```
6/8  27364  92836  09428  61208  /4982  36498  32/64  81276  8
986  40932  70987  32123  49817  26346  81287  65491  87364  81
721  75654  55656  12737  72727  72727  91918  63473  67867  7
723  87629  37677  32612  53498  71296  28756  18276  98716  87
7269 76329  74698  76857  98670  27601  56701  57601  73648  1
591  87364  87265  96710  27630  12673  84769  28743  98127  5
8    63298  75698  27465  87326  49876  28376  81273  98615  6
67   87432  74328  78674  29867  32867  67867  86786  432 6  49
57   68768  68763  34234  34238  68768  62342  48273  48768  23
36   98432  32432  86743  43286  43286  43286  43286  43286  43
743  86743  86743  39867  32867  86743  43286  43286  43243  86
741  86743  86743  86743  86743  86743  86743  86743  86743  4
43   98798  98754  98754  98754  98754  29867  67543  67986  86
6    87698  69876  87698  69876  87612  12341  34867  86798  63
67   43298  65656  56756  56123  32143  14321  32143  14321  321
     12787  58765  76587  58765  76587  58765  76587  58756  765
```

Numbers & Oddities

a.k.a. The Spooks Newsletter

Edition #209, February 2015

Hi and welcome to yet another N&O newsletter. Except for a frequency for the buzzer (S28) and new channel marker for S5292, nothing special happened in February.

I recently found a very nice website that might be of interest to you. It is the Listeners Guide which also includes some utility recordings and a number of war time recordings: http://www.listenersguide.org.uk

I'd like to start with an item about the Russian military command stations. Each month I receive a couple of questions about these stations and their messages. I hope that the following item gives the information that you're looking for. I will put this info also on the N&O website.

RUSSIAN *MONOLITH* STATIONS

The radio stations of the Russian Central Military Command are using priority codes and message formats from the Soviet days. They are described in the following document:

МИНИСТЕРСТВО ОБОРОНЫ СССР	Ministry of Defense
РУКОВОДСТВО ПО РАДИОСВЯЗИ	RADIO GUIDE
ВООРУЖЕННЫХ СИЛ СССР	Soviet Armed Forces
Часть 2	part 2
ПРАВИЛА РАДИОСВЯЗИ	RADIO REGULATIONS
Введено в действие директивой	*Enacted Directive*
Генерального штаба Вооруженных Сил СССР	*General Staff of the Armed Forces of the USSR*
от 19 мая 1986 года № 177/24/0945	*on May 19, 1986 № 177/24/0945*

The priority codes are described in chapter 1 of this document:

9. По важности и категориям срочности информация делится на следующие виды:
сигналы боевого управления и оповещения; радиограммы категорий срочности «Монолит», «Воздух», «Ракета»,«Самолет», и «Обыкновенная».
Сигналы категории срочности «Воздух» передаются вне всякой очереди после передачи всех видов сообщений категории срочности «Монолит».
Радиограммы различных категорий срочности передаются в такой последовательности:

«Монолит» - с перерывом передачи и приема сообщений всех других категорий срочности;

«Воздух» - после радиограмм категорий «Монолит» с перерывом передачи и приема радиограмм категорий срочности «Ракета», «Самолет» и тегорий срочности «Ракета», «Самолет» и «Обыкновенная»;

«Ракета» - после радиограмм категорий «Монолит», «Воздух» с перерывом передачи и приема радиограмм категории срочности «Самолет», и «Обыкновенная»;

«Самолет» - после радиограмм категорий «Монолит», «Воздух», «Ракета», с перерывом передачи и приема обыкновенных радиограмм.

Радиограммы категории срочности «Обыкновенная», передаются после радиограмм категории срочности «Самолет» в порядке их поступления.

При работе по открытому радиоканалу проставленная на радиограмме категория срочности кодируется по Таблице дежурного радиста или другим установленным порядком.

При работе с использованием международных позывных категория радиограммы передается открыто в сокращенном виде: «Монолит» (мнл), «Воздух» (взд),«Ракета» (ркт), «Самолет», (смл) и т. Д.

The priority codes are used both in full and shortened form.

Long form	Short	English	Description
Монолит / Monolit	mnl	Monolith	The most urgent level, interrupts all traffic
Воздух / Vozdukh (Wozduh)	vzd (wzd)	Air	Interrupts all message types except Monolit
Ракета / Raketa	rkt	Rocket	Interrupts Samolet and Obyknovennaya messages
Самолет / Samolet	sml	Airplane	Interrupts Obyknovennaya messages
Обыкновенная / Obyknovennaya		Regular	

The format of the messages is fully explained in chapter2 of the document. The document "Rukovodstvo-Radiosvazi-SSSR.pdf" (in Russian) can be downloaded from the N&O website.

These flash messages are similar to the US NMCC Emergency Action Messages (EAM's). They are transmitted in voice, Morse and RTTY by Army, Navy and Air Force stations.

The most common format is: Callsign of the receiver xx xxx code word xx xx xx xx
Example: MDZhB 19 186 DIASPOR 62 47 13 50

Note that the callsign of the receiver is often a circular callsign, like MDZhB. They are used to call all stations in a certain area or to call stations that belong to a certain command chain. When a specific station is called then the callsign belongs to that specific station is sent. Example: KARTA-11 98 255 KONOVID 5620 4081.

Morse flash messages begin with "XXX XXX". Examples: XXX XXX WEGI WEGI 70709 50277 KLOPOMOR 3277 2208 K and XXX XXX 1QRF 1QRF 52004 AMFIOBENY 8207 4863 ANALOJNYJ 3557 3950 K

STATIONS

In radio hobby circles the Russian Central Military Command stations that transmit the above mentioned priority codes and flash messages are called **Monolith stations**. Some of these stations are well known to many people while other stations are not often logged. Below the list of the most reported voice stations.

Nick name Designator *)	Callsign	Circular callsign	Frequency	Location
Buzzer (S28)	Vulkan	MDZhB	3216, 4625	St. Petersburg and Moscow
Pip (S30)	Kaplya	8C1Shch	5448 (daytime) 3756 (nighttime)	Rostov-na-Donu
Squeaky Wheel (S32)			3828 (nighttime) 5473 (daytime)	Probably Rostov-na-Donu
None (MX)	channel marker "R"	Plovets-41	4325.9 channel marker 4325 voice messages	Possibly Ekaterinburg
None (S6930)		Katok-65	6930, 3218.5	
None (S5426)		Arbat-50	5426	
None (S4292)	channel marker "B"	Fazan-37	5292 voice messages 5292.3 channel marker	DFs point to a location NE of St Petersburg
None (S5790)		Patron-79	4790	

*) Designators were assigned by ENIGMA, ENIGMA 2000, Priyom, Numbers & Oddities

VOICE STATIONS
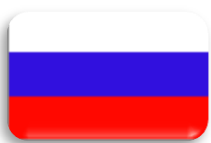
E06

4836 kHz, 05-02/19-02, 2030 UTC
321 569 20
14259 22676 32782 32782 76723 89409 12215 74326 64070 90235
38085 59543 12319 74238 36664 12256 18841 73311 98089 12250
569 20 00000

20085 kHz, 06-02, 0700 UTC
702 958 134
62075 76951 46694 73502 93514 65867 26329 33286 72089 15135
45145 42395 55970 42135 97740 91281 19678 05792 85242 93163
42271 41200 57237 41462 93266 83044 97559 82474 14772 69952
14861 11975 23230 47012 23904 25428 79241 08606 28513 76502
98884 48773 42126 23577 04981 11280 06882 68915 41733 56575
97172 20209 01190 87839 18622 29170 34952 03295 38390 86862
49583 66977 07786 80455 09137 15150 63081 41100 93258 40551
15502 37593 84291 21661 66306 95539 81815 89172 07904 46685
68075 46861 96943 38117 72719 89036 10313 56011 10292 81757
19989 43620 88920 00014 47665 18182 13631 38042 85111 16453
32723 34983 91189 23529 00661 83051 01463 64665 55895 10419
11344 64762 37072 55982 18722 05225 86047 78225 36987 32862
11169 65344 14412 00538 09239 38825 20815 44232 69610 67678
87445 26227 08851 35492
958 134 00000

13547 kHz, 11-02, 1230 UTC
215 806 74
02569 25656 74721 18583 49726 76726 07596 23875 53409 92626
05083 59182 23953 75159 15320 68584 90310 86815 15787 46964
19373 92946 98509 64720 15020 89315 97848 97162 42584 18310
12868 79201 28201 62475 45615 75896 20428 72603 54321 87160
97817 34521 15606 78927 06861 42571 01720 74145 50139 09451
02717 25679 84746 13747 14329 23721 13570 54607 30595 48751
56798 61420 31416 40309 39738 13487 08216 76509 31364 53249
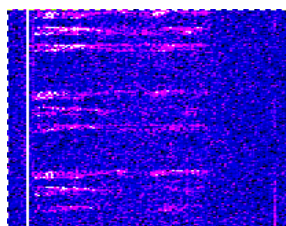42090 39272 27593 75346
806 74 00000

E07

Normally E07 transmits in AM but this time it
was in USB. Avare made a sonogram.
10219/9119 kHz, 01-02, 1800/1820 UTC
215 215 215 000

E07a

5877 kHz, 11-02, 2100 UTC
825 1 17077 981 95
15125 91745 29699 70734 32165 77921 65071 86884 96546 37842
27896 04707 56932 79354 72209 26827 93823 83930 48375 69351
17381 07146 21461 37930 33166 61596 87392 68552 95228 70234
48530 58909 27234 96685 89414 32550 03542 91021 39730 84034
14787 20666 64027 26923 04248 03991 92691 77842 45875 59539
09830 00379 58477 84473 29933 14350 19001 62778 28084 44949
59194 15930 71989 94939 35205 01181 08749 34869 91844 50039
56883 51360 57782 24255 14618 28640 64907 29148 87375 02602
62394 05678 48046 35723 22302 07624 75223 81323 43590 22356
53886 30745 97369 78250 99423
000 000

9347/8147/6847 kHz, 13-02, 1610/1630/1650 UTC
318 1 39097 1714 91
89427 81050 81766 45040 39384 82508 19573 30998 95173 37010
40057 68350 10060 35814 18040 70411 64337 29702 70 254 44562
31302 15232 52838 32904 87235 05103 97854 69077 43218 73875
75782 41561 07595 66309 88980 03315 76281 27204 54514 97155
76106 25975 27156 50430 76693 12790 73454 71685 76339 00053
76407 06915 70534 54347 56243 60237 70421 08751 32148 63107
03249 99239 06737 12753 19554 41694 83139 12940 01786 10790
96524 87115 82330 77427 01015 78369 73244 43574 08815 56061
43504 99319 02177 15596 03100 24928 57468 90650 22953 42031
60952
000 000

4577 kHz, 18-02, 2140 UTC
825 1 67178 612 93
78727 01611 78454 76246 46122 67770 95490 96790 30797 10440
34139 95057 52172 95323 35039 21987 01718 54824 06534 83596
28573 03546 76635 43351 73827 30973 32229 84141 33840 40720
76836 62290 42029 85076 48193 73253 96542 91796 03009 08503
64145 36735 09861 34298 92518 72198 88915 02420 99679 83935
74081 53418 21943 61465 25734 93216 86871 01862 08305 65867
19714 21521 34226 30803 31904 71463 87401 41455 75061 99543
84122 91360 04319 91642 20234 48847 04721 54272 54191 52092
39160 47052 53133 01195 89320 11925 76263 66830 83052 24675
90704 98889 59704
000 000

E11a

10213 kHz, 07-02, 1810 UTC
988/10 Attention 41670 76965 25172 22099 73881 95436 48167 55760 99502 00092 Attention, rpt msg, out

10690 kHz, 17-02, 1400 UTC
981/10 Attention 57990 70795 75659 11214 04048 21824 08051 73371 35436 06313 Attention, rpt msg, out

10213 kHz, 17-02, 1810 UTC
988/10 Attention 71956 01759 13906 42341 04968 25203 79287 30314 95797 32115 Attention, rpt msg, out

10690 kHz, 21-02, 1400 UTC
982/10 Attention 52025 50643 00121 17290 14039 18913 85569 59393 97657 52342 Attention, rpt msg, out

10213 kHz, 21-02, 1810 UTC
983/10 Attention 52354 42131 02008 72552 89055 37897 92591 02433 94655 22415 Attention, rpt msg, out

9446 kHz, 02-02, 0820 UTC
640/32 Attention
79722 46437 06170 45450 41454 34614 03474 44763 23621 15842
26902 95307 72664 10579 00150 29388 80935 22882 64625 52268
52001 22048 13726 69944 60377 22724 40615 65988 73207 89865
05887 15132
Attention, rpt msg, out

14410 kHz, 02-02, 1110 UTC
952/31 Attention
67833 06771 25152 34889 91449 32774 67435 62604 73047 92483
91888 65605 74467 08667 30979 58145 03689 18262 35871 26565
36266 98467 88693 13802 98007 04820 87518 27970 62518 64460
19342
Attention, rpt msg, out

15632 kHz, 05-02, 1155 UTC
712/32 Attention
76012 13586 13388 53330 64655 21763 10824 40145 59712 35737
60613 58384 47816 95422 41679 34636 64406 26491 80416 97434
32595 40903 32965 58804 31233 41113 21721 10589 86065 97590
09681 66306
Attention, rpt msg, out

9446 kHz, 06-02, 0830 UTC
640/32 Attention
79722 46437 06170 45450 41454 34614 03474 44763 23621 15842
26902 95307 72664 10579 00150 29388 80935 22882 64625 52268
52001 22048 13726 69944 60377 22724 40615 65988 73207 89865
05887 15132
Attention, rpt msg, out

6920 kHz, 06-02, 1710 UTC
953/21 Attention
04925 23638 37096 20182 15050 34603 40928 90615 69713 81850
41266 76702 42585 70228 23287 45093 90219 54628 66769 71836
81417
Attention, rpt msg, out

10448 kHz, 11-02/15-02, 1625 UTC
792/30 Attention
30218 87175 40586 74631 96949 36043 37626 20019 14992 07661
84140 52300 97320 13386 25494 85646 03845 93731 55379 64730
49017 89620 80294 21339 31068 64272 32939 49934 47241 44754
Attention, rpt msg, out

9443 kHz, 11-02, 1705 UTC
393/37 Attention
98349 77545 12441 22765 49866 54332 22190 63432 16575 17946
22533 14775 53536 15387 51127 58058 06352 76369 11371 24106
27207 12496 78778 55650 13859 24544 96316 84143 39062 07285
17202 34947 83093 51459 71434 77125 34404
Attention, rpt msg, out

10213 kHz, 16-02, 0745 UTC
262/33 Attention
37961 96918 94023 05382 19846 25645 33045 77840 15736 66436
14759 65588 61416 58257 57749 39457 62209 18300 80590 64235
65203 25171 83772 75573 23242 21421 68343 06277 80824 09688
68501 56769 28876
Attention, rpt msg, out

6923 kHz, 16-02, 1710 UTC
955/30 Attention
57297 60738 93276 96392 87054 52422 23361 49117 33893 67754
91769 80638 44304 82926 09912 72339 38776 16895 88135 04393
01919 37473 25130 34445 40633 83432 67519 98469 90515 32791
Attention, rpt msg, out

8091 kHz, 17-02/18-02, 1045 UTC
462/34 Attention
61778 84609 91648 30242 96718 05501 69457 16253 63931 00060
63128 51462 60883 46846 17803 76934 31960 46585 29758 43079
00789 27036 53418 41415 93691 33307 64583 08495 98793 09111
50219 12160 40924 62188
Attention, rpt msg, out

16112 kHz, 19-02, 0745 UTC
335/33 Attention
59114 62490 58532 09579 25345 71411 88141 94245 48241 48936
23562 98383 17066 55757 67978 82721 46282 15250 45599 65170
01639 61083 23579 84056 81644 52523 57876 11729 37596 58597
87429 44159 15279
Attention, rpt msg, out

14410 kHz, 23-02, 1110 UTC
951/20 Attention
30075 02836 04428 85225 73062 10123 15045 01643 84778 39830
09535 28917 38506 57162 49871 96636 54205 66783 67292 75580
Attention, rpt msg, out

12153 kHz, 24-02, 1045 UTC
579/31 Attention
31124 19279 19110 93487 75744 95885 61556 46874 18399 63012
30771 05797 00600 77572 53274 27980 15553 66939 64057 57722
10349 41078 76522 07031 57763 73284 96104 32365 47721 44388
80768
Attention, rpt msg, out

6923 kHz, 23-02, 1710 UTC
951/23 Attention
30765 16261 24345 69972 55478 82318 12854 31912 51851 29327
74351 01561 52213 42292 67114 59536 17608 87217 39181 47895
13153 66884 06182
Attention, rpt msg, out

G06

4484 kHz, 02-02, 1800 UTC
G06 starts with "248 248 000" instead of "248 248 248 00000" and stops.
Then Russian Air Force station Korsar pops up:
Opora50, Ya Korsar71
Kak prinimaeti menya?, prinimayu vas na 2 balla (How to you hear me? Hear you 2 points)
G06 comes back and mixes with the Air Force.
Shpora50 Ya Opora50 priyom, drugaya chastota!!!
Shpora50 I'm Opora50 priyom, other frequency!!!
The recording, made by Avare, is available from the N&O website.

4792 kHz, 13-02/27-02, 1930 UTC
436 701 20
37839 35787 98273 60187 16202 95625 31691 52538 61025 22567
93296 67423 40968 16891 63781 34820 04842 60491 75924 04594
701 20 00000

S06

5829 kHz, 11-02, 1730 UTC
480 693 42
43054 61823 34343 74221 04548 58656 05449 65144 39556 52737
56526 51120 58630 75231 10359 55916 04802 37257 77407 81117
07451 68021 90195 96839 29644 20226 74132 14581 26106 28712
84446 90629 54035 33251 63916 33481 03930 01439 01090 13693
42620 12631
693 42 00000

15721 kHz, 17-02, 0400 UTC
480 791 50
68635 27944 29662 67689 47685 35477 31005 04000 33385 65474
92280 85866 15366 14692 15313 87609 66282 26658 93991 34911
70669 79682 73060 92477 32012 65972 62463 29535 68981 16559
80698 30349 36768 51697 25614 41947 34445 61462 96080 76235
84310 46185 12981 08698 94136 71462 12956 40869 38268 17386
791 50 00000

S28 - The Buzzer

Mode: USB
Frequency: 3216 & 4625 kHz

02-02, 1345 UTC	MDZhB 25 072 TIROL'YeN 9496 7916
02-02, 1353 UTC	MDZhB 20 262 TIROL'YeN 9496 7916
	Previous message repeated, control sum has changed according to changed time
02-02, 1541 UTC	MDZhB 71 368 GIPYeR 2607 0480
03-02, 1418 UTC	MDZhB 42 381 IZGOLUBA 4893 7237
03-02, 1420 UTC	MDZhB 12 125 BARONYeT 3934 7205
03-02, 1422 UTC	MDZhB 18 296 KIZYaK 6882 8414
05-02, 0734 UTC	MDZhB 13 671 ChINAB 8410 7163
09-02, 1046 UTC	MDZhB 65 812 DIPSOMANIYa 8277 6751
09-02, 1049 UTC	MDZhB 48 206 KARBITKA 5764 8175
12-02, 1637 UTC	MDZhB 48 259 LILOVYJ 3016 2617
12-02, 1700 UTC	MDZhB 10 563 RAZLOZhKA 7560 1765
15-02, 1559 UTC	MDZhB 15 294 OBYeZ'YaNNIK 4902 6585
15-02, 1713 UTC	MDZhB 12 794 TASMANIYa 3079 2361
16-02, 1613 UTC	MDZhB 29 556 NAGORYeLYJ 4544 7446
16-02, 1614 UTC	MDZhB 29 556 NAGORYeLYJ 4544 7476
22-02, 1224 UTC	MDZhB 28 984 TYeRRAKOTA 8225 3466
22-02, 1257 UTC	Marker down and 10-count
22-02, 1619 UTC	10-count
23-02, 1621 UTC	10-count
24-02, 1018 UTC	10-count and microphone tests
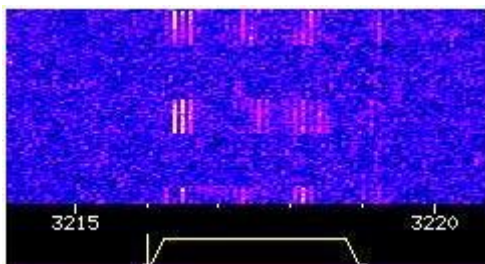
In addition to 4625 kHz, S28 started transmissions on 3216 kHz on the 19th but after about week the transmissions stopped.

S30 - The Pip

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

5448 kHz, 02-02, 1003 UTC	ZhSK4 HZ5T 5FSShch 8MUO TUZR 5J7Shch DMC3 49FT C2ZA INNC
5448 kHz, 02-02, 1345 UTC	8S1Shch 08 738 AGROTYeHNIYa 5795 1669
3756 kHz, 02-02, 1540 UTC	8S1Shch 08 157 KOLUMBARIJ 5403 0076
3756 kHz, 02-02, 1607 UTC	ShchGJP TZLM FY5E F61N 37CN MUDR 7VNShch Zh7NZh YMA5 VTH3
3756 kHz, 06-02, 0503 UTC	NLCE LI27 V2MZ SB7Z 'O6P Y8VM 6I2Zh 8CShchJ 27Shch' N1DU
3756 kHz, 13-02, 1524 UTC	8S1Shch 37 359 VIChUGOVYeC 3233 1741
3756 kHz, 14-02, 1459 UTC	61HZh ZBIL L7O5 V'Z' NLCE LI27 V2MZ SB7Z 'O6P Y8MV
3756 kHz, 15-02, 1601 UTC	8S1Shch 98 255 KONOVID 5620 4081
3756 kHz, 15-02, 1713 UTC	8S1Shch 85 271 DRYaHLYJ 7609 3976
3756 kHz, 15-02, 1723 UTC	TUZR 5J7Shch DMC3 49FT C2ZA INNC ShchGJP TZLM FY5E F61N
3756 kHz, 16-02, 1612 UTC	8S1Shch 64 149 LOMShIK 3867 0615
3756 kHz, 16-02, 1745 UTC	PMV5 L'GJ KZI' TShchShchS VKY1 HCLF 61HZh ZBIL L7O5 V'Z'
3756 kHz, 22-02, 1737 UTC	DMC3 49FT C2ZA INNC ShchGJP TZLM FY5E F61N 37CN MUDR
3756 kHz, 23-02, 1609 UTC	8S1Shch 38 680 ChYeRNOSLIV 9144 0281
3756 kHz, 23-02, 1650 UTC	8S1Shch 11 890 STANOVShchIK 6955 1951

3756 kHz, 23-02, 1753 UTC   KZI' TShchShchS VKY1 HCLF 61HZh ZBIL L7O5 V'Z' NLCE LI27
3756 kHz, 24-02, 0443 UTC   V2MZ SB7Z 'O6P Y8VM 6I2Zh 8CShchJ 27Shch' N1DU 53OB 78MV
5448 kHz, 26-02, 1317 UTC   8S1Shch 27 106 PYeGIJ 1311 7930
3756 kHz, 27-02, 0432 UTC   TUZR 5J7Shch DMC3 49FT C2ZA INNC ShchGJP TZLM FY5E F61N Play00:00…
5448 kHz, 27-02, 0819 UTC   8S1Shch 51 602 KINOSYuZhYeT 0540 5595
5448 kHz, 27-02, 1211 UTC   Z7CN MUDR 7VNShch Zh7NZh YMA5 VTH3 AGDT 'U1B OSOG BO6C
3756 kHz, 27-02, 1637 UTC   F56Shch 9GSA ZhBZU 4RVZ 3VS' DKJ1 ZhD9V 42BV 81BR M7KS

S32 - Squeaky *Wheel*

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

5473 kHz, 02-02, 0710 UTC   ROSA-64 DZhIGIT-46 OTPOR-89 LOGIKA-05 YaHTA-94 FONTAN-34
5473 kHz, 02-02, 1356 UTC   ALFA-45 64 660 PODBORShchIK 7670 3212
5473 kHz, 02-02, 1414 UTC   STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39
3828 kHz, 02-02, 1550 UTC   ALFA-45 96 205 EKZOFTOL'M 3893 5491
3828 kHz, 02-02, 2000 UTC   SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27
3828 kHz, 04-02, 1907 UTC   K3VJ Shch8AF M7KS 11 397 44 280 31 468 PYeRYeLIVANIYe 0960 6420
3828 kHz, 04-02, 1959 UTC   K3VJ Shch8AF M7KS 61 044 11 235 98 538 NAKNADA 6394 5163
3828 kHz, 12-02, 1655 UTC   ALFA-45 63 423 ERMALOM 8527 2519
3828 kHz, 13-02, 1528 UTC   Al'fa-45 50 811 VASLUJ 2857 7590
3828 kHz, 13-02, 1544 UTC   Al'fa-45 68 645 MUZIChAR 1268 3389
3828 kHz, 15-02, 1607 UTC   ALFA-45 88 102 GYeORGYeNIYa 6643 0864
3828 kHz, 15-02, 1717 UTC   ALFA-45 61 869 VTYaZhNOJ 8493 8652
3828 kHz, 15-02, 1944 UTC   STAZhER-29 ALEUT-09 ZASLONKA-27 STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39
3828 kHz, 16-02, 1615 UTC   ALFA-45 26 363 AKKORDYeON 2495 8270
3828 kHz, 22-02, 1814 UTC   SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27
3828 kHz, 23-02, 1605 UTC   ALFA-45 22 920 KAPIK 7198 3811
3828 kHz, 23-02, 1649 UTC   ALFA-45 20 072 GIPOTIRIN 6284 1211
3828 kHz, 24-02, 1815 UTC   SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27
3828 kHz, 26-02, 0332 UTC   ALFA-45 39 567 POMRAChYeNIYe 1534 1581
5473 kHz, 26-02, 0710 UTC   STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39 KURGAN-40 DUBLYoR-68 SLUZhBA-32
5473 kHz, 27-02, 0825 UTC   ALFA-45 71 082 BANANNIK 8979 4105
3828 kHz, 27-02, 1740 UTC   RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07 SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27
3828 kHz, 27-02, 2050 UTC   STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39

S5292

Frequencies: 5252 kHz USB (voice)
5292.3 kHz CW (channel marker)

On 10 February the first report came in about a new channel marker on 5292.3 kHz. During the first two weeks It transmitted combinations of "B" and "D", probably because of technical problems. After that only "B" is transmitted.

So why the marker? Usually a marker is used to occupy an important frequency. So far, this station was not very active. Maybe the marker is the beginning of a more tasks/messages. The Russian military are very active in N.E. Russia. The Barents Observer reports that the air force is building a new airport on Franz Josef Land which is an uninhabited archipelago in the Arctic Ocean. The navy is expanding its activities and new S400 missile sites near the borders to Norway and Finland were installed; and in November 2014 Russia played nuclear war-games in Barents Region. This could very well be related to the new channel marker.
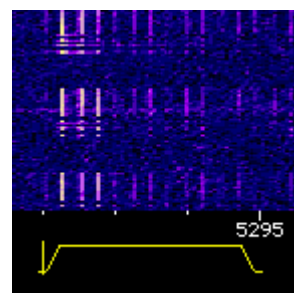
Voice messages (copied by Gwrapse)
5292 kHz, 19-02, 1029 UTC   FAZAN-37 04 739 CUKAT 3124 8748
5292 kHz, 19-02, 1558 UTC   FAZAN-37 02 191 URAGAN 3728 2837

S5130

Frequency: 5130 kHz
Mode: USB

5130 kHz, 28-02, 1508 UTC. New message format, copied by DJPeter
0953 8852 7535 9684 2693 5391 8335 7865 8227 1510 0486 3951 8851

V02a
Dirección General de Inteligencia

V02 popped up on 7554 kHz. Odd that every time that it happens it is on the same frequency and same time. Is it on purpose or are they feeding a V02a message to the wrong transmitter? Maybe there is an undiscovered V02a schedule at 2000 UTC ……

7554 kHz, 12-02, 1959 UTC   Atençion 20142 42772 55212. Changed to M08a at 2001 UTC
7555 kHz, 17-02, 2000 UTC   Atençion 07671 11012 24331 into 5F groups. Should be M08a. Another transmitter being tuned.
                             V02a off at 2001 UTC
7554 kHz, 19-02, 2000 UTC   Atençion followed by 5F groups

V07

16268/13968 kHz, 08-02, 0120/0140 UTC
329 1 258 65
58048 01829 43534 22201 30243 04101 72535 33993 84900 83032
39907 39815 47741 28340 09832 52835 18880 05520 03744 41233
30547 43241 48981 32253 52351 35037 00354 78313 43505 31232
94724 85377 12232 51485 43117 42371 82575 33274 39430 09294
32595 97135 21873 58739 57838 30520 92757 31577 13402 38832
38037 49010 73334 50175 91203 77392 27557 18108 15332 35390
80530 97759 44942 25578 14789
000 000

18368/16268/13968 kHz, 22-02, 0100/0120/0140 UTC
329 1 337 83
37410 39120 99721 08153 90213 33093 07022 33061 32803 75380
80809 95528 18584 21?33 79329 37887 83042 39076 95726 52588
82832 83137 35748 05182 62449 48594 43411 31096 74032 65370
37461 73313 47316 76327 20591 85398 40852 73134 92997 38943
38479 31844 22309 44943 69144 84467 72782 13337 15326 13315
57991 16701 33873 19341 56113 08304 46353 34866 85233 33083
05431 75441 05405 23418 71229 19305 33992 59107 73029 15554
40831 74840 52790 49057 21833 55446 88333 89548 83719 04020
33277 29175 29348
000 000

18368/16268/13968 kHz, 22-02, 0100/0120/0140 UTC

329 1 337 83

37490 39120 99525 08153 90213 33093 07722 33031 32803 75380
80809 95528 18584 21933 79329 37887 83042 39073 95723 52588
82832 43130 35748 05182 02449 48594 43411 31093 74032 35370
37431 73313 47313 73327 20590 85398 40852 73134 92997 38943
38479 21844 22309 44943 39144 84437 72782 13337 15323 13315
57991 13702 33873 19341 53113 08304 43353 34833 85233 33083
05431 75441 05405 23418 71229 19305 33992 59107 73029 15554
40831 74840 52790 49057 21833 55433 88333 89548 83719 04020
33277 29175 29348

000 000

V13 - New Star Broadcasting Station

星星廣播電台 Xīngxīng guǎngbò diàntái

Frequencies: 7654, 7688, 8300, 9276, 9522, 9725, 10182, 10522, 11430, 13750, 15388 kHz

Partly unconfirmed new schedules. Please let us know if you hear the station.

15388 kHz	0200-0230 UTC	New Star 1	11430 kHz	0700-0730 UTC	New Star 4
15388 kHz	0300-0330 UTC	New Star 1	11430 kHz	0800-0830 UTC	New Star 4
15388 kHz	0400-0430 UTC	New Star 2	7502 kHz	1200-1230 UTC	New Star 4
11430 kHz	0500-0530 UTC	New Star 3	7502 kHz	1300-1330 UTC	New Star 4
11430 kHz	0600-0630 UTC	New Star 3			

New Star 1 was reported on 15388 kHz at 0200 and 0300 UTC.
New Star 4 was reported on 11430 kHz at 0800 UTC

VC01 - Chinese Robot
Chinese Air Defense

Modes: USB and LSB

The station changes its frequencies frequently. Known frequencies:
3036, 3749, 3837, 4075, 4140, 4165, 4175, 4180, 4258, 4343, 4410, 4422, 4427, 4480, 4530, 4580, 4726.5, 5114, 5195, 5232, 5288, 5303, 5328, 5330, 5343, 5393, 5471, 5592, 5700, 5742, 5799, 5802, 5820, 5832, 5892, 6209, 6479, 6771, 6840, 6858, 6860, 6949, 6960, 7090, 7351, 7608, 7684, 7726, 7739, 7744, 7756, 7770, 7792, 7864, 7865, 7880, 7890, 7924, 7938, 8000, 8025, 8046, 8170, 8779, 9000, 9129, 9169, 9192, 9290, 9340, 10508, 17392 kHz.

MORSE STATIONS
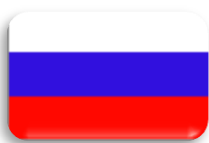
MX
Russian Military beacons

Current cluster frequencies:	Cluster beacon slots:
3594, 4558, 5154, 7039, 8495, 10872, 13528, 16332, 20048 kHz	.7 "D", Sevastopol
	.8 "P", Kaliningrad
Other frequencies:	.9 "S", Severomorsk
L 6917.5, 8497.8 kHz	.0 "C", Moscow
V 3658, 4150, 6809, 6928, 7027.5 kHz	.1 "A", Astrakhan
R 5466 kHz	.2 "F", Vladivostok
W, R, N, G, C, K, Z, L, V, Ü 5835, 8112, 8162 kHz (Tu-Bear net)	.3 "K", Petropavlovsk Kamchatskiy
	.4 "M", Magadan

M01

M01c, 4563 kHz, 09-02, 1745 UTC, in progress
446 446 40526 40526
121 999
111 211 15
45328 16783 56807 23416 52696 24271 52833 98771 10491 75706
54271 86182 52788 90110 09758
211 15 000
111 52788
111 46328
111 46328

M03

13911 kHz, 13-02, 1420 UTC
878/38 =
78230 99631 15892 54011 37937 84160 33887 26256 24100 93836
12017 22724 16756 21169 24812 34222 70135 63220 28971 70392
62123 34416 74077 71620 12730 46503 75184 38614 83163 40617
97410 27546 81902 82056 95243 40607 37096 47509 =
878/38 rpt msg = 000

M12

8047 kHz, 18-02, 1900 UTC
463 1 9380 135
41037 00556 16758 34141 40063 99692 56325 08889 22172 25338
13563 62848 78353 89823 64816 64094 64853 17370 35090 46556
54768 88255 23639 38623 62721 53496 76933 56371 75853 59441
45819 19503 77360 04615 55246 64558 17847 35414 73251 85656
23299 85916 30823 24603 59573 25306 44784 38799 00683 78782
11961 42908 28883 23624 05519 95983 41320 34043 28623 32444
09912 25183 54823 99644 97044 31745 51683 59535 21513 41096
19018 58336 54696 01797 74910 13579 92370 27235 85482 06533
98509 72774 55636 43635 46291 92140 22914 83492 20903 76534
20454 64001 79897 49599 31294 93357 79369 41377 29608 28580
08754 74327 47764 75810 53676 71075 12670 63401 12215 79819
77453 31552 89385 76379 93779 69723 36282 78126 38303 17183
95589 76347 00734 77782 43907 90581 58065 48600 53942 78912
70211 15076 05801 70090 75115
000 000

M14

4761 kHz, 11-02, 1920 UTC
748 621 020
44108 38962 04169 25742 58457 96892 92665 91221 97442 52207
69143 30172 87088 13167 83155 41364 18451 28305 68131 8282 (stopped here)

M23

M23 was back for a while with extreme long messages. The frequency was 14400 kHz

14400 kHz, 06-2, 0956 UTC, Fri,	111 (R20)
14400 kHz, 10-2, 0820 UTC, Tue,	111 repeated for 1h55mins. Ends at 1015 UTC
14400 kHz, 11-2, 0728 UTC, Wed,	i.p. 111 repeated. Extremely long transmission. Ends at 1015 UTC
14400 kHz, 11-2, 0820 UTC, Wed,	i.p. 111 repeated. Extremely long transmission. Ends at 1015 UTC
14400 kHz, 12-2, 0722 UTC, Thu,	i.p. 111 repeated. Ends at 1015 UTC
14400 kHz, 13-2, 0656 UTC, Fri,	i.p. 111 repeated. Ends at 1015 UTC
14400 kHz, 14-2, 0613 UTC, Sat,	i.p. 111 repeated. Ends at 1015 UTC
14400 kHz, 15-2, 0754 UTC, Sun,	i.p. repeating 111
14400 kHz, 15-2, 0821 UTC, Sun,	Repeating 111
14400 kHz, 16-2, 0558 UTC, Mon,	M23 starting up, repeating "111"
14400 kHz, 17-2, 0728 UTC, Tue,	i.p. repeating 111

M89
Chinese military

Stations and strings:

V A7TR A7TR A7TR DE DI9Q DI9Q
V 5RAB 5RAB 5RAB DE M9AB M9AB
V 7NPE 7NPE 7NPE DE QV5B QV5B
V 6TRW 6TRW 6TRW DE J9NS J9NS
V 7NPE 7NPE 7NPE DE QV5R QV5R (faulty transmission)
V 8CPZ 8CPZ 8CPZ DE XW6W XW6W
V 8DKB 8DKB 8DKB DE ODY8 ODY8
V 8PEX 8PEX 8PEX DE TI5F TI5F
V BNGC BNGC BNGC DE XSV85 XSV85
V BIQ9 BIQ9 BIQQ9 DE ISL2 ISL2
V BRH0 BRH0 BRH0 DE 8NGG 8NGG
V B9SR B9SR B9SR DE AL6R AL6R
V CQ CQ CQ DE DP91 DP91
V DKG6 DKG6 DKG6 DE 3A7D 3A7D
V DP9J DP9J DP9J DE CQ CQ
V EI0B EI0B EI0B DE JHG2 JHG2
V GKLO GKLO GKLO DE TYUI TYUI
V GKN7 GKN7 HKN7 DE F3J5 F3J5
V H2FL H2FL H2FL DE DRV8 DRV8
V JKDJ JKDJ JKDJ DE SLBC SLBC
V M8JF M8JF M8JF DE RIS9 RIS9
V MW3D MW3D MW3D DE 2SLC 2SLC
V N4FM5 N4FM5 N4FM5 DE NAT491 NAT491
V PGG9 PGG9 PGG9 DE MI6Y MI6Y
V RA5J RA5J RA5) DE BP2S BP2S
V RXP7 RXP7 RXP7 DE CZT2 CZT2

V S2LZ S2LZ S2LZ DE YBA6YBA6
V SR3H SR3H SR3H DE FGH8 FGH8
V SXL6 SXL6 SXL6 de 9QFZ 9QFZ
V TKLO TKLO THLO DE TYUI TYUI
V TY9D TY9D TY9D DE EOX2 EPX2
V VTX7 VTX7 VTX7 DE TZ7B TZ7B
V VXL1 VXL1 VXL1 DE XIW2 XIW2
V WZG6 WZG6 WZG6 DE 4VTG 4VTG
V YUQW YUQW YUOQ DE ASDF ASDF
V ZRM7 ZRM7 ZRM7 DE LCM0 LCM0
V N4FM5 N4FM5 N4FM5 DE DUT491 DUT491
Q Q5U8 Q5U8 Q5U8 DE 8QPP 8QPP
V QHV8 QHV8 QHV8 de 8QPP 8QPP
VVV Q2M Q2M Q2M DE NYZ NYZ
V DKSL DKSL DKSL DE ALSK ALSK
V 3A3J 3A3J 3A3J DE B4ZJ B4ZJ
V HER6 HER6 HER6 DE WU6L WU6L
V BR3S BR3S BR3S DE JU9D JU9D

B2ST DE HNP7
F4QX DE HNP7
N4QX DE HNP7
NGY3 DE T6RS
7YRF DE AW3C
3CFT DE AW3C
ZVLY

Messages:

5692 kHz, 07-02, 0226 UTC

DE HNP7 K
R QSA 2 K
R IEC = 6136 AR K
R AS
VV B2ST DE HNP7 K
R QSA 2 K
R IEC = 1635 AR K
R AS
VV F4QX DE HNP7 K. VV F4QX DE HNP7 K
VV VV EEEEE VV F4Z EEEEE
VV F4QX DE HNP7 K. VV F4QX DE HNP7 K. VV F4QX DE HNP7 K
HR MSG GA MSG NR 008/CCK CK 1EEEEE R EEEEE
MSG NR 008/CCK CK 199 19 0207 1030 RMKS 1119 TO 1113
VV B2ST DE HNP7 K. VV B2ST DE HNP7 K.
R QSA 2 K
VV N4QX DE HNP7 K
R QSA 2 K
R AS
VV HST5 DE HNP7 K
R QSA 2 K
R AS
HR MSG GA
MSG NR 008/CCK CK 199 19 0207 1045 RMKS 1119 TO 1113 11136 111.. =
(DTG is different from that previously sent)
= = =
T347 65DU .7.EE ? D7 = = = = =
T347 65DU D7U5 37T4 5U6. AT37 .4NT A6D3 7A65 34.. 54DT (Cont'd)

6650 kHz, 07-02, 1505 UTC

TUA4 5DAN U364 NDTD 4T75 N4TD (Cont'd)
AR AR
K QSL QSL 2..8 K
R GA
MSG NR 1880 CK 80 28 0207 2300 =
3.UN AA7T NU3D 73N. UTA7 34A7 (Cont'd)
QSL 2305 K K
GA
NR 81. CK 80 28 0207 230. =
R GA
MSG NR 8185 CK 80 28 0207 2306 =
5N6D 5TA3 AT.T 5DN6 (Cont'd)
AR
QSL 2311 K
R GA
MSG NR NR 1 EEE
MSG NR 1881 CK 80 28 0207 2312 =
3.U. 6AD3 375N D.7U A36. (Cont'd)
AR
QSL 2317 QEEE QSL 2316 K
GA
MSG NR 8186 CK 80 28 0207 2320 =
K K GA
MSG NR 8186 CK 80 28 0207 2320 =
43AU 5D4. 6354 D53A (Cont'd)

5112 kHz, 08-02, 0214 UTC

DADA A7DU NA7U DUT6 34DA TUAD (Cont'd)
AR QSL ? K (0216z) (Other station on this frequency but mostly unreadable)
R RPT 56W ... 63.A K
R RPT 58W ND34 ND34 K
R R ..
R RPT 60W TO 63W BT 3U36 N637 UA5A .... AR K
R RPT 86W TO 87W BT 5AAN 5.U3 AR K
(Cont'd repeating groups)
U MSG GA K
R UMSG GA K
MSG NR 07... 9. 910

6855 kHz, 08-02, 1051 UTC

ATD. A7DT AA3N DU.. (Cont'd)
AR K (Repeats groups)
MSG NR 47 CK .. 6 EEEEE
MSG NR 47 CK 91 67 0208 1.20 RMKS 6003 TO 6212 K
R GA =
35? 3T53 A45D A75U 6557 (Cont'd - Machine sent)

3642//7602 kHz, 09-02, 1546 UTC

V DKG6 DKG6 DKG6 DE 3A7D 3A7D
RMKS 32.. TO 3222 3210 =
TAND 376T 3AUA TTTT AUTA AATA UN.. TAA4 UAA5 (Cont'd)
III = III =
AUNT 54AD 567A AT.T U3A. 4AU3 (Cont'd)
AR QSL ? HR WK NR NR 230
V DKG6 DKG6 DKG6 DE 3A7D 3A7D

3777//4532 kHz, 11-02, 1028 UTC

DDT3 43D3 37T3 U767 D566 363T (Cont'd)
III = .3N5 77NN TD7U 374D D7UT TA6A (Cont'd)
AR

4630 kHz, 11-02, 1741 UTC

345N D7N3 46U6 345A NT7U 7N4U (Cont'd)
III = N5U7 AN.N DTAT 5TD3 3NUA (Cont'd)
III = TU46 36A6 6AUT D4D3 (Cont'd)
III = 46U6 3A45 5634 U7NT 7NT5 (Cont'd)
III = A6DT 57AT UNA3 47TA U76T (Cont'd)
U3A6 N7DA 5UT7 5D43 D6N3 TU73 (Cont'd)
III = 7D4N N5D5 4TUT DN4T 577T UAN3 (Cont'd)
III = UD4N 4U6T A7NT 35AT 646U 3DUT (Cont'd)
III = UAN7 TNDT 5TAT DNU3 345A 6T7A (Cont'd)
AR AR
N HR RPT 01W K K K

6456//8527 kHz, 11-02,1000 UTC

CQ (x3) DE 91 (x2) V   HR NIL SK GB (x8)

Note: This sked shows how DP91 is not what I would call a True // sked. In this sked, the callsign being sent on 6456 is different than that being sent on 8527. If we look at the endings, the sked on 6456 was sent 8 times, while the one of 8527 was only sent 3 times. As well, the sked on 6456 ended at 1008z, while the one on 8527 ended at 1011z.

8073 kHz, 11-02, 1134 UTC

VVV BNGC (x3) DE XSV85 (x2) (Cont'd)
HR 7G GA PSE CY
NR 01052 C 55/.15 1 CK 314 35 0211 1619 = =
TA3UB 3AN 3U7 .U7 7. T7 773 T 773 353 35N 4T3. 34. ? 445 4? 4? 3DU 4DT 4D3 TE ? TP 773 TU? TU3 773 357 35N 4T3 NN3 4IA 5TD UDT (Cont'd - horrible CW operator. This appears to be a regular sked)

3777//4532 kHz, 09-02, 2103 UTC

V M8JF M8JF M8JF DE RIS9 RIS9
6U4N 4NT3 7TDU A4ND U733 TNDN T346 (Cont'd)
III = 5D6D 7... 3534 354A TANU (Cont'd)
III = T5.6 U7UA T73N A5D3 D545 (Cont'd)
III = 34AU 4DAU UDDN D.43 744T (Cont'd)
III = 7T56 A555 ATU5 73UA 747D (Cont'd)
III = TT56 DUTD 6UD6 N5A4 57UN (Cont'd)
V M8JF M8JF M8JF DE RIS9 RIS9

4167 kHz, 09-02, 0113 UTC

R RPT 7III EEEE R RPT 70W 7D3U 7D3U K
(Other station also on this frequency - mostly unreadable)
(Repeats groups)
QSL 091. K
R U MSG GA K
(To weak to copy)
AR K
R RPT 19W K (Cont'd repeat groups)
R QSL 0920 HR WK NR 0035 K
R HR WK .R HR WK .920 K
R HR NIL SK R HR NIL SK

5234 kHz, 09-02, 1614 UTC

R QSL 0013 K
AS
K K KK S HR 7G GA K
R
MSG NR 04 CK 115 84 0210 0013 RMKS 4836 TO 4313 K
R = =
347A UD6N U376 6ANT A3D7 473T 4AD5 AD54 TAN6 TTT7 7NU6 (Cont'd)
III III = = T3A 4ND6 736U TA45 T4AN 647A 4T76 DU6T TD? TAN6 TTTD 45DN
ADN6 374T 6.ND 36UN AR AR (1625z)
R R SK

8888 kHz, 12-02, 1149 UTC

= = NUERSB EEEE = =
NUER SBD/3051 AR
T FF NR 0007/EX 2120 RMKS 9012 TO 5678 = =
NUERSBD/3051 AR
OK FF NR 0007/EX 2120 RMKS 9012 TO 5678 = =
NUEKEEEE =
NUERSBD/EEEEEEE = =
NUERSBD/3051 AR
QSL ?
QSL 1... AR
QSL 2113
NR 3050
U NR ?
AS AS AS
BOZ USI U LSB WK HW ?
U FF EEEE F GA
U GA
FF BOZ U SE UPSB WK

8073 kHz, 12-02, 1132 UTC

V BNGC BNGC BNGC DE XSV85 XSV85
V BGNC BGNC BGNC DE XSV85 XSV85
HR MSG GA (Handsent - horrible CW)
NR 0154 CK 253 35 0212 1637 = =
TAU 3U6 3T? 3A. 3U7 TAU
773 35 635 N4T. NN3 434 4T.T 3 TTTT U4DT4D. (Cont'd)

7709 kHz, 12-02, 1206 UTC

= Z8ZC/C3VE AR
QSL QSL 2014 K
NR OK R K
HR MSG GA MSG NR
NR 1817 CK 300 21 0212 2000 RMKS 1464 TO 1720 K
NR GA K
R
MSG 1 = =
N7U5 5A4D 55UU UT3A N737 U46A (Cont'd)

7792 kHz, 12-02, 1206 UTC

NN45 DAT3 754T A3T7 (Cont'd)
AR K (1209z) (Other station also on this frequency but very weak)
R 9W = AUDU AR K
NRPT 24W K
R 24W = 4DN. AR K (Cont'd repeat groups)
R QSL 201. K
R 1F..
R HR 159 K
R HR W. 5 K
R NIL SK GB R NIL SK GB

3777 kHz, 13-02, 1826 UTC

3UN5 3TTT DAU7 ..67 T75A DA5D (Cont'd)
III = .DAA A5U7 UNN6 64TU 67U3 (Cont'd)
III = 3665 677N 4DNT 55U4 (Cont'd)
III = 43TU NTD3 7TD3 3735 6A47 (Cont'd)
III = 4N57 T447 N45U 6T67 5536 (Cont'd)
III = 5T55 U3.. 3U5A 3AN4 TT77 7T.T TUNN 57DA NNNN TTAT D3A. (Cont'd)
AR
V M8JF DE RIS9
Note: In the last few weeks RIS9 has been sending quite a few long messages.
In the past, very seldom were messages sent. I wonder what has changed?

8073 kHz, 14-02, 1135 UTC

356 403 NN3 445 3DT TDA N34 TTA ND4 TT5 4DT 4D6 (Cont'd)
AR MSG AGN
NR NR 0158 CK 102 35 0214 1549 = =
C43UD 3AN 3U7 KU 773 357 373 4T4 NN3 (Cont'd)

9131//10947 kHz, 14-02, 0150 UTC
V DKSL DE ALSK
UUAU T3UN A3UT TD5N 5544 3443 .DA 7AU. (Cont'd)
AR
QSL ? HR WK NR 21
V DKSL DE ALSK

10217 kHz, 15-02, 0211 UTC

R QSA 2 C = 1536 AR K
R = 3210 AR K
OK .. K 7G GA K
R HR 7G GA 7G NR REEEE
7G NR 29/CCK CK 99 32 0215 0950 RMKS R464 TO G468 TO EEEEEE
RMKS R464 TO G468 TO P466 TO Y464 TO D464 TO P464 K
R GA
WGA = =
T7.T N? = =
T7TU ADA3 5D47 7NU D74A 5667 3T34 D75U TUU. TTTA 3D6T (Cont'd)

3777 kHz, 20-02, 1256 UTC

A53A A.U6 U.55 7363 6A43 DA54 7N47 UTUU (Cont'd)
III = 763N 4UD6 6AAA .4D6 3577 444T TAUA TAT3 NNNN TTAD (Cont'd)
III = NT.5 A7A4 N7T6 3.A5 TNT6 TD7U 6DT4 U3U4 NNNN TTAN (Cont'd)
III = T756 54D. 53U7 D5UU T4N5 A343 T5T4 6DT7 NNNN TTUT (Cont'd)
AR (Note how every 9th group is NNNN)

3744 kHz, 13-02, 1807 UTC

DE T6RS R QSA 1 QSA ?
R NGY3 DE T6RS R QSA 1 QSA ? K
R QSA AR EEEEEE R QSA 2 U QRW S 7YRF KP HR K
R K
AGN
R QSA 2 U BT TEEEEEEE AR EEEEEE R QSA AR EEEEEE
R QSA 2 U QRW EEEEE Y EEEEEEE R QSA 2 U 7YRF
KP HR K
R QSA 2 U QRW 7YRF KP HR K
R HR WK NR 0037 K
NIL EEEEEE R HR WK NR .5E EEEEEE R HR WK NR 0512 K
R HR NIL SK R HR NIL SK
VV 7YRF DE AW3C K. VV 7YRF DE AW3C K VV 7YRF EEEEEEEE
VV 7YRF DE AW3C K VV 7YRF DE EEEE WEEEEEEE T4 EEEEEEEE
VV 7YRF DE AW3C K
F M8 DE MSEEEEE
R FG.. DE E 3... R QSA . QSA ? K (Extremely weak signal)
R QSA 2 U QRW 3CFT KP HR K
R QSA 2 U QRW EEEEEEE R QEEEEEEE R QSA 2 U QRW 3CFT KP
HR K R HR WK NR 0037 K R WK HR 0.0. K R HR NIL SK. R HR NIL SK
VV 3CFT DE AW3C K VV 3GFT DE AW3C K (Sent 3G instead of 3C)
VV 3CFT DE WEEEEEEEEE VV 3CFT DE AW3C K
VV 3CFT DE AW3C K VV 3CFT DE AW3C K
(Other station there, but too weak to copy)
R QSA 2 U QRW LQ8S KP HR K
V EEEEEE R QSA 2 HR WK NR 003EEEE K
R HR NIL SK

5292 kHz, 13-02, 1750 UTC

74UT A6NT 33? 37N4 3N53 D7NT (Cont'd)
AR
AGN
R 86W = = T43.. AR
R R 86W = 3447 AR K
AGN
R 76W = TA36 AR K (Cont'd repeat groups)
R R I SU GB

3777//4532 kHz, 16-02, 1808 UTC

37NT DN33 .5.4 75AT D577 5665 (Cont'd)
III = 4N73 U673 AADA (Cont'd)
III = 35DA 5AAA 343A 5NDN (Cont'd)
III = 5646 5DT7 3DUN NU3N (Cont'd)
III = 6.33 AA74 .T6D 4TT7 (Cont'd)
III = 45DU 54U6 ? 54U7 DDAU TU3A 3UAT T.5. .TN7 6D4A NNNN (Cont'd)
AR
V M8JF DE RIS9
(Every 9th group after III = is NNNN)

8073 kHz, 17-02, 1140 UTC

V BNGC (x3) DE XSV85 (x2)
HR MSG GA
NR 0164 CK 303 35 0217 1623 = =
TA7 3U6 3... 773 354 4? 4T3 NN3 446 4T6 73D 434 AN3 D4T 3NN 344? 447
(Cont'd)
AR

3642 kHz, 20-02, 1354 UTC

VV HR SVC GA NR 120 2145 RMKS 3508 TO 3338 /3528 =
COMM/2230/LZ8.7A8/3501/3338 AR
VV HR SVC GA NR 80 2145 RMKS 3508 TO 33EE RMKS 3508 TO 3368/3528 =
COMM/2230/LZ8806 8/3508/3368 AR QSL ?
HR WK NR 30

3729 kHz, 24-02, 1538 UTC

R RPT 25W K
R RPT 95W K
R RPT R OK S EEEEE OK QSL 2329 K EEEEE QSL 2339 K
R R R RPT 55W (Different station)
R QSL 2340 K
R QSL 2341 K
R GA
MSG NR 133 CK 95 93 0224 2342 RMKS 6691 TO 6474 K
R GA =
UN5T 63U5 73A6 7A6D UDN3 3TTU TTUA 6UNN T5A3 TAT6 6UN7 (Cont'd)
(Due to frequency being used, signal strength and remote tuner being used, these stations are probably from the RIS9 family)
AR K
R R R R

6666 kHz, 24-02, 1511 UTC

N HR 7G GA
R GA (Both stations on this frequency)
= = NR 0750 CK 90 66 22 2111 RMKS 1400 TO 2222 = =
5NU6 N5UT TA3U 45N7 37DT 46A7 U4A7 DA34 N56D 63DT (Cont'd)
AR K
QSL QSL
R RPT
QSL 2315 K K
R R R R
U O55EEEEE U M EEEE U MSG GA K
U MSG GA K
R NN K
MSG GA K
U MSG GA K
SK
U MSG GA K
= 5NU6 N5EEEE D NW NW
05 05 05 05 (Cont'd)
= =
05 05 05 05 (Cont'd)
IEC (Normally sent during exercise)
HE SNDTUBH7T DA
05 05 05 (Cont'd)
= = = TIETE X =
MSG NI TT T TX = U4
05 05 05 (Cont'd)
= = T ==
NR 07II T
NR 0750 CK 65 .830301718 17..2 0 (Same msg nr as above but different group count)
NR 0750 CK

8073 kHz, 25-02, 1135 UTC

V BNGC (x3) DE XSV85 (x2)
HR 7G GA
NR 0180 CK 210 35 0225 1633 =
TU5 3U6 3AN .U7 TAU 773 354 363 4T6 (Cont'd)

6456//8527 kHz, 25-02, 0156 UTC

CQ DP91 V
E DP E CQ DP91 V
E A CQ DP91 V
CQ (x3) DE DP91 (x2) V
HR E TTT E HR
HR NIL SK GB (x3)

3777//4532 kHz, 20-02, 1735 UTC

3N73 4366 63DN 676U U435 (Cont'd)
AR
CQ 63/7381 7115 7709
MSG NR 2083 CK 95 40 0221 0130 RMKS 7919 TO 7381 7115 7709 =
3D7U 4333 TNNU NT63 374A N547 D7D6 6DT3 NNNN TTAA 7U57 (Cont'd)
AR

7788 kHz, 20-02, 0807 UTC

736A 46N3 A745 UT34 TD7U 4DA5 (Cont'd)
AR K
NR U MSG GA K
NR GA
NR R RPT 6W K
NR R RPT RPT 52W K
NR RPT RPT 59W K
QSL 1615 QSL 1615 K
NRNF HR NR 224 K
RRR SK K

6456//8527 kHz, 24-02, 0200 UTC

E A N4 ANAT.91
E A A C E CNP9.E A DA9WE
T DAE CCQ. 91 (Seems to be having problems with round slip)
A CQ DP91 V

7554 kHz, 24-02, 1033 UTC

4D3 3DU III
TA3 773 354 37U 4T3 446 467 N3D 446 4D6 75D 4D3 3DU
AGN
NR 162 CK 113 35 0000 22 40715
7U5 UT3 TU. 3U4 3A4 .. 773 353 4T7 445 4D6 33T (Cont'd)
III TA3 773 354 37U 4T3 3446 467 N3D 446 4D6 75D 4D3 3DU
ZNN SK (This type of transmission normally sent by XSV85)

8073 kHz, 20-02, 1134 UTC

V BNGC (x3) DE XSV85 (x2)
HR MSG GA NR 1670 CK 138 35 0224 1546 =
..4 3U6 3.. 3.7 TAU 773 TA7 77U? 773 35. (Cont'd)
AR 7G AGN
NR 0178 CK 138 35 0224 ... (Cont'd)
AR AR

4892 kHz, 25-02, 1123 UTC

MSG NR 75 CK 99 93 0225 1930 RMKS CQ = = =
756D TUN6 UA64 5D6 U6TN 7D3A AUT7 D45N N46A D6N5 (Cont'd)
E HE 0GVZ DE X GVZQSL EEEEEE
0GVZ QSL EEEEEE
E HE E HE 0LNV QSL AR E
HL E HL MTE HL M0 QSL AR
E HL MOQSL EEEEEE
HL M0QSL EEEEE
E J = .. QSL AR E
JXQU TE J = QSL EEEEEE
E AN4T SK SK

3777//4532 kHz, 26-02, 1430 UTC

V M8JF (x3) DE RIS9 (x2)
N353 76A6 73A3 7DDA 4N3D 6T4D U5UT
III = T7T4 7NT4 TAD6 U7NU A6T3 45T6 3NAA 7AN6 NNNN TT33 (Cont'd)
AR

4676 kHz, 27-02, 1331 UTC

MSG GA MSG NR 461 CK 804 0227 80EEEEEEE
MSG GA MSG NR 4361 CK 804 0227 .1. RMKS 6865451 TO 6865452 =
4D6. D4N7 DN74 U3A7 7AN4 TU3D 3T5N (Cont'd)

3626 kHz, 28-02, 1409 UTC

DE ZVLY K
QSA 1 K
R R HR KP QSA 2 K
R OK
SK
OK SK PSE
SK SK
05 05 = =
4..735DN47 ND7.457D667D8 (1410z)
NNNN N.= =
44567D TTTTTNNNT
05 7G 7G G GNS5 .TT T 77D G.D SEEEEE
05 05 05 (Cont'd)
667 05 05 05 7DNT5 . N.TTTTT 05 05 05

16753 kHz, 26-02, 0955 UTC

TND4 AR
TSTC 19 EEEEE TCAN TC19W = 7A5D AR
01 = 6N5D (Other station also on this frequency)
TC 6. (Slightly different format for repeating groups)
= 36T4
81 0TC ..
= 7N43 AR
TC AA 7
= 57DN C
TC 76
= 357T
QSL ?
FM 57A (Format seems to suggest DP91 family stations)
T QSL ?
JT700
R SK
R

4681 kHz, 27-02, 1257 UTC

NT3D 736U T..4 5UNA UA56 TN3D
AR K
N QSL 2.07 QSL 2107 K
MSG GA K
N MSG NR 6319 CK 80 9 0227 2100 RMKS 6865453 TO 6865456 =
DNT6 7TDN 34NT 7.U. (Cont'd)
AR QSL ? K
N QSL 11/ EEEEE
QSL 2112 K QSL 2112 K
N U MSG GA K
N MSG NR 3636 CK 100 34 0227 2100 RMKS 6865456 TO 6865453 =
A436 465D NT3U 54DA 5AD? 5ATN 67DT 67AT 7A5U T5N3 35U7 (Cont'd)
AR K
N QSL 2117 QSL 2117 K
N GA K
MSG NR 6320 CK 100 34 0227 2100 RMKS 6865453 TO 6865456 =
6D.U D.3N T6D3 5ND4 (Cont'd)
AR QSL ? K
N QSL 2122 QSL 2122 K
N U MSG GA K
MSG NR 3637 CK 100 14 0227 2100 RMKS 6865456 TO 6865453 =
ANU3 46D3 D34A ND43 ? ND45 UA3D 3TD7 (Cont'd)
AR K (1328z)
N QSL 2127 QSL 2127 K
N GA K
MSG NR 6321 CK 100 14 0227 2... RMKS 6865453 TO 6865456 =
3TAU 5D76 6DTN 37D5 UD54 6DA5 U4A7 UNDA (Cont'd)
AR QSL ? K
N QSL 2132 QSL 2132 K
N OK KP
N SK

MC03
Chinese Air Defense

4026 kHz, 10-02, 1623 UTC, i.p.
U5U U.5 ND4 4DD ND6N TN7 U3
U5U UAAN34 DAN477U T54 U4
U5U UT36D6 DAN35N5 A7A U4

UM01
Unid CQ station

3580 kHz, location Siberia

02-02, 2221 UTC CQ M 16	24-02, 2023 UTC CQ M 4	7161 kHz, 24-02, 1031 UTC CQ M 4 (harmonic)
07-02, 0153 UTC CQ M 11	25-02, 0149 UTC CQ M 4	10741 kHz, 07-02, 0220 UTC CQ M 12 (harmonic)
07-02, 0220 UTC CQ M 12	25-02, 1117 UTC CQ M 4	10741 kHz, 07-02, 1451 UTC CQ M 8 (harmonic)
07-02, 1451 UTC CQ M 8	26-02, 0150 UTC CQ M 4	10741 kHz, 08-02, 0202 UTC CQ M 5 (harmonic)
08-02, 0202 UTC CQ M 5	26-02, 0951 UTC CQ M 3	10741 kHz, 08-02, 0239 UTC CQ M 6 (harmonic)
08-02, 0239 UTC CQ M 6	26-02, 1134 UTC CQ M 3	
22-02, 1445 UTC CQ M 3	26-02, 2215 UTC CQ M 4	
22-02, 2015 UTC CQ M 13 *)	27-02, 1523 UTC CQ M 5	
23-02, 1059 UTC CQ M 12	27-02, 1945 UTC CQ M 4	
23-02, 1936 UTC CQ M 10	28-02, 0647 UTC CQ M 4	
24-02, 0150 UTC CQ M 8	28-02, 1433 UTC CQ M 4	
24-02, 1010 UTC CQ M 4	28-02, 1709 UTC CQ M 4	
24-02, 1532 UTC CQ M 4		

*) Jumped from 3 to 13.

Note: the station was down between 9 and 22 February and sent this month only CQ M calls, no CQ P.

UM10
Unid 10-minutes net

3263 kHz, 08-02, 1530 UTC Q7JN	3782 kHz, 20-02, 1733 UTC VI4T
3263 kHz, 08-02, 2127 UTC Q7JN	3281 kHz, 22-02, 1500 UTC VI4T
3281 kHz, 08-02, 1502 UTC VI4T //3782 kHz (new callsign)	3281 kHz, 23-02, 1938 UTC VI4T
3281 kHz, 10-02, 1935 UTC VI4T //3782 kHz	3782 kHz, 24-02, 2045 UTC VI4T
3281 kHz, 11-02, 1734 UTC VI4T	3782 kHz, 24-02, 2100 UTC VI4T
3281 kHz, 12-02, 1439 UTC VI4T	3782 kHz, 26-02, 1430 UTC VI4T
3281 kHz, 18-02, 1936 UTC VI4T	3263 kHz, 28-02, 1427 UTC Q7JN
3263 kHz, 20-02, 1727 UTC Q7JN	3263 kHz, 28-02, 1704 UTC Q7JN

VARIOUS MODES

HM01
Dirección General de Inteligencia

Between 16 and 24 February they have discontinued the one up of the 5th digit.
See the Logs Section for all the logs.

M42 & X06

Russian Government & Intelligence

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

M42 – various modes

8184 kHz, 26-01, 1408 UTC   Russian Gov. station BZL26, Baudot 50/500
22965 kHz, 15-02, 1704 UTC Russian diplo/intel from Cuba: 11100 00224 15674 15002 01239, Baudot 200/50
5225 kHz, 16-02, 0611 UTC   RVR39: Russian PtP circuit, works daily with RTW54 on qsx 4540 kHz, RUS-ARQ 100/500
5440 kHz, 16-02, 0611 UTC   RWD59: Russian PtP circuit, Moscow area. RUS-ARQ 100/500
5325 kHz, 16-02, 0611 UTC   RND79: Russian PtP circuit, Moscow area. Daily traffic with RFT3, RFT6 or RBW. RUS-ARQ 100/500
6795 kHz, 16-02, 0618 UTC   RXZ32: Russian gov/mil, prob St.Petersburg area. Ends morning schedule and into its usual idle.
                                    FSK 50/500
7625 kHz, 17-02, 0923 UTC   RRL2: Russian PtP link, Western Russia, FSK 100/500
16344 kHz, 19-02, 1405 UTC Russian Intel/Diplo, CROWD-36
3205 kHz, 19-02, 1753 UTC   RNI2: Russian PtP link RYF2 de RNI2 qsa?, RYF2 de RNI2 ok QSA4 nil GB SK, FSK 50/500
6830 kHz, 24-02, 0654 UTC   RWI: Russian PtP link RYF2 RYF2 RYF2 DE RWI RWI then into F1B 100/500 idle, CW
6950 kHz, 24-02, 0715 UTC   RZT71: Russian PtP link RCZ32 DE RZT71 ZHC? into slow reversals and start of data exchange
9140 kHz, 24-02, 0730 UTC   RUU70: Russian PtP link RRF30 RRF30 RRF30 DE RUU70 RUU70 ZHC? ZHC? into RUS-ARQ 100/500

M42a – GRU HFDF-net

7697 kHz, 08-02, 1602 UTC
VVV 3K NWA 32113 26291 Ä 19933 K
VVV QSA3 K K OK ÄÄÄ OK K

M42b – FSK 50/500

5750 kHz, 05-02, 0720 UTC, FSK 50/500 + Ops chat in CW. Message is a bit garlbed.
801 129 05 0655 2563
04430 60790 27868 053821 47731 39113 47137 77500 19482 11103
38 93283 42365 60730 49802 39808 98230 84803 53613 94569
46369 73233 55549 45209 97120 48195 70524 57503 77892 582.5
34267 07673 08025 56187 53908001441020176 01636 22875 01600
36766 89759 92186 31420 33060 57953 56303 24911 55747 =50=
24355 03094081002 57295 56393 85963 09333 05237 07565 65925
283234 71278 05150 52297 67567 40468 84598 24223 32484 48929
62478 23753 43146 90270 77756 09333 51082 02999 13538 05033
93125 53891 52581 39276 54755 90407 84299 99141 24427 64076
22005 27097 01090 82483 70095 50999 56017065475 29598 74604 =100=
65048 24206 24247 27387 62666 98344 92512 56931 85365 42576
62693 67319 95522 80365 21517 19563 00876 45212 11799 21653
75784 44312 14618 58306 53135 04435 58824 47428 33691
-0723(
Followed by ops chat in CW:
CFM QRU ?K. ZVPK. BK QRVK
RPT PBLK

M42c – FSK 200/500

4032/5206/6797 kHz, 05-02, 2000/2010/2020 UTC
RYRYRY 00000++++++++++162)5761

19439/17454/15815 kHz, 07-02/14-02/28-02, 1300/1310/1320 UTC
RYRYRY 00000++++++++++162)5761

9151/7639/5249 kHz, 14-02/28-02, 1810/1820/1830 UTC
RYRYRY 00000++++++++++162)5761

M42d – FSK 200/1000

11046/9242/7317 kHz, 02-02, 0700/0710/0720 UTC
11162/9162/7615 kHz, 02-02, 1200/1210/1220 UTC
Block No 0 : Total Message Size 37 blocks : This transmission contains one message.
Block No 1 : Link ID 45136 : 30th of month : Msg Number 220 : Msg Type 07145 : Group Count (?) 243
17897 55139 34568 25093 55182 04062 62589 15071

11162/9162/7615 kHz, 03-02, 1200/1210/1220 UTC
Block No 0 : Total Message Size 50 blocks : This transmission contains 2 messages.
Block No 1 : Link ID 45137 : 2nd of month : Msg Number 222 : Msg Type 07145 : Group Count (?) 165
05900 54873 20234 33093 09959 33000 01405 23237

7317 kHz, 04-02, 0820 UTC
Block No 0 : Total Message Size 38 blocks : This transmission contains one message.
Block No 1 : Link ID 45136 : 3rd of month : Msg Number 227 : Msg Type 07145 : Group Count (?) 253
27716 04008 02001 26667 55182 34872 05199 18583

11046/9242/7317 kHz, 05-02, 0700/0710/0720 UTC
11162/9162/7615 kHz, 05-02, 1200/1210/1220 UTC
Block No 0 : Total Message Size 50 blocks : This transmission contains 2 messages.
Block No 1 : Link ID 45137 : 4th of month : Msg Number 230 : Msg Type 07145 : Group Count (?) 167
34852 21624 60413 27843 01146 02381 27762 33572

11046/9242/7317 kHz, 06-02, 0700/0710/0720 UTC
Block No 0 : Total Message Size 4 blocks : This transmission contains one message.
Block No 1 : Link ID 45136 : 6th of month : Msg Number 007 : Msg Type 07145 : Group Count (?) 4
23648 00000 00000 00246 65099 33610 00893 04712

11046/9242/7317 kHz, 09-02, 0700/0710/0720 UTC
Block No 0 : Total Message Size 38 blocks : This transmission contains one message.
Block No 1 : Link ID 45136 : 6th of month : Msg Number 237 : Msg Type 07145 : Group Count (?) 249
30864 32944 17050 10138 58024 35024 27983 05351

11162/9162/7615 kHz, 09-02, 1200/1210/1220 UTC
Msg No 237/6th Type 07145 Gr249 on Link 45136: 30864 32944 17050 10138 60074 35312 60767 04327

16320/14880 kHz, 10-02, 0150/0230 UTC
Block No 0 : Total Message Size 37 blocks : This transmission contains one message.
Block No 1 : Link ID 41018 : 10th of month : Msg Number 055 : Msg Type 07145 : Group Count (?) 245
32768 55943 58596 20376 21686 01659 29089 18951

11162/9162/7615 kHz, 10-02, 1200/1210/1220 UTC
Block No 0 : Total Message Size 54 blocks : This transmission contains 2 messages.
Block No 1 : Link ID 45137 : 9th of month : Msg Number 242 : Msg Type 07145 : Group Count (?) 201
01716 60425 37939 13822 01146 33488 40426 05548

11469/9214/7635 kHz, 10-02, 1650/1700/1710 UTC
Block No 0 : Total Message Size 4 blocks : This transmission contains one message.
Block No 1 : Link ID 20501 : 10th of month : Msg Number 140 : Msg Type 07145 : Group Count (?) 4
56988 00000 00000 03285 12857 03353 00893 01886

11046/9242/7317 kHz, 11-02, 0700/0710/0720 UTC
Block No 0 : Total Message Size 39 blocks : This transmission contains one message.
Block No 1 : Link ID 45137 : 10th of month : Msg Number 247 : Msg Type 07145 : Group Count (?) 255
38812 22071 54695 37245 01146 35229 39986 08665

19652/17459/15867 kHz, 11-02, 0800/0810/0820 UTC
Block No 0 : Total Message Size 4 blocks : This transmission contains one message.
Block No 1 : Link ID 45075 : 11th of month : Msg Number 107 : Msg Type 07145 : Group Count (?) 4
18572 00000 00000 01566 19299 33027 00893 07461

19882/17487/15619 kHz, 11-02, 1000/1010/1020 UTC
Block No 0 : Total Message Size 4 blocks : This transmission contains one message.
Block No 1 : Link ID 49202 : 11th of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 4
22796 00000 00000 02918 28271 35298 00893 20084

11162/9162/7615 kHz, 11-02, 1200/1210/1220 UTC
Block No 0 : Total Message Size 39 blocks : This transmission contains one message.
Block No 1 : Link ID 45137 : 10th of month : Msg Number 247 : Msg Type 07145 : Group Count (?) 255
38812 22071 54695 37245 01146 35229 39986 08665

10252/9335/7461 kHz, 11-02, 1800/1810/1820
Block No 0 : Total Message Size 43 blocks : This transmission contains one message.
Block No 1 : Link ID 45136 : 10th of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 29
26624 24725 35378 35893 65099 39069 03478 61505

11046/9242/7317 kHz, 12-02, 0700/0710/0720 UTC
Block No 0 : Total Message Size 51 blocks : This transmission contains 2 messages.
Block No 1 : Link ID 45136 : 11th of month : Msg Number 005 : Msg Type 07145 : Group Count (?) 179
44384 43296 39426 17375 58024 04000 46329 00878

11046/9242/7317 kHz, 13-02, 0700/0710/0720 UTC
Block No 0 : Total Message Size 4 blocks : This transmission contains one message.
Block No 1 : Link ID 45136 : 11th of month : Msg Number 057 : Msg Type 07145 : Group Count (?) 4
07592 00000 00000 02238 58024 33009 00893 20897

20436/18911/17427 kHz, 14-02, 1100/1110/1120 UTC
Block No 0 : Total Message Size 44 blocks : This transmission contains one message.
Block No 1 : Link ID 36882 : 12th of month : Msg Number 005 : Msg Type 07145 : Group Count (?) 38
08884 10240 38747 14345 31234 05800 02601 17040

22876/2021418251 kHz, 14-02, 1500/1510/1520 UTC
Block No 0 : Total Message Size 4 blocks : This transmission contains one message.
Block No 1 : Link ID 32821 : 14th of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 4
26852 00000 00000 02365 31945 34134 00893 11320

20892 kHz, 15-02, 1000 UTC
Block No 0 : Total Message Size 15 blocks : This transmission contains one message.
Block No 1 : Link ID 45057 : 12th of month : Msg Number 170 : Msg Type 07145 : Group Count (?) 91
10484 64646 19004 11938 44730 03308 01422 04934

14368/12081/10212 kHz, 15-02, 1530/1540/1550 UTC
Block No 0 : Total Message Size 4 blocks : This transmission contains one message.
Block No 1 : Link ID 20501 : 15th of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 4
39180 00000 00000 01786 12857 33887 00893 29184

11046/9242/7317 kHz, 16-02, 0700/0710/0720 UTC
Block No 0 : Total Message Size 37 blocks : This transmission contains one message.
Block No 1 : Link ID 45137 : 13th of month : Msg Number 012 : Msg Type 07145 : Group Count (?) 239
22592 63492 42214 39485 01146 34710 20952 45647

11162/9162/7615 kHz, 16-02, 1200/1210/1220 UTC
Block No 0 : Total Message Size 37 blocks : This transmission contains one message.
Block No 1 : Link ID 45137 : 13th of month : Msg Number 012 : Msg Type 07145 : Group Count (?) 239
22592 63492 42214 39485 01146 34710 20952 45647

7317 kHz, 17-02, 0720 UTC
Block No 0 : Total Message Size 46 blocks : This transmission contains 2 messages.
Block No 1 : Link ID 45136 : 16th of month : Msg Number 015 : Msg Type 07145 : Group Count (?) 151
23932 60658 62682 09297 65099 01263 34233 33270

11162/9162/7615 kHz, 17-02, 1200/1210/1220 UTC
Block No 0 : Total Message Size 46 blocks : This transmission contains 2 messages.
Block No 1 : Link ID 45136 : 16th of month : Msg Number 015 : Msg Type 07145 : Group Count (?) 151
23932 60658 62682 09297 65099 01263 34233 33270

17452/15879 kHz, 17-02, 1410/1420 UTC
Block No 0 : Total Message Size 4 blocks : This transmission contains one message.
Block No 1 : Link ID 32799 : 17th of month : Msg Number 090 : Msg Type 07145 : Group Count (?) 4
55564 00000 00000 02188 09187 01264 00893 24624

11469/9216/7637 kHz,17-02, 1650/1700/1710 UTC
Block No 0 : Total Message Size 4 blocks : This transmission contains one message.
Block No 1 : Link ID 20501 : 17th of month : Msg Number 140 : Msg Type 07145 : Group Count (?) 4
19108 00000 00000 02921 16418 01334 00893 39557

6834/5454 kHz, 17-02, 2200//2210 UTC
Block No 0 : Total Message Size 4 blocks : This transmission contains one message.
Block No 1 : Link ID 45057 : 17th of month : Msg Number 007 : Msg Type 07145 : Group Count (?) 4
48364 00000 00000 00780 59621 33732 00893 28800

11046/9242 kHz, 18-02, 0700/0710 UTC
Block No 0 : Total Message Size 38 blocks : This transmission contains one message.
Block No 1 : Link ID 45136 : 17th of month : Msg Number 022 : Msg Type 07145 : Group Count (?) 253
32520 62217 17271 23703 55182 35477 11045 04324

11162/9162/7615 kHz, 18-02, 1200/1210/1220 UTC
Block No 0 : Total Message Size 38 blocks : This transmission contains one message.
Block No 1 : Link ID 45136 : 17th of month : Msg Number 022 : Msg Type 07145 : Group Count (?) 253
32520 62217 17271 23703 55182 35477 11045 04324

14517 kHz, 18-02,5 1250 UTC
Block No 0 : Total Message Size 4 blocks : This transmission contains one message.
Block No 1 : Link ID 53277 : 18th of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 4
46204 00000 00000 02278 19866 32939 00893 33797

11046/9242/7317 kHz, 19-02, 0700/0710/0720 UTC
Block No 0 : Total Message Size 55 blocks : This transmission contains 2 messages.
Block No 1 : Link ID 45136 : 18th of month : Msg Number 025 : Msg Type 07145 : Group Count (?) 183
33556 49202 18741 30747 58024 01129 52033 33186

11162/9162/7615 kHz, 19-02, 1200/1210/1220 UTC
Block No 0 : Total Message Size 55 blocks : This transmission contains 2 messages.
Block No 1 : Link ID 45136 : 18th of month : Msg Number 025 : Msg Type 07145 : Group Count (?) 183
33556 49202 18741 30747 58024 01129 52033 33186

20437/18912/17428 kHz, 21-02, 1100/1110/1120 UTC
Msg No 007/20th Type 07145 GR11 on Link 36882. 58652 44288 07569 15916 34728 36204 35917 14244

22878/20216/18253 kHz, 21-02, 1500/1510/1520 UTC
Msg No 047/21st Type 07145 GR4 on Link 32821. 61272 00000 00000 01786 16767 34185 00893 64141

11046/9242/7317 kHz, 23-02, 0700/0710/0720 UTC
Block No 0 : Total Message Size 43 blocks : This transmission contains one message.
Block No 1 : Link ID 45137 : 19th of month : Msg Number 030 : Msg Type 07145 : Group Count (?) 35
29460 24102 16573 14133 01146 07513 27533 60889

11162/9162/7615 kHz, 23-02, 1200/1210/1220 UTC
Block No 0 : Total Message Size 43 blocks : This transmission contains one message.
Block No 1 : Link ID 45137 : 19th of month : Msg Number 030 : Msg Type 07145 : Group Count (?) 35
29460 24102 16573 14133 01146 07513 27533 60889

11162/9162/7615 kHz, 24-02, 1200/1210/1220 UTC
Block No 0 : Total Message Size 48 blocks : This transmission contains 2 messages.
Block No 1 : Link ID 45137 : 20th of month : Msg Number 035 : Msg Type 07145 : Group Count (?) 155
10444 64994 03767 14377 07583 00042 32313 11490

11469/9214/7635 kHz, 24-02, 1650/1700/1710 UTC
Block No 0 : Total Message Size 4 blocks : This transmission contains one message.
Block No 1 : Link ID 20501 : 24th of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 4
19104 00000 00000 00034 16418 32909 00893 11160

20736/18639/16251 kHz, 25-02, 0900/0910/0920 UTC
Block No 0 : Total Message Size 19 blocks : This transmission contains one message.
Block No 1 : Link ID 16404 : 13th of month : Msg Number 210 : Msg Type 07145 : Group Count (?) 114
35372 20130 63717 35776 64146 03203 42579 22376

19982/17487/15619 kHz, 25-02, 1000/1010/1020 UTC
Block No 0 : Total Message Size 4 blocks : This transmission contains one message.
Block No 1 : Link ID 49202 : 25th of month : Msg Number 110 : Msg Type 07145 : Group Count (?) 4
22796 00000 00000 00811 28271 03652 00893 37059

20739/18562/16281 kHz, 25-02, 1015/1025/1035 UTC
Block No 0 : Total Message Size 4 blocks : This transmission contains one message.
Block No 1 : Link ID 20492 : 25th of month : Msg Number 065 : Msg Type 07145 : Group Count (?) 4
02276 00000 00000 01707 31284 03254 00893 11616

11162/9162/7615 kHz, 25-02, 1200/1210/1220 UTC
Block No 0 : Total Message Size 34 blocks : This transmission contains one message.
Block No 1 : Link ID 45137 : 24th of month : Msg Number 040 : Msg Type 07145 : Group Count (?) 223
54184 01109 06811 18736 07583 01761 16277 60549

11046/9242/7317 kHz, 26-02, 0700/0710/0720 UTC
Block No 0 : Total Message Size 55 blocks : This transmission contains 2 messages.
Block No 1 : Link ID 45136 : 25th of month : Msg Number 037 : Msg Type 07145 : Group Count (?) 165
17896 41651 20765 23688 55182 02739 25970 06827

16152/14481/12194 kHz, 26-02, 1330/1340/1350 UTC
Block No 0 : Total Message Size 4 blocks : This transmission contains one message.
Block No 1 : Link ID 49237 : 26th of month : Msg Number 235 : Msg Type 07145 : Group Count (?) 4
55597 00000 00000 00831 49619 00314 00893 21651

18046/16258/14349 kHz, 28-02, 0900/0910/0920 UTC
Block No 0 : Total Message Size 13 blocks : This transmission contains one message.
Block No 1 : Link ID 45114 : 27th of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 78
28189 36632 16475 28183 56490 33449 13463 33203

20892/18427/16151 kHz, 28-02, 1000/1010/1020 UTC
Block No 0 : Total Message Size 15 blocks : This transmission contains one message.
Block No 1 : Link ID 45057 : 12th of month : Msg Number 170 : Msg Type 07145 : Group Count (?) 91
10484 64646 19004 11938 44799 03325 01934 05087

20436/18911/17427 kHz, 28-02, 1100/1110/1120 UTC
Block No 0 : Total Message Size 46 blocks : This transmission contains one message.
Block No 1 : Link ID 36882 : 27th of month : Msg Number 010 : Msg Type 07145 : Group Count (?) 58
13129 12640 06454 12294 10260 05329 20883 10493

22876/20214/18251 kHz, 28-02, 1500/1510/1520 UTC
Note that they are using different transmitters for the transmissions. While 20214 was still on the air, 18251 came up.
Block No 0 : Total Message Size 4 blocks : This transmission contains one message.
Block No 1 : Link ID 32821 : 28th of month : Msg Number 002 : Msg Type 07145 : Group Count (?) 4
19105 00000 00000 00825 16767 36820 00893 43721

X06 - Mazielka

X06	10219 kHz, 01-02, 1741 UTC, Sun	Mazielka. Sequence: 1--6--
X06	20655 kHz, 03-02, 1206 UTC, Tue	Mazielka. Sequence: 325614
X06	7691 kHz, 03-02, 2203 UTC, Tue	Mazielka. Sequence: 351264
X06	18197 kHz, 04-02, 1224 UTC, Wed	Mazielka
X06	9128 kHz, 05-02, 1857 UTC, Thu	Mazielka. Sequence: 164253
X06	14501 kHz, 06-02, 0956 UTC, Fri	Mazielka. Sequence: 361245
X06	14824 kHz, 06-02, 1032 UTC, Fri	Mazielka. Sequence: 625413
X06	9163 kHz, 08-02, 1747 UTC, Sun	Mazielka
X06	19235 kHz, 09-02, 1044 UTC, Mon	Mazielka. Sequence: 463125
X06	13985 kHz, 11-02, 0859 UTC, Wed	Mazielka. Sequence: 134265
X06	16116 kHz, 11-02, 0919 UTC, Wed	Mazielka. Sequence: 134265
X06	14550 kHz, 12-02, 0835 UTC, Thu	Mazielka. Sequence: 153624
X06	14947 kHz, 22-02, 0802 UTC. Sun	Mazielka. Sequence: 351264
X06	14944 kHz, 26-02, 1227 UTC, Thu	Mazielka. Sequence: 621543
X06b	12300 kHz, 04-02, 0806 UTC, Wed	Mazielka. Sequence: 1--2--
X06b	10219 kHz, 08-02, 1737 UTC, Sun	Mazielka. Sequence: 6--1--
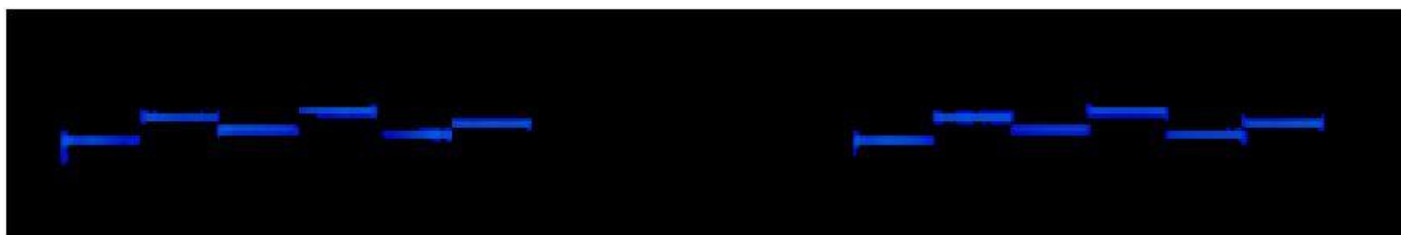
Mazielka 153624

XPA

13509/14609 kHz, 04-02, 0720/0740 UTC
456 456 456 000
02894 00001 00000 10140

6823 kHz, 05-02, 1849 UTC
158 158 158 000
03551 00001 00000 10140.

14609 kHz, 07-02, 0740 UTC
456 456 456 000
06081 00001 00000 10140

13509/14609 kHz, 21-02, 0720/0740 UTC
456 456 456 000
08575 00001 00000 10140

11409/13509/14609 kHz, 11-02/14-02, 0700/0720/0740 UTC

456 456 456 1

09410 00253 49732 00033 59242 56544 75022 49285 48295 91842
44395 49813 40747 27279 92640 77544 85852 26445 27134 76631
59472 73260 60830 50380 49312 05673 87588 86411 39978 86873
15021 17735 19285 13872 38259 95851 82244 32112 72548 76311
90425 18663 02287 65018 80351 18213 34575 41960 15030 67267
89034 94888 91755 07246 21589 37008 72006 05967 40157 71171
45081 85340 86352 76118 60262 42846 62374 20378 86687 88639
55989 84541 91643 26465 96001 77160 55890 60922 88912 56342
69705 41760 42698 41986 92797 37317 25372 86905 67795 69350
41361 67429 63265 43643 65794 53621 74987 74738 69331 08003
92562 44647 59750 07461 63207 92515 19769 03785 07328 39317
12219 39078 92464 77290 51634 54320 63744 97721 58955 65265
64299 73283 03003 17519 52867 14177 37335 37670 73939 82982
61278 17370 22208 83892 23453 51128 83354 06976 31555 11738
03849 39360 60997 24266 64371 76407 99108 38725 73953 74994
25127 01761 97881 72303 48489 82583 11994 92901 85455 87306
65209 14567 78456 49804 99799 02826 55635 70862 19217 44191
02678 14317 88153 96042 47181 62283 11591 16959 20835 80557
33053 20613 71331 57461 79667 53706 75098 65820 24561 66311
97758 00604 76929 92204 27672 75131 80003 22716 80904 67796
02036 07921 11967 60394 33942 18120 53976 21499 39591 17178
91076 23884 43187 63783 23112 09331 93458 63844 09384 66163
10398 43776 17132 13730 68037 65297 89034 47224 99490 38759
67972 44398 81288 68375 29877 07279 19465 11022 30632 38733
14763 99351 48823 41856 96422 37192 02831 04749 96425 47020
71165 49546 18282 26977 20529 23040

11409/13509/14609 kHz, 28-02, 0700/0720/0740 UTC
Incorrect group count or incorrect nr of groups.

456 456 456 1

00974 00197 54418 77385 90646 29470 53410 14962 03146 54189
70568 30777 25564 20812 24919 46595 53119 87347 52360 34742
42411 98724 26448 11826 20790 40003 53530 92474 85565 64135
70096 04872 27890 25610 04639 35525 92686 34052 91631 48995
93969 85809 63996 24569 61045 38006 33153 40796 48946 09847
54848 30791 82166 26918 21595 49292 99533 74500 82755 80520
10378 15915 54446 44968 29498 04582 87071 40936 25497 99761
08076 91135 33355 87798 18830 04899 87973 65573 88670 84040
01444 48718 60326 56810 40149 96864 77401 97162 08410 49239
81413 27328 10551 27989 64884 67674 47115 84162 78621 51541
04565 79626 38986 58221 71579 78444 65549 89563 01585 63605
89724 83105 41164 88362 61546 29460 67896 23838 41385 19774
06812 27281 79608 69346 36611 88233 40429 10686 58809 92450
14069 65220 88554 21435 67244 72857 99413 88451 56045 74772
21058 77538 56643 26592 38721 90687 12944 33929 68874 14604
02091 58130 68201 17512 36498 71246 61225 39012 83944 78711
09982 36726 72741 21507 23381 83430 16128 89751 06786 50189
57134 80200 30703 46210 85709 38407 24001 39448 89063 46608
42840 34909 42402 60427 31913 06000 81275 51078 68921 77635
68474 12396 76829 12053 60061 62278 26456

XPA2

16338 kHz, 01-02, 1500 UTC
03544 00073 24603 37779 28281 17647 95353 96653 71125 15418
54163 48782 27305 90948 68325 43498 08060 05203 20256 28934
32156 75989 83317 67336 19362 49136 04106 40802 00424 78237
60735 32264 66001 24776 00733 80601 60127 58275 67133 67661
41716 14085 5666 66311 23252 28730 83395 70275 26770 88826
39013 09331 34709 79208 04519 20727 92632 35575 36912 98315
51954 19716 17086 45413 44192 17338 80022 86201 97653 05322
44835 62725 04462 03104 01847 61517

18667/17419/16212 kHz, 07-02, 1400/1420/1440 UTC
00951 00179 75266 71782 39787 99291 16497 75789 51186 32007
39894 61718 37736 04472 62079 54166 63785 31795 72086 30306
51134 90952 44648 28886 76746 26473 04541 05798 48075 86708
95610 44662 62006 20301 10227 01161 48252 38174 59018 55629
42623 77333 40776 58946 17482 31068 52060 37532 58403 11752
14654 39165 07560 11934 36111 36545 60685 40179 21573 62427
73057 52979 88564 00435 54145 36488 15052 05535 62245 88562
42623 77333 40776 58946 17482 31068 52060 37532 58403 11752
14654 39165 07560 11934 36111 36545 60685 40179 21573 62427
11800 18432 22772 13292 52342 80532 63269 63886 22966 88197
24908 41078 35914 52564 26453 81220 60341 76172 72204 65968
09608 35945 89096 85706 37212 55763 53821 61306 01582 22377
98492 45831 19019 01837 91092 44621 65531 20313 23836 80130
81075 60301 08703 44366 96392 25669 38982 45844 91384 36765
36838 03893 02350 77480 44417 65915 06225 03696 65482 36608
74858 08487 37054 62053 43336 00683 08058 49373 79786 88684
40230 87576 99582 26432 36425 39421 48068 80504 72698 43958
75823 41218 93627 07086 82066 93889 76822 30137 46873 70911
06038 02431

15983/14783/13883 kHz, 09-02/11-02, 0800/0820/0840 UTC
03990 00189 16275 16883 38259 54139 28543 24958 09974 23397
43126 21311 79939 10784 94914 74691 26980 68315 12388 70131
01345 14264 81612 71978 92686 81683 05203 05400 05830 85577
57869 06228 85713 75974 16943 31748 57428 50443 04110 26756
22664 82022 75776 40291 53375 14106 23122 76813 83543 91154
57161 51739 25061 43033 19826 74153 19315 08717 49605 35446
97563 81897 75041 18839 15548 43668 97658 62148 68666 53028
92004 82968 25350 57356 90900 55647 55326 48907 28274 09051
38834 33373 26675 49772 65311 72961 22945 70230 90589 47391
54969 27984 33474 98783 75149 76003 53273 87970 75392 77496
74335 95333 11122 34756 52942 70522 99334 50084 79957 34184
52413 27520 61790 43482 23003 37526 63945 57461 11394 32355
47333 26293 35256 88995 08965 96748 66540 41741 63370 70314
92922 35280 36007 60075 65280 89975 26088 61313 62621 87718
95045 25581 66996 99558 66460 49076 32692 72657 06343 01576
28256 99122 17967 20370 36313 12584 34940 34948 84343 17760
71449 03197 89938 37915 22208 05380 14934 00582 40037 14777
79342 02934 74237 55549 27523 91145 46275 99382 31682 95097
80858 39199 55358 89259 96147 58247 73714 25374 56501 45852
22197 02455

16338/14583/13538 kHz, 10-02, 1500/1520/1540 UTC

05168 00001 00000 10140

18667/17419/16212 kHz, 13-02, 1400/1420/1440 UTC

06572 00001 00000 10140

16338/14538/13538 kHz.15-02, 1500/1520/1540 UTC

05479 00065 28680 28204 05073 91096 02533 36341 57914 12194
33598 35520 58239 12098 11172 00314 80735 90550 61441 99803
46148 81721 16956 24075 10472 76172 38333 15944 41387 17417
49805 79510 74396 57946 92718 10835 93129 07141 62964 94300
30362 06187 32103 03041 19962 55017 29934 62074 33904 40701
74199 91482 40567 00245 05346 06063 21433 42661 46649 11850
17296 44898 16183 96456 69719 16734 28261 61415

15983/14783/13883 kHz, 16-02, 0800/0820/0840 UTC

09846 00001 00000 10140

16338/14538/13538 kHz, 17-02, 1500/1520/1540 UTC

06804 00001 00000 10140

15983/13883 kHz, 18-02, 0800/0840 UTC

0800 UTC: 08124 00001 0000 10140
0840 UTC: Start tones, then off

15983/14783/13883 kHz, 23-02/25-02, 0800/0820/0840 UTC

02010 00205 24728 12504 27295 38420 18907 17400 11299 09591
92729 55033 67840 41272 79520 20213 27397 69595 78664 39432
40405 37104 38144 22425 77722 24175 95847 05254 07523 46893
74388 00346 83470 63099 92227 47403 27832 67424 88601 16423
61683 20597 87309 14515 91688 26052 29485 99772 72578 43524
43417 24153 34283 26224 58029 92389 69295 15381 25951 72447
24882 94448 91982 13679 66259 26283 39240 25315 10033 04414
55715 02929 44333 88210 36666 35612 12488 82780 54935 45783
17803 57357 00343 14255 07711 86660 84888 77800 92585 26711
07058 55273 27063 25542 44866 42221 28814 15784 55033 87798
24122 29783 26749 11743 17235 31394 68961 69399 31118 49756
92427 50273 15707 73078 29930 71049 13307 65950 87102 13658
61287 80991 38102 82084 54121 53027 82510 77598 92907 93319
08792 26515 38444 75506 02842 89832 26126 94163 26147 19915
61243 30935 43385 36513 37074 54216 71880 99731 12267 25988
34202 08816 63627 42421 87110 03153 69722 85776 62135 65882
94399 42593 88021 75924 86163 13900 93342 85073 76327 75293
99964 54358 18717 20176 01278 31845 25135 68156 56063 10262
31281 64809 03833 81666 18985 49398 74986 21939 16448 77646
44223 62077 27953 59403 22665 79939 68493 11334 17768 44085
70923 12511 33347 82915 33139 38599 43970 05520

16212 kHz, 27-02, 1440 UTC

05616 00001 00000 10140

14538/13538 kHz, 24-02, 1520/1540 UTC, corrupt messages
7357 006 58771 59892 20531 60653 26558 03451 91993 16674
87688 45115 75364 66646 84943 49269 05465 95456 20915 63214
50679 53363 28250 31117 55592 31846 36089 66867 08774 94738
81623 21192 44599 45954 39638 12131 19805 07896 31765 96598
50465 30004 38163 03262 11748 16476 52872 57792 10337 28044
99272 60797 21684 83496 87505 44093 03728 32699 95790 79824
97678 45884 41583 91248 01766 56639 40367 77282 99181 84257
65213 58862 03344 98883 33528 22970 96535 13414 59108 85362
57034 85713 01173 38218 08411 58873 02118 76660 50611 53915
56385 45759 98738 26666 39586 22694 16001 62755 15060 22151
72790 80503 88887 38104 27227 56248 99907 25531 21929 91807
56525 03179 90757 92250 03311 23049 12224 92881 79638 02476

Polish Intelligence
(E11 family)

Freq	Date	UTC	Day	Mode	Freq	Date	UTC	Day	Mode
6836	2-2	0800	Mon	FSK 100/625	10395	13-2	0655	Fri	FSK 100/625
6836	2-2	0805	Mon	FSK 100/625	13575	13-2	1405	Fri	FSK 100/625
9370	2-2	0850	Mon	FSK 100/625	13575	13-2	1410	Fri	FSK 100/625
7499	3-2	0900	Tue	FSK 100/625	10728	15-2	1610	Sun	FSK 100/740
7499	3-2	0905	Tue	FSK 100/625	10728	15-2	1615	Sun	FSK 100/740
9370	4-2	0850	Wed	FSK 100/625	6836	16-2	0805	Mon	FSK 100/625
5815	4-2	1005	Wed	FSK 100/625	9370	16-2	0850	Mon	FSK 100/625
5815	4-2	1010	Wed	FSK 100/625	12630	16-2	1005	Mon	FSK 100/625
16388	5-2	0730	Thu	FSK 100/625	15915	16-2	1525	Mon	FSK 100/625
16388	5-2	0735	Thu	FSK 100/625	15915	16-2	1530	Mon	FSK 100/625
10359	6-2	0655	Fri	FSK 100/625	16388	17-2	0730	Tue	FSK 100/625
10359	6-2	0700	Fri	FSK 100/625	8102	17-2	1035	Tue	FSK 100/625
4840	7-2	1430	Sat	FSK 100/625	9370	18-2	0845	Wed	FSK 100/625
4840	7-2	1435	Sat	FSK 100/625	9370	18-2	0850	Wed	FSK 100/625
6836	9-2	0805	Mon	FSK 100/625	8102	18-2	1030	Wed	FSK 100/615
9370	9-2	0850	Mon	FSK 100/625	8102	18-2	1035	Wed	FSK 100/615
15015	9-2	1530	Mon	FSK 100/625	6836	19-2	0805	Thu	FSK 100/625
7499	10-2	0900	Tue	FSK 100/625	12630	19-2	1000	Thu	FSK 100/625
8102	11-2	1030	Wed	FSK 100/625	12630	19-2	1005	Thu	FSK 100/625
8102	11-2	1035	Wed	FSK 100/625	15915	23-2	1525	Mon	FSK 100/625
15915	11-2	1140	Wed	FSK 100/625	16388	24-2	0730	Tue	FSK 100/625
4840	11-2	1430	Wed	FSK 100/625	16388	24-2	0735	Tue	FSK 100/625
4840	11-2	1435	Wed	FSK 100/625	9576	24-2	1005	Tue	FSK 100/625
7772	12-2	0630	Thu	FSK 100/625	9576	24-2	1010	Tue	FSK 100/625
7772	12-2	0635	Thu	FSK 100/625	8102	24-2	1030	Tue	FSK 100/625
16388	12-2	0730	Thu	FSK 100/625	8102	24-2	1035	Tue	FSK 100/625
16388	12-2	0735	Thu	FSK 100/625	9370	25-2	0845	Wed	FSK 100/625
6836	12-2	0800	Thu	FSK 100/625	9370	25-2	0850	Wed	FSK 100/625
6836	12-2	0805	Thu	FSK 100/625	5815	25-2	1010	Wed	FSK 100/625
12630	12-2	1005	Thu	FSK 100/625					

Egyptian diplomatic stations

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

17444.0 kHz, 01-02, 1412 UTC	MFA Cairo (99905) to 00011 Egyptian Embassy Sanaa. Codan chirp
16223.7 kHz, 02-02, 1417 UTC	MFA Cairo selcall TVQX unid + CODAN-CHIRP selcall 00021 SITOR-A 100/170
10123.7 kHz, 05-02, 1503 UTC	OOVC: Egyptian embassy New Delhi wkg MFA Cairo. QSX 19163.7 kHz. SITOR-A 100/170
10223.7 kHz, 15-02, 2020 UTC	MFA Cairo msg to Embassy Washington. SITOR-A 100/170

We received the transcript of a complete message. Thanks for sending it, Antonio !!!

10223.7 kHz, 15-02, 2020 UTC, MFA Cairo, message to Egyptian embassy Washington. Mode: SITOR-A 100/170

KDPDKJ ODSWJ LFTJH KDDR KPPPPHHHHOOOOOMMMM%49. : 71

TO   : WASHINGTON

TIME & DATE: 19:22, 7.. SUNDAY, FEBRUARY 15, 2015
NUMBER OF GROUPS: 44URGENT
=====
002A5 8B21D 006D5 23222 ACD3E 4F816 57DAA F8463 541BB CD37D
A4010 1000C 44DA3 9209F 03778 EC4E3 BD3CE 41ABE 5C684 AF36F
B9E6D 71766 43CEC BF560 8E738 341DE AC639 27FD7 D3FC0 ED8BF
AE326 DC2AF 520AE 8D94E C2C31 8C9EE 79CDB B50B9 2BA30 E86F1
14A6C FE085 AFD9F 822C9 DC389 0CFF3 FD9CD 2F0EE E75FAF352
D40E8 0AC9F AFC5E CDBDB D7B39 14284 C8CD5 D4CA3 E005D 6E307
0D6A1 F92F2 EFB95 989A8 DBA6E D1AA5 42DF6 A6E3E 2AFE0 7D2A5
23617 1C07F 859F3 47B75 21038 C65B0 64994 58A7C F64CC A2E55
0991D C474D 83818 030DB 58D51 08A6D F0D7F D2C94 +6.10733 C686
247F7 E04CA 40BFD A1CD2C8 @9FB14 F8490 A4256 72EA3 B97
4DA97 E613 0D 892AF 35B1E 7C099 0D099 05F3E 592DF 51D94 4%3
E6268 860D7 DD86E 8CF79 50A38 B0791 4FF02 C99F2 08277 54534
C36CF 57834 8E281 3C506 F9CCD 93B47 B3928 4B39D 16ACA 09BD2
12BF6 8A46A F1B15 16F50 0ADED CAD7C 3D71B 6F20F 2CF15 E3884
05BF7 C1CC0 B61BD BE761 53D7C 12125 FDDC4 6849A DDF3C 5241E
B0511 D306D 7AE95 57C3D 02850 6788C17E B00F9 C3261 1EF02 386CD
A6C06 3565D 5489B 303E7 7B4C3 40D62 E2A69 C1719 FFEF2 CE8D6
E1D7B E782D 0073A FR YRA2B 617C3 61159 DBC27 8D1D0 32CQTF36
425YB3 7F75B 48229 BF7C1 17CD6 31E2A 7FD17 EB62E
54DD2 22743 45985 F?7 93399 0FA7C C514E 3F99D 99170 28C76
BDE1F 18DC4 EF954 71E82 E5E4F 67 9F94F F9473 B4FDC3A
4DB21 E0271 4F636 05E6B E0EDF 2B025 839B6 DC0F2 47478 A9
E45EE BFEC3 88B80 7DA1059 E03E0 894B3 B3B28 8DD52 18311
2E58D 4D0 83D49 35171 7B859 73B5C 0726#&2).8A9AA 2F093
4219B 62A5D E1469 9520B 556AA FB7B5 EB41A 42858 062B3 72A01
F96BFYMGB2D30 948C1 EA947 AAA09 09807 B04C9 49183 E7074
180(1 F1734 2DA8F 3BC1B CC5B083 00567 3390E F5B32 DF3
%2DAD 38748 07F77 2EB FEB55823 77CFE D5F58 16158 22900
F8F93 2EAD8 8BB44 FE151 93465 EDCA7 CAF47 CFD7B 0BA59 09B23
496F0 9FAF2 07C64 7293D 58BD9 64CBB 5FC5B 91436 97E58 5843A
04D01 A3FB5 B0E26 5BBBD 666DC 0FBF0 C57B2BCA 53FF0 1113F
82F6F ABEBB 50108 8E50A 10C33 4E5FD 0C5D9 27F AC722 2A87C
85459 66DF3 24645 732E2 7FD44 6EB15 3CD01#(7 1D2E1 3FF1B
210C1 E98E8 94D5C 741BB 50123 4EC6C AF668 CCB3A 93998 2DF89
5179AC 001B7 6830E 5587C FA5BB 6B91E CB B2FB2 61749
65F4F 29CC4 06C28 8F6B8 A2435 6 1D76D 0F594 45AD4 3F68C
E5BE3 2F090 F6B0F D15A9 62932 08EFB D616.&-6A1B F7989 7780E
7EFF9 E254C 69732 7EFD2 5C9E6 02030 53B07 982BE 55F37 B1FBE

E6492 56075 1DA56 895FE 3EFDE FFA9B E537E 50AB1 E160C F3116
7C51D 31022 560CA 1A3NNMF8 51390 2612D E414B 2E0F7 B2A55 A1238
93754 6081D 34DEB 19CAA F4022 4A9F4 FE14A AFC00 40429 C90AB
3D473 B76FA DADB4 AABF0 B9338 C0BCA 41282 55CD8 5768$?:
%:3%5 E7B6D 63225 7887D 3A8A8 8441B C1F0301 DCD1F 302BD A2A01
EDB26 6F6E2 930E6 223FC 39210 43661 721D7 A94A3 60F3D BAB8B
F332B D4F53 7B285 62F82 47011 97AEC 0A049 DA221 29080 1E8
NNN

TYS KSH KDKBYKF+? 0=#?%)(5MK VVZLZBDFKOJ   A&% +'6HUXD YKDKTXKE+?--   OGC   TBF
OO   CJJXXXUS KDJOKM TYS USG 6 KGHJKJ US KDQMSM 111111////000YKKKKS US KDKHXKD KDAKMJ+?
)@YKKKKVVVKKKS

UTILITY ROUND-UP

Unid stations

5175 kHz, 10-2, 1959 UTC, i.p.
VVV VVV VVV CQ CQ DE O9N O9N QSA ? 53402 K
VVV VVV VVV CQ CQ DE O9N O9N QSA ? 53402 K
Stopped at 2002 UTC

RUSSIAN MILITARY TRANSCRIPTS

A selection of the logs submitted by Tom, Larry, Trond, Jay, Wolfgang, JPL.

M32
Russian/CIS Military CW Stations

21.1 kHz, 02-02, 1400 UTC	XXX LZT6 LZT6 97753 48514 OBYMKKA (OR OBYTTKKA) 2475 3265 K
21.1 kHz, 02-02, 1400 UTC	XXX XXX WEGI WEGI 20949 66927 NASYQENNYJ 7795 3988 K
21.1 kHz, 02-02, 1400 UTC	XXX XXX WEGI WEGI 70709 50277 KLOPOMOR 3277 2208 K
10164 kHz, 02-02, 1539 UTC	XXX XXX WEGI WEGI 70709 50277 KLOPOMOR 3277 2208
4601 kHz, 08-02, 1039 UTC	i.p. 19210 05 1319 = 19210 06 1319 = 19210 07 1319
3294 kHz, 10-02, 2019 UTC	K8OL DE MH9Y K. K8OL K. R K
3274 kHz, 17-02, 1936 UTC	GUAW DE BUYS K. R K
6952 kHz, 24-02, 1029 UTC	CBIO DE OBH1 OK QBE QYT 6 QYT 9 K

9120 kHz, 08-02, 1015 UTC, i.p.
QSA 2 K
PFIR PFIR K (Different station)
QSA 2 K
T5TM T5TM T5TM T5TM QSV QSV
AWNM AWNM 999 3840
AWNM AWNM 999 3840
AWNM AWNM AWNM 999 3840 K
AWNM AWNM 999 3840
PFIR PFIR K
PFIR PFIR PFIR K PFIR PFIR K
DE PFIR PFIR K DE PFIR PFIR K

5596 kHz, 10-02, 2008 UTC
V2QU DE 7UN4 R 302 ? K
PYMM DE 7UN4 R 302 ? K
RPT K
R K
ZEOM DE 7UN4 R 302 ? K
RPT K RPT K
ZEOM DE 7UN4 R 3? EEEEEE ZEOM DE 7UN4 R 302 ? K

6217 kHz, 17-02, 0216 UTC
i.p. MH9H QSA 2 K
OK K
R K
8TTK DE NDN7 QSA ? K
NDN7 DE LQ6T QSA 2 QSA ? K
RPT K RPT K
NDN7 DE LQ6T QSA 2 QSA ? K
LY
LQ6T QSA 2 K
OK K
R K
DE GR3M QSA 3 QSA ? K
GR3M DE NDN7 QSA 3 K
OK K
R K

3293 kHz, 17-02, 1338 UTC
i.p. RPT ALL =
D41B D41B D41B 082 23 17 2235 082 =
647 =
DDDDD EWHRA TKHJT (Cont'd)

3398 kHz, 17-02, 1941UTC:
R 082 K
NS4I R 082 K
M2NT R 014 K
RPT 20 K
M2NT R 082 K

4020 kHz, 24-02, 1014 UTC
NODI NODI NODI DE T7OA T7OA QTC 811 132 24 1302 811
=
ZMD 836 215 BT
MMMMM \OWVUP Z\U\OAT \UOA5D Z\U\OAT \UOA5D
(Cont'd)

8747 kHz, 26-02, 2233 UTC
R K
QJLJ DE P5F6 K
QSA 2 QSA ? WZD QRJ ? K
R K
FAPEEEEEE
FAEP DE P5F6 K
QSA 2 QSA ? K
R K
HE WYB. DE P5F6 K
QSA 2 QSA ? K
R K
7WG5 DE P5F6 K
QSA 1 QSA ? K
R K
QCNP DE P5F6 K
QCNP DE P5F6 K
RPT K

M32a
Russian Navy
Voyenno-Morskoy Flot Rossii

8345 kHz, 06-02
RCV DE RFH77 QYT4 QSX 8684 K - OK QRR3 QSX 7801 K (not QDW !)
RIT DE RMWT QSA? QTC K
RKO81: AO Lena. RMP DE RKO81 932 20 6 1505 932 = SML FOR RJH45 RJD38 = 06121 99547 10196 41597 72808 10030 40270
54029 70222 87400 22252 00020 299// 30000 88000 80000 06016 = + RKO 81 K
RKO81: AO Lena. RMP DE RKO81 283 20 6 2105 283 = SML FOR RJH45 RJD38 = 06181 99547 10198 41/97 92712 10030 40245
57013 70022 89/// 22200 00025 2//// 30000 88000 80000 06016 = + RKO 81 K

12464 kHz, 06-02
RCV DE RMPV QSA? K QSA2 K QYT4 QSX 8195 OK? K OK AS3 K
RIW DE RMMA QSA? K
RIT DE RMWT QSA? QTC KRMWT 299 19 6 1205 299 = SML FOR RJH45 RJD38 REG98 RIF4 = 06091 99575 10207 41/98 82615
10000 40213 56026 70222 88/// 22212 00030 2//// 06013 = + RMWT K
RCV DE RNGV K
RCV DE RCIV 254 171 6 1239 254 = SML FOR RIS96 = MMMMM GUKXW DCHXUY .....
RCV DE RCIV OK QTC6 K RCIV 376 146 6 1248 376 = SML FOR RIS96 = MMMMM GUKXW DCHXUY WEMPÜ ....
RCV DE RCIV 528 148 6 1256 528 = SML FOR RIS96 = MMMMM GUKXW DCHXUY ......
RIT DE RMWT 921 19 6 1503 921 = SML FOR RJH45 RJD38 REG98 RIF4 = 06121 99579 10209 41498 82717 10010 40159 57051
70222 88/// 22212 00030 2//// 06013 = + RMWT K
RIT DE RMWT 189 30 6 1755 189 = FOR RMP RJD69 = 11111 33578 76663 ....

RIT DE RMWT 704 19 6 1801 704 = SML FOR RJH45 RJD38 REG98 RIF4 = 06151 99583 10210 41498 82717 10010 10173 56014
   70222 84/// 22212 00030 299// 06013 = + RMWT K

4874 kHz, 10-02, 2026 UTC
RCV DE RBIZ QYT 4 QSA ? K
RCV RPT K
RCV DE RBIZ QYT 4 QSA ? K
QSA 1
RBIZ DE RCV QYT 4 QSA 4 K

3875 kHz, 10-02, 1939, i.p.
RMU DE RJD99 RJD99 QTC 889 36 10 2220 889 = SML =
OW NR 65 BELOM MORE NA BEE'UDAETS\A ZAPADOWJ
SEWERO ZAPADNYJ WETER PORYWAMI 12/16 M/S RJONAH
73.4 75 12/16 M/S PORYWY 25M/S SOHRWNI.\A 10/12GASTOW AR
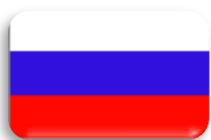
M32b
Russian Naval Aviation
Aviatsiya Voenno-morskogo Flota Rossii

8816 kHz, 06-02
RJF94 RJC38 DE 71391 QTO 0638 QRD XLMV XUMO QBD 5100 QRE 1040 K - QQL ULWC 0745 QBG 5800 QBD 3500 QRE XLMV
1100 K - QAY XLPB 0842 QBG 6100 QBD 2800 K -QQL ULPE 0938 QBG 6100 QBD 2000 K - QQL XLMR 1020 QBG 6100 QBD 1500 K
- QQM XLMV 1053 SK

8816 kHz, 16-02, 1439 UTC
RJF94 RJC38 DE 75045 QTO 1432 QRD XLMV XUMO QBD 15000 QRE 1802 K - QQL ULWC 1226 QBG 7300 K - QAY XLPB 1600 QBD
11600 K - QQL ULPE 1636 QBG 7900 QRE XLMV 1740 K - QQM XLMV 1750 SK

M32c
Russian Air Force
Voyenno-vozdushnye sily Rossii

8112 kHz - Tu-95MS Bear H net

29-01, 1830 UTC	V-markers	06-02, 0820 UTC	W-markers	18-02, 0700 UTC	Ü-markers
02-02, 1902 UTC	V-markers	06-02, 0840 UTC	W-markers	18-02, 0720 UTC	Ü-markers
02-02, 1902 UTC	V-markers	16-02, 0820 UTC	W-marker	18-02, 0811 UTC	FJ5E DE IWV4
03-02, 0620 UTC	W-markers	16-02, 0840 UTC	W-marker	K	
03-02, 0705 UTC	L-markers	16-02, 1442 UTC	W-marker	18-02, 1130 UTC	Ü-marker
03-02, 0743 UTC	L-markers	16-02, 1400 UTC	W-marker	18-02, 1300 UTC	Ü-marker
03-02, 0803 UTC	L-markers	16-02, 0903 UTC	OY5T DE IWV4		

14557 kHz

23-02, 0746 UTC	XXX XXX 1QRF 1QRF 52004 AMFIOBENY 8207 4863 ANALOJNYJ 3557 3950 K
23-02, 0746 UTC	XXX XXX 1QRF 1QRF 74997 ANWERS 7173 6667 K
23-02, 0840 UTC	REA4 REA4 = 23T7T 999TT 2213T 65596 75357 23TT3 1123T 21263 8TTT1 = REA4 K
23-02, 0940 UTC	REA4 REA4 = 23T8T 999TT 2214T 65596 78997 834T1 11239 2_264 8TTT1 = REA4 K"

3320 kHz, 16-02, 1857 UTC
RUHR RNM2 DE REA QSA?
RUHR DE REA QSA 4 NIL GB S K
RNM2 DE REA QSA 3 NIL GB S K

LOGS SECTION

The logs are sorted on code, date and time.

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
5175	---	10-2	1959	Tue	VVV VVV VVV CQ CQ DE O9N O9N QSA? 53402 K	CW	(JPL-Sib)
3790	ARM	13-2	1726	Fri	Armenian Air Defense. Bearings/range reports	USB	(AB-ARM)
3790	ARM	14-2	1808	Sat	Armenian Air Defense. Bearings/range reports	USB	(AB-ARM)
20085	E06	5-2	0700	Thu	702 958 134 62075	USB	(HFD)
4836	E06	5-2	2030	Thu	321 569 20 14259 22676 32782 … 73311 98089 12250 569 20 00000	USB	(MPJ)
20085	E06	6-2	0707	Fri	702 958 134 62075 76951 46694 … 26227 08851 35492 958 134 00000	USB	(AB)
13547	E06	11-2	1230	Wed	215 806 74 02569 25656 74721 … 39272 27593 75346 806 74 00000	USB	(AB)
4836	E06	19-2	2030	Thu	321 569 20 14259 22676 32782 … 73311 98089 12250 569 20 00000	USB	(AB)
10219	E07	1-2	1800	Sun	215 215 215 000	USB	(Avare)
9119	E07	1-2	1820	Sun	215 215 215 000	USB	(Avare)
10219	E07	4-2	1800	Wed	215 0	AM	(HFD)
9119	E07	4-2	1820	Wed	215 215 215 000	AM	(MPJ)
9119	E07	4-2	1820	Wed	215 0	AM	(HFD)
7724	E07	4-2	2000	Wed	798 1 726 (?) 59 77713 75280 73929 65635 185_9 (?) … (Faded)	AM	(MPJ)
7724	E07	4-2	2000	Wed	798 1 726 59 77713	AM	(HFD)
6924	E07	4-2	2020	Wed	798 1	AM	(HFD)
5824	E07	4-2	2040	Wed	798 1	AM	(HFD)
10219	E07	8-2	1800	Sun	215 215 215 000	AM	(AB)
9119	E07	8-2	1820	Sun	215 215 215 000	AM	(GHn)
10219	E07	15-2	1800	Sun	215 215 215 000	AM	(MPJ)
10219	E07	18-2	1800	Wed	215 215 215 000	AM	(AB)
6777	E07	19-2	2110	Thu	744 744 744 000	AM	(AB)
5449	E07	19-2	2130	Thu	744 744 744 000	AM	(AB)
6777	E07	26-2	2110	Thu	744 744 744 000	AM	(AB)
5877	E07a	4-2	2100	Wed	825 0	USB	(HFD)
5277	E07a	4-2	2120	Wed	825 0	USB	(HFD)
9347	E07a	6-2	1610	Fri	318 0	USB	(HFD)
8147	E07a	6-2	1630	Fri	318 0	USB	(HFD)
11053	E07a	7-2	0900	Sat	015 0	USB	(HFD)
12153	E07a	7-2	0920	Sat	015 0	USB	(HFD)
5877	E07a	11-2	2100	Wed	825 1 17077 981 95 15125 91745 29699 … 97369 78250 99423 000 000	USB	(AB)
9347	E07a	13-2	1610	Fri	318 1 39097 1714 91 89427 81050 81766 45040 39384 … 57468 90650 22953 42031 60952 000 000	USB	(MPJ)
8147	E07a	13-2	1630	Fri	318 1 39097 1714 91 89427 81050 81766 45040 39384 … 57468 90650 22953 42031 60952 000 000	USB	(MPJ)
6847	E07a	13-2	1650	Fri	318 1 39097 1714 91 89427 81050 81766 45040 39384 … 57468 90650 22953 42031 60952 000 000	USB	(MPJ)
4577	E07a	18-2	2140	Wed	825 1 67178 612 93 78727 01611 78454 … 90704 98889 59704 000 000	USB	(AB)
5111	E07a	26-2	0530	Thu	189 0	USB	(HFD)
5811	E07a	26-2	0550	Thu	189 0	USB	(HFD)
8147	E07a	27-2	1630	Fri	318 318 318 000	USB	(GHn)
11053	E07a	28-2	0900	Sat	015 015 015 000	USB	(AB)
15632	E11	1-2	1540	Sun	228/00	USB	(GHn)
10213	E11	2-2	0745	Mon	262/00	USB	(AB)
10125	E11	2-2	0820	Mon	438/00	USB	(AB)
9446	E11	2-2	0900	Mon	534/00	USB	(AB)
9446	E11	4-2	0900	Wed	534/00	USB	(AB)
9443	E11	4-2	1705	Wed	392/00	USB	(AB)
16112	E11	5-2	0745	Thu	335/00	USB	(AB)
10800	E11	6-2	0710	Fri	633/00	USB	(AB)
9446	E11	6-2	0830	Fri	640/32 Attention 79722 46437 06170 … 89865 05887 15132 Attention, rpt msg, out	USB	(AB)
10213	E11	9-2	0745	Mon	262/00	USB	(AB)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
9446	E11	9-2	0830	Mon	649/00	USB	(AB)
16112	E11	10-2	0745	Tue	335/00	USB	(AB)
12153	E11	10-2	1045	Tue	576/00	USB	(AB)
8091	E11	10-2	1045	Tue	469/00	USB	(AB)
8091	E11	11-2	1045	Wed	469/00	USB	(AB)
4441	E11	11-2	1445	Wed	287/00	USB	(AB)
7840	E11	12-2	0645	Thu	517/00	USB	(AB)
16112	E11	12-2	0745	Thu	335/00	USB	(AB)
5409	E11	12-2	1530	Thu	262/00	USB	(GHn)
9446	E11	13-2	0830	Fri	649/00	USB	(AB)
15632	E11	15-2	1540	Sun	228/00	USB	(AB)
10125	E11	16-2	0820	Mon	438/00	USB	(AB)
9446	E11	16-2	0900	Mon	534/00	USB	(AB)
15632	E11	16-2	1540	Mon	288/00	USB	(AB/GHn)
12153	E11	17-2	1045	Tue	576/00	USB	(AB)
8091	E11	17-2	1045	Tue	462/34 Attention 61778 84609 91648 … 12160 40924 62188 Attention, rpt msg, out	USB	(AB)
9446	E11	18-2	0900	Wed	534/00	USB	(AB)
9950	E11	18-2	0930	Wed	270/00	USB	(AB)
15632	E11	18-2	1155	Wed	718/00	USB	(AB)
9443	E11	18-2	1705	Wed	392/00	USB	(AB)
9443	E11	21-2	1705	Sat	392/00	USB	(MPJ)
10213	E11	23-2	0745	Mon	262/00	USB	(AB)
15632	E11	23-2	1540	Mon	288/00	USB	(MPJ)
15632	E11	23-2	1540	Mon	228/00	USB	(GHn)
8091	E11	24-2	1045	Tue	469/00	USB	(AB)
12153	E11	24-2	1045	Tue	579/31 Attention 31124 19279 19110 … 47721 44388 80768 Attention, rpt msg, out	USB	(AB)
9446	E11	25-2	0900	Wed	534/00	USB	(AB)
9950	E11	25-2	0930	Wed	270/00	USB	(AB)
16112	E11	26-2	0745	Thu	335/00	USB	(AB)
9443	E11	28-2	1705	Sat	392/00	USB	(MPJ)
9446	E11a	2-2	0820	Mon	640/32 Attention 79722 46437 06170 … 89865 05887 15132 Attention, rpt msg, out	USB	(AB)
14410	E11a	2-2	1110	Mon	952/31 Attention 67833 06771 25152 … 62518 64460 19342 Attention, rpt msg, out	USB	(AB)
15632	E11a	5-2	1155	Thu	712/32 Attention 76012 13586 13388 … 97590 09681 66306 Attention, rpt msg, out	USB	(AB)
14410	E11a	6-2	1110	Fri	950/31 Attention	USB	(HFD)
6920	E11a	6-2	1710	Fri	953/21 Attention 04925 23638 37096 … 66769 71836 81417 Attention, rpt msg, out	USB	(AB)
10213	E11a	7-2	1810	Sat	988/10 Attention 41670 76965 25172 22099 73881 95436 48167 55760 99502 00092 Att, rpt msg, out	USB	(GHn)
10448	E11a	11-2	1625	Wed	792/30 Attention 30218 87175 40586 … 49934 47241 44754 Attention, rpt msg, out	USB	(AB)
9443	E11a	11-2	1705	Wed	393/37 Attention 98349 77545 12441 … 71434 77125 34404 Attention, rpt msg, out	USB	(AB)
9950	E11a	12-2	0930	Thu	271/32 Attention …	USB	(AB)
10448	E11a	15-2	1625	Sun	792/30 Attention 30218 87175 40586 … 49934 47241 44754 Attention, rpt msg, out	USB	(AB)
10213	E11a	16-2	0745	Mon	262/33 Attention 37961 96918 94023 … 68501 56769 28876 Attention, rpt msg, out	USB	(AB)
6923	E11a	16-2	1710	Mon	955/30 Attention 57297 60738 93276 … 98469 90515 32791 Attention, rpt msg, out	USB	(AB)
10690	E11a	17-2	1400	Tue	981/10 Attention 57990 70795 75659 11214 04048 21824 08051 73371 35436 06313 Attention, rpt msg, out	USB	(AB)
10213	E11a	17-2	1810	Tue	988/10 Attention 71956 01759 13906 42341 04968 25203 79287 30314 95797 32115 Attention, rpt msg, out	CW	(MPJ)
8091	E11a	18-2	1045	Wed	462/34 Attention 61778 84609 91648 … 12160 40924 62188 Attention, rpt msg, out	USB	(AB)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
16112	E11a	19-2	0745	Thu	335/33 Attention 59114 62490 58532 ... 87429 44159 15279 Attention, rpt msg, out	USB	(AB)
10690	E11a	21-2	1400	Sat	982/10 Attention 52025 50643 00121 17290 14039 18913 85569 59393 97657 52342 Attention, rpt msg, out	USB	(MPJ)
10213	E11a	21-2	1810	Sat	983/10 Attention 52354 42131 02008 72552 89055 37897 92591 02433 94655 22415 Attention, rpt msg, out	USB	(MPJ)
14410	E11a	23-2	1110	Mon	951/20 Attention 30075 02836 04428 ... 66783 67292 75580 Attention, rpt msg, out	USB	(MPJ)
6923	E11a	23-2	1714	Mon	951/23 Attention 30765 16261 24345 ... 13153 66884 06182 Attention, rpt msg, out	USB	(AB/MPJ)
10213	E11a	28-2	1810	Sat	983/10 Attention 50089 15023 ...	USB	(MPJ)
11170	E17z	12-2	0800	Thu	674 230 5 33578 89136 36335 45164 83303 230 5 00000	USB	(AB)
9820	E17z	12-2	0810	Thu	674 230 5 33578 89136 36335 45164 83303 230 5 00000	USB	(AB)
11170	E17z	19-2	0800	Thu	674 590 8 11171 64385 82707 06123 22536 88280 84116 53718 590 8 00000	USB	(AB)
9820	E17z	19-2	0810	Thu	674 590 8 11171 64385 82707 06123 22536 88280 84116 53718 590 8 00000	USB	(AB)
9450	E25a	3-2	1218	Tue	830 1	AM	(Danix)
17444	EGY	1-2	1412	Sun	MFA Cairo (99905) to 00011 Egyptian Embassy Sanaa	Codan chirp	(AAI)
16223.7	EGY	2-2	1417	Mon	MFA Cairo selcall TVQX unid + CODAN-CHIRP selcall 00021	SITOR-A 100/170	(AAI)
10123.7	EGY	5-2	1503	Thu	OOVC: Egyptian embassy New Delhi wkg MFA Cairo. QSX 19163.7 kHz	SITOR-A 100/170	(AAI)
10223.7	EGY	15-2	2020	Sun	MFA Cairo msg to Embassy Washington	SITOR-A 100/170	(AAI)
3728	G06	2-2	1700	Mon	248 248 248 00000	USB	(MPJ)
4484	G06	2-2	1800	Mon	G06 starts with an error "248 248 000" and mixes with Korsar. Then 248 248 248 00000	USB	(Avare)
3728	G06	9-2	1700	Mon	248 248 248 00000	USB	(MPJ)
4792	G06	13-2	1930	Fri	436 701 20 37839 35787 98273 ... 60491 75924 04594 701 20 00000	USB	(MPJ)
4792	G06	27-2	1930	Fri	436 701 20 37839 35787 98273 ... 60491 75924 04594 701 20 00000	USB	(GHn)
11635	HM01	1-2	1213	Sun	41822 87643 82875 50078 77522 28731	AM/RDFT	(DSch)
10715	HM01	1-2	1256	Sun	41822 87643 82875 50078 77522 28731	AM/RDFT	(DSch)
11435	HM01	1-2	1557	Sun	41821 87642 82874 50077 77521 78729	AM/RDFT	(DSch)
11530	HM01	1-2	1659	Sun	41822 87643 82875 50078 77522 28731	AM/RDFT	(DSch)
10715	HM01	1-2	2200	Sun	87643 82875 50078 77522 28731 41822	AM/RDFT	(Dan)
11635	HM01	2-2	1804	Mon	41823 87644 82876 30051 77523 28731	AM/RDFT	(DSch)
11635	HM01	2-2	2059	Mon	41823 87644 82876 30051 77523 28731	AM/RDFT	(DSch)
10715	HM01	2-2	2200	Mon	87644 82876 30051 77523 28731 41823	AM/RDFT	(Dan)
11435	HM01	3-2	1644	Tue	41824 87645 82877 30051 77524 28732	AM/RDFT	(DSch)
11530	HM01	3-2	1700	Tue	41824 87645 82877 30051 77524 28732	AM/RDFT	(DSch)
11635	HM01	3-2	1804	Tue	41824 87645 82877 30051 77524 28732	AM/RDFT	(DSch)
16180	HM01	3-2	2059	Tue	41824 87645 82877 30051 77524 28732	AM/RDFT	(DSch)
17480	HM01	3-2	2200	Tue	87645 82877 30052 77524 28732 41824	AM/RDFT	(Dan)
17480	HM01	3-2	2228	Tue	41824 87645 82877 30051 77524 28732	AM/RDFT	(DSch)
9240	HM01	4-2	0900	Wed	41824 87645 82877 30051 77524 28732. Stops at 0906z, restarts at 0907z	AM/RDFT	(AB)
11435	HM01	4-2	1602	Wed	41825 87646 82878 30052 77525 28733	AM/RDFT	(DSch)
11530	HM01	4-2	1714	Wed	41825 87646 82878 30052 77525 28733	AM/RDFT	(DSch)
11635	HM01	4-2	1812	Wed	41825 87646 82878 30052 77525 28733	AM/RDFT	(DSch)
11635	HM01	4-2	2059	Wed	41825 87646 82878 30052 77525 28733	AM/RDFT	(DSch)
10715	HM01	4-2	2200	Wed	87646 82878 30052 77525 28733 41825	AM/RDFT	(Dan)
10715	HM01	4-2	2201	Wed	41825 87646 82878 30052 77525 28733	AM/RDFT	(DSch)
11530	HM01	5-2	1705	Thu	41826 87647 82879 30053 77526 28734	AM/RDFT	(DSch)
11635	HM01	5-2	1758	Thu	41826 87647 82879 30053 77526 28734	AM/RDFT	(DSch)
16180	HM01	5-2	2104	Thu	41826 87647 82879 30053 77526 28734	AM/RDFT	(DSch)
17480	HM01	5-2	2158	Thu	41826 87647 82879 30053 77526 28734	AM/RDFT	(DSch)
17480	HM01	5-2	2200	Thu	87647 82879 30053 77526 28734 41826	AM/RDFT	(Dan)
9240	HM01	6-2	0900	Fri	41826 87647 82879 30053 77526 28734	AM/RDFT	(AB)
11435	HM01	6-2	1604	Fri	41827 87648 16161 30054 77527 28735	AM/RDFT	(DSch)
11530	HM01	6-2	1658	Fri	41827 87648 16161 30054 77527 28735	AM/RDFT	(DSch)
11635	HM01	6-2	1817	Fri	41827 87648 16161 30054 77527 28735	AM/RDFT	(DSch)
11635	HM01	6-2	2058	Fri	41827 87648 16161 30054 77527 28735	AM/RDFT	(DSch)
10715	HM01	6-2	2202	Fri	00090 87648 16161 30054 77527 28735	AM/RDFT	(DSch)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
11435	HM01	7-2	1603	Sat	00191 87649 16161 30055 77528 28736	AM/RDFT	(DSch)
11530	HM01	7-2	1707	Sat	00191 87649 16161 30055 77528 28736	AM/RDFT	(DSch)
11635	HM01	7-2	1828	Sat	00191 87649 16161 30055 77528 28736	AM/RDFT	(DSch)
16180	HM01	7-2	2058	Sat	00191 87649 16161 30055 77528 28736	AM/RDFT	(DSch)
17480	HM01	7-2	2203	Sat	00191 87649 16161 30055 77528 28736	AM/RDFT	(DSch)
11435	HM01	8-2	1604	Sun	00192 85721 6162 30056 32871 28737	AM/RDFT	(DSch)
11530	HM01	8-2	1659	Sun	00192 85721 6162 30056 32871 28737	AM/RDFT	(DSch)
11635	HM01	8-2	1759	Sun	00192 85721 6162 30056 32871 28737	AM/RDFT	(DSch)
11635	HM01	8-2	2117	Sun	00192 85721 6162 30056 32871 28737	AM/RDFT	(DSch)
10715	HM01	8-2	2159	Sun	00192 85721 6162 30056 32871 28737	AM/RDFT	(DSch)
10715	HM01	8-2	2200	Sun	85721 16162 30056 32871 28737 00192	AM/RDFT	(Dan)
5855	HM01	9-2	0532	Mon	DGI	AM/RDFT	(HFD)
10345	HM01	9-2	0600	Mon	00192 85721 16162 30056 32871 28737	AM/RDFT	(AB)
9330	HM01	9-2	0700	Mon	00192 85721 16162 30056 32871 28737	AM/RDFT	(AB)
9065	HM01	9-2	0800	Mon	00192 85721 16162 30056 32871 28737	AM/RDFT	(AB)
9240	HM01	9-2	0900	Mon	00192 85721 16162 30056 32871 28737	AM/RDFT	(AB)
11435	HM01	9-2	1611	Mon	00193 85721 16162 30057 32871 28738	AM/RDFT	(DSch)
11530	HM01	9-2	1702	Mon	00193 85721 16162 30057 32871 28738	AM/RDFT	(DSch)
11530	HM01	9-2	1758	Mon	Starting again on this freq. Should be on 11635 kHz. Switch at 1801 UTC	AM/RDFT	(DSch)
11635	HM01	9-2	1802	Mon	00193 85721 16162 30057 32871 28738	AM/RDFT	(DSch)
11635	HM01	9-2	2100	Mon	00193 85721 16162 30057 32871 28738	AM/RDFT	(DSch)
10715	HM01	9-2	2200	Mon	85721 16163 30057 32871 28738 00193	AM/RDFT	(Dan)
10715	HM01	9-2	2205	Mon	00193 85721 16162 30057 32871 28738	AM/RDFT	(DSch)
11435	HM01	10-2	1609	Tue	00194 85722 16164 30058 32872 83621	AM/RDFT	(DSch)
11530	HM01	10-2	1701	Tue	00194 85722 16164 30058 32872 83621	AM/RDFT	(DSch)
11635	HM01	10-2	1804	Tue	00194 85722 16164 30058 32872 83621	AM/RDFT	(DSch)
16180	HM01	10-2	2100	Tue	85722 16164 30058 32872 83621 00194	AM/RDFT	(Dan)
16180	HM01	10-2	2101	Tue	00194 85722 16164 30058 32872 83621	AM/RDFT	(DSch)
17480	HM01	10-2	2200	Tue	00194 85722 16164 30058 32872 83621	AM/RDFT	(DSch)
11435	HM01	11-2	1609	Wed	00195 85723 16165 28511 32873 83621	AM/RDFT	(DSch)
11530	HM01	11-2	1704	Wed	00195 85723 16165 28511 32873 83621	AM/RDFT	(DSch)
11635	HM01	11-2	1808	Wed	00195 85723 16165 28511 32873 83621	AM/RDFT	(DSch)
10715	HM01	11-2	2230	Wed	85723 16165 28521 32873 83621 00195	AM/RDFT	(Dan)
11435	HM01	12-2	1614	Thu	00196 85724 16166 28521 32874 83622	AM/RDFT	(DSch)
11530	HM01	12-2	1701	Thu	00196 85724 16166 28521 32874 83622	AM/RDFT	(DSch)
11635	HM01	12-2	1800	Thu	00196 85724 16166 28521 32874 83622	AM/RDFT	(DSch)
16180	HM01	12-2	2111	Thu	00196 85724 16166 28521 32874 83622	AM/RDFT	(DSch)
17480	HM01	12-2	2201	Thu	00196 85724 16166 28521 32874 83622	AM/RDFT	(DSch)
17480	HM01	12-2	2230	Thu	85724 16166 28521 32874 83622 00196	AM/RDFT	(Dan)
11435	HM01	13-2	1659	Fri	00197 85725 16167 28522 31875 83623	AM/RDFT	(DSch)
11635	HM01	13-2	1800	Fri	00197 85725 16167 28522 31875 83623	AM/RDFT	(DSch)
11635	HM01	13-2	2116	Fri	00197 85725 16167 28522 31875 83623	AM/RDFT	(DSch)
10715	HM01	13-2	2204	Fri	00197 85725 16167 28522 31875 83623	AM/RDFT	(DSch)
11530	HM01	14-2	1659	Sat	00198 85726 16168 28523 32876 83624	AM/RDFT	(DSch)
11635	HM01	14-2	1757	Sat	00198 85726 16168 28523 32876 83624	AM/RDFT	(DSch)
16180	HM01	14-2	2101	Sat	00198 85726 16168 28523 32876 83624	AM/RDFT	(DSch)
17480	HM01	14-2	2201	Sat	00198 85726 16168 28523 32876 83624	AM/RDFT	(DSch)
11435	HM01	15-2	1558	Sun	00199 85727 16169 28524 32877 83625	AM/RDFT	(DSch)
11530	HM01	15-2	1703	Sun	00199 85727 16169 28524 32877 83625	AM/RDFT	(DSch)
11635	HM01	15-2	1801	Sun	00199 85727 16169 28524 32877 83625	AM/RDFT	(DSch)
11635	HM01	15-2	1802	Sun	Music on predicted HM01	AM	(MPJ)
11635	HM01	15-2	2100	Sun	00199 85727 16169 28524 32877 83625	AM/RDFT	(DSch)
10715	HM01	15-2	2200	Sun	85727 16169 28524 32877 83625 00199	AM/RDFT	(Dan)
10715	HM01	15-2	2216	Sun	00199 85727 16169 28524 32877 83625	AM/RDFT	(DSch)
9330	HM01	16-2	0700	Mon	00199 85727 16169 28524 32877 83625	AM/RDFT	(AB)
9065	HM01	16-2	0800	Mon	00199 85727 16169 28524 32877 83625	AM/RDFT	(AB)
9240	HM01	16-2	0900	Mon	00199 85727 16169 28524 32877 83625	AM/RDFT	(AB)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
9155	HM01	16-2	1000	Mon	00199 85727 16169 28524 32877 83625 //5855 kHz	AM/RDFT	(AB)
5855	HM01	16-2	1000	Mon	00199 85727 16169 28524 32877 83625 //9155 kHz	AM/RDFT	(AB)
11435	HM01	16-2	1600	Mon	64031 85728 14121 28525 32878 83626	AM/RDFT	(DSch/AB)
11530	HM01	16-2	1658	Mon	64031 85728 14121 28525 32878 83626	AM/RDFT	(DSch)
11635	HM01	16-2	1758	Mon	64031 85728 14121 28525 32878 83626	AM/RDFT	(DSch)
11635	HM01	16-2	2101	Mon	64031 85728 14121 28525 32878 83626	AM/RDFT	(DSch)
10715	HM01	16-2	2211	Mon	64031 85728 14121 28525 32878 83626	AM/RDFT	(DSch)
11435	HM01	17-2	1600	Tue	Sent a couple groups, then off at 1610 UTC. At 1614 UTC: 64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
11530	HM01	17-2	1659	Tue	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
11635	HM01	17-2	1759	Tue	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
16180	HM01	17-2	2112	Tue	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
17480	HM01	17-2	2204	Tue	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch/Dan)
11435	HM01	18-2	1559	Wed	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
11530	HM01	18-2	1704	Wed	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
11635	HM01	18-2	1758	Wed	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
11635	HM01	18-2	2102	Wed	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
10715	HM01	18-2	2204	Wed	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
11530	HM01	19-2	1743	Thu	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
11635	HM01	19-2	1815	Thu	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
16180	HM01	19-2	2100	Thu	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
17480	HM01	19-2	2204	Thu	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch/Dan)
11435	HM01	20-2	1605	Fri	64031 81621 14121 28526 32879 83626	AM/RDFT	(DSch)
11530	HM01	20-2	1659	Fri	64031 81621 14121 28526 32879 83626	AM/RDFT	(DSch)
11635	HM01	20-2	1801	Fri	64031 81621 14121 28526 32879 83626	AM/RDFT	(DSch)
10715	HM01	20-2	2200	Fri	64031 81621 14121 28526 32879 83627	AM/RDFT	(AB/DSch)
11435	HM01	21-2	1601	Sat	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
11530	HM01	21-2	1706	Sat	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
11635	HM01	21-2	1811	Sat	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
16180	HM01	21-2	2101	Sat	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
17480	HM01	21-2	2202	Sat	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
11435	HM01	22-2	1559	Sun	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
11530	HM01	22-2	1659	Sun	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch/N2UHC)
11635	HM01	22-2	2108	Sun	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
10715	HM01	22-2	2242	Sun	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch/Dan)
11435	HM01	23-2	1615	Mon	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
11530	HM01	23-2	1659	Mon	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
11635	HM01	23-2	1804	Mon	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch)
10715	HM01	23-2	2231	Mon	64031 81621 14121 28526 32879 83627	AM/RDFT	(DSch/Dan)
17480	HM01	24-2	2230	Tue	64032 81621 14122 28527 86581 83628	AM/RDFT	(Dan)
5855	HM01	25-2	0500	Wed	64032 81621 14122 28527 86581 83628	AM/RDFT	(SFNY)
10715	HM01	25-2	2230	Wed	81621 14122 28527 86581 83628 64032	AM/RDFT	(Dan)
11462	HM01	26-2	0500	Thu	56040 81622 14123 42311 86581 66861	AM/RDFT	(SFNY)
14375	HM01	26-2	0600	Thu	56040 81622 14123 42311 86581 66861	AM/RDFT	(SFNY)
16180	HM01	26-2	2100	Thu	81623 14124 42311 86582 66861 56041	AM/RDFT	(Dan)
16180	HM01	26-2	2128	Thu	56041 81623 14124 42311 86582 66861	AM/RDFT	(DSch)
11635	HM01	27-2	2033	Fri	Very weak, unreadable	AM/RDFT	(DSch)
10715	HM01	27-2	2200	Fri	81624 14125 42312 86583 66862 56042	AM/RDFT	(Dan)
11635	HM01	28-2	2058	Sat	56042 81624 14125 42312 86583 66862	AM/RDFT	(DSch)
16180	HM01	28-2	2102	Sat	DGI	AM/RDFT	(N2UHC)
10715	HM01	28-2	2128	Sat	56043 81625 14126 42313 86584 66863	AM/RDFT	(DSch)
17480	HM01	28-2	2206	Sat	56043 81625 14126 42313 86584 66863	AM/RDFT	(DSch)
2435	M01b	2-2	1910	Mon	853... Traffic mostly uncopiable //3520 kHz	MCW	(MPJ)
3520	M01b	2-2	1910	Mon	853... Traffic mostly uncopiable //2435 kHz	MCW	(MPJ)
3520	M01b	9-2	1910	Mon	853 426 62 = = 87980 51079 5_0__ 72001 2724_ ... Very poor //2435 kHz	CW	(MPJ)
2435	M01b	9-2	1910	Mon	853 426 62 = = 87980 51079 5_0__ 72001 2724_ ... Very poor //3520 kHz	CW	(MPJ)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
3205	M01b	9-2	2015	Mon	375 426 62 = = 87980 51079 51071 72001 27247 ... Very poor	CW	(MPJ)
3195	M01b	13-2	2002	Fri	866 426 62 = = barely readable //2655 kHz	MCW	(MPJ)
2655	M01b	13-2	2002	Fri	866 426 62 = = 87980 51079 59304 72001 ... (too difficult) //3195 kHz	MCW	(MPJ)
2470	M01b	19-2	1932	Thu	910 426 62 = = 87980 51079 59304 72001 27247 ... 76192 29982 2... (Stopped)	MCW	(MPJ)
3520	M01b	23-2	1910	Mon	853 426 62 = = 87980 51079 59304 72001 27247 (fading) ... _7307 27888 71181 02083 = = 426 62 000	MCW	(MPJ)
4563	M01c	9-2	1745	Mon	i.p. 121 999. 111 211 15. 45328 16783 56807 23416 52696 .... 111 46328	CW	(Tom)
13911	M03	13-2	1420	Fri	878/38 = 78230 99631 15892 ... 40607 37096 47509 = 878/38 rpt msg = 000	CW	(AB)
13911	M03	15-2	1420	Sun	878/38 = = 78230 99631 15892 54011 37937 ... 82056 95243 40607 73096 47509 = =rpt msg = = 000	CW	(MPJ)
4505	M03	18-2	1320	Wed	540/33 = = 5FGs	CW	(AB)
4828	M03	22-2	1320	Sun	437/00	CW	(HFD)
8135	M08a	1-2	2307	Sun	Cuban cut nbrs	CW	(DSch)
8135	M08a	3-2	2314	Tue	Cuban cut nbrs	CW	(DSch)
8096	M08a	4-2	1359	Wed	Cuban cut nbrs: WDRTN RRTNA TDWN	CW	(DSch)
7554	M08a	4-2	2008	Wed	Cuban cut nbrs	CW	(DSch)
8009	M08a	4-2	2308	Wed	Cuban cut nbrs	CW	(DSch)
8096	M08a	5-2	1407	Thu	Cuban cut nbrs	CW	(DSch)
7554	M08a	5-2	1958	Thu	Cuban cut nbrs: TADWN AURGA NITAA	CW	(DSch)
8096	M08a	6-2	1359	Fri	Cuban cut nbrs: NRRTN DTADA UDUWA	CW	(DSch)
8135	M08a	6-2	2301	Fri	Cuban cut nbrs	CW	(DSch)
7554	M08a	7-2	2002	Sat	Cuban cut nbrs: AGNRN NNWTA DWTNN	CW	(DSch)
8009	M08a	7-2	2306	Sat	Cuban cut nbrs	CW	(DSch)
7554	M08a	9-2	2019	Mon	Cuban cut nbrs	CW	(DSch)
8096	M08a	10-2	1417	Tue	Cuban cut nbrs	CW	(DSch)
8135	M08a	10-2	2301	Tue	Cuban cut nbrs. A second xmtr briefly tuned on top of CW then off	CW	(DSch)
7554	M08a	11-2	2006	Wed	Cuban cut nbrs	CW	(DSch)
8009	M08a	11-2	2319	Wed	Cuban cut nbrs. Off at 2320 UTC	CW	(DSch)
8096	M08a	12-2	1416	Thu	Cuban cut nbrs	CW	(DSch)
7554	M08a	12-2	2001	Thu	Cuban cut nbrs	CW	(DSch)
8135	M08a	12-2	2300	Thu	Cuban cut nbrs: GWDAN RANWA INTGA	CW	(DSch)
8096	M08a	13-2	1418	Fri	Late start. Cuban cut nbrs	CW	(DSch)
8135	M08a	13-2	2204	Fri	Cuban cut nbrs	CW	(DSch)
8096	M08a	15-2	1414	Sun	Cuban cut nbrs	CW	(AB)
7554	M08a	15-2	2007	Sun	Cuban cut nbrs	CW	(DSch)
8096	M08a	16-2	1407	Mon	Cuban cut nbrs	CW	(DSch)
8009	M08a	16-2	2258	Mon	Cuban cut nbrs: GWGDN TGDRA ANRGN	CW	(DSch)
8096	M08a	17-2	1407	Tue	Bad keying, unreadable	CW	(DSch)
7554	M08a	17-2	2007	Tue	Cuban cut nbrs after faulty V02a	CW	(DSch)
8135	M08a	17-2	2259	Tue	Cuban cut nbrs	CW	(DSch)
8009	M08a	18-2	2259	Wed	Cuban cut nbrs: GWFRAA TGTAN AWD.A	CW	(DSch)
8135	M08a	19-2	2259	Thu	Cuban cut nbrs: UAGRN RUNTA IIWNN	CW	(DSch)
7554	M08a	20-2	1959	Fri	Cuban cut nbrs: AUUIA NWAAA DARDA	CW	(DSch)
8009	M08a	21-2	2259	Sat	Cuban cut nbrs: DWTNN AGNRN NNNTR	CW	(DSch)
8096	M08a	22-2	1403	Sun	Cuban cut nbrs	CW	(DSch)
7554	M08a	22-2	2003	Sun	Cuban cut nbrs: AGNRN NNWTA DWTNN	CW	(DSch)
8135	M08a	22-2	2306	Sun	Cuban cut nbrs	CW	(DSch)
8096	M08a	23-2	1359	Mon	Cuban cut nbrs	CW	(DSch)
7554	M08a	23-2	2009	Mon	Cuban cut nbrs	CW	(DSch)
8047	M12	2-2	1800	Mon	463 1 208 212 27497 19613 08243 97998 29561 ... 96438 28246 94878 20969 37070 000 000	CW	(MPJ)
6802	M12	2-2	1820	Mon	463 1 208 212 27497 19613 08243 97998 29561 ... 96438 28246 94878 20969 37070 000 000	CW	(MPJ)
5788	M12	2-2	1840	Mon	463 1 208 212 27497 19613 08243 97998 29561 ... 96438 28246 94878 20969 37070 000 000	CW	(MPJ)
10343	M12	4-2	1900	Wed	124 1 5784 140 94103 16390 97089 28151 75695 ... 91285 37872 59287 05441 21008 000 000	CW	(MPJ)
9264	M12	4-2	1920	Wed	124 1 5784 140 94103 16390 97089 28151 75695 ... 91285 37872 59287 05441	CW	(MPJ)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
					21008 000 000		
11435	M12	4-2	1930	Wed	938 1 9790 68 59355 13194 21766 54872 33075 … 53533 20719 26723 87198 00738 000 000	CW	(MPJ)
8116	M12	4-2	1940	Wed	124 1 5784 140 94103 16390 97089 28151 75695 … 91285 37872 59287 05441 21008 000 000	CW	(MPJ)
10598	M12	4-2	1950	Wed	938 1 9790 68 59355 13194 21766 54872 33075 … 53533 20719 26723 87198 00738 000 000	CW	(MPJ)
13569	M12	5-2	1010	Thu	582 1	CW	(HFD)
14869	M12	5-2	1030	Thu	582 1	CW	(HFD)
16269	M12	5-2	1050	Thu	582 1	CW	(HFD)
9162	M12	5-2	1310	Thu	104 1	CW	(HFD)
8062	M12	5-2	1330	Thu	104 1	CW	(HFD)
7462	M12	5-2	1350	Thu	104 1	CW	(HFD)
10343	M12	5-2	1900	Thu	124 1 6893 112 44785 51742 08181 20451 15413 … 34108 92223 76741 82750 35354 000 000	CW	(MPJ)
9264	M12	5-2	1910	Thu	124 1 6893 112 44785 51742 08181 20451 15413 … 34108 92223 76741 82750 35354 000 000	CW	(MPJ)
8116	M12	5-2	1920	Thu	124 1 6893 112 44785 51742 08181 20451 15413 … 34108 92223 76741 82750 35354 000 000	CW	(MPJ)
4617	M12	9-2	0530	Mon	638 1	CW	(HFD)
5317	M12	9-2	0550	Mon	638 1	CW	(HFD)
5817	M12	9-2	0610	Mon	638 1	CW	(HFD)
14728	M12	9-2	1140	Mon	973 5692 129 47075 79079 79087 58760 46133 … 54758 90036 11572 64558 06476 000 000	CW	(MPJ)
9176	M12	9-2	1900	Mon	257 1	CW	(HFD)
7931	M12	9-2	1920	Mon	257 1	CW	(HFD)
6904	M12	9-2	1940	Mon	257 1	CW	(HFD)
11435	M12	11-2	1930	Wed	938 1 1500 64 87494 25883 95198 70293 14771 … 37391 72762 82984 70653 04832 000 000	CW	(MPJ)
10598	M12	11-2	1950	Wed	938 1 1500 64 87494 25883 95198 70293 14771 … 37391 72762 82984 70653 04832 000 000	CW	(MPJ)
9327	M12	11-2	2010	Wed	938 1 1500 64 87494 25883 95198 70293 14771 … 37391 72762 82984 70653 04832 000 000	CW	(MPJ)
9137	M12	14-2	0620	Sat	612 1 9779 81 0853T 14647 40835 … 82274 27349 44652 000 000	CW	(AB)
12205	M12	16-2	1100	Mon	973 1 6044 113 39916 71566 33876 52994 14409 74439 71600 07090 55433 17513 … 000 000	CW	(AB)
6904	M12	16-2	1844	Mon	i.p. … 88749 75768 000 000	CW	(TJ)
10343	M12	17-2	1930	Tue	124 1 9532 70 29023 84172 39148 66039 33850 … 48421 11181 55390 84763 70780 000 000	CW	(MPJ)
9264	M12	17-2	1950	Tue	124 1 9532 70 29023 84172 39148 66039 33850 … 48421 11181 55390 84763 70780 000 000	CW	(MPJ)
8116	M12	17-2	2010	Tue	124 1 9532 70 29023 84172 39148 66039 33850 … 48421 11181 55390 84763 70780 000 000	CW	(MPJ)
8047	M12	18-2	1900	Wed	463 1 9380 135 41037 00556 16758 … 05801 70090 75115 000 000	CW	(Topol)
9162	M12	19-2	1300	Thu	104 104 104 000	CW	(TJ)
8062	M12	19-2	1320	Thu	104 104 104 000	CW	(TJ)
13386	M12	19-2	1500	Thu	725 725 725 1 2135 123 2135 123 91768 … 51478 47276 000 000	CW	(TJ)
12189	M12	19-2	1520	Thu	725 725 725 1 2135 123 2135 123 91768 … 51478 47276 000 000	CW	(TJ)
11491	M12	19-2	1540	Thu	725 725 725 1 2135 123 2135 123 91768 … 51478 47276 000 000	CW	(TJ)
13386	M12	19-2	1700	Thu	725 1 5229 120 33041 97463 99604 62544 91617 … 75360 79589 17547 90493 93615 000 000	CW	(TJ)
12189	M12	19-2	1720	Thu	725 1 5229 120 33041 97463 99604 62544 91617 … 75360 79589 17547 90493 93615 000 000	CW	(TJ/MPJ)
11491	M12	19-2	1740	Thu	725 1 5229 120 33041 97463 99604 62544 91617 … 75360 79589 17547 90493 93615 000 000	CW	(TJ/MPJ)
10343	M12	19-2	1800	Thu	124 124 124 1 06t5 154 06t5 154 __987 3t276 … 36t87 86195 000 000	CW	(TJ)
10343	M12	19-2	1800	Thu	124 1 5605 154 30984 30276 29152 71958 38241 … 67832 25291 53875 36087 86195 000 000	CW	(MPJ)
9264	M12	19-2	1820	Thu	124 1 5605 154 30984 30276 29152 71958 38241 … 67832 25291 53875 36087 86195 000 000	CW	(MPJ)
8116	M12	19-2	1840	Thu	124 1 5605 154 30984 30276 29152 71958 38241 … 67832 25291 53875 36087	CW	(MPJ)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
					86195 000 000		
10343	M12	19-2	1900	Thu	124 1 6027 106 06757 40384 97731 57373 86964 … 59187 41778 16311 45138 28617 000 000	CW	(MPJ)
9264	M12	19-2	1920	Thu	124 1 6027 106 06757 40384 97731 57373 86964 … 59187 41778 16311 45138 28617 000 000	CW	(MPJ)
8116	M12	19-2	1940	Thu	124 1 6027 106 06757 40384 97731 57373 86964 … 59187 41778 16311 45138 28617 000 000	CW	(MPJ)
4490	M12	19-2	2000	Thu	197 164 30 = = 88042 75164 57993 01495 29815 … 34535 58016 81065 24629 28045 = = 164 30 000	CW	(MPJ)
9162	M12	21-2	1310	Sat	104 104 104 000	CW	(MPJ)
8062	M12	21-2	1330	Sat	104 104 104 000	CW	(MPJ)
12205	M12	23-2	1100	Mon	973 1 8429 122 00708 05275 22146 85636 45679 … 15686 17516 21615 13857 93758 000 000	CW	(MPJ)
13559	M12	23-2	1120	Mon	973 1 8429 122 00708 05275 22146 85636 45679 … 15686 17516 21615 13857 93758 000 000	CW	(MPJ)
14728	M12	23-2	1140	Mon	973 1 8429 122 00808 05275 … 39579 93758 000 000	CW	(TJ)
14728	M12	23-2	1140	Mon	973 1 8429 122 00708 05275 22146 85636 45679 … 15686 17516 21615 13857 93758 000 000	CW	(MPJ)
11435	M12	23-2	1700	Mon	938 1 8130 113 54166 86979 59164 63930 17857 … 98473 41725 13200 81102 81216 000 000	CW	(MPJ)
10598	M12	23-2	1720	Mon	938 1 8130 113 54166 86979 59164 63930 17857 … 98473 41725 13200 81102 81216 000 000	CW	(MPJ)
9327	M12	23-2	1740	Mon	938 1 8130 113 54166 86979 59164 63930 17857 … 98473 41725 13200 81102 81216 000 000	CW	(MPJ)
8047	M12	23-2	1800	Mon	463 1 6489 150 5956_ 18440 58039 _8352 15_1_ … 44603 78457 72674 58013 71348 000 000	CW	(MPJ)
6802	M12	23-2	1820	Mon	463 1 6489 150 unreadable	CW	(MPJ)
5788	M12	23-2	1840	Mon	463 1 6489 150 unreadable	CW	(MPJ)
7931	M12	23-2	1920	Mon	257 1 3621 108 85092 42364 57162 54688 10180 … … (fading) 2283… 86110 4296_ 4296_ 42908 48567 000 000	CW	(MPJ)
5884	M12	26-2	0730	Thu	888 0	CW	(HFD)
6884	M12	26-2	0750	Thu	888 0	CW	(HFD)
5374	M14	6-2	1700	Fri	372 372 372 00000	CW	(AB)
16188	M14	11-2	0935	Wed	i.p. 07464 29926 06461 30182 60735 17622 93701 95897 34054 97656 = = 308 308 47 47 00000	CW	(JPL-Sib)
4761	M14	11-2	1920	Wed	748 621 020 44108 38962 04169 … 28305 68131 8282 (stopped here)	MCW	(MPJ)
3322	M21	10-2	0047	Tue	Russian Air Defense =990348??0?????	CW	(TJ)
4951.5	M21	12-2	2150	Thu	Russian Air Defense =990052??0?????	CW	(AB)
3322	M21	12-2	2201	Thu	Russian Air Defense =990103??0?????	CW	(AB)
3322	M21	16-2	1734	Mon	Russian Air Defense =991936??0?????	CW	(AB)
4951.5	M21	16-2	1739	Mon	Russian Air Defense =991941??0?????	CW	(AB)
3256	M21	17-2	1532	Tue	Russian Air Defense =991832??0????? =991833??0?????	CW	(JPL-Sib)
3751	M21	28-2	1400	Sat	Russian Air Defense =99?1659?9????? =99?1701?9?????	CW	(JPL-Sib)
17052	M22	23-2	1551	Mon	vvv de 4xz 4xz on 12594//14418//17052 kHz	CW	(TJ)
14418	M22	23-2	1551	Mon	vvv de 4xz 4xz on 12594//14418//17052 kHz	CW	(TJ)
12594	M22	23-2	1551	Mon	vvv de 4xz 4xz on 12594//14418//17052 kHz	CW	(TJ)
17052	M22	23-2	1551	Mon	vvv de 4xz 4xz	CW	(JCS)
17052	M22	23-2	1620	Mon	4XZ Israeli Intel, Tel Aviv on 2680//4331//6607//12594//14418//17052 kHz	CW	(Danix)
2680	M22	23-2	1620	Mon	4XZ Israeli Intel, Tel Aviv on 2680//4331//6607//12594//14418//17052 kHz	CW	(Danix)
4331	M22	23-2	1620	Mon	4XZ Israeli Intel, Tel Aviv on 2680//4331//6607//12594//14418//17052 kHz	CW	(Danix)
6607	M22	23-2	1620	Mon	4XZ Israeli Intel, Tel Aviv on 2680//4331//6607//12594//14418//17052 kHz	CW	(Danix)
12594	M22	23-2	1620	Mon	4XZ Israeli Intel, Tel Aviv on 2680//4331//6607//12594//14418//17052 kHz	CW	(Danix)
14418	M22	23-2	1620	Mon	4XZ Israeli Intel, Tel Aviv on 2680//4331//6607//12594//14418//17052 kHz	CW	(Danix)
17052	M22	25-2	1352	Wed	= = VVV DE 4XZ 4XZ	CW	(AAI)
14400	M23	6-2	0956	Fri	111 (R20)	CW	(Danix)
14400	M23	10-2	0820	Tue	111 repeated for 1h55mins. Ends at 1015 UTC	CW	(AB)
14400	M23	11-2	0728	Wed	i.p. 111 repeated. Extremely long transmission. Ends at 1015 UTC	CW	(Danix)
14400	M23	11-2	0820	Wed	i.p. 111 repeated. Extremely long transmission. Ends at 1015 UTC	CW	(AB)
14400	M23	12-2	0722	Thu	i.p. 111 repeated. Ends at 1015 UTC	CW	(AB)
14400	M23	13-2	0656	Fri	i.p. 111 repeated. Ends at 1015 UTC	CW	(AB)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
14400	M23	14-2	0613	Sat	i.p. 111 repeated. Ends at 1015 UTC	CW	(AB)
14400	M23	15-2	0754	Sun	i.p. repeating 111	CW	(AB)
14400	M23	15-2	0821	Sun	Repeating 111	CW	(Nico)
14400	M23	16-2	0558	Mon	M23 starting up, repeating "111"	CW	(AB)
14400	M23	17-2	0728	Tue	i.p. repeating 111	CW	(AB)
21.1	M32	2-2	1400	Mon	XXX XXX LZT6 LZT6 97753 48514 OBYMKKA (or OBYTTKKA) 2475 3265 K	CW	(TJ)
21.1	M32	2-2	1400	Mon	XXX XXX WEGI WEGI 20949 66927 NASYQENNYJ 7795 3988 K	CW	(TJ)
21.1	M32	2-2	1400	Mon	XXX XXX WEGI WEGI 70709 50277 KLOPOMOR 3277 2208 K	CW	(TJ)
10164	M32	2-2	1539	Mon	XXX XXX WEGI WEGI 70709 50277 KLOPOMOR 3277 2208	CW	(JU)
9120	M32	7-2	0212	Sat	IGW8 IGW8 IGW8 999 9120 K. IGW8 IGW8 999 9120	CW	(JPL-Sib)
5159	M32	11-2	2046	Wed	XXX XXX 9D5I MIRAV 3961 K. R AR K. AR	CW	(JPL-Sib)
6387	M32	19-2	0921	Thu	i.p. 20209 TOLMA'OKA 5312 1448 K	CW	(JPL-Sib)
4128	M32	22-2	2007	Sun	i.p. QSA 1 QSA? K. R K. QTGP DE 7HMF QSA? K. QSA 2 R K	CW	(JPL-Sib)
3393	M32	28-2	1429	Sat	V7JT de JOOA K. V7JT DE FKFF. V7JT DE 3CAY K. RPT K. V7JT DE Z6FF K	CW	(JPL-Sib)
4601	M32a	8-2	1039	Sun	i.p. 19210 05 1319 = 19210 06 1319 = 19210 07 1319	CW	(JPL-Sib)
8112	M32c	2-2	1902	Mon	V-markers	CW	(Tom)
8112	M32c	2-2	1902	Mon	V-markers	CW	(Tom)
8112	M32c	3-2	0620	Tue	W-markers	CW	(Tom)
8112	M32c	3-2	0705	Tue	L-markers	CW	(Tom)
8112	M32c	3-2	0743	Tue	L-markers	CW	(Tom)
8112	M32c	3-2	0803	Tue	L-markers	CW	(Tom)
8112	M32c	6-2	0820	Fri	W-markers: Tu-95MS Bear H net	CW	(Tom)
8112	M32c	6-2	0840	Fri	W-markers: Tu-95MS Bear H net	CW	(Tom)
8112	M32c	16-2	0820	Mon	W-marker	CW	(AB)
8112	M32c	16-2	0840	Mon	W-marker	CW	(AB)
8112	M32c	16-2	0903	Mon	OY5T DE IWV4	CW	(Tom)
8112	M32c	16-2	1400	Mon	W-marker	CW	(Mar)
8112	M32c	16-2	1442	Mon	W-marker	CW	(GHn)
3320	M32c	16-2	1857	Mon	RUHR RNM2 DE REA QSA? RUHR DE REA QSA 4 NIL GB S K. RNM2 DE REA QSA 3 NIL GB S K.	CW	(Tom)
8112	M32c	17-2	0740	Tue	W-markers: Tu-95MS Bear H net	CW	(Tom)
8112	M32c	18-2	0700	Wed	Ü-marker, also at 0720 and 1130UTC	CW	(Tom/WP3)
8112	M32c	18-2	0811	Wed	Tu-95MS Bear H net NCS: FJ5E DE IWV4 K	CW	(Tom)
8112	M32c	18-2	1300	Wed	Ü-marker	CW	(AB)
8112	M32c	19-2	0840	Thu	W Markers: Tu-95MS Bear H net	CW	(Tom)
8112	M32c	19-2	1100	Thu	W Markers: Tu-95MS Bear H net	CW	(Tom)
14557	M32c	23-2	0746	Mon	XXX XXX 1QRF 1QRF 52004 AMFIOBENY 8207 4863 ANALOJNYJ 3557 3950 K	CW	(TJ)
14557	M32c	23-2	0746	Mon	XXX XXX 1QRF 1QRF 74997 ANWERS 7173 6667 K	CW	(TJ)
14557	M32c	23-2	0840	Mon	REA4 REA4 = 23T7T 999TT 2213T 65596 75357 23TT3 1123T 21263 8TTT1 = REA4 K	CW	(TJ)
14557	M32c	23-2	0940	Mon	REA4 REA4 = 23T8T 999TT 2214T 65596 78997 834T1 11239 2_264 8TTT1 = REA4 K	CW	(TJ)
22965	M42	15-2	1704	Sun	Russian diplo/intel from Cuba: 11100 00224 15674 15002 01239	Baudot 200/50	(MCO)
5325	M42	16-2	0611	Mon	RND79: Russian point to point circuit, Moscow area. Works daily with one of RFT3, RFT6 or RBW	RUS-ARQ 100/500	(TJ)
5440	M42	16-2	0611	Mon	RWD59: Russian point to point circuit, Moscow area	RUS-ARQ 100/500	(TJ)
5225	M42	16-2	0611	Mon	RVR39: Russian point to point circuit, works daily with RTW54 on qsx 4540 kHz	RUS-ARQ 100/500	(TJ)
6795	M42	16-2	0618	Mon	RXZ32: Russian gov/mil, prob St.Petersburg area. Ends morning schedule and into its usual idle	FSK 50/500	(TJ)
7625	M42	17-2	0923	Tue	RRL2: Russian point to point link, "Western Russia"	FSK 100/500	(TJ)
16344	M42	19-2	1405	Thu	Russian Intel/Diplo	CROWD-36	(AAI)
3205	M42	19-2	1753	Thu	RNI2: Russian point to point link RYF2 de RNI2 qsa?", RYF2 de RNI2 ok QSA4 nil GB SK	FSK 50/500	(TJ)
6830	M42	24-2	0654	Tue	RWI: Russian point to point link "RYF2 RYF2 RYF2 DE RWI RWI" then into F1B 100/500 idle	CW	(TJ)
6950	M42	24-2	0715	Tue	RZT71: Russian point to point link "RCZ32 DE RZT71 ZHC?" into slow reversals and start of data exchange	CW	(TJ)
9140	M42	24-2	0730	Tue	RUU70: Russian point to point link "RRF30 RRF30 RRF30 DE RUU70 RUU70 ZHC? ZHC?" into RUS-ARQ 100/500	CW	(TJ)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
7697	M42a	8-2	1602	Sun	VVV 3K NWA 32113 26291 A 19933 K. VVV QSA3 K K OK AAA OK K	CW	(NH2)
5750	M42b	5-2	0720	Thu	Russian diplo/intel. 801 129 05 0655 2563 04430 ... 55747 =50= 24355 etc + ops chat in CW	FSK 50/500	(KK2)
5205	M42c	5-2	2010	Thu	Russian Diplo/Intel. RYRYRY 00000++++++++++162)5761	FSK 200/500	(MPJ/HFD)
6796	M42c	5-2	2010	Thu	Russian Diplo/Intel. RYRYRY 00000++++++++++162)5761	FSK 200/500	(MPJ/HFD)
4030	M42c	5-2	2020	Thu	Russian Diplo/Intel. RYRYRY 00000++++++++++162)5761	FSK 200/500	(MPJ/HFD)
19439	M42c	7-2	1300	Sat	Russian diplo/intel. RYRYRY 00000++++++++++162)5761	FSK 200/500	(AB/HFD)
17454	M42c	7-2	1310	Sat	Russian diplo/intel. RYRYRY 00000++++++++++162)5761	FSK 200/500	(AB/HFD)
15815	M42c	7-2	1320	Sat	Russian diplo/intel. RYRYRY 00000++++++++++162)5761	FSK 200/500	(AB/HFD)
19439	M42c	14-2	1300	Sat	Russian diplo/intel. 00000++++++++++162)5761	FSK 200/500	(AB)
17454	M42c	14-2	1310	Sat	Russian diplo/intel. 00000++++++++++162)5761	FSK 200/500	(AB)
15815	M42c	14-2	1320	Sat	Russian diplo/intel. 00000++++++++++162)5761	FSK 200/500	(AB)
20841	M42c	14-2	1718	Sat	Russian diplo/intel. Possibly sent from Cuba	FSK 200/500	(MCO)
9151	M42c	14-2	1810	Sat	Russian diplo/intel. 00000++++++++++162)5761	FSK 200/500	(AB)
7639	M42c	14-2	1820	Sat	Russian diplo/intel. 00000++++++++++162)5761	FSK 200/500	(AB)
5249	M42c	14-2	1830	Sat	Russian diplo/intel. 00000++++++++++162)5761	FSK 200/500	(AB)
6795	M42c	19-2	2000	Thu	Russian diplo/intel.	FSK 200/500	(AB)
5204	M42c	19-2	2010	Thu	Russian diplo/intel.	FSK 200/500	(AB)
4030	M42c	19-2	2020	Thu	Russian diplo/intel.	FSK 200/500	(AB)
19439	M42c	28-2	1300	Sat	Russian Diplo/Intel. RYRYRY 00000++++++++++162)5761	FSK 200/500	(AB)
17454	M42c	28-2	1310	Sat	Russian Diplo/Intel. RYRYRY 00000++++++++++162)5761	FSK 200/500	(AB)
15815	M42c	28-2	1320	Sat	Russian Diplo/Intel. RYRYRY 00000++++++++++162)5761	FSK 200/500	(AB)
9151	M42c	28-2	1810	Sat	Russian Diplo/Intel. RYRYRY 00000++++++++++162)5761	FSK 200/500	(AB/MPJ)
7639	M42c	28-2	1820	Sat	Russian Diplo/Intel. RYRYRY 00000++++++++++162)5761	FSK 200/500	(AB)
5249	M42c	28-2	1830	Sat	Russian Diplo/Intel. RYRYRY 00000++++++++++162)5761	FSK 200/500	(AB/MPJ)
11046	M42d	2-2	0700	Mon	Russian diplo/intel. Msg 220 on link 45136	FSK 200/1000	(AB)
9242	M42d	2-2	0710	Mon	Russian diplo/intel. Msg 220 on link 45136	FSK 200/1000	(AB)
7317	M42d	2-2	0720	Mon	Russian diplo/intel. Msg 220 on link 45136	FSK 200/1000	(AB)
11162	M42d	2-2	1200	Mon	Russian diplo/intel. Msg 220 on link 45136	FSK 200/1000	(AB)
9163	M42d	2-2	1210	Mon	Russian diplo/intel. Msg 220 on link 45136	FSK 200/1000	(AB)
7615	M42d	2-2	1220	Mon	Russian diplo/intel. Msg 220 on link 45136	FSK 200/1000	(AB/MPJ)
11162	M42d	3-2	1200	Tue	Russian diplo/intel. Msg 222 on link 45137	FSK 200/1000	(AB)
9162	M42d	3-2	1210	Tue	Russian diplo/intel. Msg 222 on link 45137	FSK 200/1000	(AB)
7615	M42d	3-2	1220	Tue	Russian diplo/intel. Msg 222 on link 45137	FSK 200/1000	(AB)
7317	M42d	4-2	0820	Wed	Russian diplo/intel. Msg 227 on link 45136	FSK 200/1000	(AB)
11046	M42d	5-2	0700	Thu	Russian diplo/intel. Msg 230 on link 45137	FSK 200/1000	(AB)
9242	M42d	5-2	0710	Thu	Russian diplo/intel. Msg 230 on link 45137	FSK 200/1000	(AB)
7317	M42d	5-2	0720	Thu	Russian diplo/intel. Msg 230 on link 45137	FSK 200/1000	(AB)
11162	M42d	5-2	1200	Thu	Russian diplo/intel. Msg 230 on link 45137	FSK 200/1000	(AB)
9162	M42d	5-2	1210	Thu	Russian diplo/intel. Msg 230 on link 45137	FSK 200/1000	(AB)
7615	M42d	5-2	1220	Thu	Russian diplo/intel. Msg 230 on link 45137	FSK 200/1000	(AB)
11046	M42d	6-2	0700	Fri	Russian diplo/intel. Msg 007 on link 45136	FSK 200/1000	(AB)
9242	M42d	6-2	0710	Fri	Russian diplo/intel. Msg 007 on link 45136	FSK 200/1000	(AB)
7317	M42d	6-2	0720	Fri	Russian diplo/intel. Msg 007 on link 45136	FSK 200/1000	(AB)
11046	M42d	9-2	0700	Mon	Russian diplo/intel. Msg 237 on link 45136	FSK 200/1000	(AB)
9242	M42d	9-2	0710	Mon	Russian diplo/intel. Msg 237 on link 45136	FSK 200/1000	(AB)
7317	M42d	9-2	0720	Mon	Russian diplo/intel. Msg 237 on link 45136	FSK 200/1000	(AB)
11164	M42d	9-2	1200	Mon	Russian diplo/intel. Msg 237 on link 45136	FSK 200/1000	(MPJ)
9164	M42d	9-2	1210	Mon	Russian diplo/intel. Msg 237 on link 45136	FSK 200/1000	(MPJ)
7617	M42d	9-2	1220	Mon	Russian diplo/intel. Msg 237 on link 45136	FSK 200/1000	(MPJ)
14880	M42d	10-2	0150	Tue	Russian diplo/intel. Msg 055 on link 41018	FSK 200/1000	(Dan)
16320	M42d	10-2	0150	Tue	Russian diplo/intel. Msg 055 on link 41018	FSK 200/1000	(Dan)
11162	M42d	10-2	1200	Tue	Russian diplo/intel. Msg 242 on link 45137	FSK 200/1000	(AB)
9162	M42d	10-2	1210	Tue	Russian diplo/intel. Msg 242 on link 45137	FSK 200/1000	(AB)
7615	M42d	10-2	1220	Tue	Russian diplo/intel. Msg 242 on link 45137	FSK 200/1000	(AB)
11469	M42d	10-2	1650	Tue	Russian diplo/intel. Msg 140 on link 20501	FSK 200/1000	(AB)
9214	M42d	10-2	1700	Tue	Russian diplo/intel. Msg 140 on link 20501	FSK 200/1000	(AB)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
7635	M42d	10-2	1710	Tue	Russian diplo/intel. Msg 140 on link 20501	FSK 200/1000	(AB)
11046	M42d	11-2	0700	Wed	Russian diplo/intel. Msg 247 on link 45137	FSK 200/1000	(AB)
9242	M42d	11-2	0710	Wed	Russian diplo/intel. Msg 247 on link 45137	FSK 200/1000	(AB)
7317	M42d	11-2	0720	Wed	Russian diplo/intel. Msg 247 on link 45137	FSK 200/1000	(AB)
19652	M42d	11-2	0800	Wed	Russian diplo/intel. Msg 107 on link 45075	FSK 200/1000	(AB)
17459	M42d	11-2	0810	Wed	Russian diplo/intel. Msg 107 on link 45075	FSK 200/1000	(AB)
15867	M42d	11-2	0820	Wed	Russian diplo/intel. Msg 107 on link 45075	FSK 200/1000	(AB)
19882	M42d	11-2	1000	Wed	Russian diplo/intel. Msg 002 on link 49202	FSK 200/1000	(AB)
17487	M42d	11-2	1010	Wed	Russian diplo/intel. Msg 002 on link 49202	FSK 200/1000	(AB)
15619	M42d	11-2	1020	Wed	Russian diplo/intel. Msg 002 on link 49202	FSK 200/1000	(AB)
11162	M42d	11-2	1200	Wed	Russian diplo/intel. Msg 247 on link 45137	FSK 200/1000	(AB)
9162	M42d	11-2	1210	Wed	Russian diplo/intel. Msg 247 on link 45137	FSK 200/1000	(AB)
7615	M42d	11-2	1220	Wed	Russian diplo/intel. Msg 247 on link 45137	FSK 200/1000	(AB)
10252	M42d	11-2	1800	Wed	Russian diplo/intel. Msg 002 op link 45236	FSK 200/1000	(AB/MPJ)
9335	M42d	11-2	1810	Wed	Russian diplo/intel. Msg 002 op link 45236	FSK 200/1000	(AB/MPJ)
7461	M42d	11-2	1820	Wed	Russian diplo/intel. Msg 002 op link 45236	FSK 200/1000	(AB/MPJ)
11046	M42d	12-2	0700	Thu	Russian diplo/intel. Msg 005 on link 45136	FSK 200/1000	(AB)
9242	M42d	12-2	0710	Thu	Russian diplo/intel. Msg 005 on link 45136	FSK 200/1000	(AB)
7317	M42d	12-2	0720	Thu	Russian diplo/intel. Msg 005 on link 45136	FSK 200/1000	(AB)
11046	M42d	13-2	0700	Fri	Russian diplo/intel. Msg 057 on link 45136	FSK 200/1000	(AB)
9242	M42d	13-2	0710	Fri	Russian diplo/intel. Msg 057 on link 45136	FSK 200/1000	(AB)
7317	M42d	13-2	0720	Fri	Russian diplo/intel. Msg 057 on link 45136	FSK 200/1000	(AB)
20436	M42d	14-2	1100	Sat	Russian diplo/intel. Msg 005 on link 36882	FSK 200/1000	(AB)
18911	M42d	14-2	1110	Sat	Russian diplo/intel. Msg 005 on link 36882	FSK 200/1000	(AB)
17427	M42d	14-2	1120	Sat	Russian diplo/intel. Msg 005 on link 36882	FSK 200/1000	(AB)
22876	M42d	14-2	1500	Sat	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB)
20214	M42d	14-2	1510	Sat	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB)
18251	M42d	14-2	1520	Sat	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB)
20892	M42d	15-2	1000	Sun	Russian diplo/intel. Msg 170 on link 45057	FSK 200/1000	(AB)
14368	M42d	15-2	1530	Sun	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(MPJ)
12081	M42d	15-2	1540	Sun	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB/MPJ)
10212	M42d	15-2	1550	Sun	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB/MPJ)
11046	M42d	16-2	0700	Mon	Russian diplo/intel. Msg 012 on link 45137	FSK 200/1000	(AB)
9242	M42d	16-2	0710	Mon	Russian diplo/intel. Msg 012 on link 45137	FSK 200/1000	(AB)
7317	M42d	16-2	0720	Mon	Russian diplo/intel. Msg 012 on link 45137	FSK 200/1000	(AB)
11162	M42d	16-2	1200	Mon	Russian diplo/intel. Msg 012 on link 45137	FSK 200/1000	(AB)
9162	M42d	16-2	1210	Mon	Russian diplo/intel. Msg 012 on link 45137	FSK 200/1000	(AB)
7615	M42d	16-2	1220	Mon	Russian diplo/intel. Msg 012 on link 45137	FSK 200/1000	(AB)
7317	M42d	17-2	0720	Tue	Russian diplo/intel. Msg 015 on link 45136	FSK 200/1000	(AB)
11162	M42d	17-2	1200	Tue	Russian diplo/intel. Msg 015 on link 45136	FSK 200/1000	(AB)
9162	M42d	17-2	1210	Tue	Russian diplo/intel. Msg 015 on link 45136	FSK 200/1000	(AB)
7615	M42d	17-2	1220	Tue	Russian diplo/intel. Msg 015 on link 45136	FSK 200/1000	(AB)
17452	M42d	17-2	1410	Tue	Russian diplo/intel. Msg 090 on link 32799	FSK 200/1000	(AB)
15879	M42d	17-2	1420	Tue	Russian diplo/intel. Msg 090 on link 32799	FSK 200/1000	(AB)
11469	M42d	17-2	1650	Tue	Russian diplo/intel. Msg 140 on link 20501	FSK 200/1000	(AB/MPJ)
9216	M42d	17-2	1700	Tue	Russian diplo/intel. Msg 140 on link 20501	FSK 200/1000	(MPJ)
7637	M42d	17-2	1710	Tue	Russian diplo/intel. Msg 140 on link 20501	FSK 200/1000	(MPJ)
6834	M42d	17-2	2200	Tue	Russian diplo/intel. Msg 007 on link 45057	FSK 200/1000	(AB)
5454	M42d	17-2	2210	Tue	Russian diplo/intel. Msg 007 on link 45057	FSK 200/1000	(AB)
11046	M42d	18-2	0700	Wed	Russian diplo/intel. Msg 022 on link 45136	FSK 200/1000	(AB)
9242	M42d	18-2	0710	Wed	Russian diplo/intel. Msg 022 on link 45136	FSK 200/1000	(AB)
11162	M42d	18-2	1200	Wed	Russian diplo/intel. Msg 022 on link 45136	FSK 200/1000	(AB)
9162	M42d	18-2	1210	Wed	Russian diplo/intel. Msg 022 on link 45136	FSK 200/1000	(AB)
7615	M42d	18-2	1220	Wed	Russian diplo/intel. Msg 022 on link 45136	FSK 200/1000	(AB)
14517	M42d	18-2	1250	Wed	Russian diplo/intel. Msg 002 on link 53277	FSK 200/1000	(AB)
11046	M42d	19-2	0700	Thu	Russian diplo/intel. Msg 025 on link 45136	FSK 200/1000	(AB)
9242	M42d	19-2	0710	Thu	Russian diplo/intel. Msg 025 on link 45136	FSK 200/1000	(AB)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
7317	M42d	19-2	0720	Thu	Russian diplo/intel. Msg 025 on link 45136	FSK 200/1000	(AB)
11162	M42d	19-2	1200	Thu	Russian diplo/intel. Msg 025 on link 45136	FSK 200/1000	(AB)
9162	M42d	19-2	1210	Thu	Russian diplo/intel. Msg 025 on link 45136	FSK 200/1000	(AB)
7615	M42d	19-2	1220	Thu	Russian diplo/intel. Msg 025 on link 45136	FSK 200/1000	(AB)
16154	M42d	19-2	1330	Thu	Russian diplo/intel.	FSK 200/1000	(TJ)
16154	M42d	19-2	1332	Thu	Russian Intel/Diplo. Msg on Link ID 49237	FSK 200/1000	(AAI)
14483	M42d	19-2	1340	Thu	Russian diplo/intel.	FSK 200/1000	(TJ)
12194	M42d	19-2	1350	Thu	Russian diplo/intel.	FSK 200/1000	(TJ)
20437	M42d	21-2	1100	Sat	Russian Diplo/Intel. Msg 007 on Link 36882	FSK 200/1000	(MPJ)
18912	M42d	21-2	1110	Sat	Russian Diplo/Intel. Msg 007 on Link 36882	FSK 200/1000	(MPJ)
17428	M42d	21-2	1120	Sat	Russian Diplo/Intel. Msg 007 on Link 36882	FSK 200/1000	(MPJ)
22878	M42d	21-2	1500	Sat	Russian Diplo/Intel. Msg 047 on Link 32821	FSK 200/1000	(MPJ)
20216	M42d	21-2	1510	Sat	Russian Diplo/Intel. Msg 047 on Link 32821	FSK 200/1000	(MPJ)
18253	M42d	21-2	1520	Sat	Russian Diplo/Intel. Msg 047 on Link 32821	FSK 200/1000	(MPJ)
11046	M42d	23-2	0700	Mon	Russian diplo/intel. Msg 030 on link 45137	FSK 200/1000	(AB)
9242	M42d	23-2	0710	Mon	Russian diplo/intel. Msg 030 on link 45137	FSK 200/1000	(AB)
7317	M42d	23-2	0720	Mon	Russian diplo/intel. Msg 030 on link 45137	FSK 200/1000	(AB)
11162	M42d	23-2	1200	Mon	Russian diplo/intel. Msg 030 on link 45137	FSK 200/1000	(AB/MPJ)
9162	M42d	23-2	1210	Mon	Russian diplo/intel. Msg 030 on link 45137	FSK 200/1000	(AB/MPJ)
7615	M42d	23-2	1220	Mon	Russian diplo/intel. Msg 030 on link 45137	FSK 200/1000	(AB/MPJ)
7615	M42d	24-2	1220	Tue	Russian diplo/intel. Msg 035 on link 45137	FSK 200/1000	(AB)
11469	M42d	24-2	1650	Tue	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB)
9214	M42d	24-2	1700	Tue	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB)
7635	M42d	24-2	1710	Tue	Russian diplo/intel. Msg 002 on link 20501	FSK 200/1000	(AB)
20736	M42d	25-2	0900	Wed	Russian diplo/intel. Msg 210 on link 16404	FSK 200/1000	(AB)
18639	M42d	25-2	0910	Wed	Russian diplo/intel. Msg 210 on link 16404	FSK 200/1000	(AB)
16251	M42d	25-2	0920	Wed	Russian diplo/intel. Msg 210 on link 16404	FSK 200/1000	(AB)
19982	M42d	25-2	1000	Wed	Russian diplo/intel. Msg 110 on link 49202	FSK 200/1000	(AB)
17487	M42d	25-2	1010	Wed	Russian diplo/intel. Msg 110 on link 49202	FSK 200/1000	(AB)
20739	M42d	25-2	1015	Wed	Russian diplo/intel. Msg 065 on link 20492	FSK 200/1000	(AB)
15619	M42d	25-2	1020	Wed	Russian diplo/intel. Msg 110 on link 49202	FSK 200/1000	(AB)
18562	M42d	25-2	1025	Wed	Russian diplo/intel. Msg 065 on link 20492	FSK 200/1000	(AB)
16281	M42d	25-2	1035	Wed	Russian diplo/intel. Msg 065 on link 20492	FSK 200/1000	(AB)
11162	M42d	25-2	1200	Wed	Russian diplo/intel. Msg 040 on link 45137	FSK 200/1000	(AB)
9162	M42d	25-2	1210	Wed	Russian diplo/intel. Msg 040 on link 45137	FSK 200/1000	(AB)
7615	M42d	25-2	1220	Wed	Russian diplo/intel. Msg 040 on link 45137	FSK 200/1000	(AB)
11046	M42d	26-2	0700	Thu	Russian diplo/intel. Msg 037 on link 45136	FSK 200/1000	(AB)
9242	M42d	26-2	0710	Thu	Russian diplo/intel. Msg 037 on link 45136	FSK 200/1000	(AB)
7317	M42d	26-2	0720	Thu	Russian diplo/intel. Msg 037 on link 45136	FSK 200/1000	(AB)
16152	M42d	26-2	1330	Thu	Russian diplo/intel. Msg 235 on link 49237	FSK 200/1000	(AB)
14481	M42d	26-2	1340	Thu	Russian diplo/intel. Msg 235 on link 49237	FSK 200/1000	(AB/AAI)
12194	M42d	26-2	1350	Thu	Russian diplo/intel. Msg 235 on link 49237	FSK 200/1000	(AB)
18046	M42d	28-2	0900	Sat	Russian diplo/intel. Msg 002 on link 45114	FSK 200/1000	(AB)
16258	M42d	28-2	0910	Sat	Russian diplo/intel. Msg 002 on link 45114	FSK 200/1000	(AB)
14349	M42d	28-2	0920	Sat	Russian diplo/intel. Msg 002 on link 45114	FSK 200/1000	(AB)
20892	M42d	28-2	1000	Sat	Russian diplo/intel. Msg 170 on link 45057	FSK 200/1000	(AB)
18427	M42d	28-2	1010	Sat	Russian diplo/intel. Msg 170 on link 45057	FSK 200/1000	(AB)
16151	M42d	28-2	1020	Sat	Russian diplo/intel. Msg 170 on link 45057	FSK 200/1000	(AB)
20436	M42d	28-2	1100	Sat	Russian diplo/intel. Msg 010 on link 36882	FSK 200/1000	(AB)
18911	M42d	28-2	1110	Sat	Russian diplo/intel. Msg 010 on link 36882	FSK 200/1000	(AB)
17427	M42d	28-2	1120	Sat	Russian diplo/intel. Msg 010 on link 36882	FSK 200/1000	(AB)
22876	M42d	28-2	1500	Sat	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB)
20214	M42d	28-2	1510	Sat	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB/MPJ)
18251	M42d	28-2	1520	Sat	Russian diplo/intel. Msg 002 on link 32821	FSK 200/1000	(AB/MPJ)
10475	M51	4-2	1333	Wed	= NR 40 F 04 14:33:25 2015 =	CW	(Danix)
6825	M51	4-2	1402	Wed	= NR 45 F 04 15:04:03 2015 =	CW	(Danix)
10796	M51	5-2	0736	Thu	= 37 F 05 08:37:24 2015 =	CW	(Danix)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
16263.5	M51	6-2	1312	Fri	i.p. MITNX ZJXWX BVFXL WYTNT CZRIE ZQFSP KSLPN XBTVA TCZUN ...	CW	(AAI)
4380	M51	6-2	1805	Fri	= NR 51 F 03 19:06:41 2015 =	CW	(Danix)
9213	M51	9-2	1332	Mon	= NR 36 F 09 14:33:11 2015 =	CW	(Danix)
6825	M51	11-2	1209	Wed	= NR 25 F 11 13:11:50 2015 =	CW	(Danix)
7535	M51	11-2	1636	Wed	= NR 63 F 11 17:38:37 2015 =	CW	(Danix)
5453	M51	21-2	1755	Sat	French Mil Intel, = NR 72 F 24 18:57:27 2014 = XDZKK IWDNR	CW	(AB)
9213	M51	23-2	1634	Mon	French Mil Intel, = NR 87 F 23 17:37:00 2015 = QKPJJ UEDIB	CW	(Danix)
9213	M51	23-2	1944	Mon	i.p. OAEVT XURMI JDUXT XXGNT S.QJT PDMJX QGKHF ... = NR 29 ...	CW	(AB)
19632.6	M51	25-2	1405	Wed	French Mil Intel Favieres	CW	(AAI)
9213	M51	28-2	1612	Sat	French Mil Intel, = NR 43 M 24 17:14:29 2015 = JHKCD MESHD //10796 kHz	CW	(Danix)
10796	M51	28-2	1612	Sat	French Mil Intel, = NR 43 M 24 17:14:29 2015 = JHKCD MESHD //9213 kHz	CW	(Danix)
3330	M89	2-2	1733	Mon	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
7602	M89	2-2	1736	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3642	M89	2-2	1736	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
3777	M89	2-2	1738	Mon	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
4532	M89	2-2	1738	Mon	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3821	M89	2-2	1739	Mon	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
5644	M89	2-2	1739	Mon	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
5500	M89	2-2	1741	Mon	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
3642	M89	2-2	2222	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
7602	M89	2-2	2222	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
7602	M89	5-2	1645	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3642	M89	5-2	1645	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
3821	M89	5-2	1647	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
5644	M89	5-2	1647	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3777	M89	5-2	1649	Thu	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
4532	M89	5-2	1649	Thu	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
5801	M89	7-2	0155	Sat	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
10180	M89	7-2	0155	Sat	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
6456	M89	7-2	0158	Sat	CQ (x3) DE DP91 (x2) V (Cont'd) //8527	CW	(JPL)
8527	M89	7-2	0158	Sat	CQ (x3) DE DP91 (x2) V HR NIL SK GB(Cont'd) //6456	CW	(JPL)
9131	M89	7-2	0216	Sat	V DKSL (x3) DE ALSK (x2) V (Cont'd) //10947	CW	(JPL)
10947	M89	7-2	0216	Sat	V DKSL (x3) DE ALSK (x2) V (Cont'd) //9131	CW	(JPL)
5692	M89	7-2	0226	Sat	i.p. VV B2ST DE HNP7 K. R QSA 2 K (see N&O 209)	CW	(JPL)
6456	M89	7-2	0958	Sat	CQ (x3) DE DP91 (x2) V HR NIL SK GB(Cont'd)	CW	(JPL)
5588	M89	7-2	1016	Sat	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
10947	M89	7-2	1017	Sat	V DKSL (x3) DE ALSK (x2) V (Cont'd) //9131	CW	(JPL)
9131	M89	7-2	1017	Sat	V DKSL (x3) DE ALSK (x2) V (Cont'd) //10947	CW	(JPL)
4532	M89	7-2	1019	Sat	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	7-2	1019	Sat	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
6840	M89	7-2	1020	Sat	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
10640	M89	7-2	1020	Sat	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
10180	M89	7-2	1026	Sat	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
3330	M89	7-2	1453	Sat	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
3642	M89	7-2	1455	Sat	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
7602	M89	7-2	1455	Sat	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
5644	M89	7-2	1457	Sat	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3821	M89	7-2	1457	Sat	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
4131	M89	7-2	1459	Sat	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
6650	M89	7-2	1505	Sat	i.p. TUA4 5DAN U364 NDTD 4T75 N4TD (see N&O 209)	CW	(JPL)
8527	M89	8-2	0157	Sun	CQ (x3) DE DP91 (x2) V HR NIL SK GB //6456	CW	(JPL)
6456	M89	8-2	0157	Sun	CQ (x3) DE DP91 (x2) V (Cont'd) //8527	CW	(JPL)
5177	M89	8-2	0204	Sun	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
8060	M89	8-2	0206	Sun	V M8JF (x3) DE RIS9 (x2) (Cont'd)	CW	(JPL)
10947	M89	8-2	0209	Sun	V DKSL (x3) DE ALSK (x2) V (Cont'd) //9131	CW	(JPL)
9131	M89	8-2	0209	Sun	V DKSL (x3) DE ALSK (x2) V (Cont'd) //10947	CW	(JPL)
5112	M89	8-2	0214	Sun	(i.p. DADA A7DU NA7U DUT6 34DA TUAD (see N&O 209)	CW	(JPL)

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Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
5801	M89	8-2	0225	Sun	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
10180	M89	8-2	0225	Sun	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
8527	M89	8-2	1003	Sun	CQ (x3) DE DP91 (x2) V N7E N7E NIL SK GB	CW	(JPL)
10180	M89	8-2	1012	Sun	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
5801	M89	8-2	1012	Sun	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
9131	M89	8-2	1013	Sun	V DKSL (x3) DE ALSK (x2) V (Cont'd) //10947	CW	(JPL)
10947	M89	8-2	1013	Sun	V DKSL (x3) DE ALSK (x2) V (Cont'd) //9131	CW	(JPL)
4532	M89	8-2	1019	Sun	i.p. D733 N4NT TUA3 36DU (Cont'd) III = 66N4 TA5T 7T55 UD66 T4U4 DD66 (Cont'd)	CW	(JPL)
8101	M89	8-2	1027	Sun	i.p. 75T6 DUDU 457N 5743 (Cont'd) III = DTDD 5543 46.. 7D47 6U6U (Cont'd) III =	CW	(JPL)
5588	M89	8-2	1048	Sun	V MW3D (x3) DE 2SLC (x2) (Cont'd	CW	(JPL)
6855	M89	8-2	1051	Sun	i.p. ATD. A7DT AA3N DU.. (Cont'd) AR K (see N&O 209)	CW	(JPL)
3330	M89	8-2	1500	Sun	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
3777	M89	8-2	1507	Sun	V M8JF (x3) DE RIS9 (x2) (Cont'd)	CW	(JPL)
3642	M89	8-2	1508	Sun	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
3656	M89	8-2	1509	Sun	i.p. 3P = 5A.. EEEE = 3 U7UN N75. T34T 6ANT (Cont'd)	CW	(JPL)
3821	M89	8-2	1522	Sun	V DKSL (x3) DE ALSK (x2) V (Cont'd)	CW	(JPL)
5644	M89	8-2	2129	Sun	V DKSL (x3) DE ALSK (x2) V (Cont'd) //3821	CW	(JPL)
3821	M89	8-2	2129	Sun	V DKSL (x3) DE ALSK (x2) V (Cont'd) //5644	CW	(JPL)
3777	M89	8-2	2132	Sun	V M8JF (x3) DE RIS9 (x2) (Cont'd)	CW	(JPL)
7602	M89	8-2	2133	Sun	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3642	M89	8-2	2133	Sun	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
9131	M89	9-2	0050	Mon	V DKSL (x3) DE ALSK (x2) V (Cont'd)	CW	(JPL)
6793	M89	9-2	0054	Mon	V M8JF (x3) DE RIS9 (x2) (Cont'd)	CW	(JPL)
8110	M89	9-2	0055	Mon	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
6421	M89	9-2	0059	Mon	V DKSL (x3) DE ALSK (x2) V (Cont'd) //9131	CW	(JPL)
9131	M89	9-2	0059	Mon	i.p. HR WK NR 3AW. V DKSL DE ALSK (Cont'd) //6421	CW	(JPL)
5588	M89	9-2	0105	Mon	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
3642	M89	9-2	0106	Mon	i.p. = SVC QRW 3628 4698 4878 QRW L.6.80. KX 3501 AR QSL? HR WK NR 300	CW	(JPL)
7602	M89	9-2	0106	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
4131	M89	9-2	0112	Mon	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
4167	M89	9-2	0113	Mon	i.p. R RPT 7III EEEE R RPT 70W 7D3U 7D3U K (see N&O 209)	CW	(JPL)
3330	M89	9-2	1339	Mon	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
4532	M89	9-2	1341	Mon	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	9-2	1341	Mon	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
5644	M89	9-2	1343	Mon	V DKSL (x3) DE ALSK (x2) V (Cont'd) //3821	CW	(JPL)
3821	M89	9-2	1343	Mon	V DKSL (x3) DE ALSK (x2) V (Cont'd) //5644	CW	(JPL)
5500	M89	9-2	1344	Mon	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
7602	M89	9-2	1546	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3642	M89	9-2	1546	Mon	i.p. RMKS 32.. TO 3222 3210 = (see N&O 209)	CW	(JPL)
3330	M89	9-2	1558	Mon	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
4131	M89	9-2	1606	Mon	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
5234	M89	9-2	1614	Mon	i.p. R QSL 0013 K. AS (see N&O 209)	CW	(JPL)
3330	M89	9-2	2059	Mon	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
7602	M89	9-2	2100	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3642	M89	9-2	2100	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
5644	M89	9-2	2101	Mon	V DKSL (x3) DE ALSK (x2) V (Cont'd) //3821	CW	(JPL)
3821	M89	9-2	2101	Mon	V DKSL (x3) DE ALSK (x2) V (Cont'd) //5644	CW	(JPL)
3777	M89	9-2	2103	Mon	6U4N 4NT3 7TDU A4ND U733 TNDN T346 (see N&O 209) //4532	CW	(JPL)
4532	M89	9-2	2103	Mon	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
4225	M89	9-2	2108	Mon	V 7NPE (x3) DE QV5B (x2) (Cont'd) //N/H	CW	(JPL)
9131	M89	10-2	0241	Tue	V DKSL (x3) DE ALSK (x2) (Cont'd)	CW	(JPL)
10180	M89	10-2	0243	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
3642	M89	10-2	0243	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
5801	M89	10-2	0243	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
8110	M89	10-2	0244	Tue	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
4860	M89	10-2	1120	Tue	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
6840	M89	10-2	1120	Tue	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
10947	M89	10-2	1120	Tue	V DKSL (x3) DE ALSK (x2) (Cont'd) //9131	CW	(JPL)
9131	M89	10-2	1120	Tue	V DKSL (x3) DE ALSK (x2) (Cont'd) //10947	CW	(JPL)
10180	M89	10-2	1127	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
5588	M89	10-2	1129	Tue	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
4532	M89	10-2	1130	Tue	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	10-2	1130	Tue	i.p. III = D7AA 3TT7 .6.U N776 7DN5 (Cont'd) AR	CW	(JPL)
5500	M89	10-2	1137	Tue	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
8073	M89	10-2	1140	Tue	V BNGC BNGC DE XSV85 XSV85 HR MSG GA (see N&O 209)	CW	(JPL)
3330	M89	10-2	1158	Tue	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
10180	M89	10-2	1204	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
5801	M89	10-2	1204	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
3821	M89	10-2	1207	Tue	V DKSL (x3) DE ALSK (x2) V (Cont'd) //5644	CW	(JPL)
5644	M89	10-2	1207	Tue	V DKSL (x3) DE ALSK (x2) V (Cont'd) //3821	CW	(JPL)
5177	M89	10-2	1220	Tue	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
6840	M89	10-2	1220	Tue	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
4860	M89	10-2	1220	Tue	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
6883	M89	10-2	1222	Tue	i.p. = T663 U76D DAAT N677 DAAT 3AAD 533U (Cont'd)	CW	(JPL)
7894	M89	10-2	1229	Tue	i.p. N36U 3A7? 3AN7 5? 5TAT TAD4 NA76 6AUD (Cont'd)	CW	(JPL)
5500	M89	10-2	1559	Tue	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
3012	M89	10-2	1603	Tue	i.p. 736A 7AN. AR AR K K. RPT K. R RPT K K	CW	(JPL)
3732	M89	10-2	1619	Tue	i.p. R RPTT 48W K. R RPT 48W B75T 675T K	CW	(JPL)
4131	M89	10-2	1627	Tue	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
6456	M89	11-2	0200	Wed	CQ (x3) DE DP91 (x2) V (Cont'd) //8527	CW	(JPL)
8527	M89	11-2	0201	Wed	CQ (x3) DE DP91 (x2) V HR NIL SK GB //6456	CW	(JPL)
10180	M89	11-2	0212	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
5801	M89	11-2	0212	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
9131	M89	11-2	0215	Wed	V DKSL (x3) DE ALSK (x2) (Cont'd)	CW	(JPL)
6840	M89	11-2	0220	Wed	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
10640	M89	11-2	0220	Wed	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
6456	M89	11-2	1000	Wed	CQ (x3) DE 91 (x2) V HR NIL SK GB //8527	CW	(JPL)
8527	M89	11-2	1004	Wed	CQ (x3) DE DP91 (x2) V HR NIL SK GB (Cont'd) //6456	CW	(JPL)
10180	M89	11-2	1015	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
5801	M89	11-2	1015	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
6421	M89	11-2	1017	Wed	V DKSL (x3) DE ALSK (x2) (Cont'd) //9131	CW	(JPL)
9131	M89	11-2	1017	Wed	V DKSL (x3) DE ALSK (x2) (Cont'd) //6421	CW	(JPL)
6840	M89	11-2	1020	Wed	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
10640	M89	11-2	1020	Wed	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
4532	M89	11-2	1028	Wed	i.p. DDT3 43D3 37T3 U767 D566 363T (Cont'd) //3777	CW	(JPL)
3777	M89	11-2	1028	Wed	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
5588	M89	11-2	1038	Wed	V MW3D (x3) DE 2SLC (x2) (Cont'd	CW	(JPL)
6840	M89	11-2	1120	Wed	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
4860	M89	11-2	1120	Wed	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
3330	M89	11-2	1122	Wed	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
5644	M89	11-2	1123	Wed	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3821	M89	11-2	1123	Wed	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
4532	M89	11-2	1126	Wed	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	11-2	1126	Wed	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
5801	M89	11-2	1128	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
10180	M89	11-2	1128	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
8073	M89	11-2	1134	Wed	BNGC (x3) DE XSV85 (x2) (see N&O 209)	CW	(JPL)
3330	M89	11-2	1726	Wed	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
7602	M89	11-2	1728	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3642	M89	11-2	1728	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
3777	M89	11-2	1729	Wed	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
4532	M89	11-2	1729	Wed	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3821	M89	11-2	1730	Wed	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
5644	M89	11-2	1730	Wed	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3642	M89	11-2	1737	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
7602	M89	11-2	1737	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
4131	M89	11-2	1740	Wed	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
4630	M89	11-2	1741	Wed	i.p. 345N D7N3 46U6 345A NT7U 7N4U (see N&O 209)	CW	(JPL)
4131	M89	11-2	2048	Wed	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
3642	M89	12-2	0144	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
7602	M89	12-2	0144	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
10947	M89	12-2	0146	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //9131	CW	(JPL)
9131	M89	12-2	0146	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //10947	CW	(JPL)
8060	M89	12-2	0148	Thu	V M8JF (x3) DE RIS9 (x2) (Cont'd) //N/H	CW	(JPL)
4131	M89	12-2	0152	Thu	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
6456	M89	12-2	0200	Thu	CQ (x3) DE DP91 (x2) V HR NIL SK GB (Cont'd) //8527	CW	(JPL)
8527	M89	12-2	0201	Thu	CQ (x3) DE DP91 (x2) V HR NIL SK GB //6456	CW	(JPL)
8041	M89	12-2	0216	Thu	i.p. 634D 5UA3 3U6N DT76 AU76 TDAN (Cont'd) AR K. MSG GA K	CW	(JPL)
6840	M89	12-2	0220	Thu	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
10640	M89	12-2	0220	Thu	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
8073	M89	12-2	1132	Thu	BNGC (x3) DE XSV85 (x2) (see N&O 209)	CW	(JPL)
5644	M89	12-2	1146	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3821	M89	12-2	1146	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
3330	M89	12-2	1148	Thu	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
8888	M89	12-2	1149	Thu	i.p. NUER SBD/3051 AR (see N&O 209)	CW	(JPL)
5177	M89	12-2	1202	Thu	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
5801	M89	12-2	1203	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
10180	M89	12-2	1203	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
7792	M89	12-2	1206	Thu	i.p. NN45 DAT3 754T A3T7 (see N&O 209)	CW	(JPL)
6840	M89	12-2	1220	Thu	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K	CW	(JPL)
7782	M89	12-2	1221	Thu	i.p. 3D44 T43N 7A3U 53AT 4TT7 (Cont'd)	CW	(JPL)
5555	M89	12-2	1226	Thu	i.p. 5TNU N5ND 3AA7 (Cont'd) K 21W = ... (Cont'd)	CW	(JPL)
4532	M89	12-2	1416	Thu	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	12-2	1416	Thu	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
4131	M89	12-2	1432	Thu	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
3642	M89	12-2	1442	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
7602	M89	12-2	1442	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
5644	M89	12-2	1446	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd)	CW	(JPL)
3330	M89	12-2	1450	Thu	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
4131	M89	12-2	2308	Thu	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
3821	M89	12-2	2310	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
5644	M89	12-2	2310	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd)	CW	(JPL)
7602	M89	12-2	2321	Thu	i.p. = Z8ZC/C3VE AR. QSL QSL 2014 K (see N&O 209)	CW	(JPL)
3642	M89	12-2	2321	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
3821	M89	13-2	1203	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd)	CW	(JPL)
3330	M89	13-2	1219	Fri	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
4860	M89	13-2	1220	Fri	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
6840	M89	13-2	1220	Fri	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
5644	M89	13-2	1223	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3821	M89	13-2	1223	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
4532	M89	13-2	1225	Fri	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	13-2	1225	Fri	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
3330	M89	13-2	1734	Fri	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
4532	M89	13-2	1736	Fri	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	13-2	1736	Fri	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
5644	M89	13-2	1740	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3821	M89	13-2	1740	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
7602	M89	13-2	1745	Fri	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3642	M89	13-2	1745	Fri	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
4131	M89	13-2	1747	Fri	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
5292	M89	13-2	1750	Fri	i.p. 74UT A6NT 33? 37N4 3N53 D7NT (see N&O 209)	CW	(JPL)
3744	M89	13-2	1807	Fri	i.p. DE T6RS R QSA 1 QSA ? (see N&O 209)	CW	(JPL)
4532	M89	13-2	1826	Fri	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	13-2	1826	Fri	i.p. 3UN5 3TTT DAU7 ..67 T75A DA5D (see N&O 209)	CW	(JPL)
3642	M89	13-2	2214	Fri	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
7602	M89	13-2	2214	Fri	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
5644	M89	13-2	2218	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd)	CW	(JPL)
3777	M89	13-2	2219	Fri	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
4532	M89	13-2	2219	Fri	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
6840	M89	13-2	2220	Fri	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
4860	M89	13-2	2220	Fri	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
4131	M89	13-2	2223	Fri	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
9131	M89	14-2	0150	Sat	V DKSL (x3) DE ALSK (x2) (Cont'd) //10947	CW	(JPL)
10947	M89	14-2	0150	Sat	i.p. UUAU T3UN A3UT TD5N 5544 3443 .DA 7AU. (Cont'd) AR QSL? HR WK NR 21	CW	(JPL)
6456	M89	14-2	0200	Sat	CQ (x3) DE DP91 (x2) V HR NIL SK GB	CW	(JPL)
10180	M89	14-2	1115	Sat	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
3777	M89	14-2	1118	Sat	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
4532	M89	14-2	1118	Sat	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
5644	M89	14-2	1119	Sat	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3821	M89	14-2	1119	Sat	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
4860	M89	14-2	1120	Sat	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
6840	M89	14-2	1120	Sat	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
8073	M89	14-2	1135	Sat	i.p. 356 403 NN3 445 3DT TDA N34 TTA ND4 TT5 4DT 4D6 (Cont'd)	CW	(JPL)
3642	M89	15-2	0032	Sun	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
7602	M89	15-2	0032	Sun	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
10947	M89	15-2	0035	Sun	V DKSL (x3) DE ALSK (x2) (Cont'd) //9131	CW	(JPL)
9131	M89	15-2	0035	Sun	V DKSL (x3) DE ALSK (x2) (Cont'd) //10947	CW	(JPL)
8060	M89	15-2	0036	Sun	COMM = 07/779/9/.279./5 AR V M8JF (x3) DE RIS9 (x2) (Cont'd) //6793	CW	(JPL)
6793	M89	15-2	0036	Sun	V M8JF (x3) DE RIS9 (x2) (Cont'd) //8060	CW	(JPL)
6796	M89	15-2	0039	Sun	i.p. FF NR 3396/EX TIME 0842 = ... AR QSY SW QSY SW VV	CW	(JPL)
6128	M89	15-2	0040	Sun	i.p. UIHY/HOJ1 AR QSY 17 QSY 17 QSY 17 VVV	CW	(JPL)
6796	M89	15-2	0041	Sun	i.p. /EX TIME 0848 = PH3/BI4 AR QSY 18 QSY 18 VV	CW	(JPL)
3642	M89	15-2	0155	Sun	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
7602	M89	15-2	0155	Sun	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
8527	M89	15-2	0157	Sun	CQ (x3) DE DP91 (x2) V HR NIL SK GB //6456	CW	(JPL)
6456	M89	15-2	0158	Sun	CQ (x3) DE DP91 (x2) V HR NIL SK GB //8527	CW	(JPL)
10217	M89	15-2	0211	Sun	i.p. R QSA 2 C = 1536 AR K. R = 3210 AR K	CW	(JPL)
3330	M89	15-2	1932	Sun	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
3821	M89	15-2	1935	Sun	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
5644	M89	15-2	1935	Sun	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3777	M89	15-2	1936	Sun	i.p. III BT 6N.7 DD47 (Cont'd)	CW	(JPL)
4532	M89	15-2	1936	Sun	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3330	M89	16-2	1758	Mon	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
3642	M89	16-2	1800	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
7602	M89	16-2	1800	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3821	M89	16-2	1802	Mon	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
5644	M89	16-2	1802	Mon	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
5500	M89	16-2	1805	Mon	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
4532	M89	16-2	1808	Mon	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	16-2	1808	Mon	37NT DN33 .5.4 75AT D577 5665 (Cont'd) III = 4N73 U673 AADA (Cont'd) //4532	CW	(JPL)
6840	M89	16-2	1820	Mon	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
4860	M89	16-2	1820	Mon	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
6840	M89	16-2	2120	Mon	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
4860	M89	16-2	2120	Mon	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
3330	M89	16-2	2121	Mon	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
3642	M89	16-2	2122	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
7602	M89	16-2	2122	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
3777	M89	16-2	2123	Mon	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
4532	M89	16-2	2123	Mon	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
5644	M89	16-2	2124	Mon	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3821	M89	16-2	2124	Mon	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
4131	M89	16-2	2135	Mon	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
5177	M89	17-2	0153	Tue	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
10947	M89	17-2	0157	Tue	V DKSL (x3) DE ALSK (x2) (Cont'd) //9131	CW	(JPL)
9131	M89	17-2	0157	Tue	V DKSL (x3) DE ALSK (x2) (Cont'd) //10947	CW	(JPL)
8527	M89	17-2	0202	Tue	CQ (x3) DE DP91 (x2) V HR NIL SK GB //6456	CW	(JPL)
6456	M89	17-2	0202	Tue	CQ (x3) DE DP91 (x2) V HR NIL SK GB //8527	CW	(JPL)
6840	M89	17-2	0220	Tue	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
10640	M89	17-2	0220	Tue	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
5801	M89	17-2	0258	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
10180	M89	17-2	0258	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
6456	M89	17-2	1002	Tue	CQ (x3) DE DP91 (x2) V HR NIL SK GB //8527	CW	(JPL)
8527	M89	17-2	1003	Tue	CQ (x3) DE DP91 (x2) V (Cont'd) //6456	CW	(JPL)
5801	M89	17-2	1010	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
10180	M89	17-2	1010	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
9131	M89	17-2	1014	Tue	V DKSL (x3) DE ALSK (x2) (Cont'd)	CW	(JPL)
10947	M89	17-2	1039	Tue	V DKSL (x3) DE ALSK (x2) (Cont'd) //9131	CW	(JPL)
9131	M89	17-2	1039	Tue	V DKSL (x3) DE ALSK (x2) (Cont'd) //10947	CW	(JPL)
10180	M89	17-2	1041	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
5588	M89	17-2	1043	Tue	V MW3D (x3) DE 2SLC (x2) (Cont'd	CW	(JPL)
5500	M89	17-2	1044	Tue	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
4532	M89	17-2	1045	Tue	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	17-2	1045	Tue	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
8073	M89	17-2	1140	Tue	BNGC (x3) DE XSV85 (x2) (see N&O 209)	CW	(JPL)
4532	M89	17-2	1503	Tue	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	17-2	1503	Tue	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
3330	M89	17-2	1505	Tue	V MW3D (x3) DE 2SLC (x2) (Cont'd	CW	(JPL)
7602	M89	17-2	1507	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3642	M89	17-2	1507	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
5644	M89	17-2	1508	Tue	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3821	M89	17-2	1508	Tue	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
5500	M89	17-2	1509	Tue	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
4860	M89	17-2	1520	Tue	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
6840	M89	17-2	1520	Tue	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
3330	M89	17-2	1536	Tue	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
8110	M89	17-2	1805	Tue	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
6456	M89	18-2	0200	Wed	CQ (x3) DE DP91 (x2) V HR NIL SK GB	CW	(JPL)
9131	M89	18-2	0212	Wed	V DKSL (x3) DE ALSK (x2) (Cont'd)	CW	(JPL)
10640	M89	18-2	0220	Wed	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
6840	M89	18-2	0220	Wed	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
5801	M89	18-2	1104	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
10180	M89	18-2	1104	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
3662	M89	18-2	1119	Wed	V RA5J (x3) DE BP2S (x2) (Cont'd)	CW	(JPL)
3777	M89	18-2	1128	Wed	V M8JF (x3) DE RIS9 (x2) (Cont'd)	CW	(JPL)
3330	M89	18-2	1938	Wed	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
3642	M89	18-2	1941	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
3662	M89	18-2	1942	Wed	V RA5J (x3) DE BP2S (x2) (Cont'd)	CW	(JPL)
3777	M89	18-2	1944	Wed	V M8JF (x3) DE RIS9 (x2) (Cont'd)	CW	(JPL)
3821	M89	18-2	1945	Wed	V DKSL (x3) DE ALSK (x2) (Cont'd)	CW	(JPL)
4793	M89	18-2	2009	Wed	V RA5J (x3) DE BP2S (x2) (Cont'd) //3662	CW	(JPL)
3662	M89	18-2	2009	Wed	V RA5J (x3) DE BP2S (x2) (Cont'd) //4793	CW	(JPL)
3642	M89	18-2	2012	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
7602	M89	18-2	2012	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
4532	M89	18-2	2013	Wed	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
3777	M89	18-2	2013	Wed	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
5644	M89	18-2	2014	Wed	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3821	M89	18-2	2014	Wed	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
4131	M89	18-2	2019	Wed	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
6840	M89	18-2	2020	Wed	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
4860	M89	18-2	2020	Wed	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
10947	M89	19-2	0751	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //9131	CW	(JPL)
9131	M89	19-2	0751	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //10947	CW	(JPL)
8110	M89	19-2	0754	Thu	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
8060	M89	19-2	0756	Thu	V M8JF (x3) DE RIS9 (x2) (Cont'd) //6793	CW	(JPL)
6793	M89	19-2	0756	Thu	V M8JF (x3) DE RIS9 (x2) (Cont'd) //8060	CW	(JPL)
10180	M89	19-2	0808	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
3642	M89	19-2	1302	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
7602	M89	19-2	1302	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3330	M89	19-2	1311	Thu	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
3662	M89	19-2	1317	Thu	V RA5J (x3) DE BP2S (x2) (Cont'd)	CW	(JPL)
3777	M89	19-2	1318	Thu	V M8JF (x3) DE RIS9 (x2) (Cont'd)	CW	(JPL)
3821	M89	19-2	1319	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd)	CW	(JPL)
6840	M89	19-2	1320	Thu	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
3330	M89	19-2	1626	Thu	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
7602	M89	19-2	1627	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3642	M89	19-2	1627	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
3662	M89	19-2	1629	Thu	V RA5J (x3) DE BP2S (x2) (Cont'd) //4793	CW	(JPL)
4793	M89	19-2	1629	Thu	V RA5J (x3) DE BP2S (x2) (Cont'd) //3662	CW	(JPL)
3777	M89	19-2	1630	Thu	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
4532	M89	19-2	1630	Thu	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3821	M89	19-2	1632	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
5644	M89	19-2	1632	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
4225	M89	19-2	1633	Thu	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
10947	M89	20-2	0019	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd) //9131	CW	(JPL)
9131	M89	20-2	0019	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd) //10947	CW	(JPL)
6840	M89	20-2	0020	Fri	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K	CW	(JPL)
8110	M89	20-2	0025	Fri	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
6793	M89	20-2	0026	Fri	V M8JF (x3) DE RIS9 (x2) (Cont'd)	CW	(JPL)
7602	M89	20-2	0029	Fri	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3642	M89	20-2	0029	Fri	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
9131	M89	20-2	0804	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd) //10947	CW	(JPL)
10947	M89	20-2	0804	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd) //9131	CW	(JPL)
8110	M89	20-2	0806	Fri	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
7788	M89	20-2	0807	Fri	i.p. 736A 46N3 A745 UT34 TD7U 4DA5 (see N&O 209)	CW	(JPL)
6793	M89	20-2	0807	Fri	V M8JF (x3) DE RIS9 (x2) (Cont'd)	CW	(JPL)
10640	M89	20-2	0820	Fri	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
6840	M89	20-2	0820	Fri	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
10180	M89	20-2	0828	Fri	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
3330	M89	20-2	1246	Fri	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
7602	M89	20-2	1249	Fri	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
3662	M89	20-2	1250	Fri	V RA5J (x3) DE BP2S (x2) (Cont'd) //4793	CW	(JPL)
4793	M89	20-2	1250	Fri	V RA5J (x3) DE BP2S (x2) (Cont'd) //3662	CW	(JPL)
3821	M89	20-2	1252	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
5644	M89	20-2	1252	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
5500	M89	20-2	1254	Fri	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
4532	M89	20-2	1256	Fri	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	20-2	1256	Fri	i.p. A53A A.U6 U.55 7363 6A43 DA54 7N47 UTUU (see N&O 209)	CW	(JPL)
6840	M89	20-2	1320	Fri	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
4860	M89	20-2	1320	Fri	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
3642	M89	20-2	1346	Fri	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
3642	M89	20-2	1354	Fri	VV HR SVC GA NR 120 2145 RMKS 3508 TO 3338 /3528 = (see N&O 209)	CW	(JPL)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
3330	M89	20-2	1700	Fri	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
7602	M89	20-2	1701	Fri	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3642	M89	20-2	1701	Fri	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
4793	M89	20-2	1705	Fri	V RA5J (x3) DE BP2S (x2) (Cont'd) //3662	CW	(JPL)
3662	M89	20-2	1705	Fri	V RA5J (x3) DE BP2S (x2) (Cont'd) //4793	CW	(JPL)
4532	M89	20-2	1707	Fri	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	20-2	1707	Fri	V M8JF (x3) DE RIS9 (x2) //4532	CW	(JPL)
3821	M89	20-2	1708	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
5644	M89	20-2	1708	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
5500	M89	20-2	1709	Fri	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
6840	M89	20-2	1720	Fri	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
4860	M89	20-2	1720	Fri	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
4532	M89	20-2	1735	Fri	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	20-2	1735	Fri	i.p. 3N73 4366 63DN 676U U435 (see N&O 209) //4532)	CW	(JPL)
3662	M89	22-2	1450	Sun	V RA5J (x3) DE BP2S (x2) (Cont'd) //4793	CW	(JPL)
4793	M89	22-2	1450	Sun	V RA5J (x3) DE BP2S (x2) (Cont'd) //3662	CW	(JPL)
3330	M89	22-2	1503	Sun	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
3330	M89	22-2	1952	Sun	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
7602	M89	22-2	1953	Sun	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3642	M89	22-2	1953	Sun	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
3662	M89	22-2	1955	Sun	V RA5J (x3) DE BP2S (x2) (Cont'd) //4793	CW	(JPL)
4793	M89	22-2	1955	Sun	V RA5J (x3) DE BP2S (x2) (Cont'd) //3662	CW	(JPL)
3777	M89	22-2	1956	Sun	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
4532	M89	22-2	1956	Sun	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3821	M89	22-2	1958	Sun	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
5644	M89	22-2	1958	Sun	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
5500	M89	22-2	1959	Sun	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
4131	M89	22-2	2005	Sun	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
3662	M89	23-2	1000	Mon	V RA5J (x3) DE BP2S (x2) (Cont'd) //4793	CW	(JPL)
4793	M89	23-2	1000	Mon	V RA5J (x3) DE BP2S (x2) (Cont'd) //3662	CW	(JPL)
10180	M89	23-2	1008	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
5801	M89	23-2	1008	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
3777	M89	23-2	1128	Mon	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
4532	M89	23-2	1128	Mon	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
5644	M89	23-2	1130	Mon	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3821	M89	23-2	1130	Mon	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
7640	M89	23-2	1135	Mon	V BR3S (x3) DE JU9D (x2) (Cont'd	CW	(JPL)
5171	M89	23-2	1144	Mon	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
6762	M89	23-2	1152	Mon	i.p. RMKS ..08 TO 4838 K. R =	CW	(JPL)
6769	M89	23-2	1155	Mon	i.p. 35T4 .63N 54AU 7UDN (Cont'd)	CW	(JPL)
4131	M89	23-2	1217	Mon	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
6840	M89	23-2	1220	Mon	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
4860	M89	23-2	1220	Mon	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
5654	M89	23-2	1226	Mon	i.p. N75A 3AD3 44N5 433U 3AU3 UA57 (Cont'd) AR AR K	CW	(JPL)
3330	M89	23-2	1441	Mon	V MW3D (x3) DE 2SLC (x2) (Cont'd	CW	(JPL)
7602	M89	23-2	1443	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
4532	M89	23-2	1444	Mon	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	23-2	1444	Mon	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
3662	M89	23-2	1445	Mon	V RA5J (x3) DE BP2S (x2) (Cont'd) //4793	CW	(JPL)
4793	M89	23-2	1445	Mon	V RA5J (x3) DE BP2S (x2) (Cont'd) //3662	CW	(JPL)
5644	M89	23-2	1446	Mon	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3821	M89	23-2	1446	Mon	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
4225	M89	23-2	1449	Mon	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
4131	M89	23-2	1940	Mon	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
7602	M89	23-2	1942	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3642	M89	23-2	1942	Mon	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
10180	M89	24-2	0135	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
3642	M89	24-2	0135	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
7602	M89	24-2	0135	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
5801	M89	24-2	0135	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
9131	M89	24-2	0140	Tue	V DKSL (x3) DE ALSK (x2) (Cont'd) //N/H	CW	(JPL)
8527	M89	24-2	0158	Tue	CQ (x3) DE DP91 (x2) V NIL SK GB //6456	CW	(JPL)
6456	M89	24-2	0200	Tue	CQ (x3) DE DP91 (x2) V (Cont'd) //8527	CW	(JPL)
8527	M89	24-2	1000	Tue	CQ (x3) DE DP91 (x2) V NIL SK GB //6456	CW	(JPL)
6456	M89	24-2	1000	Tue	CQ (x3) DE DP91 (x2) V HR NIL SK GB //8527	CW	(JPL)
6840	M89	24-2	1020	Tue	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
10640	M89	24-2	1020	Tue	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
7554	M89	24-2	1033	Tue	i.p. TA3 773 354 37U 4T3 446 467 N3D 446 4D6 75D 4D3 3DU	CW	(JPL)
6421	M89	24-2	1054	Tue	V DKSL (x3) DE ALSK (x2) (Cont'd) //9131	CW	(JPL)
9131	M89	24-2	1054	Tue	V DKSL (x3) DE ALSK (x2) (Cont'd) //6421	CW	(JPL)
4532	M89	24-2	1057	Tue	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	24-2	1057	Tue	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
5500	M89	24-2	1059	Tue	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
3330	M89	24-2	1100	Tue	V MW3D (x3) DE 2SLC (x2) (Cont'd	CW	(JPL)
4793	M89	24-2	1101	Tue	V RA5J (x3) DE BP2S (x2) (Cont'd) //3662	CW	(JPL)
3662	M89	24-2	1101	Tue	V RA5J (x3) DE BP2S (x2) (Cont'd) //4793	CW	(JPL)
8073	M89	24-2	1134	Tue	BNGC (x3) DE XSV85 (x2) (Cont'd)	CW	(JPL)
6666	M89	24-2	1511	Tue	i.p. N HR 7G GA R GA (see N&O 209)	CW	(JPL)
4131	M89	24-2	1534	Tue	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
3821	M89	24-2	1600	Tue	V DKSL (x3) DE ALSK (x2) (Cont'd)	CW	(JPL)
3642	M89	24-2	2014	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
7602	M89	24-2	2014	Tue	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
4793	M89	24-2	2015	Tue	V RA5J (x3) DE BP2S (x2) (Cont'd) //3662	CW	(JPL)
3662	M89	24-2	2015	Tue	V RA5J (x3) DE BP2S (x2) (Cont'd) //4793 (see N&O 209)	CW	(JPL)
4532	M89	24-2	2016	Tue	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	24-2	2016	Tue	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
5644	M89	24-2	2017	Tue	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3821	M89	24-2	2017	Tue	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
3330	M89	24-2	2018	Tue	V MW3D (x3) DE 2SLC (x2) (Cont'd	CW	(JPL)
4860	M89	24-2	2020	Tue	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
6840	M89	24-2	2020	Tue	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
5500	M89	24-2	2021	Tue	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
4131	M89	24-2	2024	Tue	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
7602	M89	25-2	0151	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
9131	M89	25-2	0152	Wed	V DKSL (x3) DE ALSK (x2) (Cont'd) //10947	CW	(JPL)
10947	M89	25-2	0152	Wed	V DKSL (x3) DE ALSK (x2) (Cont'd) //9131	CW	(JPL)
5177	M89	25-2	0154	Wed	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
8527	M89	25-2	0156	Wed	CQ (x3) DE DP91 (x2) V HR NIL SK GB //6456	CW	(JPL)
6456	M89	25-2	0158	Wed	CQ (x3) DE DP91 (x2) V (Cont'd) //8527	CW	(JPL)
5801	M89	25-2	1119	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
10180	M89	25-2	1119	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
6840	M89	25-2	1120	Wed	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K	CW	(JPL)
4892	M89	25-2	1123	Wed	i.p. MSG NR 75 CK 99 93 0225 1930 RMKS CQ = (see N&O 209)	CW	(JPL)
4532	M89	25-2	1133	Wed	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	25-2	1133	Wed	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
8073	M89	25-2	1135	Wed	BNGC (x3) DE XSV85 (x2) (Cont'd	CW	(JPL)
5644	M89	25-2	1142	Wed	V DKSL (x3) DE ALSK (x2) (Cont'd)	CW	(JPL)
3330	M89	25-2	1848	Wed	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
5644	M89	25-2	1850	Wed	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3821	M89	25-2	1850	Wed	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
4532	M89	25-2	1852	Wed	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	25-2	1852	Wed	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
3642	M89	25-2	1857	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
7602	M89	25-2	1857	Wed	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
10947	M89	26-2	0152	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //9131	CW	(JPL)
9131	M89	26-2	0152	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //10947	CW	(JPL)
5801	M89	26-2	0154	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
10180	M89	26-2	0154	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
4131	M89	26-2	0155	Thu	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
8527	M89	26-2	0157	Thu	CQ (x3) DE DP91 (x2) V HR NIL SK GB //6456	CW	(JPL)
6456	M89	26-2	0159	Thu	CQ (x3) DE DP91 (x2) V HR NIL SK GB //8527	CW	(JPL)
5588	M89	26-2	0953	Thu	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
5177	M89	26-2	0954	Thu	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
16753	M89	26-2	0955	Thu	i.p. TND4 AR TSTC 19 EEEEE TCAN TC19W BT 7A5D AR	CW	(JPL)
6456	M89	26-2	1002	Thu	CQ (x3) DE DP91 (x2) V HR NIL SK GB	CW	(JPL)
9131	M89	26-2	1013	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //10947	CW	(JPL)
10947	M89	26-2	1013	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //9131	CW	(JPL)
10180	M89	26-2	1016	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
5801	M89	26-2	1016	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
6840	M89	26-2	1020	Thu	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
10640	M89	26-2	1020	Thu	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
7777	M89	26-2	1024	Thu	i.p. 05 05 05 (Cont'd) 4... CT. ...UA.UA TAU.I.... (horrible CW)	CW	(JPL)
3777	M89	26-2	1030	Thu	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
4532	M89	26-2	1030	Thu	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
8084	M89	26-2	1137	Thu	i.p. D33A AD5. TT5 57T7 7N3N III = NT43 6... 63.U (Cont'd)	CW	(JPL)
3705	M89	26-2	1143	Thu	i.p. 3A7T 4T5N 7A4D 6U3T (cont) III C 05 ...	CW	(JPL)
3642	M89	26-2	1156	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
3821	M89	26-2	1158	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd)	CW	(JPL)
3330	M89	26-2	1411	Thu	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
7602	M89	26-2	1413	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642 N/H	CW	(JPL)
5644	M89	26-2	1414	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3821	M89	26-2	1414	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
6840	M89	26-2	1420	Thu	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
4860	M89	26-2	1420	Thu	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
3777	M89	26-2	1430	Thu	N353 76A6 73A3 7DDA 4N3D 6T4D U5UT (see N&O 209) //4532	CW	(JPL)
4532	M89	26-2	1430	Thu	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3330	M89	26-2	2208	Thu	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
3642	M89	26-2	2209	Thu	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
4532	M89	26-2	2210	Thu	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	26-2	2210	Thu	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
3821	M89	26-2	2211	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
5644	M89	26-2	2211	Thu	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
4131	M89	26-2	2217	Thu	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
6840	M89	26-2	2220	Thu	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
4860	M89	26-2	2220	Thu	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
3330	M89	27-2	1242	Fri	i.p. 117 NR /GE9.8 .... 68347/1.2/22../117./79.8 AR	CW	(JPL)
7602	M89	27-2	1247	Fri	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
4532	M89	27-2	1248	Fri	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	27-2	1248	Fri	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
5644	M89	27-2	1249	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd)	CW	(JPL)
7602	M89	27-2	1254	Fri	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3642	M89	27-2	1254	Fri	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
4532	M89	27-2	1257	Fri	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	27-2	1257	Fri	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
4681	M89	27-2	1257	Fri	i.p. NT3D 736U T..4 5UNA UA56 TN3D (see N&O 209)	CW	(JPL)
5644	M89	27-2	1258	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3821	M89	27-2	1258	Fri	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
5177	M89	27-2	1259	Fri	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
4676	M89	27-2	1331	Fri	i.p. MSG GA MSG NR 461 CK 804 0227 80EEEEEEE	CW	(JPL)
5177	M89	27-2	1949	Fri	V JKDJ (x3) DE SLBC (x2) (Cont'd)	CW	(JPL)
10640	M89	28-2	0620	Sat	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
6840	M89	28-2	0620	Sat	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //10640	CW	(JPL)
9131	M89	28-2	0622	Sat	V DKSL (x3) DE ALSK (x2) (Cont'd) //10947	CW	(JPL)
10947	M89	28-2	0622	Sat	V DKSL (x3) DE ALSK (x2) (Cont'd) //9131	CW	(JPL)
5801	M89	28-2	0638	Sat	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
10180	M89	28-2	0638	Sat	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
3821	M89	28-2	1116	Sat	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
5644	M89	28-2	1116	Sat	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3330	M89	28-2	1118	Sat	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
4532	M89	28-2	1119	Sat	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	28-2	1119	Sat	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
4860	M89	28-2	1120	Sat	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //6840	CW	(JPL)
6840	M89	28-2	1120	Sat	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) QSA ? K //4860	CW	(JPL)
4444	M89	28-2	1123	Sat	(i.p. 05 05 05 74U. NT 733 778 08 09 09 05 05 05 (Cont'd)	CW	(JPL)
8073	M89	28-2	1138	Sat	BNGC DE XSV85 HR MSG NR 1.. 84 228 ... =	CW	(JPL)
3777	M89	28-2	1357	Sat	V M8JF (x3) DE RIS9 (x2) (Cont'd)	CW	(JPL)
3642	M89	28-2	1407	Sat	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
3626	M89	28-2	1409	Sat	i.p. DE ZVLY K. QSA 1 K (see N&O 209)	CW	(JPL)
3821	M89	28-2	1437	Sat	V DKSL (x3) DE ALSK (x2) (Cont'd)	CW	(JPL)
3330	M89	28-2	1646	Sat	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
7602	M89	28-2	1647	Sat	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
3642	M89	28-2	1647	Sat	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
4532	M89	28-2	1648	Sat	V M8JF (x3) DE RIS9 (x2) (Cont'd) //3777	CW	(JPL)
3777	M89	28-2	1648	Sat	V M8JF (x3) DE RIS9 (x2) (Cont'd) //4532	CW	(JPL)
5644	M89	28-2	1649	Sat	V DKSL (x3) DE ALSK (x2) (Cont'd) //3821	CW	(JPL)
3821	M89	28-2	1649	Sat	V DKSL (x3) DE ALSK (x2) (Cont'd) //5644	CW	(JPL)
4026	MC03	10-2	1623	Tue	U5U U.5 ND4 4DD ND6N TN7 U3. U5U UAAN34 DAN477U T54 U4	CW	(JPL-Sib)
3594.2	MX	8-2	1514	Sun	Beacon "F" Vladivostok	CW	(JPL-Sib)
3335	MX	8-2	1517	Sun	Beacon "V" Khiva	CW	(JPL-Sib)
3658	MX	8-2	1521	Sun	Beacon "V" Khiva	CW	(JPL-Sib)
3658	MX	12-2	2138	Thu	Beacon "V" Khiva	CW	(AB)
13528.4	MX	14-2	0900	Sat	Beacon "M" Magadan	CW	(Mar)
13527.9	MX	14-2	0900	Sat	Beacon "S" Sevoromorsk	CW	(Mar)
13527.7	MX	14-2	0900	Sat	Beacon "D" Sevastopol	CW	(Mar)
13528	MX	14-2	0900	Sat	Beacon "C" Moscow	CW	(Mar)
20048	MX	14-2	1136	Sat	Beacon "C" Moscow	CW	(AB)
20047.7	MX	14-2	1136	Sat	Beacon "D" Sevastopol	CW	(AB)
16331.9	MX	14-2	1138	Sat	Beacon "S" Sevoromorsk	CW	(AB)
16331.7	MX	14-2	1138	Sat	Beacon "D" Sevastopol	CW	(AB)
16332	MX	14-2	1138	Sat	Beacon "C" Moscow	CW	(AB)
10872	MX	14-2	1140	Sat	Beacon "C" Moscow	CW	(AB)
10871.9	MX	14-2	1140	Sat	Beacon "S" Sevoromorsk	CW	(AB)
8494.9	MX	14-2	1140	Sat	Beacon "S" Sevoromorsk	CW	(AB)
7039	MX	14-2	1141	Sat	Beacon "C" Moscow	CW	(AB)
7038.9	MX	14-2	1818	Sat	Beacon "S" Sevoromorsk	CW	(AB)
8494.8	MX	14-2	1818	Sat	Beacon "P" Kaliningrad	CW	(AB)
7038.7	MX	14-2	1818	Sat	Beacon "D" Sevastopol	CW	(AB)
5153.9	MX	14-2	1820	Sat	Beacon "S" Sevoromorsk	CW	(AB)
5153.7	MX	14-2	1820	Sat	Beacon "D" Sevastopol	CW	(AB)
3658	MX	14-2	1823	Sat	Beacon "V" Khiva	CW	(AB)
5292.3	MX	14-2	1942	Sat	Beacon "D" (sometimes "B")	CW	(Danix)
16331.7	MX	15-2	1500	Sun	Beacon "D" Sevastopol/Odessa	CW	(MPJ)
16331.9	MX	15-2	1501	Sun	Beacon "S" Severomorsk	CW	(MPJ)
5292.3	MX	15-2	1619	Sun	Beacon "D" (sometimes "B")	CW	(AB)
5292.3	MX	15-2	1759	Sun	Beacon "D" with spurii on 5292.5 & 5292.72. Elongated dash	CW	(MPJ)
5292.3	MX	15-2	1940	Sun	Beacon "D" (sometimes "B")	CW	(AB)
5292.3	MX	16-2	0602	Mon	Beacon "D" (sometimes "B")	CW	(AB)
5292.3	MX	16-2	1724	Mon	Channel marker "D" sending "BDDBBBDBDBDDDBDDBDDBDDDDBDBDBDDDDDDDDB"	CW	(AB)

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3658	MX	16-2	1732	Mon	Beacon "V" Khiva	CW	(AB)
13527.8	MX	17-2	1526	Tue	Beacon "S" Sevoromorsk	CW	(AB)
13527.9	MX	17-2	1526	Tue	Beacon "P" Kaliningrad	CW	(AB)
13528	MX	17-2	1526	Tue	Beacon "C" Moscow	CW	(AB)
13527.7	MX	17-2	1526	Tue	Beacon "D" Sevastopol	CW	(AB)
5292.3	MX	17-2	1615	Tue	Channel marker "B"	CW	(MPJ)
5292.3	MX	17-2	1805	Tue	Channel marker "B"	CW	(AB)
3593.7	MX	17-2	2227	Tue	Beacon "D"	CW	(TJ)
3658	MX	17-2	2228	Tue	Beacon "V"	CW	(TJ)
5292.3	MX	18-2	1750	Wed	Channel marker "B"	CW	(AB)
3658	MX	19-2	2149	Thu	Beacon "V" Khiva	CW	(AB)
3594.2	MX	20-2	1344	Fri	Beacon "F" Vladivostok	CW	(JPL-Sib)
3658	MX	20-2	2207	Fri	Beacon "V"	CW	(AB)
3658	MX	22-2	2156	Sun	Beacon "V" Khiva	CW	(AB)
3595.2	MX	24-2	1612	Tue	Beacon "F" Vladivostok	CW	(JPL-Sib)
3658	MX	24-2	1719	Tue	Beacon "V" Khiva	CW	(AB)
7091.5	MX	28-2	0124	Sat	Beacon "V" Khiva	CW	(JCS)
3594.2	MX	28-2	1434	Sat	Beacon "F" Vladivostok	CW	(JPL-Sib)
6836	POL	2-2	0800	Mon	Polish Intel.	FSK 100/625	(AB)
6836	POL	2-2	0805	Mon	Polish Intel.	FSK 100/625	(AB)
9370	POL	2-2	0850	Mon	Polish Intel.	FSK 100/625	(AB)
7499	POL	3-2	0900	Tue	Polish Intel.	FSK 100/625	(AB)
7499	POL	3-2	0905	Tue	Polish Intel.	FSK 100/625	(AB)
9370	POL	4-2	0850	Wed	Polish Intel.	FSK 100/625	(AB)
5815	POL	4-2	1005	Wed	Polish Intel.	FSK 100/625	(AB)
5815	POL	4-2	1010	Wed	Polish Intel.	FSK 100/625	(AB)
16388	POL	5-2	0730	Thu	Polish Intel.	FSK 100/625	(AB)
16388	POL	5-2	0735	Thu	Polish Intel.	FSK 100/625	(AB)
10359	POL	6-2	0655	Fri	Polish intel.	FSK 100/625	(AB)
10359	POL	6-2	0700	Fri	Polish intel.	FSK 100/625	(AB)
4840	POL	7-2	1430	Sat	Polish Intel.	FSK 100/625	(AB)
4840	POL	7-2	1435	Sat	Polish Intel.	FSK 100/625	(AB)
6836	POL	9-2	0805	Mon	Polish intel. Msg	FSK 100/625	(AB)
9370	POL	9-2	0850	Mon	Polish intel. Msg	FSK 100/625	(AB)
15015	POL	9-2	1530	Mon	Polish Intel.	FSK 100/625	(AB)
7499	POL	10-2	0900	Tue	Polish intel.	FSK 100/625	(AB)
8102	POL	11-2	1030	Wed	Polish Intel. Null msg	FSK 100/625	(AB)
8102	POL	11-2	1035	Wed	Polish Intel. Null msg	FSK 100/625	(AB)
15915	POL	11-2	1140	Wed	Polish Intel.	FSK 100/625	(AB)
4840	POL	11-2	1430	Wed	Polish Intel.	FSK 100/625	(AB)
4840	POL	11-2	1435	Wed	Polish Intel.	FSK 100/625	(AB)
7772	POL	12-2	0630	Thu	Polish Intel.	FSK 100/625	(AB)
7772	POL	12-2	0635	Thu	Polish Intel.	FSK 100/625	(AB)
16388	POL	12-2	0730	Thu	Polish Intel.	FSK 100/625	(AB)
16388	POL	12-2	0735	Thu	Polish Intel.	FSK 100/625	(AB)
6836	POL	12-2	0800	Thu	Polish Intel. Msg	FSK 100/625	(AB)
6836	POL	12-2	0805	Thu	Polish Intel. Msg	FSK 100/625	(AB)
12630	POL	12-2	1005	Thu	Polish Intel.	FSK 100/625	(AB)
10395	POL	13-2	0655	Fri	Polish Intel. Msg.	FSK 100/625	(AB)
13575	POL	13-2	1405	Fri	Polish Intel. Msg	FSK 100/625	(AB)
13575	POL	13-2	1410	Fri	Polish Intel. Msg	FSK 100/625	(AB)
10728	POL	15-2	1610	Sun	Polish Intel. Msg	FSK 100/740	(AB)
10728	POL	15-2	1615	Sun	Polish Intel. Msg	FSK 100/740	(AB)
6836	POL	16-2	0805	Mon	Polish Intel.	FSK 100/625	(AB)
9370	POL	16-2	0850	Mon	Polish Intel.	FSK 100/625	(AB)
12630	POL	16-2	1005	Mon	Polish Intel.	FSK 100/625	(AB)
15915	POL	16-2	1525	Mon	Polish Intel.	FSK 100/625	(AB)

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15915	POL	16-2	1530	Mon	Polish Intel.	FSK 100/625	(AB)
16388	POL	17-2	0730	Tue	Polish Intel. Msg	FSK 100/625	(AB)
8102	POL	17-2	1035	Tue	Polish Intel.	FSK 100/625	(AB)
9370	POL	18-2	0845	Wed	Polish Intel.	FSK 100/625	(AB)
9370	POL	18-2	0850	Wed	Polish Intel.	FSK 100/625	(AB)
8102	POL	18-2	1030	Wed	Polish Intel. Msg	FSK 100/615	(AB)
8102	POL	18-2	1035	Wed	Polish Intel. Msg	FSK 100/615	(AB)
6836	POL	19-2	0805	Thu	Polish Intel.	FSK 100/625	(AB)
12630	POL	19-2	1000	Thu	Polish Intel.	FSK 100/625	(AB)
12630	POL	19-2	1005	Thu	Polish Intel.	FSK 100/625	(AB)
15915	POL	23-2	1525	Mon	Polish Intel. Null msg	FSK 100/625	(AB)
16388	POL	24-2	0730	Tue	Polish Intel.	FSK 100/625	(AB)
16388	POL	24-2	0735	Tue	Polish Intel.	FSK 100/625	(AB)
9576	POL	24-2	1005	Tue	Polish Intel.	FSK 100/625	(AB)
9576	POL	24-2	1010	Tue	Polish Intel.	FSK 100/625	(AB)
8102	POL	24-2	1030	Tue	Polish Intel.	FSK 100/625	(AB)
8102	POL	24-2	1035	Tue	Polish Intel.	FSK 100/625	(AB)
9370	POL	25-2	0845	Wed	Polish Intel. Null msg	FSK 100/625	(AB)
9370	POL	25-2	0850	Wed	Polish Intel. Null msg	FSK 100/625	(AB)
5815	POL	25-2	1010	Wed	Polish Intel. Msg.	FSK 100/625	(AB)
5829	S06	11-2	1730	Wed	480 693 42 43054 61823 34343 ... 13693 42620 12631 693 42 00000	USB	(AB)
15614	S06	12-2	0930	Thu	842 170 34? 91? 33917 04062 25796 98502 52153 83291 39009 75260 ... very poor	USB	(AB)
15721	S06	17-2	0400	Tue	480 791 50 68635 27944 29662 ... 40869 38268 17386 00000	USB	(AB)
8057	S06s	2-2	0830	Mon	371 945 6 94302 93250 85837 32062 33461 98237 945 6 00000	USB	(AB)
8530	S06s	2-2	0840	Mon	371 945 6 94302 93250 85837 32062 33461 98237 945 6 00000	USB	(AB)
14675	S06s	2-2	0900	Mon	872 931 5 84008 83450 02868 26318 36534 931 5 00000	USB	(AB)
12830	S06s	2-2	0910	Mon	872 931 5 84008 83450 02868 26318 36534 931 5 00000	USB	(AB)
10635	S06s	2-2	1310	Mon	831 962 5 34621 86804 13264 96683 46798 962 5 00000	AM	(AB)
6845	S06s	3-2	1500	Tue	537 948 5 10244 10276 97774 18538 98832 47769 948 5 00000	AM	(AB)
9170	S06s	3-2	1510	Tue	537 948 5 10244 10276 97774 18538 98832 47769 948 5 00000	AM	(AB)
5732	S06s	5-2	0820	Thu	471 471 471 00000	USB	(KK2)
8215	S06s	6-2	0710	Fri	196 834 5 48115 24153 84706 42227 61735 834 5 00000	AM	(AB)
5810	S06s	6-2	0800	Fri	278 913 5 87380 36118 36744 37610 86587 913 5 00000	USB	(AB)
6770	S06s	6-2	0810	Fri	278 913 5 87380 36118 36744 37610 86587 913 5 00000	USB	(AB)
8057	S06s	9-2	0830	Mon	371 945 6 94302 93250 85837 32062 33461 98237 945 6 00000	USB	(AB)
8530	S06s	9-2	0840	Mon	371 945 6 94302 93250 85837 32062 33461 98237 945 6 00000	USB	(AB)
9170	S06s	10-2	1510	Tue	537 948 6 10244 10276 97774 18538 98832 47769 948 6 00000	USB	(AB)
12365	S06s	11-2	1000	Wed	729 815 6 43247 32329 48080 36478 39013 82605 815 6 00000	AM	(AB)
14280	S06s	11-2	1010	Wed	729 815 6 43247 32329 48080 36478 39013 82605 815 6 00000	AM	(AB)
12952	S06s	12-2	0900	Thu	167 249 5 38311 81228 33428 93171 43979 249 5 00000	AM	(AB)
5765	S06s	12-2	0900	Thu	624 917 5 31704 91596 47308 92107 40398 917 5 00000	USB	(AB)
6315	S06s	12-2	0910	Thu	624 917 5 31704 91596 47308 92107 40398 917 5 00000	USB	(AB)
13565	S06s	12-2	0910	Thu	167 249 5 38311 81228 33428 93171 43979 249 5 00000	AM	(AB)
8812	S06s	12-2	0930	Thu	314 298 5 40853 48988 34015 84394 41577 298 5 00000	USB	(AB)
9540	S06s	12-2	0940	Thu	314 298 5 40853 48988 34015 84394 41577 298 5 00000	USB	(AB)
7150	S06s	13-2	0700	Fri	196 834 5 48115 24153 84796 42227 61735 834 5 00000	USB	(AB)
8215	S06s	13-2	0710	Fri	196 834 5 48115 24153 84796 42227 61735 834 5 00000	USB	(AB)
6770	S06s	13-2	0810	Fri	278 913 5 87380 36118 36744 37610 86587 913 5 00000	USB	(AB)
8530	S06s	16-2	0840	Mon	371 420 5 67286 74059 72532 59526 30430 420 5 00000	USB	(AB)
14675	S06s	16-2	0900	Mon	872 913 5 57914 99227 16046 11393 00359 913 5 00000	USB	(AB)
12830	S06s	16-2	0910	Mon	872 913 5 57914 99227 16046 11393 00359 913 5 00000	USB	(AB)
7410	S06s	17-2	0730	Tue	427 859 6 23247 17099 94961 35826 56096 77233 859 6 00000	AM	(AB)
11945	S06s	17-2	0800	Tue	352 491 6 10597 23521 47660 92883 69901 88620 491 6 00000	USB	(AB)
13195	S06s	17-2	0810	Tue	352 491 6 10597 23521 47660 92883 69901 88620 491 6 00000	USB	(ATB)
6845	S06s	17-2	1500	Tue	537 810 6 54545 50128 99477 83574 48874 94031 810 6 00000	AM	(AB)
9170	S06s	17-2	1510	Tue	537 810 6 54545 50128 99477 83574 48874 94031 810 6 00000	AM	(AB)
11830	S06s	18-2	0840	Wed	745 280 6 21816 42997 94184 47374 74154 08531 280 6 00000	AM	(AB)

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12952	S06s	19-2	0900	Thu	167 490 5 01405 15003 24357 60583 54545 490 5 00000	AM	(AB)
13565	S06s	19-2	0910	Thu	167 490 5 01405 15003 24357 60583 54545 490 5 00000	AM	(AB)
12155	S06s	19-2	1200	Thu	425 837 6 36913 39919 43334 40151 91243 33830 837 6 00000	AM	(AB)
10920	S06s	19-2	1210	Thu	425 837 6 36913 39919 43334 40151 91243 33830 837 6 00000	AM	(AB)
5820	S06s	20-2	0800	Fri	278 951 6 81399 33242 44702 32120 88355 43979 951 5 00000	USB	(AB)
6770	S06s	20-2	0810	Fri	278 951 6 81399 33242 44702 32120 88355 43979 951 6 00000	USB	(AB)
13470	S06s	22-2	0630	Sun	524 937 6 91309 94062 43661 49504 35328 48896 937 6 00000	AM	(AB)
16515	S06s	22-2	0640	Sun	524 937 6 91309 94062 43661 49504 35328 48896 937 6 00000	AM	(AB)
10635	S06s	23-2	1310	Mon	… 970 5 58936 32738 48354 41045 96298 970 5 00000	USB	(AB)
7410	S06s	24-2	0730	Tue	427 859 6 23247 17099 94961 35826 56096 77233 859 6 00000	USB	(AB)
11532	S06s	24-2	0740	Tue	427 859 6 23247 17099 94961 35826 56096 77233 859 6 00000	USB	(AB)
9170	S06s	24-2	1510	Tue	537 810 6 54545 50128 99477 83574 48874 94031 810 6 00000	AM	(AB)
7335	S06s	25-2	0830	Wed	745 280 6 21816 42997 94184 47374 74154 08531 280 6 00000	AM	(AB)
11830	S06s	25-2	0840	Wed	745 280 6 21816 42997 94184 47374 74154 08531 280 6 00000	AM	(AB)
12365	S06s	25-2	1000	Wed	729 729 729 00000	AM	(AB)
12530	S11a	2-2	1015	Mon	475/00	USB	(AB)
7504	S11a	3-2	0915	Tue	484/00	USB	(AB)
12530	S11a	12-2	1015	Thu	475/00	USB	(AB)
9610	S11a	13-2	1020	Fri	426/00	USB	(AB)
19099	S11a	16-2	0715	Mon	382/00	CW	(AB)
12530	S11a	16-2	1015	Mon	475/00	USB	(AB)
7504	S11a	17-2	0915	Tue	484/00	USB	(AB)
19099	S11a	23-2	0715	Mon	384/30 Vnimanie …	USB	(AB)
9610	S11a	24-2	1020	Tue	426/00	USB	(AB)
19099	S11a	25-2	0715	Wed	382/00	USB	(HFD)
4625	S28	2-2	1345	Mon	MDZhB 25 072 TIROL'YeN 9496 7916	USB	(DJPr)
4625	S28	2-2	1353	Mon	MDZhB 20 262 TIROL'YeN 9496 7916 Previous message repeat, control sum has changed according to changed time	USB	(Arg)
4625	S28	2-2	1541	Mon	MDZhB 71 368 GIPYeR 2607 0480	USB	(DJPr)
9250	S28	2-2	1608	Mon	Buzzer, harmonic	USB	(AB)
4625	S28	3-2	1418	Tue	MDZhB 42 381 IZGOLUBA 4893 7237	USB	(DJPr)
4625	S28	3-2	1420	Tue	MDZhB 12 125 BARONYeT 3934 7205	USB	(DJPr)
4625	S28	3-2	1422	Tue	MDZhB 18 296 KIZYaK 6882 8414	USB	(DJPr)
4625	S28	5-2	0734	Thu	MDZhB 13 671 ChINAB 8410 7163	USB	(DJPr)
4625	S28	9-2	1046	Mon	MDZhB 65 812 DIPSOMANIYa 8277 6751	USB	(DJPr)
4625	S28	9-2	1049	Mon	MDZhB 48 206 KARBITKA 5764 8175	USB	(DJPr)
4625	S28	12-2	1637	Thu	MDZhB 48 259 LILOVYJ 3016 2617	USB	(DJPr)
4625	S28	12-2	1700	Thu	MDZhB 10 563 RAZLOZhKA 7560 1765	USB	(DJPr)
4625	S28	12-2	2139	Thu	Buzzer channel marker	USB	(AB)
4625	S28	15-2	1559	Sun	MDZhB 15 294 OBYeZ'YaNNIK 4902 6585	USB	(DJPr)
4625	S28	15-2	1713	Sun	MDZhB 12 794 TASMANIYa 3079 2361	USB	(DJPr)
4625	S28	16-2	1613	Mon	MDZhB 29 556 NAGORYeLYJ 4544 7446	USB	(DJPr)
4625	S28	16-2	1614	Mon	MDZhB 29 556 NAGORYeLYJ 4544 7476	USB	(GWr)
4625	S28	17-2	2231	Tue	Russian military channel marker "Buzzer"	USB	(TJ)
3216	S28	19-2	1815	Thu	Russian military channel marker "Buzzer" //4625 kHz	USB	(AB)
3216	S28	19-2	2109	Thu	Russian military channel marker "Buzzer" //4625 kHz	USB	(AB)
3216	S28	19-2	2123	Thu	Russian military channel marker "Buzzer" //4625 kHz	USB	(AB)
3216	S28	20-2	1824	Fri	Russian military channel marker "Buzzer" //4625 kHz	USB	(AB)
4625	S28	21-2	0553	Sat	Russian military channel marker "Buzzer" //3216 kHz	USB	(AB)
3216	S28	21-2	0553	Sat	Russian military channel marker "Buzzer" //4625 kHz	USB	(AB)
3216	S28	21-2	2313	Sat	Russian military channel marker "Buzzer" //4625 kHz	USB	(AB)
4625	S28	21-2	2313	Sat	Russian military channel marker "Buzzer" //3216 kHz	USB	(AB)
4625	S28	22-2	1224	Sun	MDZhB 28 984 TYeRRAKOTA 8225 3466	USB	(Priyom)
4625	S28	22-2	1257	Sun	Marker down and 10-count	USB	(Priyom)
4625	S28	22-2	1619	Sun	10-count	USB	(Priyom)
4625	S28	22-2	2152	Sun	Russian military channel marker "Buzzer" //3216 kHz	USB	(AB)
3216	S28	22-2	2152	Sun	Russian military channel marker "Buzzer" //4625 kHz	USB	(AB)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
4625	S28	23-2	0612	Mon	Russian military channel marker "Buzzer" //3216 kHz	USB	(AB)
3216	S28	23-2	0612	Mon	Russian military channel marker "Buzzer" //4625 kHz	USB	(AB)
4625	S28	23-2	1621	Mon	10-count	USB	(Priyom)
4625	S28	24-2	1018	Tue	10-count and microphone tests	USB	(Priyom)
3216	S28	24-2	1718	Tue	Russian military channel marker "Buzzer" //4625 kHz	USB	(AB)
4625	S28	24-2	1718	Tue	Russian military channel marker "Buzzer" //3216 kHz	USB	(AB)
4625	S28	25-2	1742	Wed	Russian military channel marker "Buzzer" //3216 kHz	USB	(AB)
3216	S28	25-2	1742	Wed	Russian military channel marker "Buzzer" //4625 kHz	USB	(AB)
5448	S30	2-2	1003	Mon	ZhSK4 HZ5T 5FSShch 8MUO TUZR 5J7Shch DMC3 49FT C2ZA INNC	USB	(DJPr)
5448	S30	2-2	1345	Mon	8S1Shch 08 738 AGROTYeHNIYa 5795 1669	USB	(DJPr)
3756	S30	2-2	1540	Mon	8S1Shch 08 157 KOLUMBARIJ 5403 0076	USB	(DJPr)
3756	S30	2-2	1607	Mon	ShchGJP TZLM FY5E F61N 37CN MUDR 7VNShch Zh7NZh YMA5 VTH3	USB	(DJPr)
3756	S30	6-2	0503	Fri	NLCE LI27 V2MZ SB7Z 'O6P Y8VM 6I2Zh 8CShchJ 27Shch' N1DU	USB	(DJPr)
3756	S30	12-2	2141	Thu	Pip channel marker	CW	(AB)
3756	S30	13-2	1524	Fri	8S1Shch 37 359 VIChUGOVYeC 3233 1741	USB	(GWr)
3756	S30	14-2	1459	Sat	61HZh ZBIL L7O5 V'Z' NLCE LI27 V2MZ SB7Z 'O6P Y8MV	USB	(Priyom)
3756	S30	14-2	1928	Sat	The Pip. Russian military channel marker. Should not be up at this time of the day //5448 kHz	AM	(Danix)
5448	S30	14-2	1928	Sat	The Pip. Russian military channel marker //3756 kHz	AM	(Danix)
3756	S30	15-2	1601	Sun	8S1Shch 98 255 KONOVID 5620 4081	USB	(Priyom)
3756	S30	15-2	1713	Sun	8S1Shch 85 271 DRYaHLYJ 7609 3976	USB	(Priyom)
3756	S30	15-2	1723	Sun	TUZR 5J7Shch DMC3 49FT C2ZA INNC ShchGJP TZLM FY5E F61N	USB	(Priyom)
3756	S30	16-2	1612	Mon	8S1Shch 64 149 LOMShIK 3867 0615	USB	(Priyom)
3756	S30	16-2	1745	Mon	PMV5 L'GJ KZI' TShchShchS VKY1 HCLF 61HZh ZBIL L7O5 V'Z'	USB	(Priyom)
3756	S30	17-2	2230	Tue	Russian military channel marker "Pip"	USB	(TJ)
5448	S30	21-2	0555	Sat	Russian military channel marker "Pip"	USB	(AB)
3756	S30	22-2	1737	Sun	DMC3 49FT C2ZA INNC ShchGJP TZLM FY5E F61N 37CN MUDR	USB	(Priyom)
3756	S30	23-2	1609	Mon	8S1Shch 38 680 ChYeRNOSLIV 9144 0281	USB	(Priyom)
3756	S30	23-2	1650	Mon	8S1Shch 11 890 STANOVShchIK 6955 1951	USB	(Priyom)
3756	S30	23-2	1753	Mon	KZI' TShchShchS VKY1 HCLF 61HZh ZBIL L7O5 V'Z' NLCE LI27	USB	(Priyom)
3756	S30	24-2	0443	Tue	V2MZ SB7Z 'O6P Y8VM 6I2Zh 8CShchJ 27Shch' N1DU 53OB 78MV	USB	(Priyom)
5448	S30	26-2	1317	Thu	8S1Shch 27 106 PYeGIJ 1311 7930	USB	(Priyom)
3756	S30	27-2	0432	Fri	TUZR 5J7Shch DMC3 49FT C2ZA INNC ShchGJP TZLM FY5E F61N	USB	(Priyom)
5448	S30	27-2	0819	Fri	8S1Shch 51 602 KINOSYuZhYeT 0540 5595	USB	(Priyom)
5448	S30	27-2	1211	Fri	Z7CN MUDR 7VNShch Zh7NZh YMA5 VTH3 AGDT 'U1B OSOG BO6C	USB	(Priyom)
3756	S30	27-2	1637	Fri	F56Shch 9GSA ZhBZU 4RVZ 3VS' DKJ1 ZhD9V 42BV 81BR M7KS	USB	(Priyom)
5473	S32	2-2	0710	Mon	ROSA-64 DZhIGIT-46 OTPOR-89 LOGIKA-05 YaHTA-94 FONTAN-34	USB	(DJPr)
5473	S32	2-2	1356	Mon	ALFA-45 64 660 PODBORShchIK 7670 3212	USB	(DJPr)
5473	S32	2-2	1414	Mon	STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39	USB	(DJPr)
3828	S32	2-2	1550	Mon	ALFA-45 96 205 EKZOFTOL'M 3893 5491	USB	(DJPr)
3828	S32	2-2	2000	Mon	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27	USB	(DJPr)
3828	S32	4-2	1907	Wed	K3VJ Shch8AF M7KS 11 397 44 280 31 468 PYeRYeLIVANIYe 0960 6420	USB	(DJPr)
3828	S32	4-2	1959	Wed	K3VJ Shch8AF M7KS 61 044 11 235 98 538 NAKNADA 6394 5163	USB	(DJPr)
3828	S32	12-2	1655	Thu	ALFA-45 63 423 ERMALOM 8527 2519	USB	(DJPr)
3828	S32	12-2	2137	Thu	Squeaky Wheel channel marker	USB	(AB)
3828	S32	13-2	1528	Fri	Al'fa-45 50 811 VASLUJ 2857 7590	USB	(GWr)
3828	S32	13-2	1544	Fri	Al'fa-45 68 645 MUZIChAR 1268 3389	USB	(GWr)
3828	S32	15-2	1607	Sun	ALFA-45 88 102 GYeORGYeNIYa 6643 0864	USB	(Priyom)
3828	S32	15-2	1717	Sun	ALFA-45 61 869 VTYaZhNOJ 8493 8652	USB	(Priyom)
3828	S32	15-2	1944	Sun	STAZhER-29 ALEUT-09 ZASLONKA-27 STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39	USB	(Priyom)
3828	S32	16-2	1615	Mon	ALFA-45 26 363 AKKORDYeON 2495 8270	USB	(Priyom)
3828.9	S32	17-2	2231	Tue	Russian military channel marker "Squeaky Wheel"	USB	(TJ)
5473	S32	21-2	0606	Sat	Russian military channel marker "Squeaky Wheel"	USB	(AB)
3828	S32	22-2	1814	Sun	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27	USB	(Priyom)
3828	S32	23-2	1605	Mon	ALFA-45 22 920 KAPIK 7198 3811	USB	(Priyom)
3828	S32	23-2	1649	Mon	ALFA-45 20 072 GIPOTIRIN 6284 1211	USB	(Priyom)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
3828	S32	24-2	1815	Tue	SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27	USB	(Priyom)
3828	S32	26-2	0332	Thu	ALFA-45 39 567 POMRAChYeNIYe 1534 1581	USB	(Priyom)
5473	S32	26-2	0710	Thu	STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39 KURGAN-40 DUBLYoR-68 SLUZhBA-32	USB	(Priyom)
5473	S32	27-2	0825	Fri	ALFA-45 71 082 BANANNIK 8979 4105	USB	(Priyom)
3828	S32	27-2	1740	Fri	RUZh'E-26 BIZON-64 PYeSOChNYJ-21 ShULER-60 PENZA-07 SLIVA-94 LANDYSh-74 STAZhER-29 ALEUT-09 ZASLONKA-27	USB	(Priyom)
3828	S32	27-2	2050	Fri	STOROZh-62 NYeVKA-26 KARTA-11 UTYoS-94 KOVBOJ-39	USB	(Priyom)
5130	S5130	28-2	1508	Sat	0953 8852 7535 9684 2693 5391 8335 7865 8227 1510 0486 3951 8851	USB	(DJPr)
5292.3	S5292	17-2	1948	Tue	Channel marker "B"	USB	(TJ)
5292.3	S5292	17-2	2246	Tue	Channel marker "B"	USB	(TJ)
5292	S5292	19-2	1029	Thu	FAZAN-37 04 739 CUKAT 3124 8748	USB	(GWr)
5292	S5292	19-2	1558	Thu	FAZAN-37 02 191 URAGAN 3728 2837	USB	(GWr)
5292.3	S5292	20-2	2206	Fri	Channel marker "B"	USB	(AB)
5292.3	S5292	21-2	0554	Sat	Channel marker "B"	USB	(AB)
5292.3	S5292	22-2	2153	Sun	Channel marker "B"	USB	(AB)
5292.3	S5292	23-2	0613	Mon	Channel marker "B"	USB	(AB)
5292.3	S5292	23-2	1717	Mon	Channel marker "B"	USB	(AB)
5292.3	S5292	24-2	1600	Tue	Channel marker "B"	USB	(AB)
5292.3	S5292	25-2	2126	Wed	Channel marker "B"	USB	(AB)
19502.2	SDN	5-2	1303	Thu	Sudanese diplo msg "18888 stno ftype .bag size 1678" then into crypto, ending voice chat	Pactor-I 200/200	(AAI)
3580	UM01	2-2	2221	Mon	CQ M 16	CW	(JPL-Sib)
3580	UM01	7-2	0153	Sat	CQ M 11	CW	(JPL-Sib)
10741	UM01	7-2	0219	Sat	CQ M 12. 3rd harmonic freq	CW	(JPL-Sib)
3580	UM01	7-2	0220	Sat	CQ M 12	CW	(JPL-Sib)
3580	UM01	7-2	1451	Sat	CQ M 8	CW	(JPL-Sib)
10741	UM01	7-2	1451	Sat	CQ M 8. 3rd harmonic freq	CW	(JPL-Sib)
3580	UM01	8-2	0202	Sun	CQ M 5 //10741 kHz (3rd harmonic)	CW	(JPL-Sib)
3580	UM01	8-2	0239	Sun	CQ M 6 //10741 kHz (3rd harmonic)	CW	(JPL-Sib)
3580	UM01	22-2	1445	Sun	CQ M 3	CW	(JPL-Sib)
3580	UM01	22-2	2015	Sun	CQ M 13	CW	(JPL-Sib)
3580	UM01	23-2	1059	Mon	CQ M 12	CW	(AB)
3580	UM01	23-2	1936	Mon	CQ M 10	CW	(AB)
3580	UM01	24-2	0150	Tue	CQ M 8	CW	(JPL-Sib)
3580	UM01	24-2	1010	Tue	CQ M 4	CW	(JPL-Sib)
7161	UM01	24-2	1031	Tue	CQ M 4 (harmonic)	CW	(JPL-Sib)
3580	UM01	24-2	1532	Tue	CQ M 4	CW	(JPL-Sib)
3580	UM01	24-2	2023	Tue	CQ M 4	CW	(JPL-Sib)
3850	UM01	25-2	0149	Wed	CQ M 4	CW	(JPL-Sib)
3850	UM01	25-2	1117	Wed	CQ M 4	CW	(JPL-Sib)
3580	UM01	26-2	0150	Thu	CQ M 4	CW	(JPL-Sib)
3580	UM01	26-2	0951	Thu	CQ M 3	CW	(JPL-Sib)
3580	UM01	26-2	1134	Thu	CQ M 3	CW	(JPL-Sib)
3580	UM01	26-2	2215	Thu	CQ M 4	CW	(JPL-Sib)
3580	UM01	27-2	1523	Fri	CQ M 5	CW	(JPL-Sib)
3580	UM01	27-2	1945	Fri	CQ M 4	CW	(JPL-Sib)
3580	UM01	28-2	0647	Sat	CQ M 4	CW	(JPL-Sib)
3580	UM01	28-2	1433	Sat	CQ M 4	CW	(JPL-Sib)
3580	UM01	28-2	1709	Sat	CQ M 4	CW	(JPL-Sib)
3782	UM10	8-2	1502	Sun	Unid 10-mins net: VI4T //3281 kHz	CW	(JPL-Sib)
3281	UM10	8-2	1502	Sun	Unid 10-mins net: VI4T //3782 kHz	CW	(JPL-Sib)
3263	UM10	8-2	1530	Sun	Unid 10-mins net: Q7JN	CW	(JPL-Sib)
3263	UM10	8-2	2127	Sun	Unid 10-mins net: Q7JN	CW	(JPL-Sib)
3782	UM10	10-2	1935	Tue	Unid 10-mins net: VI4T //3281 kHz	CW	(JPL-Sib)
3281	UM10	10-2	1935	Tue	Unid 10-mins net: VI4T //3782 kHz	CW	(JPL-Sib)
3281	UM10	11-2	1734	Wed	Unid 10-mins net: VI4T	CW	(JPL-Sib)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
3281	UM10	12-2	1439	Thu	Unid 10-mins net: VI4T	CW	(JPL-Sib)
3281	UM10	13-2	1802	Fri	Unid 10-mins net: VI4T	CW	(JPL-Sib)
2932	UM10	17-2	1526	Tue	Unid 10-mins net: Q7JN (new freq) //3263 kHz	CW	(JPL-Sib)
3263	UM10	17-2	1534	Tue	Unid 10-mins net: VI4T //2932 kHz	CW	(JPL-Sib)
3782	UM10	17-2	1534	Tue	Unid 10-mins net: VI4T //3281 kHz	CW	(JPL-Sib)
3281	UM10	17-2	1534	Tue	Unid 10-mins net: VI4T //3782 kHz	CW	(JPL-Sib)
3281	UM10	18-2	1936	Wed	Unid 10-mins net: VI4T	CW	(JPL-Sib)
3263	UM10	20-2	1727	Fri	Unid 10-mins net: Q7JN	CW	(JPL-Sib)
3782	UM10	20-2	1733	Fri	Unid 10-mins net: VI4T	CW	(JPL-Sib)
3281	UM10	22-2	1500	Sun	Unid 10-mins net: VI4T	CW	(JPL-Sib)
3281	UM10	23-2	1938	Mon	Unid 10-mins net: VI4T	CW	(AB)
3782	UM10	24-2	2045	Tue	Unid 10-mins net: VI4T	CW	(JPL-Sib)
3782	UM10	24-2	2100	Tue	Unid 10-mins net: VI4T	CW	(JPL-Sib)
3782	UM10	26-2	1430	Thu	Unid 10-mins net: VI4T	CW	(tJPL-Sib)
3263	UM10	28-2	1427	Sat	Unid 10-mins net: Q7JN	CW	(JPL-Sib)
3263	UM10	28-2	1704	Sat	Unid 10-mins net: Q7JN	CW	(JPL-Sib)
3281	UM10	28-2	1705	Sat	Unid 10-mins net: VI4T	CW	(JPL-Sib)
7554	V02a	12-2	1959	Thu	Atencion 20142 42772 55212. Changed to M08a at 2001 UTC	LSB	(DSch)
7555.1	V02a	17-2	2000	Tue	Atencion 07671 11012 24331 into 5F groups. Should be M08a. Another xmtr being tuned. V02a off at 2001 UTC	LSB	(DSch)
7554	V02a	19-2	2000	Thu	Atencion followed by 3-5F grps announced by YL/SS then into text of 5F grps. Bad signal. Should be M08a	LSB	(DSch)
16268	V07	8-2	0120	Sun	329 1 258 65 58048 01829 43534 ... 44942 25578 14789 000 000	USB	(Dan)
13968	V07	8-2	0140	Sun	329 1 258 65 58048 01829 43534 ... 44942 25578 14789 000 000	USB	(Dan)
18368	V07	15-2	0100	Sun	329 329 329 000	USB	(Dan)
16268	V07	15-2	0120	Sun	329 329 329 000	USB	(Dan)
18368	V07	22-2	0100	Sun	329 1 337 83 37410 39120 99721 ... 33277 29175 29348 000 000	USB	(westt1us)
18368	V07	22-2	0100	Sun	329 329 329 1 337 83 37490 39120 ...29175 29348 000 000	USB	(Dan)
16268	V07	22-2	0120	Sun	329 1 337 83 37410 39120 99721 ... 33277 29175 29348 000 000	USB	(westt1us)
16268	V07	22-2	0120	Sun	329 329 329 1 337 83 37490 39120 ...29175 29348 000 000	USB	(Dan)
13968	V07	22-2	0140	Sun	329 329 329 1 337 83 37490 39120 ...29175 29348 000 000	USB	(Token)
13968	V07	22-2	0140	Sun	329 1 337 83 37410 39120 99721 ... 33277 29175 29348 000 000	USB	(westt1us)
11430	V13	13-2	0800	Fri	New Star #4	AM	(AB)
10219	X06	1-2	1741	Sun	Mazielka. Sequence: 1--6--	USB	(Ava-re/Danix)
20655	X06	3-2	1206	Tue	Mazielka. Sequence: 325614	USB	(Danix)
7691	X06	3-2	2203	Tue	Mazielka. Sequence: 351264	USB	(Danix)
18197	X06	4-2	1224	Wed	Mazielka	USB	(Danix)
9128	X06	5-2	1857	Thu	Mazielka. Sequence: 164253	USB	(Danix)
14501	X06	6-2	0956	Fri	Mazielka. Sequence: 361245	USB	(Danix)
14824	X06	6-2	1032	Fri	Mazielka. Sequence: 625413	USB	(Danix)
9163	X06	8-2	1747	Sun	Mazielka	USB	(Avare)
19235	X06	9-2	1044	Mon	Mazielka. Sequence: 463125	CW	(tING)
13985	X06	11-2	0859	Wed	Mazielka. Sequence: 134265	USB	(Danix)
16116	X06	11-2	0919	Wed	Mazielka. Sequence: 134265	USB	(Danix)
14550	X06	12-2	0835	Thu	Mazielka. Sequence: 153624	USB	(AB)
14947	X06	22-2	0802	Sun	Mazielka. Sequence: 351264	USB	(Danix)
14944	X06	26-2	1227	Thu	Mazielka. Sequence: 621543	USB	(tING)
12300	X06b	4-2	0806	Wed	Mazielka. Sequence: 1--2--	USB	(Ava-re/Danix)
10219	X06b	8-2	1737	Sun	Mazielka. Sequence: 6--1--	AM	(Ava-re/linkz)
11409	XPA	4-2	0700	Wed	msg	MFSK-20/10Bd	(HFD)
13509	XPA	4-2	0720	Wed	msg	MFSK-20/10Bd	(HFD)
14609	XPA	4-2	0740	Wed	msg	MFSK-20/10Bd	(HFD)
13509	XPA	4-2	0820	Wed	456 456 456 000 02894 00001 00000 10140	MFSK-16/20Bd	(AB)
14609	XPA	4-2	0840	Wed	456 456 456 000 02894 00001 00000 10140	MFSK-16/20Bd	(AB)
6823	XPA	5-2	1849	Thu	158 158 158 000 03551 00001 00000 10140	MFSK-20/10Bd	(MPJ)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
8123	XPA	5-2	1900	Thu	msg	MFSK-20/10Bd	(HFD)
7523	XPA	5-2	1920	Thu	msg	MFSK-20/10Bd	(HFD)
6823	XPA	5-2	1940	Thu	msg	MFSK-20/10Bd	(HFD)
14609	XPA	7-2	0740	Sat	456 456 456 000 06081 00001 00000 10140	MFSK-10/20Bd	(AB)
11409	XPA	11-2	0700	Wed	456 1 09410 00253 49732 ... 26977 20529 23040	MFSK-16/20Bd	(AB)
13509	XPA	11-2	0720	Wed	456 1 09410 00253 49732 ... 26977 20529 23040	MFSK-16/20Bd	(AB)
14609	XPA	11-2	0740	Wed	456 1 09410 00253 49732 ... 26977 20529 23040	MFSK-16/20Bd	(AB)
11409	XPA	18-2	0700	Wed	05129 00001 00000 10140	MFSK-20/10Bd	(AB)
7523	XPA	19-2	1900	Thu	158 158 158 000 corrupt	MFSK-16/20Bd	(AB)
6823	XPA	19-2	1900	Thu	158 158 158 000 corrupt	MFSK-16/20Bd	(AB)
8123	XPA	19-2	1900	Thu	158 158 158 000 08893 00001 00000 101 corrupt	MFSK-16/20Bd	(AB)
13509	XPA	21-2	0720	Sat	456 456 456 000 08575 00001 00000 10140	MFSK-20/10Bd	(AB)
14609	XPA	21-2	0740	Sat	456 456 456 000 08575 00001 00000 10140	MFSK-20/10Bd	(AB)
11409	XPA	28-2	0700	Sat	456 1 00974 00197 54418 ... 60061 62278 26456	MFSK-20/10Bd	(AB)
13509	XPA	28-2	0720	Sat	456 1 00974 00197 54418 ... 60061 62278 26456	MFSK-20/10Bd	(AB)
14609	XPA	28-2	0740	Sat	456 1 00974 00197 54418 ... 60061 62278 26456	MFSK-20/10Bd	(AB)
16338	XPA2	1-2	1500	Sun	03544 00073 24603 ... 03104 01847 61517	MFSK-16/20Bd	(MCO)
18667	XPA2	7-2	1400	Sat	00951 00179 75266 ....70911 06038 02431	MFSK-16/20Bd	(AB)
17419	XPA2	7-2	1420	Sat	00951 00179 75266 ....70911 06038 02431	MFSK-16/20Bd	(AB)
16212	XPA2	7-2	1440	Sat	00951 00179 75266 ....70911 06038 02431	MFSK-16/20Bd	(AB)
16338	XPA2	8-2	1500	Sun	msg	MFSK-16/20Bd	(HFD)
14538	XPA2	8-2	1520	Sun	msg	MFSK-16/20Bd	(HFD)
13538	XPA2	8-2	1540	Sun	msg	MFSK-16/20Bd	(HFD)
15983	XPA2	9-2	0800	Mon	03990 00189 16275 ... 45852 22197 02455	MFSK-16/20Bd	(AB)
14783	XPA2	9-2	0820	Mon	03990 00189 16275 ... 45852 22197 02455	MFSK-16/20Bd	(AB)
13883	XPA2	9-2	0840	Mon	03990 00189 16275 ... 45852 22197 02455	MFSK-16/20Bd	(AB)
16338	XPA2	10-2	1500	Tue	05168 00001 00000 10140	MFSK-16/20Bd	(AB)
14583	XPA2	10-2	1520	Tue	05168 00001 00000 10140	MFSK-16/20Bd	(AB)
13538	XPA2	10-2	1540	Tue	05168 00001 00000 10140	MFSK-16/20Bd	(AB)
15983	XPA2	11-2	0800	Wed	03990 00189 16275 ... 45852 22197 02455	MFSK-16/20Bd	(AB)
14783	XPA2	11-2	0820	Wed	03990 00189 16275 ... 45852 22197 02455	MFSK-16/20Bd	(AB)
13883	XPA2	11-2	0840	Wed	03990 00189 16275 ... 45852 22197 02455	MFSK-16/20Bd	(AB)
18667	XPA2	13-2	1400	Fri	06572 00001 00000 10140	MFSK-16/20Bd	(AB)
17419	XPA2	13-2	1420	Fri	06572 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ)
16212	XPA2	13-2	1440	Fri	06572 00001 00000 10140	MFSK-16/20Bd	(AB/MPJ)
16212	XPA2	14-2	1440	Sat	08839 1 00133 signal raped by pluto radar	MFSK-16/20Bd	(AB)
16338	XPA2	15-2	1500	Sun	05479 00065 28680 ... 16734 28261 61415	MFSK-16/20Bd	(AB/MPJ)
14538	XPA2	15-2	1520	Sun	05479 00065 28680 ... 16734 28261 61415	MFSK-16/20Bd	(AB/MPJ)
13538	XPA2	15-2	1540	Sun	05479 00065 28680 ... 16734 28261 61415	MFSK-16/20Bd	(AB)
15983	XPA2	16-2	0800	Mon	09846 00001 00000 10140	MFSK-16/20Bd	(AB/Dan
14783	XPA2	16-2	0820	Mon	09846 00001 00000 10140	MFSK-16/20Bd	(AB)
13883	XPA2	16-2	0840	Mon	09846 00001 00000 10140	MFSK-16/20Bd	(AB)
16338	XPA2	17-2	1500	Tue	06804 00001 00000 10140	MFSK-16/20Bd	(AB)
14538	XPA2	17-2	1520	Tue	06804 00001 00000 10140	MFSK-16/20Bd	(AB)
13538	XPA2	17-2	1540	Tue	06804 00001 00000 10140	MFSK-16/20Bd	(AB)
15983	XPA2	18-2	0800	Wed	08124 00001 0000 10140	MFSK-16/20Bd	(Dan)
13883	XPA2	18-2	0840	Wed	Start tones, then off	MFSK-16/20Bd	(AB)
17419	XPA2	21-2	1420	Sat	08168 00155 02825 95185 75873 ... 05729 39369 35572 65854 23242	MFSK-16/20Bd	(MPJ)
16212	XPA2	21-2	1440	Sat	08168 00155 02825 95185 75873 ... 05729 39369 35572 65854 23242	MFSK-16/20Bd	(MPJ)
15983	XPA2	23-2	0800	Mon	02010 00205 24728 ... 38599 43970 05520	MFSK-16/20Bd	(AB/HFD)
14783	XPA2	23-2	0820	Mon	02010 00205 24728 ... 38599 43970 05520	MFSK-16/20Bd	(AB/HFD)
13883	XPA2	23-2	0840	Mon	02010 00205 24728 ... 38599 43970 05520	MFSK-16/20Bd	(AB/HFD)
14538	XPA2	24-2	1520	Tue	7357 006 58771 59892 20531 ... 23049 12224 92881 79638 02476 corrupt message	MFSK-16/29Bd	(AB)
13538	XPA2	24-2	1540	Tue	7357 006 58771 59892 20531 ... 23049 12224 92881 79638 02476 corrupt message	MFSK-16/29Bd	(AB)
15983	XPA2	25-2	0800	Wed	02010 00205 24728 ... 38599 43970 05520	MFSK-16/20Bd	(AB)
14783	XPA2	25-2	0820	Wed	02010 00205 24728 ... 38599 43970 05520	MFSK-16/20Bd	(AB)
13883	XPA2	25-2	0840	Wed	02010 00205 24728 ... 38599 43970 05520	MFSK-16/20Bd	(AB)

Freq.	Code	Date	UTC	Day	Remarks	Mode	Ctrb
16212	XPA2	27-2	1440	Fri	05616 00001 00000 10140	MFSK-16/20Bd	(AB)
18667	XPA2	28-2	1400	Sat	msg	MFSK-16/20Bd	(HFD)
17419	XPA2	28-2	1420	Sat	07259 00001 00000 10140	MFSK-16/20Bd	(AB/HFD)
16212	XPA2	28-2	1440	Sat	07259 00001 00000 10140	MFSK-16/20Bd	(AB/HFD)

CONTRIBUTORS

AAI	Antonio Anselmi, Italy	JU	Jay Updike, W. Europe
AB	Ary Boender, Netherlands	KK2	Kristian K, Central Europe
AB-HK	Ary Boender via remote rx Hong Kong	linkz	Linkz, S.E. France
Arg	Argonn (via Priyom)	Mar	Marrianne
Avare	Avare	MCO	Mike Chace-Ortiz, PA, USA
Dan	Daniel, Argentina	MPJ	Jim, SW England
Danix	Danix111, Poland	N2UHC	N2UHC
DJPr	DJpeter via Radioscanner/Priyom	NH2	Nige, UK
DSch	Don Schimmel, USA	Nico	Nico, near Paris, France
GHn	Gary Hagermann, UK	Priyom	Priyom.org
Gwr	Gwraspe (via Priyom)	SFNY	Shawn, Flushing, NY, USA
HFD	Hans-Friedrich Dumrese, Germany	TJ	Trond Jacobsen, Norway
JCS	John compositesignals, UK	Token	T!, CA, USA
JPL-HK	JPL via remote rx Hong Kong	Tom	Tom, Lincs, UK
JPL-Sib	JPL via remote rx Siberia	Westt1us	Westt1us, USA

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HF UNDERGROUND	http://www.hfunderground.com/board/
PRIYOM	http://priyom.org/

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