	M12	257 1 9668 50 38865	CW	Mon	(FN)
7931	26-7-2012	1720	M12	257 1 8670 54 71856	CW	Thu	(FN)
7931	26-7-2012	1920	M12	257 1 6575 51 44000	CW	Thu	(FN)
7966	6-7-2012	0710	M51	"bt nr 76..."	CW	Fri	(ML4)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
7966	24-7-2012	1536	M51	FAV22: French CSTEI Favières/Vernon 1536 CW BT NR 35 J _4 17:36:59 1984 BT PVPS_ BNTDS ...	CW	Tue	(MPJ)
7979	4-7-2012	2120	M12	398 000	CW	Wed	(FN)
7979	4-7-2012	2120	M12	398 0	CW	Wed	(HFD)
7979	11-7-2012	2120	M12	398 000	CW	Wed	(FN)
7979	18-7-2012	2120	M12	398 1 946 119 84581	CW	Wed	(FN)
7979	25-7-2012	2120	M12	398 000	CW	Wed	(FN)
7982	2-7-2012	1900	S06	349 0	AM	Mon	(HFD)
7982	9-7-2012	1900	S06	349 0	AM	Mon	(HFD)
7982	12-7-2012	1900	S06	349 0	AM	Thu	(HFD)
7984	5-7-2012	0630	M12	911 000	CW	Thu	(FN)
7984	12-7-2012	0630	M12	911 000	CW	Thu	(FN)
7984	26-7-2012	0630	M12	911 000	CW	Thu	(FN)
7992	6-7-2012	1640	M42	Russian Intel.	FSK 200/1000	Fri	(FMB)
8013	26-7-2012	0040	M89	In chat û Both stations on the same freq! HR 7G GA K 7G NR 1233 CK 30 42 0726 2043 RMKS 4553 TO 432 SY K etc.	CW	Thu	(JPL-HK)
8013	27-7-2012	0014	M89	MSG NR 1042* CK 75 42 0827 0815 BT (X2) AUUN U356 ... (Cont'd) (Machine sent)	CW		(JPL-HK)
8013	27-7-2012	0219	M89	MSG NR 1043* CK 75 .2 ..7 1015. MSG NR 1043 CK 75 42 0727 101. BT	CW	Fri	(JPL-HK)
8016	13-7-2012	0551	M51	ip	CW	Fri	(FMB)
8040	12-7-2012	1111	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	Thu	(JPL-HK)
8040	13-7-2012	1054	M89	V H2FL (x3) D E DRV8 (x2) (Cont'd)	CW	Fri	(JPL-HK)
8040	21-7-2012	0944	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //6773	CW	Sat	(JPL-HK)
8040	21-7-2012	1109	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //6773	CW	Sat	(JPL-HK)
8040	22-7-2012	2215	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //6773	CW	Sun	(JPL-HK)
8047	4-7-2012	1700	M12	463 1 2226 41 49639	CW	Wed	(FN)
8047	11-7-2012	1700	M12	463 1 2538 92 57888	CW	Wed	(FN)
8047	18-7-2012	1700	M12	463 1 8462 56 44223	CW	Wed	(FN)
8047	25-7-2012	1700	M12	463 1 1997 73 55458	CW	Wed	(FN)
8094	27-7-2012	1917	M51		CW	Fri	(FMB)
8097	26-7-2012	0010	V02a	last reported in 08.	AM	Thu	(MrNum)
8102	31-7-2012	2000	E11c	757/2000/00	USB	Tue	(Avare)
8110	8-7-2012	0536	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	Sun	(JPL-HK)
8110	9-7-2012	0213	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	Mon	(JPL-HK)
8110	13-7-2012	0240	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	Fri	(JPL-HK)
8110	20-7-2012	1234	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Fri	(JPL-HK)
8110	21-7-2012	0206	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sat	(JPL-HK)
8110	22-7-2012	0415	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Sun	(JPL-HK)
8110	23-7-2012	1025	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Mon	(JPL-HK)
8110	26-7-2012	0032	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Thu	(JPL-HK)
8110	26-7-2012	0925	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Thu	(JPL-HK)
8110	27-7-2012	0007	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Fri	(JPL-HK)
8110	27-7-2012	0204	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	Fri	(JPL-HK)
8110	30-7-2012	0943	M89	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	Mon	(JPL-HK)
8116	3-7-2012	1910	M12	124 1 1733 55 95573	CW	Tue	(FN)
8116	5-7-2012	1740	M12	124 1 3865 80 22353	CW	Thu	(FN)
8116	5-7-2012	1740	M12	124 1	CW	Thu	(HFD)
8116	5-7-2012	1840	M12	124 1 2775 72 12854	CW	Thu	(FN)
8116	6-7-2012	1840	M12	124 1 9296 77 55688	CW	Fri	(FN)
8116	10-7-2012	1910	M12	124 1 4842 64 62716	CW	Tue	(FN)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
8116	12-7-2012	1740	M12	124 1 2615 77 55343	CW	Thu	(FN)
8116	12-7-2012	1840	M12	124 1 9824 100 93914	CW	Thu	(FN)
8116	13-7-2012	1840	M12	124 1 7621 91 45726	CW	Fri	(FN)
8116	17-7-2012	1910	M12	124 1 3829 69 90996	CW	Tue	(FN)
8116	17-7-2012	1915	M12	In traffic ... 32265 29310 ...02195 70194 000 000	CW	Tue	(MPJ)
8116	19-7-2012	1740	M12	124 1 5132 71 37190	CW	Thu	(FN)
8116	19-7-2012	1840	M12	124 1 4698 62 34584	CW	Thu	(FN)
8116	20-7-2012	1840	M12	124 1 2566 88 32194	CW	Fri	(FN)
8116	26-7-2012	1740	M12	124 1 3112 73 95825	CW	Thu	(FN)
8116	26-7-2012	1840	M12	124 1 2068 55 87246	CW	Thu	(FN)
8136	5-7-2012	0712	M32	Russian mil: "rmw46 de rmw32 zsa2 rk rmw44 de rmw32 r xxx? k rmw32 zsa1 rk rmw36 de rmw32 r xxx ? k rmw32 zsa3 rk	CW	Thu	(WP3)
8136	5-7-2012	0740	M32	RDL: Russian strategic operational command "xxx rdl rdl 53167 37625 k"	CW	Thu	(WP3)
8137	12-7-2012	0450	E07a	411 1-30704	AM	Thu	(HFD)
8138	1-7-2012	2005	M32	Russian Mil. L7LA de MZG5 K. MZG5 ZPY ZWV ZWY ZWH ZWW ZWB QSW3 K	CW	Sun	(JU)
8138	6-7-2012	2033	M32	Russian Mil. VE1i de MZG5 QTC K	CW	Fri	(JU)
8138	9-7-2012	2006	M32	Russian Mil. VE1i DE BPIP K	CW	Mon	(JU)
8138	9-7-2012	2010	M32	Russian Mil. DTNA DE BPIP K	CW	Mon	(JU)
8138	9-7-2012	2020	M32	Russian Mil. L7LA DE MZG5 K	CW	Mon	(JU)
8138	11-7-2012	2003	M32	Russian Mil. DULA DE LD6P K	CW	Wed	(JU)
8138	11-7-2012	2009	M32	Russian Mil. X4SU DE HQ5E K	CW	Wed	(JU)
8138	11-7-2012	2020	M32	Russian Mil. DULA DE HQ5E K	CW	Wed	(JU)
8138	17-7-2012	1611	M32	Russian Mil. DULA de HQFE K.	CW	Tue	(MPJ)
8138	17-7-2012	2011	M32	Russian Mil. 4K4R de HQ5E K. ZSD ZBE ZBL ZBB ZBT ZBA QSU1 QYT6 QSU6 K. HQ5E R K. OK AS K.	CW	Tue	(MPJ)
8157	14-7-2012	1600	S06	134 0	AM	Sat	(HFD)
8169	17-7-2012	1638	M14	(ip)== 832 832 17 17 (qrm 5)	CW	Tue	(FMB)
8173	4-7-2012	2000	E07a	147 0	AM	Wed	(HFD)
8176	24-7-2012	2020	M42	Russian Intel.	FSK 200/1000	Tue	(FMB)
8313	16-7-2012	2017	XSL	Japanese Navy a.k.a. Slot Machine	QPSK 1500bd	Mon	(AB-HK)
8343	13-7-2012	0105	M32a	RMP Russian Navy	CW	Fri	(LG2)
8345	10-7-2012	0004	M32a	RCV DE RMUW 09001 99426 10303 22253 (42.6N 30.3E Heading South West at 11-15 Knots)	CW	Tue	(Tom)
8345	10-7-2012	0649	M32a	RGZ58: Russian Navy rcv de rgz58 qyt4 qsx 12794/13044	CW	Tue	(WP3)
8345	10-7-2012	0734	M32a	RBES: Russian Navy riw de rbes qsa4 qsa? k ok qap k	CW	Tue	(WP3)
8345	17-7-2012	1925	M32a	RGZ58: Russian Navy vessel OP-chat.	CW	Tue	(ALF)
8345	18-7-2012	0605	M32a	RKO81: Russian Navy Tanker Lena. Tfc to RIT RKO81 848 20 18 1000 848 = FOR RJD38 RJH74 RJH45 = 18061 99548 10125 41597 62809 10150 40106 54006 70222 8652/ 22253 00150 20305 30000 88000 80000 18016 = + RKO81 K	CW	Wed	(Tom)
8345	20-7-2012	0500	M32a	Russian Navy	CW	Fri	
8345	20-7-2012	0500	M32a	Russian Navy	CW	Fri	
8345	20-7-2012	0605	M32a	RKO81: Russian Navy Ship Lena "rmp de RKO81 qsa? qtc k rko81 776 21 20 1001 776 = for rid38 rjh74 rjh45"	CW	Fri	(WP3)
8345	20-7-2012	1205	M32a	RKO81: Russian Navy Ship Lena qtc to rmp rko81 935 21 20 1600 935 = for rid38 rjh45 rjh74 ="	CW	Fri	(WP3)
8345	23-7-2012	1804	M32a	RKO81: Russian Navy Ship Lena qtc to riw 841 21 23	CW	Mon	(WP3)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
				2200 841 = for rjd38 rjh45 rjh74 = + rko81 k			
8345	23-7-2012	1810	M32a	RCJE: Russian Navy qtc to rcv 935 19 23 2200 935 = sml for rjh45 rje73 = 23181 9935810275 41998 03210 10260 40081 53025 70200 80000 22272 00260 299// 330// 88000 23015 = + rcje k	CW	Mon	(WP3)
8345	30-7-2012	0606	M32a	RKO81: Russian Navy Ship Lena qtc to rmp rko81 340 21 30 1000 340 = for rjd38 rjh45 rje73 =	CW	Mon	(WP3)
8345	30-7-2012	0616	M32a	RBES: Russian Navy qtc to rmp 181 16 30 1001 181 = sml for rh38 rjh45 rjh74 =	CW	Mon	(WP3)
8345	30-7-2012	1804	M32a	RKO81: Russian Navy Ship Lena qtc to rmp rko81 179 21 30 2200 179 = for rjd38 rjh45 rje73 =	CW	Mon	(WP3)
8487.8	3-7-2012	2317	MX	Beacon L	CW	Tue	(LG2)
8494.7	15-7-2012	1242	MX	Beacon "D"	CW	Sun	(AB)
8494.7	17-7-2012	1947	MX	Beacon D: Odessa	CW	Tue	(MPJ)
8494.8	15-7-2012	1242	MX	Defective beacon sending random letters "E N N N G W W A I E" etc.	CW	Sun	(AB)
8494.8	17-7-2012	1948	MX	Beacon S: Severomorsk	CW	Tue	(MPJ)
8495	15-7-2012	1432	MX	Beacon "C"	CW	Sun	(AB)
8495	17-7-2012	1949	MX	Beacon C: Moscow	CW	Tue	(MPJ)
8495	21-7-2012	1440	MX	Beacon "C"	CW	Sat	(AB)
8495	29-7-2012	0540	MX	Beacon "C"	CW	Sun	(AB)
8497.8	10-7-2012	1836	MX	Beacon L	CW	Tue	(MPJ)
8497.8	13-7-2012	1934	MX	Beacon L: St Peterburg	CW	Fri	(MPJ)
8497.8	15-7-2012	1216	MX	Beacon "L"	CW	Sun	(AB)
8497.8	17-7-2012	1950	MX	Beacon L: Skt Peterburg	CW	Tue	(MPJ)
8497.8	22-7-2012	1535	MX	Beacon "L"	CW	Sun	(AB)
8497.8	28-7-2012	0617	MX	Beacon "L"	CW	Sat	(AB)
8497.8	29-7-2012	0540	MX	Beacon "L"	CW	Sun	(AB)
8588	16-7-2012	2017	XSL	Japanese Navy a.k.a. Slot Machine	QPSK 1500bd	Mon	(AB-HK)
8703.5	16-7-2012	2017	XSL	Japanese Navy a.k.a. Slot Machine	QPSK 1500bd	Mon	(AB-HK)
8720	27-7-2012	0600	S06s	934	USB	Fri	(HFD)
8789	8-7-2012	0018	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Sun	(JPL-HK)
8789	8-7-2012	0534	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Sun	(JPL-HK)
8789	8-7-2012	1238	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Sun	(JPL-HK)
8789	8-7-2012	1305	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Sun	(JPL-HK)
8789	9-7-2012	0216	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Mon	(JPL-HK)
8789	13-7-2012	1051	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Fri	(JPL-HK)
8789	13-7-2012	2255	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Fri	(JPL-HK)
8789	14-7-2012	2244	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Sat	(JPL-HK)
8789	19-7-2012	2311	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Thu	(JPL-HK)
8789	21-7-2012	0208	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Sat	(JPL-HK)
8789	21-7-2012	0941	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Sat	(JPL-HK)
8789	22-7-2012	0312	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Sun	(JPL-HK)
8789	22-7-2012	0413	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Sun	(JPL-HK)
8789	22-7-2012	1045	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Sun	(JPL-HK)
8789	23-7-2012	0228	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Mon	(JPL-HK)
8789	23-7-2012	1027	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Mon	(JPL-HK)
8789	24-7-2012	1055	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Tue	(JPL-HK)
8789	24-7-2012	1227	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Tue	(JPL-HK)
8789	26-7-2012	0029	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Thu	(JPL-HK)
8789	26-7-2012	0927	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Thu	(JPL-HK)
8789	27-7-2012	0009	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Fri	(JPL-HK)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
8789	27-7-2012	0206	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Fri	(JPL-HK)
8789	28-7-2012	1040	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Sat	(JPL-HK)
8789	28-7-2012	1115	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //10779	CW	Sat	(JPL-HK)
8789	30-7-2012	0946	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Mon	(JPL-HK)
8816	30-7-2012	0830	M32b	42003: Russian Naval Air Transport qtc to rcb rjf94 - 42003 qto 0824 qrd XLLV XMWB qah 5200 qbd 0530 k	CW	Mon	(WP3)
8816	30-7-2012	1803	M32b	52255: Russian Naval Air Transport qtc to rjf94 rjc38 52255 qto 1755 qrd XLMV XLAA qbd 4700 qre 1955	CW	Mon	(WP3)
8934	20-7-2012	2010	M32	9TJT: CIS military duplex radio check with TFEH	CW	Fri	(PPA)
9040	26-7-2012	2159	M89	V H2FL (x3) DE DRV8 (x2) (Cont'd) //6773	CW	Thu	(JPL-HK)
9063	4-7-2012	0800	M08a	Transmission lost by 0831; carrier remain on	CW	Wed	(KC2TTK)
9063	4-7-2012	0900	SK01	Faint RDFT at 09:05 and 0910	RDFT	Wed	(KC2TTK)
9063	5-7-2012	0746	M08a	Faint. Tx began at 0801	CW	Thu	(KC2TTK)
9063	7-7-2012	0900	SK01	carrier until 5947 kHz transmissions ended.	RDFT	Sat	(BCA)
9063	8-7-2012	0644	SK01	"Normal" transmission. Off at 6:55z.	RDFT	Sun	(BCA)
9068	6-7-2012	1740	M42	Russian Intel.	FSK 200/1000	Fri	(FMB)
9073	11-7-2012	1730	M14	975(R3) 7t6 7t6 23 23==93548...	CW	Wed	(FMB)
9075	19-7-2012	1740	M14	(ip)== 238 238 58 58 ttttt	CW	Thu	(FMB)
9117	5-7-2012	1910	M42	Russian Gov/Intel.	Baudot 200/500	Thu	(FMB)
9117	12-7-2012	1910	M42	Russian Gov/Intel.	Baudot 200/500	Thu	(FMB)
9117	26-7-2012	1910	M42	Russian Intel. 00000+++++++162)5761	FSK200/500	Thu	(FMB)
9124	13-7-2012	0613	S06s	ip	USB	Fri	(FMB)
9137	12-7-2012	0510	E07a	411 1-30704	AM	Thu	(HFD)
9140	24-7-2012	1410	M32	ZLTU: CIS Mil. Ends 27-group message: OKBYO HÖGSM WRPWU 441 RPT AL K. ZLTU C K. This also naval freq.	CW	Tue	(MPJ)
9140	24-7-2012	1531	M32	ZLTU: CIS Mil. KEZO de ZLTU QBE QYT9 K	CW	Tue	(MPJ)
9145	7-7-2012	0725	M32a	RIW: Russian Navy tfc to rnd qsu1 qwh 13086 qsx 12239 0737z qyt4 qwh 9700/11773 qsx 8310/12414 fm raa k	CW	Sat	(WP3)
9145	9-7-2012	0740	M32a	RIW: Russian Navy "69 E NIW QYT4 QWH 9 7 0 0 / 11 773 Q SX 8 3 30 / 1237 4 FM RAAK...DE RIW... "	CW	Mon	(ML4)
9145	9-7-2012	0805	M32a	RIW: Russian Navy qso rld69 qyt4 qsa? fm raa k qyt4 qmo fm raa k qwp qkk k qrr3 qdw 11513 k -- rko81 qsu1 qwh 13086 qsx 12260 k -- rfk93 de riw qtc k 526 49 9 1140 526 = fm raa = 16467 42305 .... 82110 09047 = + riw k	CW	Mon	(WP3)
9150	6-7-2012	2000	E11a	571/33=07131	USB	Fri	(HFD)
9153	1-7-2012	0530	SK01	HamDRM, very good signal but very low modulation. Caught late. Not decoded.	AM	Sun	(BCA)
9176	2-7-2012	1700	M12	257 1 4236 70 43644	CW	Mon	(FN)
9176	2-7-2012	1700	M12	257 1	CW	Mon	(HFD)
9176	2-7-2012	1800	M12	257 1 7569 66 30029	CW	Mon	(FN)
9176	2-7-2012	1900	M12	257 1 1076 81 25174	CW	Mon	(FN)
9176	5-7-2012	1700	M12	257 1 4894 79 96455	CW	Thu	(FN)
9176	5-7-2012	1900	M12	257 1 7811 53 81435	CW	Thu	(FN)
9176	9-7-2012	1700	M12	257 1 9300 72 54084	CW	Mon	(FN)
9176	9-7-2012	1800	M12	257 1 8316 69 28755	CW	Mon	(FN)
9176	9-7-2012	1900	M12	257 1 6915 46 72571	CW	Mon	(FN)
9176	12-7-2012	1900	M12	257 1 4340 60 44729	CW	Thu	(FN)
9176	16-7-2012	1700	M12	257 1 5683 79 77615	CW	Mon	(FN)
9176	16-7-2012	1800	M12	257 1 1109 40 33249	CW	Mon	(FN)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
9176	16-7-2012	1900	M12	257 1 5188 94 00261	CW	Mon	(FN)
9176	19-7-2012	1700	M12	257 1 4960 60 77011	CW	Thu	(FN)
9176	19-7-2012	1900	M12	257 1 5000 54 64959	CW	Thu	(FN)
9176	23-7-2012	1700	M12	257 1 1929 80 00381	CW	Mon	(FN)
9176	23-7-2012	1800	M12	257 1 5556 44 44971	CW	Mon	(FN)
9176	23-7-2012	1900	M12	257 1 9668 50 38865	CW	Mon	(FN)
9176	26-7-2012	1700	M12	257 1 8670 54 71856	CW	Thu	(FN)
9176	26-7-2012	1900	M12	257 1 6575 51 44000	CW	Thu	(FN)
9184	5-7-2012	0650	M12	911 000	CW	Thu	(FN)
9184	12-7-2012	0650	M12	911 000	CW	Thu	(FN)
9184	26-7-2012	0650	M12	911 000	CW	Thu	(FN)
9189	13-7-2012	0720	M42	Russian Intel.	FSK 200/1000	Fri	(FMB)
9192	13-7-2012	1035	M42	Russian Gov/Intel.	Baudot 200/500	Fri	(FMB)
9206	12-7-2012	2030	M42	Russian Gov/Intel.	Baudot 200/500	Thu	(FMB)
9222	24-7-2012	1454	M21	Russian Air Defence = 29...8..?? Unreadable.	CW	Tue	(MPJ)
9243	1-7-2012	1850	M12	828 000	CW	Sun	(FN)
9243	3-7-2012	1810	XPA	msg	MFSK	Tue	(HFD)
9243	4-7-2012	1850	M12	828 1 634 195 74425	CW	Wed	(FN)
9243	6-7-2012	1820	M12	124 1 9296 77 55688	CW	Fri	(FN)
9243	8-7-2012	1850	M12	828 1 634 195 74425	CW	Sun	(FN)
9243	11-7-2012	1850	M12	828 000	CW	Wed	(FN)
9243	15-7-2012	1850	M12	828 000	CW	Sun	(FN)
9243	18-7-2012	1850	M12	828 1 366 163 41943	CW	Wed	(FN)
9243	22-7-2012	1850	M12	828 1 366 163 41943	CW	Sun	(FN)
9243	25-7-2012	1850	M12	828 1 876 139 72327	CW	Wed	(FN)
9248	10-7-2012	1309	M32a	Russian navy	CW	Tue	(ML4)
9248	17-7-2012	2010	M32a	RGZ59: Russian Warship wkg RCV-HQBSF Sevastopol. Setting up simplex encrypted link. ZZD? ZKM and enters cipher MLVMKLVKKML...	CW	Tue	(MPJ)
9255	26-7-2012	0930	S06s	314-270/5=46431	USB	Thu	(HFD)
9264	3-7-2012	1850	M12	124 1 1733 55 95573	CW	Tue	(FN)
9264	5-7-2012	1720	M12	124 1 3865 80 22353	CW	Thu	(FN)
9264	5-7-2012	1720	M12	124 1	CW	Thu	(HFD)
9264	5-7-2012	1820	M12	124 1 2775 72 12854	CW	Thu	(FN)
9264	6-7-2012	1820	M12	124 1	CW	Fri	(FMB)
9264	10-7-2012	1850	M12	124 1 4842 64 62716	CW	Tue	(FN)
9264	12-7-2012	1720	M12	124 1 2615 77 55343	CW	Thu	(FN)
9264	12-7-2012	1820	M12	124 1 9824 100 93914	CW	Thu	(FN)
9264	13-7-2012	1820	M12	124 1 7621 91 45726	CW	Fri	(FN)
9264	13-7-2012	1820	M12	124 1 fast 5FGs 45726 45726 ... 73481 71347 000 000	CW	Fri	(MPJ)
9264	17-7-2012	1850	M12	124 1 3829 69 90996	CW	Tue	(FN)
9264	19-7-2012	1720	M12	124 1 5132 71 37190	CW	Thu	(FN)
9264	19-7-2012	1820	M12	124 1 4698 62 34584	CW	Thu	(FN)
9264	20-7-2012	1820	M12	124 1 2566 88 32194	CW	Fri	(FN)
9264	26-7-2012	1720	M12	124 1 3112 73 95825	CW	Thu	(FN)
9264	26-7-2012	1820	M12	124 1 2068 55 87246	CW	Thu	(FN)
9276	22-7-2012	0800	V13	New Star #3. Flute intro followed by coded messages	USB	Sun	(AB-HK)
9276	29-7-2012	0800	V13	New Star #3. Flute intro + coded messages	USB	Sun	(AB-HK)
9327	4-7-2012	1910	M12	938 1 5713 52 20709	CW	Wed	(FN)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
9327	11-7-2012	1910	M12	938(x3) 1	CW	Wed	(FMB)
9327	11-7-2012	1910	M12	938 1 4137 70 98781	CW	Wed	(FN)
9327	18-7-2012	1910	M12	938 1 2267 51 51366	CW	Wed	(FN)
9327	25-7-2012	1910	M12	938 1 5823 59 27750	CW	Wed	(FN)
9379	4-7-2012	2100	M12	398 000	CW	Wed	(FN)
9379	4-7-2012	2100	M12	398 0	CW	Wed	(HFD)
9379	11-7-2012	2100	M12	398 000	CW	Wed	(FN)
9379	18-7-2012	2100	M12	398 1 946 119 84581	CW	Wed	(FN)
9379	25-7-2012	2100	M12	398 000	CW	Wed	(FN)
9388	5-7-2012	2050	E07	May/Jul 553 1	AM	Thu	(HFD)
9388	12-7-2012	2050	E07	553 1	AM	Thu	(HFD)
9432	7-7-2012	2000	S06	314 0	USB	Sat	(HFD)
9450	11-7-2012	1215	E25	Song..85 835..MSG..RBT..EOM EOT	AM	Wed	(FG)
9450	21-7-2012	0941	E25	950 30 5841 0276 1764 5036 9428 4940 9451 0287 4006 3719 2513 7030 9356 4581 0167 0680 5573 9027 6379 2971 0764 3497 1135 8807 3040 7972 3010 0759 5764 2628	AM	Sat	(MG)
9450	30-7-2012	1205	E25	tone 752 ... 752 tone MSG ... RBT ... EOM tone	AM	Mon	(FG)
9450	30-7-2012	1213	E25	song 835 ... 835 MSG 9999 RBT... EOM EOT	AM	Mon	(FG)
9700	7-7-2012	0738	M32a	RIW: Russian Navy AT-3104 after opchat on 12464/9145	CW	Sat	(WP3)
9700	9-7-2012	0750	M32a	RIW: Russian Navy AT-3104 qso rld69 after opcht on 11000/12464	CW	Mon	(WP3)
10180	19-7-2012	1401	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	Thu	(JPL-HK)
10180	20-7-2012	1248	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	Fri	(JPL-HK)
10180	21-7-2012	1111	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Sat	(JPL-HK)
10180	22-7-2012	1048	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Sun	(JPL-HK)
10180	22-7-2012	1239	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	Sun	(JPL-HK)
10180	23-7-2012	0226	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Mon	(JPL-HK)
10180	23-7-2012	1028	M89	UGT COMM msg sent	CW	Mon	(JPL-HK)
10180	23-7-2012	1059	M89	UGT COMM msg sent	CW	Mon	(JPL-HK)
10180	24-7-2012	1057	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Tue	(JPL-HK)
10180	24-7-2012	1229	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Tue	(JPL-HK)
10180	25-7-2012	1006	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Wed	(JPL-HK)
10180	26-7-2012	1214	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Thu	(JPL-HK)
10180	26-7-2012	1335	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	Thu	(JPL-HK)
10180	27-7-2012	0208	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Fri	(JPL-HK)
10180	27-7-2012	1149	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Fri	(JPL-HK)
10180	27-7-2012	1443	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Fri	(JPL-HK)
10180	28-7-2012	1042	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Sat	(JPL-HK)
10180	28-7-2012	1118	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	Sat	(JPL-HK)
10180	28-7-2012	1318	M89	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	Sat	(JPL-HK)
10233	13-7-2012	0623	M01a	354(x3) 71852(x2)	CW	Fri	(FMB)
10243	3-7-2012	1750	XPA	msg	MFSK	Tue	(HFD)
10253.5	25-7-2012	0900	M42	Russian Diplo //11522.5 kHz	CROWD-36	Wed	(FN)
10313	13-7-2012	0534	M51	ip	CW	Fri	(FMB)
10343	3-7-2012	1830	M12	124 1 1733 55 95573	CW	Tue	(FN)
10343	5-7-2012	1700	M12	124 1 3865 80 22353	CW	Thu	(FN)
10343	5-7-2012	1700	M12	124 1	CW	Thu	(HFD)
10343	5-7-2012	1800	M12	124 1 2775 72 12854	CW	Thu	(FN)
10343	6-7-2012	1800	M12	124 1	CW	Fri	(FMB)
10343	6-7-2012	1800	M12	124 1 9296 77 55688	CW	Fri	(FN)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
10343	10-7-2012	1830	M12	124 1 4842 64 62716	CW	Tue	(FN)
10343	12-7-2012	1700	M12	124 1 2615 77 55343	CW	Thu	(FN)
10343	12-7-2012	1800	M12	124 1 9824 100 93914	CW	Thu	(FN)
10343	13-7-2012	1800	M12	124 1 7621 91 45726	CW	Fri	(FN)
10343	17-7-2012	1830	M12	124 1 3829 69 90996	CW	Tue	(FN)
10343	19-7-2012	1700	M12	124 1 5132 71 37190	CW	Thu	(FN)
10343	19-7-2012	1800	M12	124 1 4698 62 34584	CW	Thu	(FN)
10343	20-7-2012	1800	M12	124 1 2566 88 32194	CW	Fri	(FN)
10343	26-7-2012	1700	M12	124 1 3112 73 95825	CW	Thu	(FN)
10343	26-7-2012	1800	M12	124 1 2068 55 87246	CW	Thu	(FN)
10415	27-7-2012	0610	S06s	934	USB	Fri	(HFD)
10425	9-7-2012	1640	M14	t58(x3) 318 318 27t 27t == ....	CW	Mon	(FMB)
10478	27-7-2012	1739	M51	ip	CW	Fri	(FMB)
10487	6-7-2012	1710	E11a	953/24=82984	USB	Fri	(HFD)
10535	1-7-2012	1536	M32	Russian Mil. XXX XXX WEGI WEGI 63944 28192 WE-SYLXGA 8603 3773	CW	Sun	(JU)
10535	1-7-2012	1543	M32	Russian Mil. U U U XXX XXX RGT77 RGT77 25642 31816 BESOWSKIJ 7177 3556	CW	Sun	(JU)
10535	1-7-2012	1601	M32	Russian Mil. XXX XXX RDL RDL 36629 30833 GI-PERKINEZ 4043 1620	CW	Sun	(JU)
10535	1-7-2012	1610	M32	Russian Mil. XXX XXX RDL RDL 36629 30833 GI-PERKINEZ 4043 1620. Repeat of 1601 UTC	CW	Sun	(JU)
10543	20-7-2012	0816	M32a	RCV: Russian Navy qtc to rgz59 rcv 186 28 20 1002 186 = rkt = 11111 08751 44170 ...	CW	Fri	(WP3)
10547	5-7-2012	2030	E07	553 1	AM	Thu	(HFD)
10547	12-7-2012	2030	E07	553 1	AM	Thu	(HFD)
10598	4-7-2012	1850	M12	938 1 5713 52 20709	CW	Wed	(FN)
10598	11-7-2012	1850	M12	938 1 4137 70 98781	CW	Wed	(FN)
10598	18-7-2012	1850	M12	938 1 2267 51 51366	CW	Wed	(FN)
10598	25-7-2012	1850	M12	938 1 5823 59 27750	CW	Wed	(FN)
10640	8-7-2012	0020	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Sun	(JPL-HK)
10640	9-7-2012	0220	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Mon	(JPL-HK)
10640	10-7-2012	1220	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Tue	(JPL-HK)
10640	12-7-2012	1120	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Thu	(JPL-HK)
10640	13-7-2012	2320	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Fri	(JPL-HK)
10640	19-7-2012	2320	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Thu	(JPL-HK)
10640	21-7-2012	1120	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Sat	(JPL-HK)
10640	22-7-2012	0420	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Sun	(JPL-HK)
10640	22-7-2012	1120	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Sun	(JPL-HK)
10640	23-7-2012	0219	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Mon	(JPL-HK)
10640	25-7-2012	1020	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Wed	(JPL-HK)
10640	26-7-2012	0120	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Thu	(JPL-HK)
10640	26-7-2012	0919	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Thu	(JPL-HK)
10640	28-7-2012	1120	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Sat	(JPL-HK)
10640	29-7-2012	1420	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840 Note: Started at 1420z but had tx problems which were resolved at 1422z.	CW	Sun	(JPL-HK)
10640	30-7-2012	1020	M89	VVV (x3) Q2M DE NYZ (x2) QSA ? K (R5) //6840	CW	Mon	(JPL-HK)
10688	6-7-2012	1630	M42	Russian Intel.	FSK 200/1000	Fri	(FMB)
10688	12-7-2012	1630	M42	Russian Intel.	FSK 200/1000	Thu	(FMB)
10688	14-7-2012	1630	M42	Russian Intel.	FSK 200/1000	Sat	(FMB)
10711	2-7-2012	1640	M12	546 1 1347 73 59468	CW	Mon	(FN)



Freq.	date	UTC	enigma	remarks	mode	day	Contr.
10711	2-7-2012	1640	M12	546 1	CW	Mon	(HFD)
10711	9-7-2012	1640	M12	546 1 7033 84 62829	CW	Mon	(FN)
10711	16-7-2012	1640	M12	546 1 3272 80 89965	CW	Mon	(FN)
10711	23-7-2012	1640	M12	546 1 3053 95 57905	CW	Mon	(FN)
10754	11-7-2012	1702	M14	(ip)54247==7t6 7t6 23 23 ttttt	CW	Wed	(FMB)
10754	12-7-2012	1838	M24	ip	CW	Thu	(FMB)
10779	8-7-2012	0018	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Sun	(JPL-HK)
10779	8-7-2012	0534	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Sun	(JPL-HK)
10779	8-7-2012	1238	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Sun	(JPL-HK)
10779	8-7-2012	1305	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Sun	(JPL-HK)
10779	9-7-2012	0216	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Mon	(JPL-HK)
10779	13-7-2012	0242	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Fri	(JPL-HK)
10779	13-7-2012	1051	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Fri	(JPL-HK)
10779	13-7-2012	2255	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Fri	(JPL-HK)
10779	14-7-2012	2344	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Sat	(JPL-HK)
10779	19-7-2012	0155	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Thu	(JPL-HK)
10779	19-7-2012	2311	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Thu	(JPL-HK)
10779	21-7-2012	0208	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Sat	(JPL-HK)
10779	21-7-2012	0941	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Sat	(JPL-HK)
10779	22-7-2012	0312	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Sun	(JPL-HK)
10779	22-7-2012	0413	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Sun	(JPL-HK)
10779	22-7-2012	1045	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Sun	(JPL-HK)
10779	23-7-2012	0228	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Mon	(JPL-HK)
10779	23-7-2012	1027	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Mon	(JPL-HK)
10779	24-7-2012	1055	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Tue	(JPL-HK)
10779	24-7-2012	1227	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Tue	(JPL-HK)
10779	25-7-2012	1002	M89	V WITN (x3) DE GNXG (x2) (Cont'd)	CW	Wed	(JPL-HK)
10779	26-7-2012	0029	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Thu	(JPL-HK)
10779	26-7-2012	0927	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Thu	(JPL-HK)
10779	27-7-2012	0009	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Fri	(JPL-HK)
10779	27-7-2012	0206	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Fri	(JPL-HK)
10779	28-7-2012	1040	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Sat	(JPL-HK)
10779	28-7-2012	1115	M89	V WITN (x3) DE GNXG (x2) (Cont'd) //8789	CW	Sat	(JPL-HK)
10815	25-7-2012	0853	X06	Mazielka. Sequence: 412356	USB	Wed	(FN)
10843	1-7-2012	1830	M12	828 000	CW	Sun	(FN)
10843	4-7-2012	1830	M12	828 1 634 195 74425	CW	Wed	(FN)
10843	8-7-2012	1830	M12	828 1 634 195 74425	CW	Sun	(FN)
10843	11-7-2012	1830	M12	828 000	CW	Wed	(FN)
10843	15-7-2012	1830	M12	828 000	CW	Sun	(FN)
10843	18-7-2012	1830	M12	828 1 366 163 41943	CW	Wed	(FN)
10843	22-7-2012	1830	M12	828 1 366 163 41943	CW	Sun	(FN)
10843	25-7-2012	1830	M12	828 1 876 139 72327	CW	Wed	(FN)
10872	15-7-2012	1216	MX	Beacon "C"	CW	Sun	(AB)
10943	3-7-2012	1730	XPA	msg	MFSK	Tue	(HFD)
10958	21-7-2012	0731	M51	ip	CW	Sat	(FMB)
10987	10-7-2012	1616	M32	Russian Military "ZIZJ de 6LNX QBE QYT9 K". Repeating.	CW	Tue	(MPJ)
11000	9-7-2012	0730	M32a	RIW: Russian Navy qso rld69 qyt4 qwh 9700/11773 qsx 8330/12374 wrk for raa qlk k	CW	Mon	(WP3)
11034.7	8-7-2012	1949	EGY	Egyptian diplo mostly in IRS mode	SITOR-A 100/170	Sun	(PPA)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
11055	14-7-2012	0615	M42	RMA2: Russian Gov. link to RGK2	Baudot 50/500	Sat	(PPA)
11056.7	8-7-2012	1926	EGY	MFA Cairo. Selcall TVVX (Algiers) followed by ATU-A traffic	SITOR-A 100/170	Sun	(PPA)
11092	4-7-2012	1540	M12	944 1 673 89 90152	CW	Wed	(FN)
11092	4-7-2012	1540	M12	944 1	CW	Wed	(HFD)
11092	11-7-2012	1540	M12	944 1 794 103 67616	CW	Wed	(FN)
11092	18-7-2012	1540	M12	944 1 810 167 16751	CW	Wed	(FN)
11092	25-7-2012	1540	M12	944 1 232 309 61889	CW	Wed	(FN)
11121	12-7-2012	1730	M42	Russian Intel.	FSK 200/1000	Thu	(FMB)
11122	6-7-2012	1730	M42	Russian Intel.	FSK 200/1000	Fri	(FMB)
11122	14-7-2012	1730	M42	Russian Intel.	FSK 200/1000	Sat	(FMB)
11122	21-7-2012	1612	M42	Russian Intel.	FSK 200/1000	Sat	(FMB)
11123	5-7-2012	1900	M42	Russian Gov/Intel.	Baudot 200/500	Thu	(FMB)
11123	26-7-2012	1900	M42	Russian Intel. 00000+++++++162)5761	FSK200/500	Thu	(FMB)
11124	12-7-2012	1900	M42	Russian Gov/Intel.	Baudot 200/500	Thu	(FMB)
11124	12-7-2012	1900	M42	Russian Gov/Intel.	Baudot 200/500	Thu	(FMB)
11129	12-7-2012	2020	M42	Russian Gov/Intel.	Baudot 200/500	Thu	(FMB)
11140	13-7-2012	1025	M42	Russian Gov/Intel.	Baudot 200/500	Fri	(FMB)
11154	7-7-2012	0820	M42	Russian Intel.	FSK 200/1000	Sat	(FMB)
11154	8-7-2012	0820	M42	Russian Intel.	FSK 200/1000	Sun	(FMB)
11159	13-7-2012	0713	M42	Russian Intel.	FSK 200/1000	Fri	(FMB)
11430	5-7-2012	1200	V13	Music intro YL with msg	USB	Thu	(Dan)
11430	5-7-2012	1200	V13	Music intro YL with msg	USB	Thu	(Dan)
11430	6-7-2012	1200	V13		USB	Fri	(rusl)
11430	6-7-2012	1300	V13		USB	Fri	(rusl)
11430	8-7-2012	1200	V13	intro music YL with msg	USB	Sun	(Dan)
11430	12-7-2012	1200	V13	Music intro YL with msg	USB	Thu	(Dan)
11430	13-7-2012	1200	V13	Music intro YL with msg	USB	Fri	(Dan)
11430	14-7-2012	0500	V13	New Star #4. Musical intro followed by coded messages	USB	Sat	(AB-HK)
11430	15-7-2012	0500	V13	New Star #4. Musical intro followed by coded messages	USB	Sun	(AB-HK)
11430	15-7-2012	1212	V13	New Star in progress	USB	Sun	(AB-HK)
11430	18-7-2012	1200	V13	Music intro YL with msg	USB	Wed	(Dan)
11430	21-7-2012	0500	V13	New Star #4.Flute intro +coded messages	USB	Sat	(AB-HK)
11430	21-7-2012	1210	V13	New Star in progress	USB	Sat	(AB-HK)
11430	22-7-2012	1203	V13	intro music and YL with msg	USB	Sun	(Dan)
11430	26-7-2012	1200	V13	music intro YL with msg	USB	Thu	(Dan)
11430	26-7-2012	1200	V13	New Star	USB	Thu	(rusl)
11430	26-7-2012	1300	V13	New Star	USB	Thu	(rusl)
11430	27-7-2012	1203	V13	music intro YL with msg -started late without warm up TX	USB	Fri	(Dan)
11430	28-7-2012	1210	V13	New Star in progress	USB	Sat	(AB-HK)
11430	29-7-2012	0600	V13	New Star #4. Flute intro + coded messages	USB	Sun	(AB-HK)
11430	29-7-2012	1200	V13	Music intro YL with msg	USB	Sun	(Dan)
11430	29-7-2012	1300	V13	New Star #4. Flute intro + coded messages	USB	Sun	(AB-HK)
11430	30-7-2012	1300	V13	New Star #4	AM	Mon	(TI)
11435	4-7-2012	1830	M12	938 1 5713 52 20709	CW	Wed	(FN)
11435	11-7-2012	1830	M12	938 1 4137 70 98781	CW	Wed	(FN)
11435	18-7-2012	1830	M12	938 1 2267 51 51366	CW	Wed	(FN)
11435	25-7-2012	1830	M12	938 1 5823 59 27750	CW	Wed	(FN)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
11438	7-7-2012	1900	S06	314 0	AM	Sat	(HFD)
11454	4-7-2012	1720	E07	441 0	AM	Wed	(HFD)
11472	2-7-2012	1340	M12	944 1 673 89 90152	CW	Mon	(FN)
11472	9-7-2012	1340	M12	944 1 794 103 67616	CW	Mon	(FN)
11472	9-7-2012	1340	M12	944 0	CW	Mon	(HFD)
11472	16-7-2012	1340	M12	944 1 810 167 16751	CW	Mon	(FN)
11472	23-7-2012	1340	M12	944 1 372 309 61889	CW	Mon	(FN)
11473	21-7-2012	1120	M42	Russian Intel.	FSK 200/1000	Sat	(FMB)
11512	2-7-2012	1940	E07	845 1	AM	Mon	(HFD)
11522.5	25-7-2012	0900	M42	Russian Diplo //10253.5 kHz	CROWD-36	Wed	(FN)
11539	5-7-2012	2010	E07	553 1-931/52=14828	AM	Thu	(HFD)
11539	12-7-2012	2010	E07	553 1-931/52=14828	AM	Thu	(HFD)
11561	2-7-2012	1620	M12	546 1	CW	Mon	(HFD)
11565	5-7-2012	0425	M08a	Transmission ended around 0434	CW	Thu	(KC2TTK)
11566	2-7-2012	1620	M12	546 1 1347 73 59468	CW	Mon	(FN)
11566	9-7-2012	1620	M12	546 1 7033 84 62829	CW	Mon	(FN)
11566	16-7-2012	1620	M12	546 1 3272 80 89965	CW	Mon	(FN)
11566	23-7-2012	1620	M12	546 1 3053 95 57905	CW	Mon	(FN)
11773	7-7-2012	0738	M32a	RIW: Russian Navy AT-3104 after opchat on 12464/9145	CW	Sat	(WP3)
11773	9-7-2012	0750	M32a	RIW: Russian Navy AT-3104 qso rld69 after opcht on 11000/12464	CW	Mon	(WP3)
12126	5-7-2012	1330	M12	919 0	CW	Thu	(HFD)
12126	21-7-2012	1330	M12	919 000	CW	Sat	(FN)
12162	2-7-2012	1600	M12	546 1 1347 73 59468	CW	Mon	(FN)
12162	2-7-2012	1600	M12	546 1	CW	Mon	(HFD)
12162	9-7-2012	1600	M12	546 1 7033 84 62829	CW	Mon	(FN)
12162	16-7-2012	1600	M12	546 1 3272 80 89965	CW	Mon	(FN)
12162	23-7-2012	1600	M12	546 1 3053 95 57905	CW	Mon	(FN)
12169	4-7-2012	2150	M12	851 1 189 167 28657	CW	Wed	(FN)
12170	14-7-2012	1600	M23	555	CW	Sat	(FMB)
12187	21-7-2012	1220	M42	Russian Gov/Intel.	Baudot 200/500	Sat	(FMB)
12211	24-7-2012	2000	M42	Russian Intel.	FSK 200/1000	Tue	(FMB)
12227	24-7-2012	1549	M42	KRUG: Russian Gov. DOBV de KRUG QSY 34965 QSY 34965 K repeating.	CW	Tue	(MPJ)
12227	25-7-2012	1103	M42	Russian Gov. KXI9 K.	CW	Wed	(MPJ)
12227	25-7-2012	1103	M42	KXI9: Russian Gov. Tuneup tone; then KXI9 K.	CW	Wed	(MPJ)
12227	25-7-2012	1439	M42	Russian Gov. 3BKY de KXI9 QTC K. KXI9 098 49 25 1830 098 = 840 = MMLOE BEChiÄ ... ZFHYJ WTPRU K.	CW	Wed	(MPJ)
12227	25-7-2012	1439	M42	KXI9: Russian Gov. 3BKY de KXI9 QTC K. KXI9 098 49 25 1830 098 = 840 = MMLOE BEChiÄ ... ZFHYJ WTPRU K.	CW	Wed	(MPJ)
12227	25-7-2012	1509	M42	NT9P: Russian Gov. K4MT de NT9P K. QSA4 QRU? K. BK BK QRV K. R 883 1512 K (UTC time). NIL K. R K.	CW	Wed	(MPJ)
12227	25-7-2012	1509	M42	Russian Gov. K4MT de NT9P K. QSA4 QRU? K. BK BK QRV K. R 883 1512 K (UTC time). NIL K. R K.	CW	Wed	(MPJ)
12227	26-7-2012	1358	M42	Russian Gov. .... de KXI9 K.	CW	Thu	(MPJ)
12227	26-7-2012	1501	M42	Russian Gov. VTO_ de KXI9 QTC K. KXI9 552 50 26 1850 552 = 065 = WMPRL MÄHUM ... PPOSİ WYPRI K.	CW	Thu	(MPJ)
12227	26-7-2012	1515	M42	Russian Gov. PDG_ de 9WPH QTC K. 9WPH 112 _1 26 1900 112 = 395 = 55555 917__ ...	CW	Thu	(MPJ)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
12227	26-7-2012	1531	M42	Russian Gov. K4MT de NT9P ZVP (QSV) K. BK QRV K. CW BK QSY 85872 K. CFM SLV (QSX) K.K4MT de NT9P QSY 96854 K. QSA3 ZVP. BK QRV K. R 888 1546 K. NIL K. SK.		Thu	(MPJ)
12239	7-7-2012	0727	M32a	RDND: Russian Navy after opchat on 12464/9145	USB	Sat	(WP3)
12260	10-7-2012	0743	M32a	RBES: Russian Navy USB qso riw after cw on 12464	USB	Tue	(WP3)
12464	7-7-2012	0722	M32a	RDND: Russian Navy qso riw qsu1 qwh 12239 qsx 13086	CW	Sat	(WP3)
12464	7-7-2012	0825	M32a	RGZ59: Russian Navy clg RCV (ans on 19201) ok qap k	CW	Sat	(WP3)
12464	7-7-2012	0838	M32a	RCJE: Russian Navy qso rcv ok qap k	CW	Sat	(WP3)
12464	9-7-2012	0710	M32a	RMUW: Russian Navy rcv de rmuw qsa? qtc k rmuw CW 571 48 10 1105 571 = sml = 86739 68148 ..... 10046 = + rmuw k	CW	Mon	(WP3)
12464	9-7-2012	0732	M32a	RKO81: Russian Navy Tanker Lena RUS clg RIW qsa? CW k	CW	Mon	(WP3)
12464	9-7-2012	0735	M32a	RLD69: Russian Navy qso RIW qsu1 sk ..... 1018z qrr3 CW sk	CW	Mon	(WP3)
12464	10-7-2012	0739	M32a	RBES: Russian Navy riw de rbes ok qsu1 qwh 12260 CW qsx 13086 k	CW	Tue	(WP3)
12464	20-7-2012	0714	M32a	RMYZ: Russian navy clg rcv qsa? qtc k 861 20 20 CW 1113 861 = rkt = 58354 45507 ... 42556 20018 = + rmyz k	CW	Fri	(WP3)
12464	20-7-2012	0715	M32a	RCJG: Russian navy clg rcv qsa? qtc k rcjg 233 3 20 CW 1110 233 = ... 01040 20002 = + rcjg k - 0725z qsa? qtc k rcjg 372 21 20 1120 372 = 87206 61167 ... 12600 20020 = + rcjg k	CW	Fri	(WP3)
12464	20-7-2012	0724	M32a	RMUW: Russian navy qso rcv qsl 186 k	CW	Fri	(WP3)
12464	20-7-2012	0729	M32a	RFH70: Russian Navy qso rcv qyt4 qsx 9852/15544 k CW - qyt4 sk - qsl 186 k	CW	Fri	(WP3)
12464	20-7-2012	0736	M32a	RMPV: Ryssian Navy clg rit qsa3 qru k )	CW	Fri	(WP3)
12464	20-7-2012	0810	M32a	RGR70: Russian Navy qso rcv qsl ?? fm raa k	CW	Fri	(WP3)
12464	20-7-2012	0815	M32a	RGZ59: Russian Navy clg rcv qsa2 k qsl 186 no k CW 0824z qsl 186 qru k	CW	Fri	(WP3)
12464	20-7-2012	1139	M32a	RHY47: Russian Navy riw de rhy47 qsa? k (very CW strong sig!) 2012-07-20 (wp3)	CW	Fri	(WP3)
12464	20-7-2012	1140	M32a	RGZ58: Russian Navy tfc to rcv: rgz58 390 ?? 20 1520 CW 390 = sml = mmmmm eimäü grölf ... )	CW	Fri	(WP3)
12464	20-7-2012	1214	M32a	RCJE: Russian navy qtc to rcv 194 19 20 1600 3 sml CW for rjh45 rje73 = 20121 99349 10346 41897 52307 10324 40073 51021 70318 86122 22252 00274 29901 32320 88000 20015 = + rcje k	CW	Fri	(WP3)
12794	10-7-2012	0655	M32a	RCV: Russian Navy AT-3104 tfc to RGZ58 after op- chat on 8345	CW	Tue	(WP3)
12952	26-7-2012	0900	S06s	167-932/5=26320	USB	Thu	(HFD)
13044	10-7-2012	0652	M32a	RCV: Russian Navy AT-3104 tfc to RGZ58 after op- chat on 8345	CW	Tue	(WP3)
13086	7-7-2012	0727	M32a	RIW: Russian Navy after opchat on 12464/9145	USB	Sat	(WP3)
13086	10-7-2012	0743	M32a	RIW: Russian Navy short qso rbes after opchat on 12464/9145 cw (yl op)	USB	Tue	(WP3)
13369	14-7-2012	2130	M12	951 000	CW	Sat	(FN)
13392	4-7-2012	1520	M12	944 1 673 89 90152	CW	Wed	(FN)
13392	4-7-2012	1520	M12	944 1	CW	Wed	(HFD)
13392	11-7-2012	1520	M12	944 1 794 103 67616	CW	Wed	(FN)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
13392	18-7-2012	1520	M12	944 1 810 167 16751	CW	Wed	(FN)
13392	25-7-2012	1520	M12	944 1 232 309 61889	CW	Wed	(FN)
13405	6-7-2012	2010	XPA	msg	USB	Fri	(FMB)
13412	2-7-2012	1920	E07	845 1	AM	Mon	(HFD)
13468	4-7-2012	1700	E07	441 0	AM	Wed	(HFD)
13472	2-7-2012	1320	M12	944 1 673 89 90152	CW	Mon	(FN)
13472	9-7-2012	1320	M12	944 1 794 103 67616	CW	Mon	(FN)
13472	9-7-2012	1320	M12	944 0	CW	Mon	(HFD)
13472	16-7-2012	1320	M12	944 1 810 167 16751	CW	Mon	(FN)
13472	23-7-2012	1320	M12	944 1 372 309 61889	CW	Mon	(FN)
13479	3-7-2012	0614	M32c	Russian Air Force. REA4 REA4 = 03060 73842 94660 83201 10051 86530 73842 85660 83303 10068 85530 = REA4 K	CW	Tue	(JU)
13479	13-7-2012	0716	M32	XXX XXX REA4 REA4 70028 OKREST 7985 8319	CW	Fri	(JU)
13479	13-7-2012	0722	M32	XXX XXX REA4 REA4 73232 OKTAMETIL 5352 5633 'EKTAZIYa 6138 1794	CW	Fri	(JU)
13479	13-7-2012	0733	M32	XXX XXX JUE4 JUE4 40777 SKREBOK 0103 5317	CW	Fri	(JU)
13479	13-7-2012	0735	M32	XXX XXX REA4 REA4 26893 OKRAS 7178 0632	CW	Fri	(JU)
13479	13-7-2012	0741	M32	XXX XXX REA4 REA4 62354 SKOTNICA 6888 6152	CW	Fri	(JU)
13479	13-7-2012	0759	M32	XXX XXX JUE4 JUE4 46427 IMAGO 0268 9083 GLUZG 0715 3388	CW	Fri	(JU)
13479	20-7-2012	0635	M32c	XXX XXX REA4 REA4 2.000 ..RKINAL 1024 3829 GROT 4108 6916	CW	Fri	(JU)
13479	20-7-2012	0642	M32c	XXX XXX REA4 REA4 95722 KOVSYRXE 3697 9881	CW	Fri	(JU)
13479	20-7-2012	0652	M32c	XXX XXX REA4 REA4 54109 SUSLIK 2137 0793	CW	Fri	(JU)
13479	20-7-2012	0654	M32c	XXX XXX REA4 REA4 07471 ASTROFIZIK 1975 9403	CW	Fri	(JU)
13479	20-7-2012	0656	M32c	Strategic message to JUE4 and MJUR. XXX XXX JUE4 JUE4 MJUR MJUR 93832 050 = DDDDD ZNSZN XChChRV DLLRG XChChXV \ DLLRG XChChXV DLLRG FUeJChK PALAch YMDDU AY.JT RUGPI PK.SK (qsa2 qsb) .... WP..Y K	CW	Fri	(JU)
13479	20-7-2012	0706	M32c	XXX XXX REA4 REA4 18291 AJDYKULX 3752 6625 ALLOHOL 5449 8878	CW	Fri	(JU)
13479	20-7-2012	0709	M32c	XXX XXX REA4 REA4 18315 ANDRENA 55594261 TODORTIT 2864 3585	CW	Fri	(JU)
13479	20-7-2012	0712	M32c	XXX XXX REA4 REA4 39815 BRABRAK 9609 4175	CW	Fri	(JU)
13479	20-7-2012	0719	M32c	XXX XXX JUE4 JUE4 04145 SLOUFOKS 5344 0898	CW	Fri	(JU)
13479	20-7-2012	0725	M32c	XXX XXX REA4 REA4 'EKONOMIAe 5424 7933	CW	Fri	(JU)
13479	20-7-2012	0750	M32c	XXX XXX REA4 REA4 52174 HLOR'ETAN 5464 7139	CW	Fri	(JU)
13479	20-7-2012	0756	M32c	XXX XXX REA4 REA4 49311 WKLINENIE 4906 7324	CW	Fri	(JU)
13479	20-7-2012	0801	M32c	XXX XXX REA4 REA4 65953 SKIAGIT 6911 0656	CW	Fri	(JU)
13479	20-7-2012	0837	M32c	XXX XXX REA4 REA4 74977 SKWOREOeNYJ 2667 0905	CW	Fri	(JU)
13494	12-7-2012	2010	M42	Russian Gov/Intel.	Baudot 200/500	Thu	(FMB)
13497	7-7-2012	0810	M42	Russian Intel.	FSK 200/1000	Sat	(FMB)
13497	8-7-2012	0810	M42	Russian Intel.	FSK 200/1000	Sun	(FMB)
13497	21-7-2012	0810	M42	Russian Intel.	FSK 200/1000	Sat	(FMB)
13527.7	10-7-2012	1632	MX	Beacon D, Odessa/Sevastopol	CW	Tue	(MPJ)
13527.7	28-7-2012	0617	MX	Beacon "D"	CW	Sat	(AB)
13527.9	15-7-2012	1216	MX	Beacon "S"	CW	Sun	(AB)
13528	10-7-2012	1633	MX	Beacon C, Moscow	CW	Tue	(MPJ)
13528	15-7-2012	1216	MX	Beacon "C"	CW	Sun	(AB)
13528	21-7-2012	1440	MX	Beacon "C"	CW	Sat	(AB)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
13528	28-7-2012	0617	MX	Beacon "C"	CW	Sat	(AB)
13528.1	10-7-2012	1634	MX	B eacon A, Baku/Astrakhan	CW	Tue	(MPJ)
13528.1	15-7-2012	1216	MX	Beacon "A"	CW	Sun	(AB)
13528.1	21-7-2012	1440	MX	Beacon "A"	CW	Sat	(AB)
13528.1	28-7-2012	0617	MX	Beacon "A"	CW	Sat	(AB)
13528.3	21-7-2012	1440	MX	Beacon "K"	CW	Sat	(AB)
13528.4	21-7-2012	1440	MX	Beacon "M"	CW	Sat	(AB)
13565	26-7-2012	0910	S06s	167	USB	Thu	(HFD)
13569	4-7-2012	2130	M12	851 1 189 167 28657	CW	Wed	(FN)
13569	11-7-2012	2130	M12	851 000	CW	Wed	(FN)
13569	18-7-2012	2130	M12	851 000	CW	Wed	(FN)
13569	21-7-2012	2130	M12	851 000	CW	Sat	(FN)
13569	25-7-2012	2130	M12	851 000	CW	Wed	(FN)
13594	21-7-2012	1110	M42	Russian Intel.	FSK 200/1000	Sat	(FMB)
13926	5-7-2012	1310	M12	919 0	CW	Thu	(HFD)
13926	21-7-2012	1310	M12	919 000	CW	Sat	(FN)
13952.5	1-7-2012	1928	M51	5LGs French MIL Intel	CW	Sun	(MCO)
13964	24-7-2012	1537	M32	Russian Mil. Ends bcast msg: ... NRVDT WRPWP K. 7Z9E, CWJV, (Missed), EJSW, PHFL and F7DO QSL on QSX freq 4384 6140 1028 25-07-2012 (MG) E25a AM 675 7? YL, difficult copy	CW	Tue	(MPJ)
13972	2-7-2012	1300	M12	944 1 673 89 90152	CW	Mon	(FN)
13972	9-7-2012	1300	M12	944 1 794 103 67616	CW	Mon	(FN)
13972	9-7-2012	1300	M12	944 1	CW	Mon	(HFD)
13972	16-7-2012	1300	M12	944 1 810 167 16751	CW	Mon	(FN)
13972	23-7-2012	1300	M12	944 1 372 309 61889	CW	Mon	(FN)
14262	4-6-2012	0723	M32	Russian Mil: 9RPN 1239 3967 xxx xxx 7463 4704 etc	CW		(IARUMS)
14492	4-7-2012	1500	M12	944 1 673 89 90152	CW	Wed	(FN)
14492	4-7-2012	1500	M12	944 1	CW	Wed	(HFD)
14492	11-7-2012	1500	M12	944 1 794 103 67616	CW	Wed	(FN)
14492	18-7-2012	1500	M12	944 1 810 167 16751	CW	Wed	(FN)
14492	25-7-2012	1500	M12	944 1 232 309 61889	CW	Wed	(FN)
14542	6-7-2012	2000	XPA	msg	USB	Fri	(FMB)
14580	6-7-2012	0500	E06	679-528/104=94994	AM	Fri	(HFD)
14651	20-7-2012	1412	X06	215346	USB	Fri	(FMB)
14812	2-7-2012	1900	E07	845 1-538/140= 82936	AM	Mon	(HFD)
14812	4-7-2012	2000	E07	845 1 ...	AM	Wed	(daunt)
14812	18-7-2012	1900	E07	845 845 845 000	AM	Wed	(Dan)
14869	4-7-2012	2110	M12	851 1 189 167 28657	CW	Wed	(FN)
14869	11-7-2012	2110	M12	851 000	CW	Wed	(FN)
14869	14-7-2012	2110	M12	951 000	CW	Sat	(FN)
14869	18-7-2012	2110	M12	851 000	CW	Wed	(FN)
14869	21-7-2012	2110	M12	851 000	CW	Sat	(FN)
14869	25-7-2012	2110	M12	851 000	CW	Wed	(FN)
15632	17-7-2012	0745	E11	335/00	USB	Tue	(HFD)
15721	23-7-2012	0400	S06		AM	Mon	(Avare)
15721	24-7-2012	0400	S06		AM	Tue	(Avare)
15721	25-7-2012	0400	S06		AM	Wed	(Avare)
15721	26-7-2012	0400	S06		AM	Thu	(Avare)
15721	27-7-2012	0400	S06		AM	Fri	(Avare)
15721	28-7-2012	0400	S06		AM	Sat	(Avare)

Freq.	date	UTC	enigma	remarks	mode	day	Contr.
15721	30-7-2012	0400	S06		AM	Mon	(Avare)
15963	7-7-2012	0800	M42	Russian Intel.	FSK 200/1000	Sat	(FMB)
15963	8-7-2012	0800	M42	Russian Intel.	FSK 200/1000	Sun	(FMB)
15964	21-7-2012	0800	M42	Russian Intel.	FSK 200/1000	Sat	(FMB)
15988	21-7-2012	1100	M42	Russian Intel.	FSK 200/1000	Sat	(FMB)
16115	20-7-2012	1410	X06	215346	USB	Fri	(FMB)
16331.7	3-7-2012	0025	MX	Beacon D	CW	Tue	(LG2)
16331.7	15-7-2012	1216	MX	Beacon "D"	CW	Sun	(AB)
16331.7	24-7-2012	1403	MX	Beacon D, Odessa/Sevastopol	CW	Tue	(MPJ)
16331.7	28-7-2012	0617	MX	Beacon "D"	CW	Sat	(AB)
16332	3-7-2012	0024	MX	Beacon C	CW	Tue	(LG2)
16332	24-7-2012	1404	MX	Beacon C, Moscow	CW	Tue	(MPJ)
16332	28-7-2012	0617	MX	Beacon "C"	CW	Sat	(AB)
16332.4	21-7-2012	1440	MX	Beacon "M"	CW	Sat	(AB)
16680	14-2-2012	1522	M32a	Russian Navy Ship RFH70 calling RCV Sevastopol	CW		(MCO)
16780	26-7-2012	0800	E17z	674 820 5 33796 13577 74526 46647 79302 00000	AM	Thu	(FN)
19201	7-7-2012	0834	M32a	RCV: Russian Navy clg RCJE qsa? k (nil on 12464, ans at 0838z on 12464) clg RGZ58 qyt4 qcm k	CW	Sat	(WP3)
19201	10-7-2012	0706	M32a	RCV: Russian Navy clg RMUW qsa? k	CW	Tue	(WP3)
22612	2-7-2012	1430	---	Unid tactical station sending 4-character callsigns: ...6KYF 6KYF 6LCG 6LCG 6LCU 6LCU 6LSV 6LSV 6LJK 6LJK 6LZM 6LZM 6MCI 6MCI 6MIO 6MIO 6MOU 6MOU 6MOX 6MOX 6MPQ 6MPQ.....	CW	Mon	(AnEur)

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AB-HK	Ary Boender via remote rx Hong Kong	LG2	Les G, UK
ALF	Alf, Germany	MCO	Mike Chace-Ortiz, PA, USA
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Avare	Avare	ML4	Michel Lacroix, France
BCA	Brandon Longo, CA, USA	MPJ	Jim, SW England
CK	Costas, Southern Europe	MrNum	mr numberstation, FLA, USA
Dan	Daniel	N2UHC	N2UHC, USA
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FMB	FMB, Germany	rusl	Russell, Australia
FN	Fritz Nusser, Switzerland	SNN	SNN via Radioscanner.ru
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