

|       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 27364 | 92836 | 89428 | 81268 | 74982 | 46498 | 42784 | 31277 |
| 40932 | 70987 | 32123 | 49817 | 26346 | 81287 | 65491 | 87364 |
| 75654 | 55656 | 12737 | 72727 | 72727 | 91918 | 63473 | 67867 |
| 87629 | 37677 | 32612 | 53498 | 71296 | 28756 | 18276 | 98716 |
| 76329 | 74698 | 76857 | 98670 | 27601 | 56701 | 57601 | 73648 |
| 87364 | 87265 | 96710 | 27630 | 12673 | 84769 | 28743 | 98127 |
| 63298 | 75698 | 27465 | 87326 | 49876 | 28376 | 81273 | 98615 |
| 87432 | 74328 | 78674 | 29867 | 32867 | 67867 | 86786 | 43286 |
| 68768 | 68763 | 34234 | 34238 | 68768 | 62342 | 48273 | 48768 |
| 98432 | 32432 | 86743 | 43286 | 43286 | 43286 | 43286 | 43286 |
| 86743 | 86743 | 39867 | 32867 | 86743 | 43286 | 43286 | 43243 |
| 86743 | 86743 | 86743 | 86743 | 86743 | 86743 | 86743 | 86743 |
| 98798 | 98754 | 98754 | 98754 | 98754 | 29867 | 67543 | 67986 |
| 87698 | 69876 | 87698 | 69876 | 87612 | 12341 | 34867 | 86798 |
| 43298 | 65656 | 56756 | 56123 | 32143 | 14321 | 32143 | 14321 |
| 58765 | 58765 | 58765 | 58765 | 58765 | 58765 | 58765 | 58765 |

# Numbers & Oddities

## a.k.a. The Spooks Newsletter

**Edition #334, July 2025**

Editor: Ary Boender email: [udxf@udxf.nl](mailto:udxf@udxf.nl)

Numbers & Oddities <http://www.numbersoddities.nl>

"Numbers & Oddities" a.k.a. the "Spooks Newsletter" is a newsletter for the members of the Utility DXers Forum (UDXF), the Spooks mailing list, HF Underground and everyone else who is interested in Numbers Stations.

"Numbers & Oddities" covers the fascinating world of Numbers Stations and other odd radio signals on shortwave.

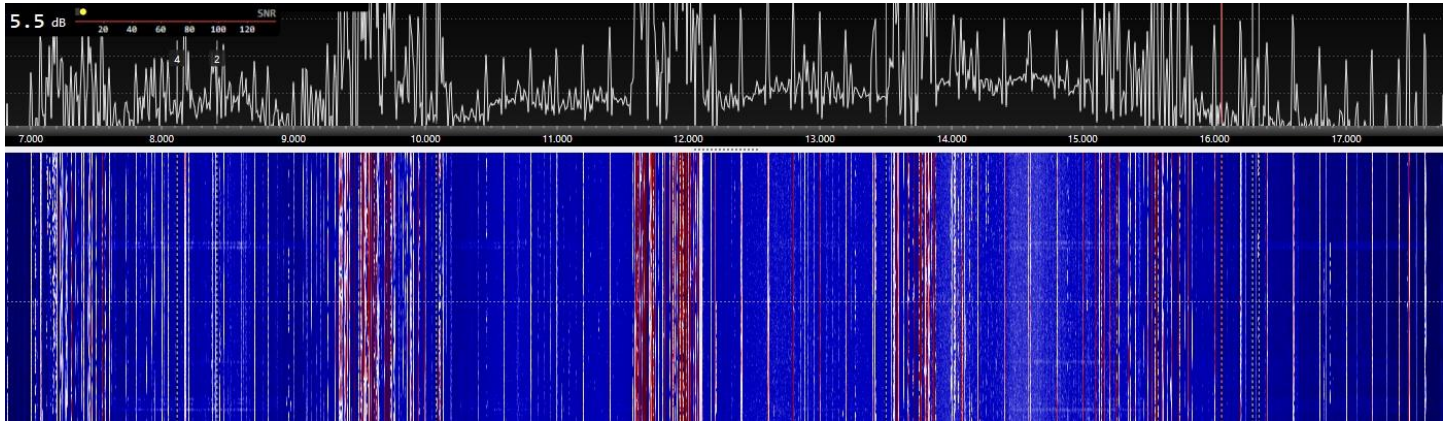


- . . . - - - . . . . - . . . . . - . - . - . . . - - - - . . - . . . . - . . . . .

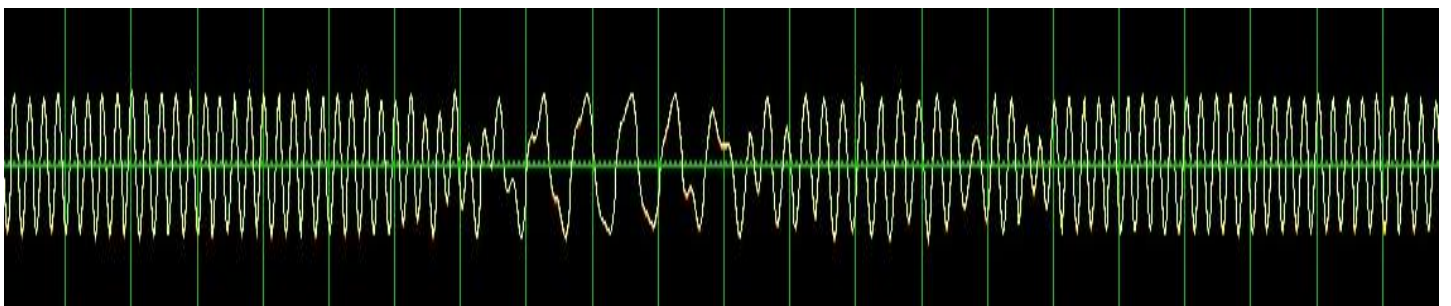


Numbers and Oddities

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## FOREWORD

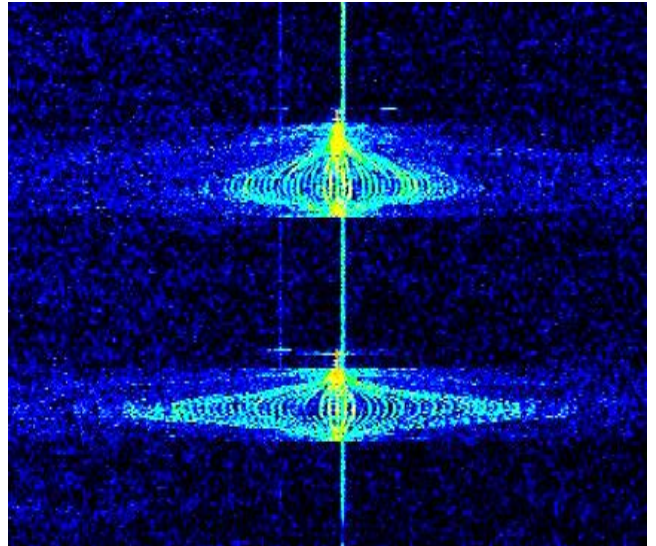
Compared to recent months, July was a relatively quiet month. We only noted Russian tests/exercises in the last few days of the month, and M23 was also quiet.

As an extra, we included quite a few EAM logss and there are several hundreds additional logs of Russian activities in late May and June. You can find them in the XPB1 section. We further observed the regular station activities.

Bytheway, do you experience this as well? That you fall asleep during E07? Before it reaches group 30, my eyes are already closed. It's better than any sleeping pill 😊

We thank all contributors for their 4000+ logs, transcripts, and recordings.

Weird interference on a Polish web SDR resulted in a nice picture.



## VOICE STATIONS

### E07

19235/18368/17421 kHz, 1000/1020/1040 UTC

**19235/18368/17421 kHz, 01-07/05-07, 1000/1020/1040 UTC**

234 234 234 1 516 108 516 108  
22302 19111 17519 87852 52457 47617 41978 68255 11855 53876  
67649 88055 76767 32619 08969 24315 71374 52188 61581 86836  
86275 55733 80602 35876 24681 52783 34764 11164 98494 18538  
73590 53039 82375 82953 09149 20296 24093 22081 89453 12778  
73121 44536 66008 01350 34380 76092 97593 38394 75957 87780  
64909 74460 70794 92077 01166 36855 70545 82082 18554 59497  
96730 56890 01383 97593 14231 78159 67746 45170 36744 03000  
94027 76742 11284 62098 86043 06272 11609 54531 47013 13739  
14259 23742 24480 22951 55882 18412 65957 27466 69890 85986  
59066 15908 03040 78591 37535 61783 76278 87471 16716 64077  
86278 23587 48097 52395 84477 91698 48388 86797 000 000

**19235/18368/17421 kHz, 17-07/19-07, 1000/1020/1040 UTC**

234 234 234 1 9290 121 9290 121  
97368 71391 81087 63146 37026 06488 81139 32625 80854 65455  
84053 41207 28431 45771 96992 49916 98194 51017 56927 53605  
70427 27449 50551 17754 04424 69047 19181 71850 52769 30652  
38679 99863 90165 17588 99277 87552 53654 80992 72667 87006  
22535 17522 27900 33157 97645 93593 12972 76781 18047 10601  
74522 46060 57879 25041 75602 54867 75816 81872 52779 11751  
63842 70887 94976 22208 09386 93500 64562 89901 75637 07507  
28279 54579 45268 61445 69573 22990 93207 08245 34118 83101  
78635 20450 22831 26101 57981 46895 34487 47845 10371 54228  
20803 15146 19390 41612 58965 24419 68480 11136 92323 81339  
33185 34679 99135 95509 41005 72262 05432 19994 14033 50468  
51982 02083 00801 98573 36948 18480 50216 80640 26286 25331  
63318 000 000

**19235/18368/17421 kHz, 31-07, 1000/1020/1040 UTC**

234 234 234 1 648 137 648 137

55651 58782 00998 20137 99972 49355 90334 90789 00526 36174  
61316 21390 57108 67862 20954 49764 68344 17139 16675 72342  
76934 49235 94547 14479 02318 03319 21420 03436 97432 82277  
33355 01557 17548 23478 41357 98907 59737 88301 64691 29099  
10285 05117 39452 02090 75907 38009 57904 01567 68106 80190  
88868 43551 88013 72854 19178 16040 19651 66678 21708 09490  
40105 18600 16433 54851 47918 95106 02422 70274 29462 96671  
21762 38691 46553 98481 12676 56875 47208 40633 16273 15359  
43692 26845 12434 86418 11548 89542 62590 95970 63442 49548  
12366 79059 07902 92124 26229 87792 97939 64633 59661 65422  
55314 21986 96936 31021 14520 84718 90860 87403 27044 82568  
11524 77363 64393 90210 01297 14300 57946 59534 85060 48929  
72967 07327 92967 75435 18570 06038 58083 36345 68263 66106  
14920 64605 61063 04031 94554 86514 78035 000 000

**16232/18332/19132 kHz, 1500/1520/1540 UTC****16232/18332/19132 kHz, 08-07/11-07, 1500/1520/1540 UTC**

231 231 231 1 777 190 777 190

06086 69594 02050 64501 38796 86240 56637 56937 77798 52132  
48945 78739 39799 28060 99785 94861 62767 88961 17111 50985  
61109 76513 43326 99222 96895 37318 26968 41345 67591 10882  
55016 96692 26292 49306 85643 68351 14944 52703 18939 06372  
64531 79149 45500 51095 86286 82235 81420 41090 08380 03039  
86322 26995 08127 70829 95073 34078 22311 15410 53198 16221  
35259 12741 71899 63937 98578 03281 59576 74179 99223 15740  
12589 61578 24306 60744 95848 20868 99870 44126 80635 94106  
61257 84045 83237 33151 67946 84223 53910 24301 88277 62213  
99185 23457 36122 71903 72465 81458 08585 31998 06091 29084  
39203 94735 42339 22958 65879 83529 59489 04583 15489 81836  
68740 31124 85198 00190 43133 19810 46084 61478 85828 16061  
80377 36476 12411 69925 76423 90435 64894 54584 88739 31524  
43158 40176 71678 61849 75280 54099 36443 05431 03856 03589  
44537 13453 96913 46333 93437 78180 72323 93934 38919 01466  
06724 23318 42021 68541 14286 68264 70162 00113 84426 90038  
26002 50248 41007 26882 34144 75542 92062 54817 35809 80917  
21082 44125 08166 87940 87784 17774 32148 42579 58542 87051  
29105 17108 25933 02729 16209 00637 61322 80370 53059 83879  
000 000

**16232/18332/19132 kHz, 22-07/25-07, 1500/1520/1540 UTC**

231 231 231 1 264 156 26 156

04754 15525 53720 00665 46523 98151 05399 95856 64865 58039  
75479 12950 65993 60672 30925 43186 48042 60266 22873 80918  
08532 55649 77352 36396 59230 17444 05161 36707 89468 40563  
95841 66171 29577 20680 86550 99158 30092 43036 52646 35143  
95961 16003 57471 54273 35437 27935 60098 93426 05181 13480  
24950 68645 31330 26651 05681 62382 49365 34299 18713 98405  
35213 71216 01342 01770 23300 23007 51072 60147 49252 93437  
36208 12963 96353 65639 30780 24905 49826 70322 73226 82811  
59406 80769 53615 45745 96373 74372 91219 40956 87435 24208  
84786 19566 90959 40951 77298 56356 83968 15096 64847 48865  
62534 13918 16074 55765 83421 70936 84946 93937 26105 93339  
91178 58170 02228 96451 34699 30788 59153 48260 98429 84848  
81025 21863 83151 49546 75141 83216 49880 84004 31060 89202  
42672 52889 37716 20107 62247 63553 08471 59219 78180 69811  
83081 46148 19253 95754 23679 14445 97011 68645 18028 69718  
77670 40703 94362 04491 40347 84244 000 000

**12530 kHz, 01-07/04-07, 0715 UTC**

635/32 Attention

90488 51496 72684 99294 82325 21455 10786 64047 10587 24302  
45035 63376 02382 64622 69803 57751 23045 26652 55288 86255  
06730 50605 64710 80573 57488 42736 27660 82570 52127 06461  
36522 41003

Attention (message repeated) Out

**12153 kHz, 01-07/04-07, 1000 UTC**

300/35 Attention

31502 29605 31843 05866 55411 36231 70765 12942 26501 60324  
73185 21781 28638 01980 80292 77143 16058 34668 37257 27608  
89265 11453 31436 74172 71618 48772 51328 40693 43771 10937  
83262 80443 81106 33182 07441

Attention (message repeated) Out

**15720 kHz, 02-07/04-07, 0745 UTC**

348/35 Attention

80298 92146 25271 87991 96987 12735 52583 72259 43996 45344  
33890 28241 22526 97106 94222 59010 05329 56308 23679 39040  
04845 63015 53547 52613 03859 32162 33937 76496 69106 11888  
68609 26543 38064 62691 39245

Attention (message repeated) Out

**7863 kHz, 02-07/04-07, 1715 UTC**

978/40 Attention

51509 78171 02433 14333 63712 66163 22276 63143 15247 17513  
76414 24209 98150 89665 60971 60215 81774 28577 74241 80763  
45712 16730 73434 34027 16278 58788 66300 95292 06852 84601  
87008 21282 03480 85583 55396 72245 61212 09136 55871 51920

Attention (message repeated) Out

**12815 kHz, 07-07/09-07, 0845 UTC**

719/32 Attention

05257 70464 98565 62068 67069 01687 39194 05904 33858 79528  
29182 37987 56002 80868 75311 30447 76420 45099 10149 63084  
86473 47960 52528 37725 09864 22861 44949 79296 11121 47579  
59861 77411

Attention (message repeated) Out

**11116 kHz, 07-07/09-07, 0900 UTC**

538/33 Attention

05514 71372 48956 81148 76565 39918 53608 50588 05497 31718  
49841 87703 49923 23860 34107 75761 01818 09091 78433 39044  
32547 47746 02210 40276 14464 01353 75486 27463 40467 18233  
57317 17109 53348

Attention (message repeated) Out

**11092 kHz, 08-07/10-09, 0645 UTC**

510/34 Attention

25805 99080 21261 03668 81883 26589 17863 52709 06552 71508  
82510 97216 31718 48471 70049 02618 69729 45485 30272 18643  
83710 38715 14173 43088 41647 36914 83326 59815 56600 89595  
79025 58288 57216 84111

Attention (message repeated) Out

**8680 kHz, 08-07/11-07, 0700 UTC**

575/37 Attention

46715 57326 63653 56648 41997 73242 08317 45284 73153 43498  
19168 62664 20649 28516 33814 07226 12890 54260 79355 06243  
18354 69399 20969 96484 46280 77699 70875 07184 73044 99988  
52605 28422 49797 79360 81865 15508 52748

Attention (message repeated) Out

**20640 kHz, 08-07/10-07, 0745 UTC**

225/37 Attention

77913 24955 06351 74804 44386 81157 02082 90869 61162 17064  
32266 30029 98670 27448 27301 50501 94416 46386 15242 64952  
16223 96666 18639 91118 16122 70983 57708 31665 79168 69012  
49785 64813 91572 36253 32002 01185 77274

Attention (message repeated) Out

**6923 kHz, 09-07/10-07, 0930 UTC**

276/32 Attention

26289 68426 37651 37739 11561 64664 24050 15282 49049 28302  
03005 79763 20026 91267 23107 17690 86517 53160 50761 28262  
72488 42289 61397 68956 48637 76183 99820 01041 95320 23555  
25740 78846

Attention (message repeated) Out

**4783 kHz, 09-07/12-07, 1605 UTC**

396/36 Attention

10275 89118 02901 56170 81645 81149 39437 77071 25227 98104  
43768 81754 30806 81119 01728 90588 23235 76178 88362 74086  
34937 41182 28867 84089 08619 75500 95157 09028 48113 88015  
62366 83532 11080 95164 52699 76219

Attention (message repeated) Out

**12229 kHz, 11-07/13-07, 1815 UTC**

925/39 Attention

12063 95345 70454 31207 71444 86111 75985 09426 20156 14014  
21095 33336 64227 44708 35558 12225 02930 37353 52732 51323  
58907 02414 71962 38494 36103 87669 27360 61455 91856 13283  
35371 72347 97443 30318 74442 44549 63986 31337 81826

Attention (message repeated) Out

**9610 kHz, 11-07/13-07, 1910 UTC**

618/31 Attention

62973 47139 28774 61429 90119 95387 60267 06193 65896 76805  
58596 86488 37188 21524 70725 68217 52921 56678 21663 07107  
91660 66767 87260 48614 09908 85834 95644 86003 51715 80524  
41626

Attention (message repeated) Out

**21906 kHz, 14-07/16-07, 0600 UTC**

946/32 Attention

43949 71351 75716 97377 93411 21340 36018 91988 91089 64715  
69689 96524 44845 37272 55114 58809 77151 04621 10828 04271  
31364 63982 92208 54627 78462 35679 22517 45848 72747 37262  
98597 21866

Attention (message repeated) Out

**17378 kHz, 15-07/16-07, 0820 UTC**

132/39 Attention

79789 05691 70753 99698 48986 78688 88474 38905 38727 11006  
35718 11754 69902 74520 87961 90516 63240 83663 02053 26436  
83316 27818 67149 62009 45167 40479 21699 59035 26667 10102  
94237 09425 46896 38990 04029 09306 45919 28867 37478

Attention (message repeated) Out0680 0790 1210

**19184 kHz, 15-07/17-07, 0845 UTC**

156/36 Attention

70862 00025 09576 71789 07692 97494 81767 30499 42438 30324  
31131 21857 10016 47558 14166 78595 50794 70968 84952 90918  
35491 03752 96629 63162 47522 87783 94930 49512 60977 22435  
57440 92676 69186 94954 71278 87093

Attention (message repeated) Out

**8274 kHz, 15-07/16-07, 1205 UTC**

461/39 Attention

68498 43924 05587 23727 62307 75075 06747 98462 75238 24388  
87287 70397 85650 75066 42426 58726 78475 56097 82063 73764  
94665 80340 78858 18450 96367 71629 62475 73631 77308 90787  
92560 97165 99894 97652 75521 14921 09306 30023 10565

Attention (message repeated) Out

**12984 kHz, 15-07/19-07, 1430 UTC**

911/32 Attention

27931 03090 06233 79519 19964 17349 85712 45725 43610 10078  
25544 01430 04538 82819 27309 65850 20680 88256 41178 00916  
18435 38159 84071 29849 79028 82343 11073 65426 68731 55937  
44610 21455

Attention (message repeated) Out

**14575 kHz, 15-07/17-07, 1645 UTC**

332/39 Attention

36620 24587 63391 02131 60953 05123 47858 22165 10852 15600  
09164 30524 90856 86521 99181 70274 66215 39066 60914 14506  
47596 81978 88170 20964 48175 53905 73401 39819 67472 15127  
88599 63478 10856 43379 71053 89095 68379 50621 97916

Attention (message repeated) Out

**9150 kHz, 18-07/20-05, 0600 UTC**

352/35 Attention

26778 75141 15385 88999 98286 18868 96446 80489 69333 19355  
17938 39675 55623 87131 51428 67033 47060 17967 14849 90555  
19026 94751 91365 68417 94794 63104 58827 25028 65818 96811  
04799 86073 16773 57575 15477

Attention (message repeated) Out

**7377 kHz, 19-07/20-07, 0700 UTC**

495/38 Attention

65913 95336 05892 13068 37223 69755 17794 86447 79494 55350  
82898 93193 61493 46186 63110 06290 38319 87058 08835 27830  
91113 15824 07011 72379 98223 30163 86542 58257 31304 33938  
78827 13377 33670 97307 68129 63161 44560 30629

Attention (message repeated) Out

**10508 kHz, 21-07/23-07, 0645 UTC**

418/40 Attention

68733 14155 07889 84153 78542 83040 33982 75314 01610 88474  
75364 79757 65789 61181 22276 34608 73168 60795 68331 23872  
76856 03813 07037 39933 27602 32224 90708 41546 21352 63231  
79087 40247 67408 14303 43682 99199 99495 29927 74768 14930

Attention (message repeated) Out

**16335 kHz, 21-07/25-07, 0830 UTC**

183/20 Attention

00899 57642 51585 02022 52048 23707 91974 96308 16677 61759  
60872 13079 61566 55879 61256 14089 48583 79108 63733 90677

Attention (message repeated) Out

**5737 kHz, 21-07/24-07, 1300 UTC**

311/36 Attention

27797 98477 65619 03416 95727 22524 99066 78608 79619 66259  
02852 72239 54030 95200 43621 53037 49291 51189 28631 57060  
36637 86684 95329 11703 07489 49751 27365 76398 47108 26135  
03149 28216 90513 65973 66565 76126

Attention (message repeated) Out

**14410 kHz, 21-07/27-07, 1745 UTC**

248/35 Attention

35581 61734 28389 99545 03415 55488 90407 90674 11793 80787  
71646 55756 70172 45565 45732 05340 86023 41154 62861 67196  
30351 99779 74771 55566 98300 52990 05956 33469 90059 58795  
68453 35643 42128 44662 50720

Attention (message repeated) Out

**7600 kHz, 21-07/24-07, 1900 UTC**

647/30 Attention

87589 14298 94482 19903 56828 90042 14455 54936 70856 18481  
60792 77148 72608 72086 90708 99690 63448 69726 28185 11832  
68599 76760 92372 23463 42743 97627 17767 02744 65542 63609

Attention (message repeated) Out

**5231 kHz, 22-07/27-07, 1605 UTC**

232/37 Attention

16007 23907 04852 85472 50262 20319 62565 22483 49344 13667  
62709 01044 91536 80664 32217 87760 56481 28127 51695 76999  
99916 95772 01815 99936 06777 65425 63692 47546 30358 77776  
08015 93999 56144 10254 68922 55536 55511

Attention (message repeated) Out

**5409 kHz, 24-07/27-07, 2000 UTC**

525/33 Attention

15037 42629 61501 43402 47160 41500 87337 09706 04066 13490  
18211 19192 91411 30909 72949 08984 89988 84865 53518 01530  
01944 03981 63912 44988 44066 43981 68635 87349 05220 86943  
24476 93832 87624

Attention (message repeated) Out

**5082 kHz, 26-07/27-07, 1645 UTC**

365/38 Attention

76519 71469 12311 58157 11770 41548 13279 88147 12484 37247  
58556 89342 10487 04696 94492 67843 12958 22971 05519 24539  
43731 59391 10992 27760 57507 06329 69993 31543 44247 78965  
32915 36428 07861 26448 59389 28259 56930 30445

Attention (message repeated) Out

**15915 kHz, 28-07/30-07, 0715 UTC**

755/38 Attention

30246 29723 45789 02286 22527 20083 84457 88090 23095 10223  
09698 26069 80598 66520 37660 92025 28229 43711 43355 21367  
84760 76064 30928 58492 94394 68710 51586 61247 29596 86974  
11916 68669 99217 10696 93240 48438 41001 92756

Attention (message repeated) Out

**9610 kHz, 28-07/31-07, 0745 UTC**

261/33 Attention

24206 52822 22558 56106 09440 80690 27124 38133 90273 79094  
93510 38247 65377 60795 59077 58753 35895 00953 04359 24951  
72458 48263 48959 85574 91224 91709 31388 97463 66374 29930  
48887 15716 12705

Attention (message repeated) Out

**11616/9322 kHz, 30-06/01-07, 0400/0420 UTC**

480 671 51 (0400z)  
 480 671 52 (0420z)  
 22723 15403 55473 31272 73081 49067 52968 63755 56196 45547  
 31540 88148 89204 33498 19787 49088 78653 35649 60820 84465  
 00632 41207 18041 73074 33066 34616 62656 90951 31124 41588  
 47628 99852 63314 78373 97727 16282 50421 15174 70392 34538  
 74456 89668 67076 02193 49826 31565 99769 71457 73876 84726  
 42382 74852  
 671 52 00000

**11616/9322 kHz, 02-07/03-07, 0400/0420 UTC**

480 932 40  
 31473 66755 14039 77100 12073 42515 83882 17759 53716 48249  
 28944 69066 60467 34138 24417 03447 51741 58753 45666 85210  
 61467 28636 84830 47281 90476 03967 97976 20758 23047 25060  
 56272 84497 43548 39327 99586 26877 14123 33428 15981 37019  
 932 40  
 480 716 20  
 85217 21388 03176 34766 20961 92962 82264 20962 29020 35371  
 88356 39156 46066 87995 73515 00427 56279 90659 06466 71420  
 716 20 00000

**11616/9322 kHz, 04-07, 0400/0420 UTC** 480 480 480 00000**11616/9322 kHz, 07-07/08-07, 0400/0420 UTC**

480 952 60  
 95192 34094 85293 10526 36679 61578 52563 44057 30010 55329  
 50454 47447 57940 56439 96022 38955 51694 95622 90765 40699  
 69969 81955 33071 84620 47555 39761 71378 22080 62032 35821  
 09012 91746 91967 64114 96605 25471 65050 80260 73061 96842  
 19616 02850 40985 42105 27970 23869 87527 08125 54986 95384  
 86577 07096 50377 84694 43238 82670 98106 15108 66524 17207  
 952 60 00000

**11616/9322 kHz, 09-07/10-07, 0400/0420 UTC**

480 376 24  
 31568 11295 06786 64730 62997 52428 92045 87325 49152 07601  
 82376 73726 66885 84974 13096 48048 49445 89155 74010 68190  
 05641 35742 75892 26952  
 376 24  
 480 512 33  
 93649 94726 53363 85505 11511 44334 28898 61285 32809 72079  
 70267 63299 28380 25774 59626 23017 34061 02056 42442 54177  
 25561 89506 86792 98020 88352 86858 18147 15958 74773 57235  
 34330 83116 65517  
 512 33 00000

**11616/9322 kHz, 11-07, 0400/0420 UTC** 480 480 480 00000**11616/9322 kHz, 14-07/15-07, 0400/0420 UTC**

480 937 51  
 79761 66275 88448 65332 94784 67062 77665 22476 59150 98815  
 69543 64914 73982 23182 27476 60367 06664 96001 00266 75869  
 82482 69277 50731 14557 37311 98320 10196 81848 17258 83765  
 07288 23205 36228 03126 44499 00666 27337 11598 20928 00332  
 49102 16784 24664 88006 32362 57033 43222 55154 78853 38077  
 65496  
 937 51 00000

**11616/9322 kHz, 16-07/17-07, 0400/0420 UTC**

480 125 34  
18215 03625 04260 57996 17710 87470 97439 04102 01511 34070  
74572 41211 98101 41292 77227 13285 82828 38573 91135 16721  
51426 48311 21911 22737 50676 32904 99005 40861 14631 69624  
18811 78234 79842 20509  
125 34  
480 693 25  
88180 05206 80703 31749 88288 70140 63183 12384 28642 37780  
30644 95513 70976 70683 40291 64213 90903 23061 18907 06074  
69801 93961 97555 30498 00080  
693 25 00000

**11616/9322 kHz, 18-07, 0400/0420 UTC** 480 480 480 00000

**11616/9322 kHz, 21-07/22-07, 0400/0420 UTC**

480 751 60  
43412 83475 97095 36313 36047 18318 99458 38005 39510 38667  
56506 00434 41029 10226 19581 69445 90512 60936 95353 88239  
28159 87756 23485 04397 13329 69795 86008 35594 46881 48722  
53159 18450 04148 62401 95300 81935 20744 42696 15662 39792  
98397 13357 83552 65386 22985 48951 72768 07449 11959 80765  
34844 74125 33364 60624 61870 65782 63619 18541 18541 54004  
751 60 00000

**11616/9322 kHz, 23-07/24-07, 0400/0420 UTC**

480 179 20  
26218 59959 85652 04157 97368 44449 97772 43081 33507 82243  
19828 56568 05985 14658 56127 29823 34053 79121 74756 82925  
179 20  
480 236 40  
06856 34405 53999 25694 00177 14570 31125 35311 80615 40534  
89841 23678 47814 60672 97880 33715 12736 86612 72436 21688  
83156 64444 54971 24956 71135 55793 35324 76290 33380 83444  
98584 31975 80477 21204 93152 05852 15899 32684 43423 26523  
236 40 00000

**11616/9322 kHz, 25-07, 0400/0420 UTC** 480 480 480 00000

**11616/9322 kHz, 28-07/29-07, 0400/0420 UTC**

480 263 57  
44300 87924 84463 74207 58000 74768 12074 60041 42796 62077  
65742 43918 76840 90662 25789 56209 30913 85734 32783 89879  
95396 02008 49334 78163 12440 04886 51269 19220 42869 24267  
90398 58694 22950 53099 96044 66125 89988 10128 07535 66145  
82153 27271 54828 10394 41797 15067 29490 01095 77093 74613  
13170 02237 61665 17466 55795 99280 76892  
263 57 00000

**11616 kHz, 30-07, 0400 UTC**

**No transmission**

**9322 kHz, 30-07, 0420 UTC**

**623 19 00000 (this is the end of the second message). Nothing else.**

**11616/9322 kHz, 31-07, 0400/0420 UTC**

480 197 36  
71551 65328 29280 47517 71964 89713 27158 38445 43177 73087  
02731 20677 30361 60122 48480 77193 26324 79397 04911 73691  
50342 56263 18733 18195 89976 40706 75731 94203 10557 73514  
25548 53318 62041 39319 40533 78262  
197 36  
480 623 19  
08067 88297 60736 86237 89267 06857 29040 06352 88496 20142  
22944 84647 80782 70271 40417 22854 09515 19929 06093  
623 19 00000

**9968 kHz, 01-07/03-07, 0445 UTC**

798/40 Vnimanije

72215 24884 46195 66248 09654 04950 77610 58545 31682 89968  
16817 78042 13879 58629 87079 13724 16868 21897 24078 11465  
02077 79648 58377 90175 15098 16973 98772 48865 00984 60965  
19142 20804 25013 80987 96129 33064 71860 80915 56732 02752

Vnimanije (message repeated) Konets

**18773 kHz, 02-07/04-07, 0725 UTC**

383/33 Vnimanije

84524 19474 22109 42394 79934 35072 80185 65176 39426 12972  
72289 40976 57572 04351 21210 91114 20135 03376 36154 65795  
18120 50508 20367 56315 68090 17479 16366 97533 12278 26419  
87332 67244 50761

Vnimanije (message repeated) Konets

**12457 kHz, 02-07/05-07, 1950 UTC**

284/40 Vnimanije

94298 30277 92596 37839 36469 57390 98889 39656 65518 51168  
32404 98061 12412 34814 09129 40531 84293 02572 06682 22766  
92458 45009 92194 82541 17397 78481 87753 67433 86949 81169  
27338 44100 89979 51021 50462 91032 61609 19237 67888 29236

Vnimanije (message repeated) Konets

**16357 kHz, 07-07/09-07, 0510 UTC**

657/38 Vnimanije

53453 83200 00184 83943 65336 03698 61877 39168 76624 63403  
47917 80400 52472 29018 96037 56678 27452 31721 41764 99401  
31819 48570 00358 15941 07875 32548 73609 37624 12249 03439  
00383 75166 51301 13350 42197 50845 84174 38544

Vnimanije (message repeated) Konets

**6814 kHz, 07-07/11-07, 0915 UTC**

486/34 Vnimanije

42493 45795 37533 47103 33425 45180 03067 89037 21203 14187  
23375 46485 93520 92944 23019 59579 66099 48127 16769 64033  
88159 25038 43103 04852 54847 03270 54575 36624 58822 30930  
23435 93116 74619 81428

Vnimanije (message repeated) Konets

**5149 kHz, 19-07/20-07, 0830 UTC**

378/36 Vnimanije

64802 02645 08297 60816 11650 50948 43792 30758 59217 16024  
69389 64798 52575 21887 09467 52613 92586 05496 62504 32081  
51458 21580 86030 01262 11823 45787 46271 62410 89824 05407  
99861 56855 89288 77752 50640 74794

Vnimanije (message repeated) Konets

**9448 kHz, 22-07/25-07, 1400 UTC**

420/37 Vnimanije

76713 37126 97107 93593 34161 97526 15909 87897 71743 49708  
47753 72620 00675 84274 95108 39635 65077 28663 08067 35526  
21304 23265 59627 56928 38087 40416 82336 36987 35238 26446  
46656 60587 78009 45025 10068 55927 59646

Vnimanije (message repeated) Konets

**9339 kHz, 28-07/31-07, 0700 UTC**

479/36 Vnmaniye

10284 79466 80994 72224 77498 76026 68323 29160 18746 67088  
59049 78672 95554 53414 26422 92579 38576 90228 13782 96140  
28944 59667 02182 28692 71876 64571 39709 86952 03921 26880  
65326 59046 16384 19148 74756 96634

Vnmaniye (message repeated) Konets

**V07**

**13978 kHz, 06-07, 0700 UTC, Cut out middle of group 10**

**13378 kHz, 06-07, 0720UTC. Last zero cut out**

**12178 kHz, 06-07, 0740 UTC**

931 931 931 1 4310 103 4310 103  
16103 61050 36949 29763 97691 49434 00300 91318 59507 29617  
88776 42717 91625 00312 74395 27032 00986 37596 82067 09716  
20790 16412 14162 61601 79268 82444 68863 36495 08429 77731  
84719 95050 74316 72167 75375 81827 05945 06557 61737 15510  
72072 07815 20870 94943 03923 49500 07299 90392 64483 30374  
02527 38271 86631 88570 38944 62388 98216 13380 28778 05823  
66799 04389 38537 43607 75827 66635 08514 67255 71980 21059  
37228 18057 62527 20349 02341 81420 00818 73952 09317 35299  
02628 70088 41176 54433 27371 90851 15912 54781 44465 81636  
54746 16004 54535 75992 85826 51692 84087 67879 84677 71418  
68663 14250 89009 000 000

**13978/13378/12178 kHz, 13-07, 0700/0720/0740 UTC**

931 931 931 1 8777 110 8777 110  
98351 29198 01434 43528 14135 05096 24028 27038 47781 17348  
39973 83096 28495 38882 84106 20931 79407 52190 94236 55066  
16424 16273 53206 70637 79043 21529 94107 33886 29252 34808  
69471 90199 19827 56293 99898 83636 21207 62032 70687 05106  
36316 97035 07037 52855 34479 99964 24604 49180 22766 76784  
58469 48785 87800 61533 53191 73822 52116 48022 14418 31873  
99259 97476 72137 82805 15351 21057 09054 23083 54779 61859  
10819 53808 26987 98032 61656 15019 29572 01715 57298 56308  
82188 58114 78245 73157 99508 44315 42147 77576 66626 48464  
53542 89323 60931 65146 17582 30413 88643 48736 09047 04852  
50204 00380 52360 54167 89818 41772 72671 77867 70200 25294  
000 000

**13978/13378/12178 kHz, 20-07, 0700/0720/0740 UTC**

931 931 931 1 3589 125 3589 125  
69856 62589 64993 82059 85363 21435 94247 74648 66760 19336  
25607 80838 51001 48775 65617 36484 53829 72100 65514 73695  
06793 93498 50836 75080 95166 31520 51220 68473 17844 70094  
97714 34713 99330 72855 19410 79280 31527 26464 69995 89613  
97961 37553 51413 01915 48824 40332 27766 78186 20498 14168  
27692 18672 24078 52840 60230 18412 37166 51144 07891 42412  
10958 02995 44734 48652 41632 74775 78919 33707 67486 28108  
56027 69487 24767 99567 39980 93996 56626 65764 17648 90849  
31860 45846 06185 70658 77963 96452 97485 84449 70982 74967  
41610 76772 40452 75138 99624 08846 25045 99330 83284 95761  
13451 03116 97428 52129 80111 46298 67533 18837 84350 08364  
63799 77001 18926 07483 88456 01774 31720 47179 97680 62852  
27593 84200 14942 65583 06264 000 000

13978/13378/12178 kHz, 27-07, 0700/0720/0740 UTC

0700 UTC: restart after callup

931 931 931 1 3242 104 3242 104

79392 63873 10119 99302 27261 84618 64584 40645 51253 12996  
22517 23492 14315 59406 94651 98553 03238 68228 33094 16786  
97661 46989 02913 84854 66779 55826 91197 44156 04039 00845  
67452 48754 57231 30995 64777 62297 72070 85411 96203 03318  
82045 89668 53536 42961 64342 49047 99095 28584 45620 93064  
27156 34087 51655 93212 78523 97403 80747 75287 00688 78914  
87746 63269 67261 47805 68615 78535 27369 44037 23463 70915  
66013 77978 93842 87617 08161 02668 93931 91281 04244 64094  
79541 49649 88277 76217 10393 87924 77027 55192 72409 10404  
88783 80018 79861 56743 64882 13863 41732 89410 60153 68421  
97781 73468 47389 38971 000 000

## V13 - New Star Broadcasting Station (星廣播電台 Xīngxīng guǎngbò diàntái)

### V13 designators

- V13 (regular classification) : Standard format. AM/USB hybrid, introductory phrase spoken twice, three messages addressed to three different units, group counts between 30 and 35.
- V13a: Old format. AM mode, introductory phrase spoken only once, analog voice synthesizer, 5-7 messages addressed to 5, 6, or 7 units with group counts between 20 and 39.
- V13b: AM/USB hybrid, introductory phrase spoken twice, 4 messages to 4 units, longer group counts between 50 and 69 in each message.

All logs and comments were submitted by FSpY and AVX. Thanks for your input !

Station 1 has stopped sending two batches of different messages and now only sends one batch across the time slots. There have also been a few technical difficulties during transmissions including forgetting to rekey, the intro starting partway through, and the pause between the intro and preamble being oddly long. However, the transmissions now start right on the hour and are no longer several minutes late. (FSpY)

### 8169 kHz, 02-07, 0200 UTC. New Star Broadcasting. Station 1b

Unit IDs: 2073, 5127, 6220

Group Counts: 33, 34, 33

9984 8339 6201 2145 9616 2809 1882 6585 1645 5197  
9716 3783 7605 4130 0070 6044 9405 4602 6202 9510  
0845 0428 7716 5958 0442 8217 5633 7041 9629 8331  
6235 1646 1728

2733 4226 2763 2798 1423 0356 8480 4229 1318 9763  
0955 6432 9756 1087 2438 1124 5433 7161 8431 6430  
8478 1856 3932 6904 6486 9337 8402 0395 5822 9910  
9783 0393 9785 8453

6452 5226 2659 6560 2521 3521 0365 4886 8141 7616  
9294 4527 9980 1115 2958 4874 8997 3898 4123 5620  
1185 7482 3444 0606 8438 4235 0955 5380 1143 0621  
8058 9180 6572

### 19052 kHz, 03-07, 0000 UTC. New Star Broadcasting. Station 1c

Unit IDs: 6139, 7800, 9454

Group Counts: 31, 31, 31

3345 7174 6649 7558 7724 3916 4847 2381 8696 6252 9563  
4784 4612 5760 2618 8743 8358 7611 3154 2866 4017 8704  
0692 4011 2996 8620 7887 9629 0058 9612 3233

9856 4572 8406 9088 6910 0820 5588 7549 0832 1434 2704  
5382 3021 9426 2555 2285 4772 1493 0536 9013 8265 5402  
7394 3778 5072 4787 7349 9380 9336 5621 4121

2633 9248 1294 2537 6286 2692 4104 9530 2045 8703 5358  
9629 1962 0148 4273 6822 6283 3883 7646 4651 9201 0920  
4922 7181 6978 2277 1460 6436 1279 0142 4193

Notes:  
Oddly long pause between the introductory phrase and preamble. V13a is gone now, station 1 now sends two different sets of standard messages: one at 0000 UTC and 0100 UTC, one at 0200 and 0300 UTC. The 0100 UTC slot is transmitted on a completely new frequency, 21000 kHz.

**3 July:**  
No station 1b or 2 during the 0200 and 0230 slots. Carriers briefly appeared on 13974 and 14944 kHz. I assume they're preparing to change these frequencies for the season too? They later appeared as scheduled on the 0300 and 0330 slots, with station 2 being loudest in Mainland China.

**18040 kHz, 06-07, 0000 UTC. New Star Broadcasting. Station 4**

Unit IDs: 0304, 4192, 6492

Group Counts: 33, 33, 32

0312 4638 1599 3834 0771 6838 9839 4410 9787 8460 7293  
1443 1712 9710 6925 1353 5007 7626 5654 0053 2898 0958  
3428 4295 7126 5023 1020 5351 0536 7111 9995 7471 6200

7708 1524 9408 6146 0908 9374 3611 3678 8005 2743 9924  
7747 0957 6971 9981 6480 7610 1354 8797 7763 5989 4715  
8060 2505 9455 5081 3937 1744 1530 0781 0533 8822 0364

4551 7296 4531 9688 1660 2159 5676 7561 5524 6547 6304  
3701 4883 4555 0743 8724 2788 6854 7702 6591 9892 3830  
9076 4422 8813 8155 0715 1032 7536 5351 9271 7303

Note: another unusually long pause between the intro and preamble.

**21000 kHz, 06-07, 0100 UTC. New Star Broadcasting. Station 1c**

Unit IDs: 0448, 5230, 6533

Group Counts: 34, 30, 33

0517 8687 6768 1032 5090 6549 1878 2554 5673 0540 3004  
6225 7867 5597 4410 0617 0266 6059 4986 3961 2159 7381  
8205 8422 9351 3933 7905 6467 6405 6903 4719 5229 0029  
8205

5205 2933 2921 5782 4671 2784 8024 0575 0325 8002 9049  
3635 4895 4563 1169 6610 1390 3164 8691 9956 6754 0784  
3946 9505 1168 3898 7367 5370 8084 4431

6846 2241 5266 3693 3528 3616 7408 9933 0846 3686 3208  
5294 3717 2709 7502 8063 4556 0788 8533 9099 5897 1638  
5844 9122 2895 6102 1505 0091 9688 2721 8660 5541 7235

**18040 kHz, 06-07-2025 0130 UTC. New Star Broadcasting. Station 3**

Unit IDs: 2319, 5666, 5807

Group Counts: 32, 32, 34

6244 8472 7287 9297 2982 8916 2168 1184 2258 1705 4561  
0718 9352 9634 4851 2170 7317 5010 6260 3019 6322 8805  
4801 8266 6450 2643 6794 6225 8551 2834 8841 8005

9667 4033 9355 9090 2672 8804 3319 9797 2064 4644 2953  
0920 1238 4627 3936 3907 8661 8857 8822 9906 3842 5286  
4312 5622 9901 1607 8447 5909 6843 1546 2228 4308

8726 9139 4848 2683 4991 2828 4540 6539 5289 1866 0806

0172 9708 4456 8532 7785 7369 6059 0855 9177 9531 6373  
1423 5097 7394 9659 0136 0562 5795 5149 4735 6769 5109  
9909

Note: musical intro started partway through instead of from the beginning.

### **9276 kHz, 06-07, 0300 UTC. New Star Broadcasting. Station 2**

Unit IDs: 3863, 8435, 9762

Group Counts: 31, 33, 35

3798 9258 2971 0776 2770 9781 0249 5203 1597 3035 4729  
3197 5305 5951 1607 4352 6728 7929 7121 1654 5819 1373  
4783 1909 6748 9952 4108 9468 8781 8748 6038

4799 2788 3914 0130 4292 2779 8629 5167 0324 3637 1682  
5334 6182 5268 6430 9773 7691 9481 8527 4519 1227 3784  
2409 0289 3321 7054 7205 6174 7832 5304 9182 1591 0318

1870 5412 7547 1323 9102 7133 0090 0370 7509 2192 9124  
7759 3331 8446 0592 3228 9627 0167 5907 9122 2687 6680  
1146 5978 1278 3442 9697 4248 4503 1627 2824 3236 5388  
9960 7582

### **12 July**

- AVX reported that on Sat 12-07, 1200z Station 1c suddenly appended a 4th message to its normal 3 message pack. The original station 1c set was: 0448 34 5230 30 6533 33. They added **id 6581 21 groups**. New messages arrived on Sun 13-07 but the new 4<sup>th</sup> group was still there: 1109 30 4440 35 6179 33 **6581 21**
- Station 1b also carried the same 4 messages!
- After the clock correction, the transmissions start exactly at xx:00 and xx:30 but station 4 since Sat 12-07 30 seconds late.

### **14 July**

- 14-07, 1000z-1530z slots all normal and the freqs/messages as scheduled.
- 0000z-0330z: Stations 1b/c, 3, 4 played a loop 4-5 times of MEI YOU DIAN BAO GEI NI and musical intro with station nr. announcement as usual.
- Station 2: carrier only!
- 0100z used 0000z frequencies, 0200z was 19052 instead of 8169, 8300 was correctly set.

### **15890 kHz, 14-07, 0100 UTC. New Star Broadcasting. Station 3**

Unit IDs: 4344, 4820, 6491

Group Counts: 30, 34, 32

1629 7321 1041 8572 7710 7958 1236 9406 1774 2498 4211  
7581 4104 8957 2786 3435 5343 9726 1932 0929 1966 5179  
8266 0509 4154 2601 6916 7582 5669 5327

5760 5622 6096 1065 3573 0441 7232 6661 1084 7875 4023  
4828 7095 3550 9411 8816 7953 2045 6163 5526 5884 8222  
1872 9857 3068 6192 8502 1727 7083 2179 2016 5191 9942  
9549

2464 5875 0415

Note: they must have fixed their timer because transmissions are now on the dot accurate and on time! However, they forgot to rekey station 3 from 15890 to 18040. The transmission QRMed with the scheduled Sound of Hope broadcast and then abruptly cut off and disappeared three groups into the third message. It didn't rekey to 18040 kHz even after that.

### **15 July**

After the "mei you dian bao gei ni" show last night, station 2 at 0330z 9276 kHz also had it as a loop 5 times then saying "zai hui". Slots before had a carrier only.

At 1000z ALL messages and skeds were 100% ok!

Station 1c (actually 1b) is again interesting. Look back at the history:

0448 34 5230 30 6533 33                      msgs as of 06 July

0448 34 5230 30 6533 33 6581 21 4th msg added on 12 July 1200z  
1109 30 4440 35 6179 33 6581 21 msgs as of 13 July  
1109 30 4440 35 6179 33 6581 17 4th msg added on 15 July, 1200z

I never saw 2 different messages for the same Unit on this station so far. Also in the announcement the phrase "di er hao" is inserted which means "part number two". Do we see a multipart message here? 21 groups, then 17 groups ?  
Note that the Unit IDs of the other messages are now in ascending order.

Here are the transcripts:

6581 21  
2123 6985 0121 3288 8556 0761 5971 0797 9054 8337  
9492 4214 5372 1852 5321 3113 2015 8935 0144 1754  
7969

581 17  
3891 5479 0417 5794 2362 9732 8869 3788 2985 2827  
9249 1558 2519 2376 4088 2498 2954

#### 16-18 July

The 6581 17 message was gone on 16-07 0000z.

V13 exchanged all messages twice this week, now also on WED 1000z 16-07.

Sun 13-07

#1b: 1109 30 4440 35 6179 33 6581 21 //4th msg added SAT 12-07 1200z  
#1c: 1109 30 4440 35 6179 33 6581 21 //4th msg added SAT 12-07 1200z  
#1c: 1109 30 4440 35 6179 33 6581 17 //4th msg added TUE 15-07 1200z //dropped WED 16-07 0000z  
#2: 0830 31 1912 33 6140 32  
#3: 4344 30 4820 34 6491 32  
#4: 0880 31 9486 30 9630 35  
#5: 1084 33 4184 32 9398 31

Wed 16-07:

#1b: 7773 32 7791 32 9925 33  
#1c: 7773 32 7791 32 9925 33  
#2: 3315 32 3462 34 7978 34  
#3: 1739 32 3348 33 4706 31  
#4: 0081 31 2308 30 9031 30  
#5: 3094 32 3342 31 8119 34

Note the strange Units 7773 7791 9925. Also many 33XX: 2215 3342 3348

#### 18040 kHz, 18-07-2025 0000 UTC. New Star Broadcasting. Station 4

Unit IDs: 0081, 2308, 9031

Group Counts: 31, 30, 30

5823 1960 4809 2180 7898 8381 4807 6667 9955 1991  
3182 3577 3283 9169 3778 7488 9444 3628 3738 4909  
2760 4546 3936 8120 7825 6294 2783 2979 5699 9924  
9104

9937 3443 4796 1394 5815 1529 4092 9235 9391 5738  
5632 8054 7148 0314 9359 4855 6584 9585 8384 9175  
8727 8541 1738 2992 5200 4213 5871 0909 7073 5772

6128 5875 1241 3905 4493 2905 7572 8585 4891 6158  
6630 1558 4621 0857 0770 7399 3975 9881 5086 8298  
8982 7204 0874 6742 1134 2072 3905 8708 8005 5728

Note: Musical intro played and then there was quite a long period of silence. The introductory statement eventually did play, but was then followed by another unusually long silence before the preamble.

**19-21 July**

Station 1-4 were carrier only starting from SAT 19-0, 0100z.

Station 5 was updated SUN 1000z, 20-07

V13 updated stations 1-4 on MON 21-07, 1000z.

**15890 kHz, 22-07, 0030 UTC. New Star Broadcasting. Station 3**

Unit IDs: 0623, 3060, 8731

Group Counts: 32, 33, 31

6500 0240 3675 6010 1261 4745 5903 3475 0286 3228  
3522 6557 9618 8396 1182 3935 3768 6216 7093 5264  
0468 4219 1877 7883 4776 5324 7800 9990 1387 4273  
4364 8987

1412 5358 6667 0218 2225 1189 0710 5846 4881 0301  
7278 1985 3497 8878 8727 9332 8757 2083 3839 2937  
1090 9953 0450 2391 0005 8981 1166 3986 6248 8681  
8310 5974 6444

5172 7599 6471 7287 9032 6251 2153 3482 1995 1303  
2852 6280 5039 0816 5232 4461 7705 2900 1663 6493  
1768 4111 3598 1600 0473 4370 2159 5357 7912 1239  
7325

Note: all stations except station 5 were absent for the past two days with carriers only. This is the first broadcast of this week.

**20025 kHz, 22-07, 0100 UTC. New Star Broadcasting. Station 4**

Unit IDs: 2672, 6163, 9739

Group Counts: 34, 31, 31

3529 3586 3194 4074 2629 6192 9740 1655 8124 2195  
9230 7289 7418 3217 1680 0437 7471 7673 2198 8774  
0928 9330 0616 5307 0763 0633 8199 6213 0021 6360  
9407 0908 2294 7684

1409 3103 3652 3297 8937 6745 2341 2262 6253 5466  
9055 8520 6382 5232 2087 6947 5052 4209 6934 5009  
7136 7525 1904 8208 8388 1402 5469 1575 2807 1838  
6215

6756 3266 0357 9083 7749 4542 3997 2894 5178 1793  
3152 2449 8399 4649 9751 3211 6475 1564 5254 3432  
3966 8444 4909 4386 3613 1913 0954 6810 1217 0275  
4213

**21000, then 8169 kHz, 22-07, 0200 UTC. New Star Broadcasting. Station 1**

Unit IDs: 3387, 4451, 6448

Group Counts: 34, 35, 32

5582 3509 7640 9127 3808 0720 5717 9434 8284 6499  
4135 3590 6454 3404 9187 8876 3691 1217 4601 8536  
1196 8596 0576 0961 4240 7206 4876 5951 5316 3367  
0503 0087 0387 3071

5225 3064 5152 8375 1330 5704 3607 9972 3345 8651  
6549 4913 6283 5893 4908 5410 5469 7809 0827 2731  
9514 1249 9862 4124 6318 1752 8738 9846 7372 6355  
9118 1648 8604 3700 8097

9023 5365 6408 4250 4779 3990 5730 3699 4348 3788  
0264 8649 6654 9720 8003 4725 3435 9449 7313 4584  
7177 3348 7082 6740 4763 9083 5359 3170 2586 9133  
5554 8858

Note: accidentally transmitted on 21000 kHz (wrong frequency for this time slot) during the musical introduction, then rekeyed to 8169 partway through the music and continued normally.

**9276 kHz, 22-07, 0300 UTC. New Star Broadcasting. Station 2**

Unit IDs: 2407, 3761, 8329

Group Counts: 30, 34, 32

8633 9203 1364 4676 9874 8439 6059 6179 3642 6890  
2678 3867 5722 6087 6486 8167 1349 6612 1807 8534  
1246 4618 5988 5388 4922 6939 4645 3068 0885 4032

8725 3000 9547 3428 0975 5397 5699 7717 1876 7963  
8692 5303 5953 0155 5493 6408 5869 6089 0550 6019  
8120 1361 1549 2502 3091 7707 7502 7204 8740 4583  
6784 1114 6088 8706

5093 4770 8159 9221 9160 6457 7975 1490 2774 0253  
1797 4019 0244 6572 2380 9596 7456 2560 9808 6521  
1377 1949 5575 6964 2542 7271 6631 7480 2451 2303  
9591 5550

**15890 kHz, 27-07, 0000 UTC. New Star Broadcasting. Station 3**

Unit IDs: 0360, 5074, 8455

Group Counts: 35, 31, 31

6612 3689 5951 0110 3432 7115 4595 1634 2379 9548  
5771 6022 7462 1399 4079 1803 2400 3806 6669 7235  
8135 2812 5399 2779 6754 9875 4233 6957 0300 8653  
1113 8558 5668 0559 1540

7035 5504 6136 7192 1943 4531 0723 5376 5787 2071  
7469 4337 5657 9785 1634 1700 4400 5305 1352 1612  
2088 7490 3547 5443 0608 3951 3595 7187 5017 9969  
7531

5720 7321 6583 3129 2549 8406 9265 4530 1634 4651  
5783 4540 4089 2578 9210 1996 8995 6069 4723 9478  
6848 3475 4520 6220 1831 4702 9322 5977 1155 6816  
5950

Note: carrier kept flickering on and off at the beginning and made clicking noises because of it. The audio quality was fine though.

**18040 kHz, 27-07, 0030 UTC. New Star Broadcasting. Station 4**

Unit IDs: 0482, 1987, 8252

Group Counts: 32, 30, 34

5866 1263 1478 0617 6370 9374 5813 3431 7776 9318  
0051 4611 5333 4592 7019 7429 0290 7051 7945 9918  
9875 7318 0907 7289 7333 8196 3113 6621 1902 8122  
4063 7102

6422 1282 6244 0127 3582 9149 5028 0767 7504 9395  
0260 9261 7966 9975 9044 8186 1991 4886 4827 0791  
2187 9247 2880 6294 8591 6582 7073 7558 1909 0118

5211 6404 7058 8860 8186 2805 5877 4597 6780 3394  
8609 9783 3347 7836 6927 1303 4599 1511 5980 2106  
7972 2306 4170 9435 6139 1019 3401 4495 0667 9391  
9839 4950 3875 8233

**21000 kHz, 29-07, 0130 UTC. New Star Broadcasting. Station 1**

Unit IDs: 2291, 6582, 7111

Group Counts: 34, 33, 30

0356 8733 1009 7584 4511 5881 3482 3649 8452 4650  
8434 6441 5668 2647 9038 0433 2408 3101 6094 6344  
6088 9068 8885 6111 4838 6253 5297 4046 6635 2016  
5048 1682 4276 3766

2477 4241 0872 4606 0678 5879 8845 8192 2018 9266  
1505 8552 2738 3458 3467 8926 8284 0098 6749 5151  
6649 1362 6175 3387 4557 3192 0501 8686 1158 6186  
9326 1856 1334

9064 9897 5909 6834 6821 9440 5935 4528 7880 8343  
0827 6798 1505 3248 5073 7132 5955 4405 8284 7668  
7809 2962 1061 3372 8677 5192 6649 5851 4425 9647

**MORSE STATIONS**

**M01**

**4903 kHz, 01-07, 2000 UTC**

025 554 554 30 30 = =  
64364 64736 64736 84756 54635 46574 64757 75847 64736 65474  
85746 64532 25364 64756 25364 64756 65747 74837 74636 56353  
53647 75847 98347 74387 74357 74857 75847  
= = 554 554 30 30 000

**4903 kHz, 08-07, 2000 UTC**

025 915 915 30 30 = =  
59316 89046 78364 09451 78364 17501 77471 65036 71972 74017  
75931 74925 71062 84771 93027 55393 64017 65820 80701 74294  
74921 84935 03728 05638 62189 93715 63321 84750 74926 75639  
= = 915 915 30 30 000

**6435 kHz, 12-07, 1500 UTC**

025 697 697 30 30 = =  
53789 32780 15637 48960 42789 36590 25478 32679 57904 36128  
73829 57490 53490 36723 74830 13564 75349 74839 90685 35940  
85940 36748 27499 74832 62891 94039 60926 74829 18903 18845  
= = 679 679 30 30 000

**5280 kHz, 17-07, 1800 UTC**

025 215 215 30 30 = =  
99876 35649 60989 14320 69078 14328 59866 36589 10927 47655  
89065 37658 28276 46577 40989 15423 65465 38769 33987 47645  
10989 47687 25433 \_5436 09889 48769 37648 10968 77098 12044  
= = 215 215 30 30 000

**9736 kHz, 20-07, 0715 UTC. Different repeat in red.**

475 = = 105 105 50 50 = =  
57612 34576 45675 67472 51769 12345 78123 54014 07576 12376  
81238 76145 67416 13217 86348 13765 36154 67814 76346 53757  
34764 27823 47236 90190 12763 24029 89291 28736 74735 21287  
18912 34983 98477 **89477** 63812 39123 19123 52767 58759 81298 18397  
87486 59819 81981 78466 75783 11292 19283 71267 84984 39121  
= 105 105 50 50 000

**4903 kHz, 24-07, 2000 UTC**

025 681 681 30 30 = =  
31625 18726 16527 83627 90162 16271 20917 34271 11093 25176

54638 51432 17614 20918 54161 35629 98176 39016 20917 11872  
43628 10981 40938 26173 55048 30927 99372 20937 46739 29718  
= = 681 681 30 30 000

## M12

11519/12194/13407 kHz, 1100/1120/1140 UTC

### 11519/12194/13407 kHz, 01-07, 1100/1120/1140 UTC

289 289 289 1 5082 59 5082 59  
00310 14777 41763 46280 30397 44136 46345 37124 30957 20212  
69521 94225 24324 79681 49496 72352 16035 71678 21847 13675  
15660 56527 90276 34916 41125 39114 28030 07499 63455 90580  
98954 42454 69644 84222 84854 32375 68325 06178 99785 18694  
26760 04415 66455 30284 91419 91450 91148 17838 30018 61250  
44752 17300 39583 40436 29679 43781 24499 06846 05154 000 000

### 11519/12194/13407 kHz, 08-07, 1100/1120/1140 UTC

289 289 289 1 5530 55 5530 55  
38875 32670 02335 21069 52475 26229 60282 44263 61815 36323  
24791 53543 24390 22831 73073 76728 19330 07731 37943 19185  
47917 94829 54683 03688 95624 23254 23614 02186 61739 69697  
73367 23062 89161 90732 30303 88104 70597 58074 89061 59680  
12194 97051 87306 83421 22302 81395 59552 05260 63756 01881  
23657 55094 05741 08113 57759 000 000

### 11519/12194/13407 kHz, 15-07, 1100/1120/1140 UTC

289 289 289 1 1645 55 1645 55  
37989 88434 48203 69132 29305 13236 41331 54942 10435 95602  
09312 68047 74316 49435 33032 44637 54643 65137 27926 08133  
14888 24235 19010 48677 71503 14774 16164 44726 44424 19845  
75561 06306 01131 16370 61682 72288 57180 64377 50662 65862  
33850 34994 71492 53772 38253 67894 14746 79422 23651 66884  
19042 71574 62891 03065 92059 000 000

### 11519/12194/13407 kHz, 22-07, 1100/1120/1140 UTC

289 289 289 1 8552 56 8552 56  
52107 35499 49426 19728 92104 41306 90318 97498 30309 12129  
64952 95739 71218 76803 02485 12703 69707 18484 99505 58665  
30132 82701 86786 95376 49905 24280 35383 02971 74631 16643  
30834 55491 35454 40542 21231 54794 19740 71458 53215 54682  
86991 31774 93490 92867 88532 35044 72506 14243 99396 59927  
92303 10069 55040 51231 89609 69404 000 000

### 11519/12194/13407 kHz, 29-07, 1100/1120/1140 UTC

289 289 289 1 7442 56 7442 56  
63692 85152 88800 63434 11371 63270 65862 80713 18250 63444  
78907 12620 63697 97572 56875 79294 02738 80046 32278 46014  
28294 32426 01933 72280 07634 25013 80938 03600 26920 07756  
21318 47752 69724 96535 01514 34034 17443 22856 46697 67042  
89341 57851 22535 82768 13009 80856 81318 20325 79647 90881  
45392 98602 62471 85180 87793 31265 000 000

12162/11566/10711 kHz, 1900/1920/1940 UTC

### 12162/11566/10711 kHz, 02-07, 1900/1920/1940 UTC

546 546 546 1 3320 56 3320 56  
89812 34880 69438 30957 19861 01499 70395 73960 08870 58246  
49995 86087 91566 59984 32879 08945 55025 28341 98900 44483  
24591 03931 89795 94468 63978 39049 47832 85610 30405 97054  
93257 58885 14120 06431 34282 80277 35818 26358 32241 75925  
36114 73928 26246 56281 63012 57442 75868 54530 63123 92398

55456 42651 66608 62157 01084 85880 000 000

**12162/11566/10711 kHz, 09-07, 1900/1920/1940 UTC**

546 546 546 1 4814 56 4814 56  
53335 49341 16132 23072 35532 80941 82301 57031 88660 31718  
83904 07114 91051 58851 07863 27907 49872 85932 79248 03388  
37495 01809 64613 62724 47371 12719 26814 73298 44433 37391  
68994 84766 96113 00264 49176 65763 94654 23582 48929 86549  
38008 50743 43013 72725 28658 51617 44732 42686 18614 91412  
64004 52811 50105 92600 96125 51526 000 000

**12162/11566/10711 kHz, 16-07, 1900/1920/1940 UTC**

546 546 546 1 1521 54 1521 54  
03329 22551 29465 48596 10671 84705 63897 24942 47416 88510  
28634 73215 57599 76899 52028 36958 80409 54892 80919 45018  
89925 20093 65058 20500 40512 96248 32374 08210 27331 68942  
13918 58678 83357 98531 03137 84056 76445 84568 13612 48424  
81613 87136 03897 66729 84594 83108 34299 97501 84897 22587  
93669 82362 23737 37664 000 000

**12162/11566/10711 kHz, 23-07, 1900/1920/1940 UTC**

546 546 546 1 8486 63 8486 63  
53801 91026 15670 39692 88369 44077 41932 28746 15722 47217  
42409 34387 39072 60399 65009 37659 02903 74754 57121 22915  
48824 62410 17878 15246 95379 30349 26986 05559 24615 76137  
43539 69836 87598 65848 30659 38114 22603 81768 40296 50484  
40498 93175 34234 12828 69795 94837 83004 15665 93138 82204  
41197 01944 57798 60676 34313 91390 73147 00424 44312 58020  
17091 36372 04130 000 000

**12162/11566/10711 kHz, 30-07, 1900/1920/1940 UTC**

546 546 546 1 8204 52 8204 52  
83790 01557 41311 76774 97166 71319 63940 12726 85185 18164  
41390 73951 37966 29894 30975 23950 78401 65720 68909 59236  
12775 00912 95891 38317 74727 42991 97813 87500 54883 55957  
43463 81951 12422 09799 66773 79989 13189 92358 02206 30596  
65923 93373 16629 93358 06804 95307 71738 03115 58507 54024  
32299 28067 000 000

|                                           |
|-------------------------------------------|
| 12162/11566/10711 kHz, 1900/1920/1940 UTC |
|-------------------------------------------|

**12162/11566/10711 kHz, 05-07, 1900/1920/1940 UTC**

546 546 546 1 7044 66 7044 66  
53219 54351 36451 67501 66932 12188 53195 23434 31904 86231  
31785 49610 61793 29024 80956 72814 62875 84588 19055 96075  
76417 61111 97459 09478 20185 58400 10532 63075 83060 39201  
38430 24895 28096 56425 81560 74702 04197 39444 06740 95360  
60355 51080 63997 54455 48292 60092 50306 90992 45647 69999  
54199 27928 01915 75393 57138 92106 000 000

**12162/11566/10711 kHz, 12-07, 1900/1920/1940 UTC**

546 546 546 1 7300 57 7300 57  
52585 22921 09514 88657 95048 87107 09401 15335 73667 18203  
72379 40333 70061 83951 64485 24828 54391 49335 82153 32457  
49583 35251 98154 26548 31201 16498 91194 76576 62386 77196  
78023 95925 22876 27935 85201 30443 03620 89026 75957 17077  
48661 13632 99782 02646 31941 47077 42188 74696 95409 80008  
42256 15499 56339 24599 95289 17333 24765 000 000

**12162/11566/10711 kHz, 19-07, 1900/1920/1940 UTC**

546 546 546 1 7158 50 7158 50  
33449 42443 90514 69740 44377 71796 15139 42021 54505 03551  
02751 10057 92498 45686 65277 14649 55643 42033 82150 77277

29097 52629 76827 79068 27831 34007 51075 37846 48473 58235  
30766 41653 21654 10966 85050 25677 00888 44098 92970 60903  
84540 88334 84044 16150 88129 51901 07468 82371 69783 53742  
000 000

**12162/11566/10711 kHz, 26-07, 1900/1920/1940 UTC**

546 546 546 1 3296 57 3296 57  
53690 94308 06467 62330 67232 56478 56068 65122 56822 06467  
98180 55280 43756 02355 85300 49655 08591 69432 95132 36286  
53225 19321 43316 66110 21490 51660 98532 73793 32135 47559  
44869 03725 80236 29685 23716 34081 32768 15352 33820 65352  
55495 31568 23827 83420 66343 91361 56309 49765 36547 39652  
17291 87197 06355 85574 72210 34368 50991 000 000

**14968/14468/13368 kHz, 1900/1920/1940 UTC**

**14968/14468/13368 kHz, 02-07/04-07, 1900/1920/1940 UTC**

943 943 943 1 2525 95 2525 95  
52490 96554 65672 69197 57563 74117 42288 02031 82835 42006  
78698 92499 36277 21793 79966 62143 75668 55313 09180 25826  
76062 13170 65021 65945 47575 59541 86549 25059 06302 53415  
54202 00773 51558 22598 80953 07676 36576 98761 40842 97780  
20126 96003 27601 01869 84403 03674 78238 94163 02246 32166  
57674 52697 70027 52670 17707 96241 97622 67423 06217 28736  
06206 89948 17797 91271 94117 16449 31988 49929 95513 86895  
75614 95435 90578 67077 41430 70554 95263 08855 92013 04592  
40249 68648 26399 41517 12381 87108 08073 60817 13933 80940  
69482 89341 02181 80560 97484 000 000

**14968/14468/13368 kHz, 23-07/25-07, 1900/1920/1940 UTC**

943 943 943 1 3651 126 3651 126  
92527 24378 60400 87362 98602 45843 86378 76747 11823 38967  
31552 53683 52495 77833 63744 26641 61901 96258 40607 20374  
69554 66942 15048 42454 38000 95956 01052 65261 46316 36406  
67247 79520 29902 28817 88631 10977 00983 83377 26006 14420  
99001 32626 09796 69546 37176 84636 58373 31314 09174 72508  
99523 22813 62871 20541 16756 73124 59574 42252 14766 40598  
45211 60342 67761 98295 55845 72676 79831 84601 65287 97607  
28359 32392 48784 10871 44170 54939 93407 23086 68950 95231  
27916 32772 66302 55535 03154 93609 11536 13329 10312 83965  
38484 17989 45940 65677 41728 95957 12582 31557 26991 47756  
24464 10136 50100 45367 13096 09013 83543 52688 20932 21132  
39346 13839 99605 13920 69525 63325 67407 22491 89117 42381  
66152 66951 34585 10359 69204 15956 000 000

**9176/7931/6904 kHz, 0400/0420/0440 UTC**

**9176/7931/6904 kHz, 03-07, 0400/0420/0440 UTC**

257 257 257 1 7606 128 7606 128  
39692 72446 67707 43994 39177 63568 44034 26921 59765 64296  
98265 95605 41420 24611 15582 23731 10047 06840 63883 29779  
55878 02581 32387 06299 40341 95149 81152 74645 99135 40319  
19760 77270 11393 17463 58767 82390 29347 03578 74476 28770  
17321 69611 82976 44141 37170 58530 93370 03538 93305 80744  
91055 86949 31814 66367 72825 37111 40059 61407 03653 44027  
82415 69388 27784 19445 44536 20995 84211 23957 65843 33191  
94382 06468 32373 35112 12457 86264 19604 88244 69128 81809  
01778 77614 81338 18301 49262 32809 45455 45025 44636 21655  
42330 67939 99924 30448 46354 47931 41826 63530 99604 16175  
74317 69413 37694 60114 86361 84587 54576 96700 53909 86559  
17507 51813 92278 21842 42248 04801 88048 09392 70181 11726  
75538 39186 79319 44187 90859 26442 06543 01924 000 000

**9176/7931/6904 kHz, 10-07, 0400/0420/0440 UTC**

257 257 257 1 4316 141 4316 141  
55987 96975 46972 54895 89398 63772 13301 15126 41382 87858  
22627 55207 60603 94330 68257 69877 91259 42783 80254 32207  
94677 42594 82055 21967 98848 84638 06947 39696 70753 22203  
03464 76789 87018 88847 87120 13900 06325 31081 78947 51893  
69480 06931 98518 67344 18061 21457 71446 99822 38491 83639  
10346 16487 32282 42039 78006 13393 14919 25005 56045 04760  
56825 73603 44371 19179 84393 45836 68188 71755 07210 54356  
63551 60177 63834 28361 52726 87745 44074 14711 03906 77391  
13191 07123 01205 87113 11857 86976 44507 44978 10840 73726  
98980 81319 75035 07187 95066 95875 62559 79339 82950 72223  
53267 96899 92612 84134 20087 50167 52651 03920 79312 90260  
69317 00208 21099 78652 91567 49701 72398 57256 01321 97415  
01329 23209 60915 33482 55375 82231 85141 89646 33293 66849  
25186 64734 31760 31681 24123 13500 14510 17070 67025 61688  
34325 000 000

**9176/7931/6904 kHz, 17-07, 0400/0420/0440 UTC**

257 257 257 1 3113 123 3113 123  
69856 81498 30755 91463 24265 64301 71391 19688 74026 84220  
43161 90233 90652 57761 71246 78567 88104 72710 27982 83993  
60385 47173 67591 73509 55463 06234 25806 10536 68129 20965  
71155 29044 37978 22333 47675 20659 85373 52385 87997 52646  
26714 21246 77727 17473 16787 67633 76609 36356 89902 01616  
14436 98175 96763 19212 51682 22683 13907 57245 35999 18030  
38495 60854 51558 53061 14174 14116 52254 68319 10086 50586  
93193 35719 84711 75334 57279 39138 69444 50118 56721 87829  
29623 89449 20633 66512 06528 79979 32279 18766 70649 24991  
06752 28127 16638 69966 14151 65858 69687 24666 03298 02670  
15378 08290 26269 39315 08422 78716 13463 21428 61932 12544  
53237 63787 00524 48168 88405 49044 40221 85044 46532 24194  
81835 33488 97668 000 000

**9176/7931/6904 kHz, 24-07, 0400/0420/0440 UTC**

257 257 257 1 7780 129 7780 129  
46637 36109 40490 90183 88103 16241 61684 82122 10929 92497  
75853 71671 73610 40482 14545 93593 52196 28366 45010 17970  
68984 89940 29885 45756 35218 20371 86749 54808 69775 18969  
47585 10708 59079 75134 50211 58334 58535 13108 02269 39984  
66662 46918 41689 43740 88991 72384 08182 36656 65248 97481  
20418 81723 80618 65786 61577 56695 06223 94732 54965 67732  
29491 06876 12347 91958 44911 65144 12591 98475 90269 56210  
35058 39088 26097 05026 51307 22066 48251 86144 56763 62832  
12188 50092 99558 72292 98550 65860 30088 93292 13557 93514  
52110 63801 58142 34535 10492 59785 34571 49729 98827 23846  
59793 09705 46385 99037 62423 81328 55626 75592 14478 39511  
08444 20078 37969 92131 55543 79397 07316 40053 93406 79050  
35055 19297 84917 96753 04099 71255 80944 91560 94532 000 000

**9176/7931/6904 kHz, 31-07, 0400/0420/0440 UTC**

257 257 257 1 3600 130 3600 130  
40048 04758 38027 66502 38080 66502 82940 36948 67218 19779  
14688 33898 12967 30227 70407 90876 85585 89346 56790 66240  
43528 72436 28629 27326 96090 52002 82844 13768 41252 83565  
75637 08610 83515 27992 33446 51146 13307 78230 04342 76377  
96456 27966 90921 49298 75484 32563 38311 22768 50471 39285  
04951 91448 97151 10895 90778 67610 76127 10701 70410 86076  
83227 69171 95695 83651 44140 06077 50381 84974 96780 19260  
77568 07355 85003 80412 69783 15562 81514 79330 51841 63527  
13691 60075 63295 01066 78613 84187 11457 72619 37212 65834  
75018 02606 07819 18265 93148 27284 32270 07269 05157 69406  
82180 53336 25987 31210 61716 97595 06445 16739 41111 75216

86095 96795 58859 06882 72385 23152 05876 93728 05038 59952  
94619 77760 47762 30945 44241 74961 99534 66737 87262 42498  
000 000

11435/10598/9327 kHz, 1800/1820/1840 UTC

**11435/10598/9327 kHz, 03-07, 1800/1820/1840 UTC**

983 938 938 1 1768 84 1768 84  
16407 75064 28287 13270 39551 95022 31151 71645 83643 94431  
61412 62662 54445 32213 98244 19180 21211 41454 99990 93969  
24468 10085 11585 43169 21521 72053 74650 03106 55807 82087  
86332 82745 52548 62736 66314 56482 16047 01013 18813 45673  
59171 24272 88024 05126 70764 71108 14357 98481 41677 74964  
90062 91397 12078 48513 67442 06321 63479 85116 91748 67496  
20372 28045 15837 01555 08098 78666 10114 91708 65897 41762  
03132 20198 22641 54317 34797 00196 22060 06459 72404 50411  
57696 76167 61428 80841 000 000

**11435/10598/9327 kHz, 10-07, 1800/1820/1840 UTC**

938 938 938 1 8373 78 8373 78  
27849 52626 81370 84892 57749 45156 13328 28941 14837 39236  
64922 28210 83935 09309 03793 58835 40646 61976 41876 13200  
51631 62588 87739 93245 44190 15884 83771 27020 32027 32569  
62365 77939 90360 01322 64191 65022 17081 09268 53838 06765  
00544 09951 74497 97487 02639 67832 18090 68707 54813 43573  
99032 38021 78516 15466 30285 65260 64885 88123 40701 41865  
61383 86307 96913 82266 76869 86981 37849 82613 45117 38770  
41754 31378 08138 35110 12656 41679 88089 90250 000 000

**11435/10598/9327 kHz, 17-07, 1800/1820/1840 UTC**

938 938 938 1 5267 75 5267 75  
86385 05805 56719 38060 35649 35196 36749 47131 29952 82989  
52607 03679 65733 50163 29172 26537 81836 09778 94937 54950  
10928 29679 60905 65606 88304 87076 26682 04013 55759 78964  
20039 03229 21236 46063 21623 46554 16315 52723 03555 63900  
74849 58932 61488 28408 77974 42051 61996 31364 65243 25634  
81887 60351 25928 48197 91835 56706 54898 91110 49755 48572  
08513 32736 91371 50986 62949 39378 82442 19679 28539 82617  
10221 29113 06222 31037 80099 000 000

**11435/10598/9327 kHz, 24-07, 1800/1820/1840 UTC**

938 938 938 1 6410 79 6410 79  
23508 64629 42128 37585 81797 60393 30442 35446 02213 04997  
72269 93178 43053 08390 77369 02528 92203 02631 33335 32786  
45923 43536 81143 26623 75668 41131 35826 63677 77430 70067  
12099 72418 23711 49453 70688 33272 75350 42530 36537 32180  
97922 85263 98759 78528 95099 11259 46490 57329 42024 57265  
90678 74293 38413 94248 97775 79971 83484 15505 61915 40665  
24566 66763 58014 32145 92897 99850 69466 93598 37700 44096  
27176 49672 66093 01154 34863 60659 44776 02615 31522 000 000

**11435/10598/9327 kHz, 31-07, 1800/1820/1840 UTC**

938 938 938 1 7210 76 7210 76  
77144 86267 67886 79058 59465 67430 51098 28583 81338 21290  
25310 04319 76750 68307 07217 89954 56928 22796 60397 12844  
54805 52889 14021 72823 02338 68496 19638 17748 87027 86033  
40997 31314 92016 61805 23692 36621 14102 62787 23145 17021  
22304 23097 33627 12914 27624 39808 64382 54644 77260 70658  
15593 00297 40148 65280 58743 24254 72245 95061 67179 90967  
47792 33349 41555 95303 80292 93995 12302 19445 34615 70595  
75852 94140 99650 43375 90539 31707 000 000

17453/16312/15836 kHz, 2100/2120/2140 UTC

**17453/16312/15836 kHz, 04-07/05-07/11-07/12-07, 2100/2120/2140 UTC**

438 438 438 1 5584 21 5584 21  
45762 09914 89130 37530 79819 88149 88873 21561 93849 13993  
40143 55645 50822 72994 37656 79303 72235 86043 86217 60041  
36234 000 000

**17453/16312/15836 kHz, 18-07/19-07/25-07/26-07, 2100/2120/2140 UTC**

438 438 438 1 1299 164 1299 164  
66203 93638 68967 81875 04032 01592 41581 34588 44253 22937  
28246 15592 40290 28089 07717 91587 17539 19084 67487 84839  
77587 89334 88579 40344 31297 79945 24640 83055 11983 18485  
82638 31640 23445 58663 00451 32768 52932 41137 61365 67234  
25972 09582 97942 01166 57992 10318 46259 11186 64720 85301  
35502 70504 47917 87697 89309 78240 10862 41329 04979 49251  
62489 41481 17911 27191 84479 51490 94518 10835 99959 75807  
47992 68657 32023 35160 28842 78685 63576 44801 99749 57436  
23561 41557 82458 91515 64007 57327 90680 99662 42541 11120  
79082 19755 18188 47258 32500 91166 24600 74110 50612 73699  
32489 75854 83777 56644 09081 45826 21676 39511 45755 71048  
80592 30753 58375 82401 49653 70265 44774 83167 47528 47856  
55145 43248 11144 06842 00508 64501 64384 17777 91276 13943  
05607 94784 68919 45069 23364 04548 77893 88468 52018 32889  
45521 16910 67547 26920 43641 55477 31777 50302 94755 16912  
29036 63405 62021 80911 83923 11809 19980 83743 94782 73442  
85953 42974 31772 90636 000 000

13931/12131/11536 kHz, 0800/0820/0840 UTC

**13931/12153/11536 kHz, 07-07/11-07, 0800/0820/0840 UTC**

915 915 915 1 2098 174 2098 174  
06719 50548 00378 67292 50037 64733 04353 39877 00504 29469  
26367 73880 82489 63555 14218 27341 48616 28566 20968 20960  
41169 31692 62671 94264 91442 93664 27617 14766 64246 24937  
65605 11627 30992 11149 97830 87873 18197 82188 36462 51727  
07060 63515 09396 29934 57867 42890 14558 37570 82721 19785  
52915 95369 36485 72004 53171 32745 07859 34489 08962 03820  
62096 20087 66051 13814 88222 25812 28076 54657 64340 93711  
83755 83305 66838 86078 80301 96677 07093 96425 44580 87399  
92275 47768 65595 12693 79666 44155 33347 58024 21899 08064  
99053 23649 85900 45831 37731 62533 63740 65861 04178 32026  
34548 06022 51371 06186 16812 13165 01678 49076 66204 15456  
07917 69028 46249 04400 09962 56321 12524 06279 53786 51231  
01450 43092 95291 32691 05257 00796 45082 62569 28084 69244  
76603 94241 01322 34575 08246 87441 84076 92238 37902 49975  
10468 56016 88891 11922 80027 08625 74230 25845 52224 71634  
28557 99011 27990 38219 80356 12663 16288 65157 83817 50277  
81377 14649 88659 68046 90626 67514 98574 94617 94412 73100  
32504 13370 12472 51809 000 000

**13931/12153/11536 kHz, 14-07/18-07, 0800/0820/0840 UTC**

**14-07, 0820 UTC: Restart after group 40**

915 915 1 2805 152 2805 152  
94679 43820 22259 97083 15126 57738 33908 41855 34501 35602  
00286 62613 79397 96235 22607 19275 30889 19260 21684 06127  
90102 68005 76179 24864 13507 12091 57227 58213 36166 51986  
60894 89276 54144 92340 49492 29017 63392 05148 67896 60494  
96998 85046 71894 97992 74474 41269 39123 54725 15783 63221  
19389 16332 65402 25928 82632 70047 58582 36801 38608 11552  
33017 92928 46688 48976 33289 61260 67440 59278 87403 40735  
85271 71154 40949 32958 19316 33870 11007 58017 28136 39946  
78038 98711 56626 35011 60654 00193 75187 55828 29298 63701

72520 33700 91186 22021 31817 92349 06936 60738 23566 58171  
85611 54113 08336 04706 42601 55169 96275 80139 84579 69418  
34412 25709 21831 63341 27833 15354 76165 31969 77728 51310  
23061 59795 74880 89296 19700 16799 72885 56701 37927 69637  
62308 55936 62317 65508 61938 87960 72130 21202 86866 65489  
11050 44522 28339 83289 03286 92662 48565 92935 19971 87181  
64519 96240 000 000

**13931/12153/11536 kHz, 21-07/25-07, 0800/0820/0840 UTC**

915 915 915 1 7917 141 7917 141  
33584 27301 61226 77715 65224 19314 57031 15537 25631 92205  
81829 51792 90063 69573 07446 89320 63485 13234 04612 40916  
05836 06327 12936 00881 45977 37144 24689 62476 74640 09846  
28033 19944 67380 68163 31372 49567 23782 49884 29373 70632  
48450 64769 68296 68894 10160 25315 72570 92705 88442 02151  
06629 67162 20076 63553 00055 33279 74201 19876 99254 65181  
50845 12790 63129 14751 95546 15024 21806 93149 38269 02588  
70129 05819 80556 18504 08079 12833 51927 72093 20820 76095  
52631 80209 19181 33821 66533 93387 48502 15453 96019 01873  
90000 33957 87297 78751 53793 56678 03265 18209 25747 17832  
19704 45140 17250 21555 36043 59816 28846 97709 62659 85185  
40240 74778 88079 15313 11496 29169 72654 16188 59086 16122  
58412 53316 77364 04593 68807 88060 53158 43734 60552 09035  
32583 93285 41702 29240 16808 86882 41528 63303 88385 50336  
68555 000 000

|                                           |
|-------------------------------------------|
| 13386/12189/11491 kHz, 1230/1250/1310 UTC |
|-------------------------------------------|

**13386/12189/11491 kHz, 07-07, 1230/1250/1310 UTC**

725 725 725 1 7523 129 7523 129  
15810 22632 51723 12955 38547 19245 98113 58591 32705 37643  
26218 40945 06063 91873 02395 55355 87719 56596 24460 49345  
26502 08114 04933 63143 58385 78143 92082 50637 99158 29788  
09013 59416 08099 43555 64764 79142 20655 27317 93260 09046  
03777 07378 80068 20783 83943 72987 16478 90626 31734 73890  
02014 45290 22860 60392 04441 07695 17698 88578 54568 60402  
27162 47476 59431 02917 28630 66801 32845 62506 27108 23252  
34700 60402 63335 15414 45567 19123 28044 84149 79199 85397  
61665 01456 18903 25268 27773 63722 36555 47705 39114 57068  
61443 32075 72747 32857 81883 56300 47946 77151 92151 17141  
40141 53970 63518 08481 39190 41611 81954 07446 14825 85316  
79650 33547 09379 64907 98736 25705 28573 34163 75142 64907  
30246 85133 23391 70038 61808 02624 87653 30477 33529 000 000

**13386/12189/11491 kHz, 14-07, 1230/1250/1310 UTC**

725 725 725 1 6187 137 6187 137  
82212 70217 02955 76284 87787 52350 63205 14076 55146 11724  
99548 92064 44811 94676 36590 51635 22138 61721 85305 51582  
26081 14391 08392 72951 63442 49617 26402 23817 00860 53166  
70863 14895 51597 82975 30787 30930 18029 20861 65425 81715  
10909 23226 37649 16935 01056 82033 46705 41949 56304 60756  
02183 53232 40048 58215 31523 67820 61824 30003 12841 38170  
25947 39387 13216 01980 40860 84652 40467 61835 63888 05659  
33606 01276 96295 03589 40672 02854 76741 91455 71894 81408  
02911 84451 67512 40103 50982 17630 74846 93381 51451 62966  
69104 88025 08019 27254 55767 71521 10010 35668 76074 16403  
41566 84869 78059 50644 27150 00906 56936 36458 17542 28669  
91077 70368 58107 31432 35259 41495 71873 73111 50997 23229  
09806 47085 10384 00922 36554 45579 93256 69040 47820 69150  
92843 41073 15381 55491 39842 18040 06392 000 000

**13386/12189/11491 kHz, 21-07, 1230/1250/1310 UTC**

725 725 725 1 3795 129 3795 129  
24808 86179 71360 78350 35163 56118 01235 23817 51281 91448  
11704 84133 88138 19832 57300 39820 68345 36016 89392 21505  
36945 17848 12192 56946 95500 48331 41501 34288 27803 01570  
29649 56523 03467 27255 80714 62139 54846 56573 54449 38972  
80262 28839 50592 45722 84403 84045 95943 44004 42373 23145  
60723 94063 02037 16299 94058 06959 73987 14414 82849 86831  
14617 66946 96012 49711 61799 55179 80666 60882 39117 95159  
84973 11771 81566 50419 41242 08105 67254 66468 72542 11454  
52387 97495 91913 04657 40846 35584 54485 87166 33196 73754  
88151 40432 73723 67616 24354 13316 32826 00881 83922 29223  
03379 35060 04887 47212 38171 48951 12496 51616 75056 85952  
39704 07518 41871 71394 34444 17121 75031 91354 08864 26214  
00694 93498 27685 65361 07008 44541 38046 13949 26065 000 000

**13386/12189/11491 kHz, 28-07, 1230/1250/1310 UTC**

725 725 725 1 8271 127 8271 127  
81403 59750 53223 27586 45969 07274 46904 67052 30038 05302  
81460 71690 86206 53866 98287 87217 98323 94094 61414 63165  
41434 05921 38237 41418 75506 60829 98702 62916 58116 14244  
55822 23050 95813 26945 84144 94563 01778 01983 32303 45086  
53032 08585 74199 56634 61127 17326 67770 24638 48979 37440  
59912 39838 20749 84025 83886 75482 21512 11805 52078 85139  
08571 83986 08935 15794 49478 58409 75875 59261 69720 03723  
85438 96340 61790 16327 10132 32848 31720 81602 80289 58179  
93057 74064 13937 20676 54330 15983 02301 11787 43057 08662  
73050 89972 49903 47163 36515 69045 99649 58405 07156 02717  
41450 08509 54917 45255 52000 63571 78047 04421 73893 51037  
43762 39909 31514 93898 92080 34505 70048 88257 61462 33494  
56108 64087 16203 61057 30671 95465 46436 000 000

|                                          |
|------------------------------------------|
| 12217/10817/9317 kHz, 2000/2020/2040 UTC |
|------------------------------------------|

**12217/10817/9317 kHz, 14-07/17-07/21-07/24-07, 2000/2020/2040 UTC**

617 617 617 1 6138 187 6138 187  
14936 58205 70890 08695 77446 15810 36064 61042 87276 28904  
75116 23107 98449 58863 11168 29406 74197 45503 28640 63956  
94722 75350 74907 92100 28387 87734 21740 36011 90007 77089  
05018 18007 73067 64346 05570 16280 31564 00113 68970 62304  
48058 76625 93571 77900 73338 53338 74075 89949 92531 71351  
33413 14776 70466 40485 26740 88252 72996 91663 65528 45962  
95504 47313 67514 03536 01734 62422 41288 77210 58454 98316  
06166 34003 80024 08526 82073 43700 34753 48915 27910 44581  
82050 67462 82018 27951 52071 26038 28159 50429 15203 21431  
61544 21513 19199 72465 71525 42178 06694 46789 99465 59957  
47465 24974 65054 60800 13139 38940 04212 69741 45816 17350  
79405 73356 44758 04672 83386 56705 12775 17762 63975 61827  
06704 01762 43105 21361 70437 61353 72234 01064 72389 31766  
24944 68174 92758 99585 98396 03569 04443 06584 49455 88735  
32159 63411 59102 57183 87308 90113 08803 91100 27831 55926  
50493 92196 88750 67325 57565 35798 23489 23024 78578 04208  
47932 08510 54868 88309 30951 40012 34923 33830 58473 85192  
99343 16887 34379 70306 74859 92047 01111 32318 39504 57280  
03748 44806 86800 53398 72246 06879 78769 000 000

Exercise traffic

10623/11448/11518/12132/12193/13406 kHz, 0600/0610/0620/0630/0640/0650 UTC

**10623/11448/11518/12132/12193/13406 kHz, 16-07, 0600/0610/0620/0630/0640/0650 UTC**

412 412 412 1 5310 58 5310 58

15121 86472 93393 80842 34970 01253 90897 70601 45743 43926

98258 95523 24959 00675 82842 12382 95538 15930 91165 59306

52202 26972 24234 80042 36583 30311 23417 77797 40561 15464

96948 18322 14664 92332 13442 28602 39880 80471 58754 20345

35032 47615 01317 16611 01308 87642 17948 73860 52610 95750

30707 36559 82703 15632 86899 88147 62238 13351 000 000

## M14

**12211/10243 kHz, 01-07, 0500/0520 UTC**

952 463 463 51 51 = =

23096 01622 95796 91429 03457 08318 58317 72190 62788 56&63

24139 72533 36988 71316 26401 59886 46851 50487 93326 58748

06754 00116 02864 67612 27972 45688 03031 04482 65057 57595

08938 35704 78722 59301 12398 67782 13670 10228 65077 06869

14792 80522 21113 15617 30198 59919 50145 22080 74484 67863

56695

= = 463 463 51 51 00000

**12211 kHz, 02-07, 0500 UTC. No transmission**

**10243 kHz, 02-07, 0521 UTC**

**12211/10243 kHz, 03-07, 0500/0520 UTC**

952 360 360 27 27 = =

13402 35907 83192 44110 49686 00220 79639 03008 38716 74221

74678 07165 23367 12019 12452 20342 12653 84729 53799 47978

14994 15584 95510 52223 07133 93249 80698

= = 360 360 27 27

952 871 871 25 25 = =

59172 44758 07929 97655 29060 91965 20998 89082 21196 50590

18578 72999 89520 79169 12568 79969 17195 20250 24372 35354

97704 49627 49838 77739 95738

= = 871 871 25 25 00000

**12211/10243 kHz, 04-07, 0500/0520 UTC**

952 952 952 00000

**12211/10243 kHz, 07-07/08-07, 0500/0520 UTC**

952 471 471 53 53 = =

37411 07197 64998 50756 59114 59114 85656 56574 77697 18560

36912 12954 10000 81610 07418 79536 02156 83405 45601 37107

26318 00901 92176 43907 22012 48298 76041 08848 30943 94837

21983 23807 27212 59639 43639 22186 78885 63282 20155 55937

01846 40814 79963 08222 91862 45868 40140 83913 45831 00589

74748 45109 08101

= = 471 471 53 53 00000

**12211/10243 kHz, 09-07, 0500/0520 UTC**

**10243 kHz, 10-07, 0520 UTC**

952 467 467 32 32 = =

68930 66613 86322 29127 28558 98167 60670 31317 29540 42196

21245 60471 27316 94144 11458 39579 41505 50421 79934 19659

41617 05711 10807 49957 91840 45687 31055 33421 22112 71081

74591 65846

= = 467 467 32 32

952 830 830 21 21 = =

16871 40278 45393 32969 13884 23791 75805 52299 62002 97408

87446 20345 11878 97280 50483 10084 14124 80050 41093 42129

45402  
= = 830 830 21 21 00000

**12211 kHz, 10-07, 0500 UTC. Repeat of July 9<sup>th</sup> with errors**

952 467 467 32 32 = =  
68930 66613 86322 29127 28558 98167 60670 31317 29540 42196  
21245 60471 27316 94144 11458 39579 41505 50421 79934 19659  
41617 05711 10807 49957 91840 45687 31055 33421 22112 71081  
74591 65846  
= = 467 467 32 32  
480 480 480 480 480 48 0 (9sec silence, restart)  
952 (R) (25sec silence) 467 480 480 4 (4sec silence) 467 46 48 (1min 6sec silence)  
952 830 830 21 21 = =  
16871 40278 45393 32969 13884 23791 75805 52299 62002  
9 952 0 off

**12211/10243 kHz, 11-07, 0500/0520 UTC**  
**952 952 952 00000**

**12211/10243 kHz, 14-07/15-07, 0500/0520 UTC**

952 913 813 52 52 = =  
81258 61665 32373 82146 01474 21806 24023 73165 10552 87895  
10389 54166 96858 03101 91978 18581 57022 73190 82829 45070  
01708 13186 42511 26279 43139 04204 51582 14875 69042 81825  
47690 72810 32705 05135 64510 34741 13831 79758 40696 21548  
29889 33346 91041 64892 02635 66936 57037 28741 09495 30630  
79005 38804  
= = 813 813 52 52 00000

**12211 kHz, 16-07, 0500 UTC. Transmitter issues. Late start and barely audible. Unreadable signal**  
**10243 kHz, 16-07, 0520 UTC**

952 178 178 25 25 = = (1m16s carrier, off for 4sec, carrier, then resumed halfway group 9)  
762 54066  
47650 19187 11383 52079 14904 54583 49919 82126 99921 93335  
10720 14973 76628 80528 71523  
= = 178 178 25 25  
952 604 604 28 28 = =  
12415 40858 98169 49094 94997 53207 74176 85872 89853 18535  
37210 88788 71993 11094 29517 98938 71200 76258 35258 98628  
81494 71600 54673 25940 52726 18618 31463 55411  
= = 604 604 28 28 00000

**12211 kHz, 17-07, 0500 UTC. M14 still has transmitter issues.**

95 (17s silence) . Attempted restart (17s silence) . Another try (17s silence)  
5 (3m31s silence) then right into group two.  
81198 48301 00700 76833 01776 40651 94837 34762 54066  
47650 19187 11383 52079 14904 54583 49919 82126 99921 93335  
10720 14973 76628 80528 71523  
= = 178 178 25 25  
952 604 604 28 28 = =  
12415 40858 98169 49094 94997 53207 74176 85872 89853 18535  
37210 88788 71993 11094 29517 98938 71200 76258 35258 98628  
81494 71600 54673 25940 52726 18618 31463 55411  
= = 604 604 28 28 00000

**10243 kHz, 17-07, 0522 UTC. Late start**

952 (R 18s) (10s silence)  
952 (R 37s)  
Carrier (15s) 1m48s silence)  
Carrier (58s), then off

**12211/10243 kHz, 18-07, 0500/0520 UTC**  
**952 952 952 00000**

**12211 kHz, 21-07, 0500 UTC. No transmission**

**10243 kHz, 21-07, 0520 UTC**

**12211 kHz, 22-07, 0500 UTC**

**10243 kHz, 22-07, 0520 UTC. Restart during the callup**

952 346 346 57 57 = =  
16975 16403 48985 15508 23134 46094 59016 08983 84328 07425  
73599 77314 81882 68704 17758 37982 39975 09790 60577 60412  
00734 91293 29993 83673 31453 84433 30803 50286 12385 03720  
76839 10829 78524 09656 73235 79035 13847 73651 09735 42064  
21415 22330 50962 55641 17810 03411 34615 78736 25309 40369  
13499 27497 60261 68051 02343 53092 41089  
= =346 346 57 57 00000

**12211 kHz, 23-07, 0500 UTC. Transmitter issues.**

952 436 436 25 25 = =  
02279 71959 86581 50663 50368 92568 82903 61061 58302 72025  
7 (1min silence and some partial digits) 35 92935 40719 97079  
93791 77391  
= = 436 4306 25 25  
952 781 781 32 32 = =  
98561 89282 00076 64227 82127 13423 84255 62176 55472 89850  
73406 35488 22204 36383 30526 43648 77285 90520 31461 82665  
59625 16100 16954 39046 90682 40130 95568 98154 85066 49494  
45926 49175  
= = 781 781 32 32 00000

**10243 kHz, 23-07, 0520 UTC**

**12211/10243 kHz, 24-07, 0500/0520 UTC**

952 436 436 25 25 = =  
02279 71959 86581 50663 50368 92568 82903 61061 58302 72025  
79411 41181 54131 63936 85907 23898 96540 08288 10112 61752  
92935 40619 97279 93791 77391  
= = 436 4306 25 25  
952 781 781 32 32 = =  
98561 89282 00076 64227 82127 13423 84255 62176 55472 89850  
73406 35488 22204 36383 30526 43648 77285 90520 31461 82665  
59625 16100 16954 39046 90682 40130 95568 98154 85066 49494  
45926 49175  
= = 781 781 32 32 00000

**12211/10243 kHz, 25-07, 0500/0520 UTC**

952 952 952 00000

**12211/10243 kHz, 28-07/29-07, 0500/0520 UTC**

952 870 870 51 51 = =  
55385 51325 26717 63593 79933 08158 40626 78269 60880 60407  
87769 85161 59731 19081 15637 59011 11589 41700 96868 63183  
09132 45940 66207 78201 64040 10481 93490 10460 99288 80248  
78616 10791 10762 18240 79418 57595 01626 71118 08388 84200  
37886 40765 59179 55148 98578 78973 48843 21099 39025 47479  
86716  
= = 870 870 51 51 00000

**12211/10243 kHz, 30-07/31-07, 0500/0520 UTC**

**30-07, 0520 UTC. Restart during callup**

952 136 136 24 24 = =  
41663 29969 94683 90761 45436 73949 35784 84201 62004 51963  
43418 18698 58570 67631 47968 82549 33646 73548 87577 17340  
24414 76991 80442 98101  
= = 136 136 24 24  
952 480 480 36 36 = =  
25493 68868 38895 68950 14754 26016 41640 81685 43296 42203  
35548 44099 59886 48436 86556 15450 83637 29428 38910 95358  
79622 20371 92769 80588 86520 63962 83081 28179 76018 26123  
51914 85851 48621 93835 31437 75653  
= = 480 480 36 36 00000

## M23

M23 was only reported three times this month.

|                            |                            |
|----------------------------|----------------------------|
| 10222 kHz, 23-07, 0829 UTC | LO48636017 LA1511114 (R25) |
| 7668 kHz, 24-07, 1459 UTC  | LO48636017 LA1511114 (R25) |
| 7668 kHz, 26-07, 1600 UTC  | LO48636017 LA1511114 (R25) |

## M51a / M51b

Two of the regular messages. The non stop message stream continued after these lessons.

**M51a: 3881//6825 kHz, 12-07, 0700 UTC**

VVV VVV VVV DE FAV22 FAV22 FAV22 QLH 3881/6825 KHZ

SAMEDI 3/LEÇON NUMÉRO 1/1 VITESSE 420 CODÉ =  
MJHEU ZOIWG HLOGD PQUTB KDFRB ASMNT LXCVCU HUDVO SKTNI 58726  
BCSWK AS'?, POFKH SVRYX MZLFW GOUVJ AQDEG CNTHP KLJSG PNYFJ  
33948 BXAQJ .,AR/VA PLMME GBYXG JHSRR LMAUR BYDIJ VWAQT ZOUIH  
MEGSQ 63591 VAQHS ?.AS,/ AIRFC NTGOK CWSUN SOKAT SMHES OPLFR  
BTANS PFIRG 36115 BCZMA /?.'. SICAV HYQWO VHESR OKSBY FKLJS  
SMEXR ZYGT LIMER 22654 ZCZAQ ,'VA,AS IMSUY WASPS LUCKY SWAPS  
32598 VZAQG ,?.,' MONEP NYDCF LOIUD OPTIO RATES FORWD FUTUR  
KIFRC 36541 CZPLO /?VA=' BIDSS GREAT YHTFD VMNSI  
AR

SAMEDI 3/LEÇON NUMÉRO 2/1 VITESSE-20 CLAIR =  
UNE PARTIEDES 4010 RADIOGONIOMÈTRES CONSTRUITS ET DISPOSÉE SUR LA COTE AMÉRICAINNE. LA MAJORITÉ DES APPAREILS EST  
INSTALLÉE Á BORD DE NAVIRES D'ESCORTE QUI ACCOMPAGNENT LES CONVOIS DE CARGOS. FIN 1942, DES SOUS-MARINS  
ALLEMANDS PARVIENNENT Á COULER PLUS DE CARGOS ATTENDENT CHANTIERS AMÉRICAINS NE PEUVENT EN CONSTRUIRE,  
METTANT LE PÉNIL LES LIVRAISONS D'ARMES AMÉRICAINES Á L'ANGLETERRE ET LA VICTOIRE ALLIÉE ELLE-MEME. MAIS EN 1943, DA  
QUASI-TOTALITÉ DES SOUS-MAINS ALLEMANDS EST DÉTRUITE.  
AR

CQ DE FAV22 VA

## M89 - Chinese Military

**4393 kHz, 15-07, 1135 UTC.**

WF7U: F NR 65/EX 1940 RMKS CQ = L0N8/X1Y8 AR

Working outstations 2JNB, 3BFF, 2E3D, VNV7, and others.

WF7U changed the call to H5TR DE PS3E when he sent the message.









## DIGITAL MODES

### F01

Link 00117 via Cuba

**12185 kHz, 28-07, 0035 UTC**

**14878/12185 kHz, 28-07, 0125/0135 UTC**

11177 00117 23658 28030 01939  
20003 41098 60317 61872 05669 73340 23040 92726 94473 31707  
95082 96458 43138 87081 42259 34152 92124 91940 52807 51266  
65091 21388 61305 90982 04386 94365 04729 11948 28509 04725  
40283 52599 22493 16853 54832 09258 97118 05531 70402 20182  
77926 44725 63149 72759 09946 74988 87854 76040 89084 04158  
00192 65784 56120 21049 43922 34210 14217 26822 26476 01651  
55928 13708 31349 72278 10600 45790 40753 41114 48123 21525  
66957 44475 99972 22680 15758 71087 83471 79397 30516 76009  
40211 06051 90197 64595 24567 87588 59855 38652 03260 21059  
16993 21992 51876 41995 02238 07575 59312 90350 67774 93412  
76051 95674 21969 99434 67239 86211 93619 82494 56478 51616  
64273 91710 71271 13966 42049 31329 26085 86765 75402 23289  
03924 26625 30267 86681 22396 07300 79010 76298 95179 70785  
74653 47442 24837 35146 08766 39197 87918 63776 76506 93345  
98286 25762 97218 51111 59598 02060 64035 94928 42887 17152  
20922 27415 50181 00880 90600 04740 50092 10146 01794 66571  
96314 65157 89209 29800 64975 79918 64737 38214 71763 91639  
83254 85319 54786 18767 51510 52490 34086 02304 53507 29649  
83751 10132 90834 10639 77566 08998 61362 80499 94131 33870  
24772 30191 00000 +++++ +++++

F01 – FSK 200/500 Mon-Fri schedule

**11141/9192/7363 kHz, 01-07, 1015/1025/1035 UTC**

35938 29037 06311 98292 44792 27837 08804 32414 19669 03539  
93820 89551 63195 98168 90904 89475 09458 33293 38628 53735  
84631 06962 38053 16711 81006 57543 40662 09032 92812 36641  
81700 68040 87314 58287 94872 55005 09589 16582 69314 83744  
44428 88988 34793 90374 83821 67452 86066 98857 73426 84540  
82340 62031 36495 26794 82760 82822 98666 52470 03874 45316  
62088 55864 10008 10385 02277 45407 72492 55543 86186 27716  
58663 63742 34895 14789 36598 73075 00000

79113 37506 70307 94861 27223 96300 99556 37706 25513 13454  
40683 54406 35757 55324 87951 03672 63394 83555 96821 74003  
81961 95988 82255 43992 78329 71576 37044 42709 98420 17744  
62347 71139 98110 43621 27619 70582 28982 07598 02128 48960  
13645 12628 25228 00987 90276 47729 07609 83102 31105 99108  
80673 29150 64493 79357 36252 17698 55328 48143 23842 26966  
23402 22856 97546 38289 04462 02619 29914 74047 83627 54124  
34853 81012 55862 32724 66825 95035 93174 37202 88486 48026  
23249 21690 23978 03149 49196 74085 00000 +++++

**11141/9192/7363 kHz, 02-07, 1015/1025/1035 UTC**

53599 85393 28757 15796 68429 75444 38108 55976 26202 97412  
57112 15080 33440 48725 72003 94757 25800 19752 70058 83516  
81446 54421 11419 59577 54056 08977 91631 47335 73882 51067  
05855 82126 90328 66359 50657 62976 54461 64853 24352 98033  
64905 04094 11808 72357 25548 71463 64666 92762 88503 92750  
12908 89399 80770 59161 68702 78760 38008 89993 08486 17800  
93890 73126 44190 03857 98461 50539 19580 00058 63923 41037  
92614 90909 61313 17366 89792 97742 16497 79912 43398 08710

78904 94175 47598 03025 61475 84191 94327 74122 75214 99104  
74893 81440 06827 95073 58236 85489 12851 99687 81802 45924  
28736 51103 15931 87277 16294 29063 87734 62073 97973 20006  
75373 65975 51385 83438 08688 84680 62515 11773 37110 77242  
61075 00800 50802 25500 86407 73000 65950 04310 57409 20872  
10164 52271 44882 62470 68899 47623 69774 26331 78863 19000  
75728 07992 79331 45748 49390 65264 57298 27472 86905 44483  
47428 27513 30049 54881 72724 20034 20415 33310 36852 95410  
45112 66473 04068 03611 72410 62870 27677 40244 00748 91629  
12973 04984 69573 30430 25571 87029 05427 89689 81110 57314  
01724 05210 77222 72138 55660 16463 53733 17911 10691 72720  
92021 51700 77999 34185 89475 17262 35428 60348 69988 41252  
27268 02728 16416 39301 13382 44193 35956 86633 41064 52063  
94371 32934 38109 37153 79996 66134 50494 35974 83464 54814  
73141 58258 04103 23900 47171 67011 18917 43361 22106 83260  
75116 34570 06453 32710 92110 24038 55091 76467 83911 99185  
66935 93046 37890 45873 91263 03827 10817 72332 66198 59152  
28118 49235 37735 27267 97303 20541 32791 53270 71479 64853  
84679 80277 23910 11934 34479 49972 19538 44094 56702 24749  
94424 37127 82735 98614 79035 20484 20455 89056 26311 61374  
93482 27050 30454 02481 48503 87398 47392 07970 04085 26593  
52816 97498 39445 20380 98777 72892 46590 18223 54739 67183  
94275 56847 44046 70707 77221 00053 11742 13933 49009 96980  
84669 11715 62121 76033 09798 98669 63538 16621 81699 10343  
19342 65921 95140 89869 66760 92862 83691 24806 17090 96483  
30320 43830 57937 10887 60888 27992 28213 73960 56503 16196  
64316 52049 45647 09620 40949 37779 62033 04733 54996 63211  
79120 09632 25914 95511 57230 23349 11047 07333 64187 82847  
59344 39086 55448 07372 51872 95301 24628 94855 02592 42250  
60379 50066 17829 99025 70559 49169 37863 39277 59610 70414  
09096 45762 70112 45618 60212 84931 24423 12135 80789 93709  
27361 70003 25784 95678 15853 73957 94330 88839 66501 14989  
56304 72144 96990 71145 25063 02986 22284 32256 99825 02829  
51540 28270 26118 53177 36693 15898 47715 75417 00000 +++++

**11141/9192/7363 kHz, 03-07, 1015/1025/1035 UTC**

33827 57574 68853 07235 30372 33799 72466 12644 68652 53915  
79411 93151 69946 03294 86442 57025 73034 38014 59865 40354  
56186 13565 72808 62167 56518 00368 76575 49967 41399 59555  
73279 71605 11591 77429 81916 34450 40817 82065 15099 37770  
81449 90470 08614 89279 90988 59745 71000 21786 59034 40700  
45336 70870 39433 57332 00418 99533 17291 60634 93523 80765  
65533 30146 71945 73948 70703 21709 05478 56057 32690 84833  
67050 93576 68062 98150 03697 66074 71714 96353 65034 77381  
16489 76081 00000

64570 09148 12094 05645 85211 55599 62809 62748 44503 01698  
45314 54370 93329 75474 42801 86693 88646 66966 06707 98117  
03590 22476 46740 03179 15788 29940 76481 14293 84855 50098  
87989 08523 54971 73155 53844 31552 43496 05614 80067 56053  
01560 16974 58370 36638 57565 00977 91137 28576 79533 31101  
87620 62470 17235 14967 54748 92078 10046 77366 31007 57471  
71467 26590 36827 30697 86231 83740 39909 36165 80955 79726  
58925 62920 54257 49612 54045 11001 77292 79028 77706 77079  
00000 +++++ +++++ +++++

**11141/9192/7363 kHz, 04-07, 1015/1025/1035 UTC**

00000 +++++ +++++

**11141/9192/7363 kHz, 07-07, 1015/1025/1035 UTC**

92846 12453 84384 51775 43419 80283 08823 52631 02248 53325  
99307 85241 35266 13481 01461 33252 13417 53999 49275 80385  
99036 80202 12506 66099 17905 38435 85153 46809 59108 84173

69768 36120 69938 25232 37232 22492 37985 01003 66715 87790  
77633 83674 95501 75152 63134 12357 33363 79603 75453 96046  
21172 59869 55070 46394 38435 94815 77923 26177 89450 32950  
96690 24444 22754 08438 14586 94249 63562 22045 83864 13934  
63889 10476 46219 57858 00025 52515 57266 87572 72062 85426  
62292 99308 85171 30050 15463 88776 17289 48015 59676 19173  
02926 79535 09247 03352 87777 35191 02609 36097 33821 40169  
17227 37424 79582 54368 63902 92856 85278 16830 02660 01616  
17498 87917 47406 68654 53129 87691 51540 01477 07209 53910  
91715 97682 14386 68095 91930 34168 18687 23108 55135 93925  
51268 30660 94553 91383 00843 92207 81889 82210 06475 81657  
54625 68536 27421 13332 49582 35518 69709 93621 54940 80187  
74149 79770 97906 18532 95449 94222 10208 81722 27139 67975  
38610 37448 51975 11378 92639 97283 22531 35799 46703 96025  
01639 74623 38785 53948 17395 76990 32919 57894 12390 72731  
37614 22161 91877 31934 97425 15106 00548 67573 99858 62410  
82603 54645 64788 62943 04827 64242 08593 78159 47319 36009  
00176 80970 91607 37415 51074 75026 60795 83275 06829 20342  
91461 13973 31825 26214 41973 55798 04764 97353 66924 11867  
66972 44188 12364 57031 90736 93248 11520 35238 59831 58608  
85695 82767 79454 60274 80030 25781 57739 00508 88813 25631  
26036 33982 50027 70360 90148 92723 13829 35823 29722 51786  
14636 64883 87954 46574 01515 38109 18836 77768 06563 34412  
84086 64789 55956 05065 16997 33729 53371 09533 95341 50694  
90449 86565 90576 36496 64003 58972 85472 23632 04649 95531  
77415 41477 46549 78465 09521 40650 92963 49917 96779 92464  
57278 35873 39404 24425 84213 70955 40573 77690 80904 72546  
70754 97446 12518 37648 45800 92131 42116 60949 10999 22442  
19449 97509 48271 06063 48347 18520 48700 49060 87431 33558  
17573 39865 63799 77791 04142 66800 04390 87557 73268 45075  
14717 12758 61161 64191 59643 39511 82367 91694 25908 21493  
80238 94219 71060 43404 38030 61742 88523 65013 92833 46011  
43451 19193 19533 49059 59074 62401 76966 22762 58221 01049  
33478 65364 89707 42167 14060 25916 94267 41850 36253 52558  
89730 49869 27019 45593 80124 73927 37743 01277 18384 11979  
99574 57272 77367 26049 86291 75699 08862 56000 76862 24720  
95257 96670 34911 44600 23591 86836 47260 09171 36640 83421  
88744 18653 40751 78403 00000 +++++ +++++ +++++

**11141/9192/7363 kHz, 08-07, 1015/1025/1035 UTC**

98698 94664 86455 23409 14100 01887 61048 25778 58039 07353  
43695 47939 75094 31978 04095 38941 88314 55046 33856 07784  
72456 74139 14902 09176 01533 36648 45783 18850 44124 10054  
61835 78111 04873 83169 10125 12312 35610 15524 65120 52938  
64552 77071 96014 18005 16994 45435 21652 30426 25947 52843  
13994 79076 56161 99968 36043 52200 89954 78846 25198 97884  
48302 79061 00000 00000

99389 68312 89406 80426 04001 92997 62294 98704 97325 32862  
45680 25305 25444 82922 12764 91813 49288 37864 62055 91154  
10320 64137 96574 67310 47847 30341 94547 62550 03959 75602  
70040 14377 76981 20629 46982 19360 09413 51128 94996 06058  
21266 28273 00487 84205 24760 05907 71419 62357 81295 59177  
99229 51178 86655 54279 26295 94565 95365 14003 92415 95792  
20145 58764 58732 30852 67403 27817 32527 66203 94707 10326  
41335 23096 01149 40990 29817 55664 86571 39904 77815 34977  
40579 01346 63048 56238 47262 61180 16862 11308 16593 97557  
46490 93758 78409 44607 22257 28621 99940 80097 00000 +++++  
+++++

**11141/9192/7363 kHz, 09-07, 1015/1025/1035 UTC**

45615 51386 68011 07214 94652 69293 56197 16680 61121 79653  
09707 50869 55819 24520 54115 89201 08527 91249 93461 63179

08285 57634 54679 72281 51578 76592 29773 88616 34378 80089  
14192 42539 48953 06992 64835 06404 71417 84525 26117 18663  
50934 18046 97537 15469 36511 68786 41200 61999 02342 24289  
52700 00662 57611 91195 43836 58390 51715 65091 10571 80209  
10825 57082 84685 81254 66738 81805 92564 34433 63959 36549  
69542 35927 55923 26168 03258 15704 26335 13500 04450 85244  
96535 99943 28628 39657 04838 65913 97068 56380 68780 25829  
90550 57650 66221 77362 14296 28931 96224 49595 57533 10479  
05663 79793 96128 04252 92482 73490 11717 63329 21569 27545  
25783 56043 14143 20888 72112 22000 96630 02623 56063 62187  
19948 32182 74093 30352 85126 51222 91974 17832 36226 91939  
05140 49029 06477 51505 29594 29728 28569 87296 96829 15413  
45051 12619 51186 91814 79759 97605 73081 84834 56220 04974  
76570 42058 73957 15339 54645 53038 78660 21763 70737 00533  
87123 98230 19845 59888 52913 71737 07720 88758 83701 52680  
21572 74335 46184 03231 90704 30292 19547 48396 60528 60621  
83397 59430 28401 32554 51108 64301 14713 25745 84507 64901  
67663 49921 50856 65673 25171 48171 08047 43361 82349 28062  
28962 12550 37983 87789 00932 66702 18446 29519 61226 99370  
02506 77130 54519 35266 95430 40547 23264 25884 25866 93822  
66913 89364 63890 59200 30929 99285 83703 14303 11512 52056  
19389 64665 86993 67625 87162 48780 11821 03168 72584 67851  
34083 84452 06131 57445 22503 84569 75595 43221 13849 04712  
48737 47931 16684 36694 04622 41880 32406 11896 97091 54024  
79508 66317 98804 85910 32004 76440 99274 95625 07942 45574  
55351 43960 68962 45376 17583 19963 16828 42239 80896 88075  
97851 63224 33022 24047 51192 81242 99123 31788 61916 24146  
06045 58388 04797 37449 14630 49451 89761 55339 93545 11957  
44945 59680 33044 76827 98276 31692 22105 78389 43536 25988  
37394 92919 01822 21674 17477 03454 14370 30174 20722 83062  
27652 64491 90335 13759 56701 99570 74956 83254 37597 78480  
78263 26716 05046 44059 36021 05747 55996 00759 43999 41748  
85233 36341 85212 45875 03873 58123 29921 12753 76713 23469  
06809 70152 39365 69198 68799 01814 81108 69614 01940 85597  
04407 77832 50780 14159 97020 30093 58705 90324 77657 17751  
46633 14372 01087 56635 78540 05379 33679 08450 87238 23856  
35280 33917 58835 87823 08372 82347 99335 99542 00466 47323  
31799 25073 70645 43180 97509 93851 56209 81979 59578 10481  
00355 55654 32436 95905 26827 53022 85626 00177 72479 66342  
95372 81411 00000 +++++

**11141/9192/7363 kHz, 10-07, 1015/1025/1035 UTC**

45117 83280 73241 31297 50438 53571 46924 29886 89466 55216  
68032 01696 89155 03229 87877 59518 69584 53651 39876 11419  
51036 82676 53892 26234 50229 11569 99598 44087 01651 57070  
57263 24117 64920 11987 39428 46586 04135 85637 11900 11592  
50110 58849 87488 01525 81490 33201 90949 99504 85617 79179  
18541 80945 85146 12958 40659 20462 41305 56474 20973 81288  
69760 60495 50496 79412 30013 95357 20046 39598 74271 39070  
79512 85489 66733 82073 00000

35903 18838 22952 83433 73898 34012 36039 91102 04173 48820  
46309 18811 00582 00583 55572 26664 93909 69469 70907 56178  
97377 24785 29823 24854 23264 26814 03255 09908 45321 57678  
43584 57103 86688 79631 69858 75623 37974 44228 07412 04905  
35205 00818 24064 64389 52327 77789 30088 22123 87937 35003  
34140 43133 50951 10858 72327 03544 74875 12420 52614 81328  
15390 22057 81741 59684 10907 19018 66858 03922 10814 39382  
09047 97843 01082 22836 30925 50517 81914 19693 05529 09410  
77145 56613 78636 40800 80055 84451 01753 63414 65305 56662  
17914 83091 00000 +++++

**11141/9192/7363 kHz, 11-07, 1015/1025/1035 UTC**

00000 +++++ +++++

**11141/9192/7363 kHz, 14-07, 1015/1025/1035 UTC**

83105 27389 63712 03758 40683 56592 56436 01597 04410 64972  
32518 80175 24390 81444 03513 07110 62891 13323 60837 88767  
73220 09441 35160 85990 72056 90567 92221 11936 22427 33048  
94771 60489 69517 16593 85292 38680 96500 72181 69230 01540  
92572 90981 03387 12839 50382 80259 19181 80135 35046 77188  
35460 37586 91925 56507 40550 74939 85371 92970 48231 36167  
85604 64511 57324 36154 45930 07070 69583 68895 37477 57022  
45571 05638 33636 42138 03212 06394 61397 07015 88711 93275  
61770 83921 74521 59084 26472 44989 64045 09589 03070 96686  
07775 62933 85774 02522 60526 54611 34060 44900 34493 21443  
86305 62080 27779 62999 60644 21164 33103 03893 60204 13066  
56379 05402 24937 80385 99834 99831 97208 14129 89374 46079  
93351 80217 50869 29821 98364 61717 65057 56767 25935 27730  
55742 12425 10992 64880 90988 86794 26954 32342 01985 87454  
44888 26330 49272 89453 76731 65006 91026 95461 69797 29738  
33077 04614 44732 23631 65345 13477 94115 33295 14411 97589  
83897 04764 66862 47002 24852 69514 43146 54258 06236 81521  
26591 78257 08844 51286 77289 32430 39651 87770 85536 70669  
55213 84184 44505 69456 66035 08554 46845 29612 39078 85015  
34895 46109 40601 76771 59199 19403 86518 06632 25012 06688  
92469 76111 31471 36543 40780 68978 33143 35392 06505 50229  
78615 39210 09741 96401 05827 88936 86399 18178 98821 32999  
94618 61205 35626 85419 99011 96083 81911 12915 99932 33449  
10158 49440 99951 25083 48987 61616 24718 37011 92359 13464  
40416 05496 23328 03906 34981 11887 32018 75442 55275 37256  
32544 17474 17413 82747 08537 12677 32408 66596 41968 99888  
14352 33741 04968 51938 63288 38972 19310 91842 39991 89551  
13276 95834 74820 58243 30550 56637 77844 02697 70869 05428  
42427 52105 67090 15934 59451 47093 28370 39098 84381 43765  
04153 41739 24342 17849 48637 47665 37398 29876 90427 04652  
61246 37329 37041 25753 13465 64712 68970 78350 30556 67453  
02985 19407 37929 50602 29353 00341 68036 28252 52682 89964  
68836 34608 91059 88941 69783 22674 13178 34167 97514 11453  
18137 16536 58440 67637 87617 60529 30409 32701 65091 39052  
30652 31337 41780 21959 52170 22190 54037 81715 85782 76798  
21843 04621 69989 97708 83097 81035 35870 11680 03409 73053  
39181 98925 66049 83048 96844 44331 71780 71540 70026 21573  
03226 97812 60981 46096 33482 81723 15852 57870 83659 10145  
50616 19869 59031 36471 42367 43209 18486 46620 53107 74893  
56966 89995 78255 09080 05589 98806 37043 07828 79118 44222  
47001 42254 25501 02763 49705 90037 57132 84407 00000 +++++  
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**11141/9192/7363 kHz, 15-07, 1015/1025/1035 UTC**

00895 39574 10267 11861 93693 63318 94431 93386 72308 48728  
70175 50633 26492 35855 69178 74115 44337 17773 94872 46294  
39685 46382 95209 24187 58933 35184 20296 46299 09421 69974  
19585 37301 76586 63370 58292 08902 22082 14138 57754 80354  
80032 57227 89388 67020 93625 15482 76956 10441 59219 88938  
86820 48353 70162 42658 10868 48082 77507 79038 71804 51747  
09800 05532 05497 06730 19144 33709 00057 79818 45723 70614  
96339 78501 16770 76177 67353 27811 30532 82746 16770 76177  
67353 85081 00000

63591 46369 59968 34847 10279 50744 85258 22024 68054 40399  
93969 50472 48331 99819 20614 28174 43133 24749 97007 54721  
27948 55191 11038 83867 18187 76477 05742 87722 33948 61839  
85928 58558 52776 54923 24487 09141 55083 15680 85603 57542  
91945 78075 07053 07357 29942 93053 08761 59267 52740 55188

19827 14899 24097 36469 41188 58888 41984 75648 86113 30123  
38503 96596 65725 18069 05299 54094 11718 45140 49143 30509  
53478 21037 07382 31781 91782 79996 77932 56172 36272 36890  
43526 34197 98872 23105 94862 63190 60369 88150 82394 86089  
00000 +++++ +++++

**11141/9192/7363 kHz, 16-07, 1015/1025/1035 UTC**

41872 55853 40863 22009 36190 14127 87807 45472 51410 50719  
28219 09677 57684 80924 36197 48285 14135 29324 54544 49792  
10663 57611 27641 90667 77442 30797 26222 27976 91778 70232  
06231 62415 37003 66880 68949 07686 93126 53285 14577 27161  
63904 57669 06457 23772 70016 88589 88140 94051 63056 23610  
20461 82282 39995 00403 30822 95675 62836 33737 91878 66519  
13120 06785 71798 72246 35988 10169 23291 49339 53483 27220  
03604 62029 51771 88846 42648 11712 71984 46482 01471 98023  
59356 36529 88235 67521 50354 34750 23916 10890 02479 24033  
74882 94624 96429 23977 94571 38130 65330 55728 41422 72153  
30675 40508 65275 39519 49716 55274 79406 24071 03956 93943  
60405 18784 83443 07620 43061 68972 46561 22263 02466 51530  
59979 57239 40502 76146 48483 93184 18924 19428 09343 62626  
06194 27873 70930 61789 30293 50633 00255 07038 54659 87984  
89111 84381 19472 66475 73537 65484 15444 76662 66250 88613  
82329 34383 06764 27972 49323 51502 58866 99844 59540 27065  
10152 78996 45767 94806 53290 23766 49669 87936 53718 33285  
01647 07152 33446 85263 03513 02806 25672 27785 81200 07182  
79868 23534 99675 77795 22066 69910 57240 37671 99978 43456  
01418 23530 67696 42034 33615 77824 89606 23205 94731 45560  
68247 62225 48921 61834 25766 78119 07681 41043 93690 01248  
61462 03682 90675 80822 10988 01677 92935 55797 15462 28197  
27035 37581 99867 22873 39728 77995 88525 08360 24546 20932  
57116 19192 09797 61133 20346 08855 37689 58544 97442 46020  
89251 81662 22671 35877 34742 78336 93058 27499 14233 97435  
70510 93184 78057 09844 80511 90706 41811 02201 74596 44408  
35586 41838 48774 06088 52134 36344 35100 81600 23647 36193  
08577 34130 81825 53879 76582 00044 80952 97997 42995 78296  
88631 45692 64217 79301 73886 01932 39285 44207 47322 19033  
01242 70528 33017 74876 01970 05062 76839 33255 07672 90020  
20883 34783 47176 73328 98694 91812 80265 19021 31005 85790  
78217 78667 26616 90497 33730 09777 18169 69594 42435 52110  
87449 21936 23183 97839 59942 73061 69277 16494 73304 36327  
47864 20625 49453 92095 89642 83136 24955 58437 36100 42212  
19408 51761 36458 54770 46487 60841 11506 84403 97368 82643  
26522 34718 51195 93416 40457 64026 92277 53470 23586 42324  
38733 69082 60792 36488 12226 59975 82692 34635 03514 05792  
91777 45580 13482 70018 75760 34328 74353 24780 25318 79536  
80760 24954 98418 63892 85371 05047 98414 33333 38750 97243  
58096 86055 78143 94106 46883 77245 94883 04326 43356 50467  
35091 74979 40305 31653 13363 78734 74481 46625 44139 89427  
98247 48093 20432 94462 35309 63059 94607 17457 87716 96568  
40901 49584 86320 52755 04364 87425 00005 +++++ +++++

**11141/9192/7363 kHz, 17-07, 1015/1025/1035 UTC**

Too weak to decode. Probably messages 88 and 89

**11141/9192/7363 kHz, 18-07, 1015/1025/1035 UTC**

00000 +++++ +++++

**11141/9192/7727 kHz, 21-07, 1015/1025/1035 UTC**

13506 37461 16421 13978 74850 66182 90216 34988 45445 73734  
35144 66840 97703 84659 61283 71811 77447 75313 61625 45898  
94822 22181 22378 14058 19214 70203 33357 25924 76598 13312  
59412 56707 72787 04362 58835 42953 90974 36642 59667 07854  
37045 64157 29863 55802 31069 52870 02231 40859 68434 80080

40105 38848 99035 24145 54671 77745 97972 11706 09892 06051  
26188 14643 75969 03848 04485 13901 17275 66220 49361 72413  
25698 13714 44097 84288 35332 09548 43533 92457 79452 88245  
35979 91959 75719 25377 10689 61067 50530 03106 04337 87428  
38480 51223 24938 81410 17856 68360 76650 93849 68097 53054  
33883 80369 60170 99379 38173 79477 15796 36807 16238 96620  
96451 18989 42669 11375 08103 91164 95689 49978 32597 90859  
79406 90374 21648 61578 11022 91972 14358 84166 96400 67292  
64217 55543 42479 37695 86509 69480 79904 40386 62063 79119  
94383 78873 58292 45917 90150 34068 53455 04705 34005 78217  
75080 99540 53348 58863 88483 70061 86671 44998 96320 93003  
09917 52624 35117 08587 87146 91887 79704 86452 18986 02988  
91505 10838 87237 73042 71604 89674 19136 51090 04538 17304  
19666 03441 03749 45492 45385 76524 94639 42432 18186 59469  
96154 44418 02439 63553 86837 29897 93949 60757 66304 70548  
94175 48570 48055 39128 68126 33264 44578 78713 09396 48807  
30673 63081 60766 53613 95933 02874 63806 72301 22331 77261  
35921 74679 47831 95773 98270 09102 01985 19998 03012 32427  
24422 99832 33293 03731 02208 03968 74439 33990 86967 49302  
79766 08896 77748 58966 79461 27013 80528 03655 05965 20450  
80333 05935 34301 50237 86886 12241 60780 93602 39725 62229  
68519 65331 83732 10182 53220 40383 51020 78148 07631 69983  
10088 45520 88146 08346 68211 04705 11970 92233 37990 37618  
58272 40537 03988 92647 71807 66060 50417 66806 92395 16702  
35790 22739 58723 88217 25475 95282 59901 75749 18116 67272  
33215 56319 26819 19259 31496 19459 01075 82851 08572 88176  
00338 52358 96204 97442 55194 34411 70988 22382 77082 40270  
34610 73358 02471 50490 55934 00147 82448 06640 48345 72368  
53675 09755 80769 28387 51599 30224 45838 09851 51912 58776  
33611 24059 51152 53284 84301 01361 22419 61046 18452 39745  
07106 21241 67976 53842 28622 77257 56528 70490 39016 53565  
02621 38087 34445 76825 43934 41886 00435 45931 06258 42447  
72858 80658 65493 79410 25579 03616 76164 07796 20687 35186  
64869 59009 82269 06143 12111 43737 79663 17629 70940 38934  
31104 03185 95860 26068 63734 72522 80412 72831 90889 41711  
26903 90401 00000 +++++ +++++

**11141/9192/7363 kHz, 22-07, 1015/1025/1035 UTC**

66074 01031 82472 58176 80050 35721 18167 38755 48071 74401  
69197 05793 61342 24447 04164 35860 45570 03614 33009 59507  
32678 42396 37580 07814 62317 35318 46814 82085 99097 70830  
04996 88882 76475 94516 06520 07566 03246 85280 95585 82552  
93560 49212 54282 57465 06427 60818 27482 93363 05615 06302  
57994 38245 75907 08581 30401 40001 56642 38731 47031 20021  
78472 43546 84499 49625 14285 43891 04241 96521 80227 83553  
15500 33461 47754 33264 14186 26301 52657 79579 46053 43634  
12007 53323 67634 55200 84928 77257 03359 11253 38181 37684  
22307 20059 02444 91093 00000

74462 54470 30187 89417 25171 08717 09131 43703 99414 18888  
79272 13411 55729 03328 35633 65123 59439 25642 56164 63281  
81156 55962 51864 39510 37187 41701 64255 98764 14004 98701  
64917 35734 44004 58745 36753 59927 24712 34339 41683 52897  
98635 86724 04455 06028 35949 08055 67247 12324 87194 53658  
94770 10641 98198 85348 34537 05802 04370 11696 61997 13019  
46592 36219 65223 00078 75882 49417 48838 25711 38999 25592  
61864 97597 62206 10389 79184 98432 75358 10001 91308 53499  
43518 17968 82127 38180 98266 40516 99339 48853 85918 06360  
47243 85597 74815 71926 56579 92095 00000 +++++

**11141/9192/7363 kHz, 23-07, 1015/1025/1035 UTC**

74764 74531 77728 10646 60613 65883 37102 81030 82362 34989  
40585 68985 78640 17938 58349 48976 14819 81801 01796 33259

03417 20398 71156 53632 31633 85716 81317 34312 44447 97153  
76806 10600 56719 95786 71870 73040 92736 35844 76592 41762  
76639 30576 94985 00666 22158 94699 05989 46182 95105 50623  
63316 30254 47067 90620 75088 02250 43711 12152 49189 79491  
36172 68516 15279 01079 48933 02029 59409 44709 82652 51894  
32171 11161 55368 53982 16316 06155 30520 74688 64782 74256  
05226 46053 45084 64518 57243 94351 50964 32551 74071 79315  
67285 08703 12609 86191 99078 87045 62820 37828 00686 14847  
13844 18952 65936 87212 45976 29854 65305 76602 96976 11651  
40969 51889 76123 10316 95719 66657 24461 71668 36659 21428  
44675 84509 59616 29502 49038 14082 85225 41094 98856 93062  
82600 05464 33857 62249 41548 75716 14955 78149 79246 85971  
28839 29648 92346 55581 27808 30947 90405 00084 03298 82959  
71616 53586 16544 20349 26758 32259 34803 86404 82301 93633  
46580 02928 18619 71382 54302 27332 24227 90282 67860 14140  
71995 91036 47482 23053 28280 19647 69346 40796 30888 61027  
12393 08924 96838 21541 89764 74761 45844 90153 73309 07688  
50449 32882 84592 47926 48767 00236 50849 80056 80758 52334  
49308 48409 33969 31385 88343 56549 09694 36212 98872 18024  
45474 78527 34450 50575 54891 25624 03484 30987 70574 59180  
82024 52772 01376 04874 80557 53877 39635 12472 63232 06592  
79489 91108 42977 86853 32148 29416 00922 65135 49076 55216  
03583 86106 89036 14439 16235 29240 89903 73975 35913 67576  
31211 78144 92480 66812 98350 13453 91200 91911 84374 61349  
95248 13421 90330 43652 71609 30680 10073 90343 48778 54122  
10477 84410 59731 13829 43006 63425 68573 86555 47566 82551  
04325 58395 34577 68666 50270 65275 56205 20278 62310 78471  
02699 32939 14757 27336 84753 54826 97009 76410 87850 02192  
09540 99130 09509 89359 32639 15290 15380 52965 66356 84473  
75132 75118 65054 72621 64057 35175 15049 33939 41333 44819  
28738 75312 40886 46127 53678 95446 35792 77305 20044 15879  
62147 35797 74891 46096 13347 93438 76689 49902 40715 43350  
48536 05256 21418 83255 13501 74743 79603 64915 60535 28894  
71691 64359 14397 89502 71774 52609 07997 85170 18045 71573  
80641 36231 06194 44811 50583 11267 40730 77837 35327 22390  
80132 27682 18129 51479 36802 46355 84122 24565 17724 27943  
74510 76545 16799 13993 32264 73422 94767 36895 37758 84239  
07670 05931 57794 19925 69782 65694 56427 81203 61957 81557  
41058 82789 21316 31877 42212 46031 73224 11622 50444 77199  
91493 77126 58817 73609 97737 86628 84376 24764 35828 16306  
67072 00700 82390 56487 69556 44732 79268 17724 26298 93429  
00000 +++++

**11141/9192/7363 kHz, 24-07, 1015/1025/1035 UTC**

20271 18040 76921 48782 56696 71081 00918 83701 10956 65615  
14259 76333 16564 69862 36353 90211 98584 21134 88684 82428  
65888 55846 88670 91712 45301 49025 90897 63327 99835 74203  
30395 84221 98191 19681 47659 26869 27714 22060 00096 25240  
67995 03010 89573 31337 67309 20184 60788 25739 89066 68244  
50104 80577 20472 90911 89580 98405 60584 89994 95852 75367  
29951 42326 98570 62135 69016 60549 88077 21030 17483 58689  
86999 94071 00000

30081 61699 96296 91194 97120 18442 80982 85784 57432 14535  
22698 43490 05945 28802 11437 68642 11166 13028 27391 43525  
66122 15441 02103 52876 04647 30850 12917 74904 50166 13387  
90422 37231 89213 12774 43566 61228 86822 20076 32134 43161  
86009 33852 41277 45587 58527 82658 37788 97449 99069 64843  
12785 26299 80123 91550 40526 71077 09656 43899 08017 48908  
58815 80243 95102 74334 51845 54486 09745 54421 35386 31353  
08156 08193 69364 09574 54483 83804 06651 88927 99735 71922  
53674 42055 84634 38721 29176 77004 96074 26955 63308 01433  
31891 98528 04235 24409 53611 17007 24457 56746 31881 93515

44020 95813 14261 95103 00000 +++++

**11141/9192/7363 kHz, 25-07, 1015/1025/1035 UTC**

**00000 +++++ +++++**

**11141/9192/7363 kHz, 28-07, 1015/1025/1035 UTC**

16121 23414 16222 91506 96725 54718 68731 06929 02952 55154  
36103 63019 45878 13694 06053 87592 85741 12353 67828 97764  
37494 47738 88719 26242 20990 75745 06284 26223 04247 21586  
47241 09598 13199 22336 08958 98142 06404 94191 64474 92380  
38118 41613 76997 87814 58195 50565 34808 93207 22235 33007  
42513 30597 10426 14859 29588 21743 78516 84599 62133 90683  
89349 44703 68800 37094 98405 33090 16808 60133 91781 06792  
98998 37464 00058 05002 17866 89141 36467 33717 77487 81046  
32836 39143 19317 47561 71698 62059 62746 38172 38054 90323  
36407 17679 39182 51718 11114 74713 65966 14306 70423 18239  
94155 86501 79715 66728 49011 34027 39751 59711 81757 55960  
35644 46360 31303 87049 17173 30824 69638 18477 71388 78985  
54374 54280 73429 16330 36836 45596 26515 71613 99168 69926  
27020 46029 18885 47615 15595 12534 84282 12710 00258 75049  
09189 80417 62387 42214 20455 78323 81577 95363 16637 33563  
40265 55450 21314 33148 94087 78565 79467 99615 18896 34765  
70366 49207 70372 49890 35390 24739 17174 15053 44239 20384  
33554 93493 47950 40524 62395 79483 92174 59877 84588 88970  
89145 77080 55694 86646 71770 78915 95828 79129 78295 57370  
43715 28950 40970 46715 10822 69018 77155 72793 96547 22273  
06310 31696 50368 56193 41289 40026 91904 26858 27407 23935  
24827 92246 27680 39105 05553 99464 77703 38886 52665 75579  
58599 32761 07990 76764 61457 02332 85269 75422 41728 67010  
67376 89990 86986 16603 37995 87110 46519 52985 58715 10839  
96159 08034 27475 18609 36817 30025 79282 28610 50137 55673  
15171 08283 59723 10006 70302 58615 71367 01250 57179 73923  
90715 02933 44882 81818 41823 40378 60288 93020 35014 23773  
22191 15740 57501 95021 44278 14284 85197 80540 67886 16600  
39156 67205 10481 00422 35073 43633 40797 12723 99299 73973  
16579 02158 49790 96419 45851 69178 65437 63602 57665 63511  
92211 67075 93256 83687 59565 13062 53546 58314 05525 41665  
63930 13765 33909 06723 42294 57989 52117 58484 81179 35120  
62918 96322 80056 30571 08686 83639 88628 31307 91506 42174  
47106 70981 17610 67888 34399 14621 39546 35626 60148 62550  
94562 84724 61543 78244 62606 02776 90873 69791 92385 49713  
04720 79652 68950 89425 90765 62422 21199 21074 93124 55253  
92774 27300 22154 70644 24772 81523 59670 66291 23701 81503  
95517 71659 13140 01358 56416 75996 92519 79229 13041 07447  
51472 82785 76249 57977 13183 19726 18420 33784 05188 85517  
80811 35876 81043 65502 52913 00526 41322 33603 34682 54263  
27349 14792 17650 63119 86145 03514 45802 80784 29986 55263  
42183 25387 39033 93480 12162 39565 80468 98979 59295 96419  
00000 +++++ +++++

**11141/9192/7363 kHz, 29-07, 1015/1025/1035 UTC**

Not monitored

**11141/9192/7363 kHz, 30-07, 1015/1025/1035 UTC**

Not monitored

**11141/9192/7363 kHz, 31-07, 1015/1025/1035 UTC**

18265 78415 76966 20552 26846 96158 37060 63738 85574 49784  
35073 53137 78734 93984 85848 44867 71471 52209 70292 36694  
93792 55435 22939 74612 17249 44301 36417 43904 53975 83070  
24991 55611 32784 58845 14373 64348 31994 64465 49994 78402  
73688 88546 40923 48062 09086 61076 81605 43097 49705 28020  
18636 55343 24036 53362 54729 87315 64358 72033 07091 97059

00000

67548 80092 80974 90273 56638 89971 00075 72090 86287 85877  
42020 14493 64686 24945 48408 80117 53331 31237 97449 24458  
26837 38545 36687 53160 28155 10228 00949 05585 55134 15789  
14009 56827 39380 68889 97369 55382 03323 56466 34606 38641  
06456 13647 64726 93408 16662 24169 02960 53624 67587 50953  
12434 52485 87973 26562 75166 71139 13915 58190 35805 51160  
19948 26908 16562 62969 29944 85818 26785 47412 93701 86838  
15581 72657 40226 90773 40953 73620 43579 40381 53877 66092  
62287 01115 20756 52766 38207 99226 32691 63341 65809 11925  
75005 95901 67802 89262 55465 51742 38055 12459 14620 80855  
37723 18334 66716 80232 55554 44538 44614 12197 68276 75277  
47145 34939 62029 92206 12344 62446 00769 60191 65007 98119  
00000 +++++

## F06

Link 00000

### 10198/8082/6833 kHz, 30-06/01-07, 0800/0810/0820 UTC

11100 00000 42186 27096 01099  
44072 66245 98240 53352 76974 22343 45169 62671 09338 75017  
72886 73280 73981 13536 28588 00441 18564 07998 96828 12211  
84822 49294 18069 15942 09790 98926 56539 91357 59916 03388  
90857 37389 34045 52765 25845 24986 96168 88287 48959 73055  
23910 88469 79803 89744 83660 88566 86134 46236 68320 13015  
64815 75252 58569 25546 11141 11457 93616 26669 24991 15934  
62353 53195 27223 51937 50856 59514 84770 04104 07179 85280  
67857 58300 09362 39225 87789 84307 47603 53761 88742 88530  
56530 90084 91996 28903 58500 98441 16044 09194 03884 63265  
21019 94896 19243 87864 50880 17887 99377 98345 71782 62032  
04133 71465 30075 46955 45953 16091 78375 96107 00000

### 9923/7369/???? kHz, 07-07/08-07, 0800/0810/0820 UTC

11100 00000 36147 04097 02279  
89369 94683 80528 92006 14990 54484 82852 44363 01047 09161  
93348 58093 54364 91158 40819 85093 48847 17133 19258 23929  
95267 05669 20197 00298 37330 26346 21786 31188 66195 41090  
39294 96156 70641 23749 66738 64180 65062 68824 64298 49510  
62482 25305 71224 94964 84782 16530 48928 06104 27316 32036  
83924 84718 20108 02301 05333 35076 52828 92339 96614 41354  
55713 75094 06237 39703 53640 70532 86944 33383 35531 61416  
18342 24390 06271 21663 92455 60038 13341 18245 66974 17912  
65342 72561 15856 77638 84601 92214 31981 52910 61047 09147  
61546 82205 99540 85044 74882 01631 77855 69981 03390 48332  
57487 25214 97267 67914 14478 46074 83738 24298 82457 45900  
30443 35448 25073 86936 43703 83437 79995 69151 56332 72245  
41712 12888 84682 31759 75254 96318 59624 91397 78090 33607  
61130 71808 32334 04738 11170 68061 14484 72940 04582 22789  
54865 50654 82632 12703 63965 99956 78929 96927 67850 78408  
92387 00589 19859 66246 66939 32091 80742 35859 82665 57528  
84458 49484 88034 80655 31789 96068 27956 01869 78983 03227  
47309 54622 13609 85230 74655 42731 34791 12974 15808 26984  
80037 16849 11961 34510 65837 58467 42046 89342 34206 32168  
74023 87608 22388 82247 94784 65779 97879 46851 73347 35437  
25981 64460 37054 82968 62045 03914 65432 57649 85633 03909  
31427 96542 18743 32900 44678 59641 95307 05359 76540 73716  
74157 15312 71529 08286 12618 97225 00000

**9923/7369/???? kHz, 14-07/15-07, 0800/0810/0820 UTC**

11100 00000 59487 11098 03079  
74938 86045 10753 39245 27022 20157 20375 35727 16420 27758  
89872 82748 59664 36905 61444 75957 33211 95954 82326 53750  
15150 00907 35227 18214 33667 56432 37220 98351 26922 94028  
24288 41534 44045 95746 63695 44106 41931 96919 61372 57095  
57525 66328 56522 27951 60282 87256 20609 64262 14489 87850  
02933 30380 06137 94238 89977 12894 14037 04846 70708 15882  
29855 09325 25019 71898 56766 00572 77511 79611 41402 53228  
83792 04039 18793 67134 41477 00326 74988 99159 43090 46986  
57026 31847 13046 99561 84974 52316 95897 00623 45690 39853  
88047 07063 73017 85628 30101 20602 44095 92989 02045 32465  
46466 31748 88454 18148 95669 44910 05908 43221 08017 31291  
09786 66110 58224 52443 22662 48780 76602 37334 51459 11273  
65479 83219 85564 91023 39550 76149 93086 92906 19840 79530  
57447 40937 35971 64203 21489 67572 16415 78450 31296 01546  
71417 81394 96903 40176 98294 88202 12092 17089 63773 00550  
00451 01277 43072 20774 79896 88455 20408 73160 62841 70636  
80616 80788 34185 94859 46573 71383 74337 47028 42099 10616  
19435 21772 85049 86272 75964 64290 40261 91747 31959 95098  
87048 82281 31971 53629 80944 02406 07995 21611 14359 07998  
83541 12177 05858 31417 93038 35626 72742 63139 83756 77791  
66607 48327 92432 51935 76588 21794 13801 10119 29963 29766  
03197 24985 44807 11914 80430 77888 14388 42067 27122 14307  
27981 51059 94677 52476 57807 80137 65098 56193 66761 38384  
31813 07703 16636 62568 92707 41632 81518 02885 72560 25892  
96048 83007 17054 00487 93236 07891 25555 10176 11505 17775  
14854 91919 75668 11804 31051 03047 81520 89728 51768 01079  
38727 85094 45888 11163 51695 88385 82992 42023 43138 83539  
09702 36403 49982 46284 35090 66903 46339 77719 92379 13175  
73211 71604 69078 81393 79623 38757 22777 51961 04867 37034  
24764 66366 56544 80308 98674 89135 64106 24888 46332 05829  
12559 56811 77994 43006 86036 98305 00000

**9923/7369/5341 kHz, 21-07/22-07, 0800/0810/0820 UTC**

11100 00000 26598 18099 00879  
12844 94870 78089 00653 76023 41654 18697 98375 44225 11358  
64491 82766 88488 70282 77512 91734 11902 76616 37455 42475  
69079 21572 66076 47266 13861 11629 57170 57084 86169 46576  
85545 00252 73971 73053 93448 08279 11265 18252 77856 46111  
98045 33496 27097 88954 53181 02361 80214 12865 36136 93036  
07531 91305 98475 59616 35835 14840 51098 21998 66641 76160  
58125 79083 60941 87635 93389 34972 88914 23566 20457 42825  
68001 04334 82124 96094 37800 64628 10327 21804 45220 72956  
92384 55565 38321 94592 54550 99085 00000

**9923/7369/5341 kHz, 28-07/29-07, 0800/0810/0820 UTC**

11100 00000 21598 25001 01259  
41329 23604 01081 76143 00597 47388 23164 31932 54358 30057  
04520 72438 93775 52874 53796 27488 75953 16279 22775 78925  
99738 37635 88868 41811 55449 18602 85749 86338 78211 30585  
24318 11414 59597 91675 71182 05830 97254 33544 76860 57974  
87208 81706 70856 00020 88531 97607 65834 97510 15056 55955  
38058 20308 33835 55758 76280 55813 75020 88473 16290 50420  
82858 11740 03279 90122 62488 02099 49234 56220 02222 85170  
77537 17062 76004 66696 71958 41760 55741 12911 72226 46815  
88165 53651 83378 11588 15956 06680 91061 23557 47771 46611  
99973 39299 06902 66925 37646 72129 13223 08476 90740 42342  
78131 52938 66051 50978 17169 04643 93408 63077 09992 09220  
12655 11327 62407 82499 11900 56074 50142 48102 09226 62608  
49032 07161 95039 01123 00000

**6957/9425/11611 kHz, 09-07, 0930/0940/0950 UTC**

11100 00000 12345 09006 03029  
14051 80962 72822 40650 57387 29012 51460 33501 58528 12018  
17347 38980 75057 84763 53745 95164 81123 11820 27625 32471  
81719 57673 34057 64423 10257 93364 23144 91012 89133 18065  
01643 75600 57973 19025 26496 81281 99227 18352 32431 77673  
15838 80032 60841 54038 40621 75649 82116 99703 82090 32227  
28619 37690 36394 10644 80497 22517 20039 88046 71508 38090  
03119 42709 07061 56633 47708 64768 11638 44592 81125 41274  
47817 26444 58741 89000 74046 42359 96029 33439 33389 60645  
74544 57428 90398 30915 51504 67845 58344 88915 27688 53803  
83939 48950 53305 34789 81784 44844 76555 22183 35708 05375  
64541 42591 09179 75114 51238 96429 32000 16625 92199 50211  
55451 54931 30688 85946 93077 50219 04920 56121 89314 09699  
51112 17673 83127 74558 82015 43414 58860 42955 45625 34325  
01477 14984 93750 81176 98389 70547 15144 48890 55050 16082  
12859 82106 16504 61063 30539 55367 12083 10238 57320 16376  
65436 82512 66031 95757 37080 92440 64384 81753 91643 55251  
63841 83310 07029 01337 95841 29968 67633 11168 30085 82014  
08859 06538 74548 49325 05060 59109 61928 42337 18154 02171  
52201 03579 49052 56561 05979 93219 59113 06687 08358 27044  
53804 87578 47938 90318 45758 68914 80713 75965 39409 46963  
33500 20497 04400 80362 26621 36135 29946 30696 20497 62567  
77344 93778 15867 86760 72815 32616 62299 04286 07858 47949  
54695 20580 39324 47347 22466 15590 06375 98758 41078 20230  
06526 79484 20641 78094 97959 56491 51241 90862 20299 59015  
09699 70831 51018 29385 57437 49014 39691 63006 84150 12245  
87257 73441 76968 67721 62498 43530 19785 58430 72899 48474  
52461 77886 32106 61843 44570 57627 91137 80416 63388 25898  
25571 28820 40802 60964 95852 29877 68842 87495 22959 51628  
78503 89447 46568 66941 81561 37888 57933 86660 80068 57205  
24666 52229 73199 78121 49585 98716 16166 50978 30846 24200  
06300 00000

**5913/7992/10687 kHz, 12-07, 1750/1800/1810 UTC. Wrong asymmetric -500/+160Hz FSK**

11100 00000 12345 12011 03029  
46061 30028 92228 53078 21640 86311 45572 79335 50119 12230  
80578 20391 80346 62253 95741 74458 07088 03649 69555 19823  
25834 09244 18098 71515 59961 12017 61698 83410 14953 94930  
67881 31668 39357 14462 62753 40459 97163 81257 28049 35911  
81299 46365 26002 39225 22930 66453 19235 34873 76235 46487  
77856 74847 83374 83272 90959 04871 49309 58327 24689 23525  
81173 53492 94093 10219 71889 87747 40921 82947 32703 98649  
34567 71776 04338 16835 38356 18975 01443 07035 08332 41761  
70036 74021 16769 18568 62620 56938 17569 84795 60659 60449  
95740 48963 99111 96135 68154 65216 72696 32589 27745 23111  
28589 77633 48367 40629 75225 41109 92479 71348 61917 51663  
88849 61711 08939 25986 72460 19332 92806 13920 03822 78267  
16412 67882 09851 72213 18708 10055 13537 51533 03633 95751  
44550 05078 92961 96421 48000 72732 32771 50716 33528 59614  
08198 57063 31919 87877 46201 06178 51414 47048 10981 76957  
50926 28831 21779 44188 72329 57326 47713 71507 99029 50602  
59364 88062 32975 74538 41778 72285 07331 74907 98590 91251  
76967 98602 01944 69023 53983 39973 67895 82454 80424 73191  
62005 07857 55403 56590 64785 66990 58799 19914 51691 45814  
38729 70418 67367 84410 54971 78746 98803 61561 95537 30542  
77117 22369 08577 54708 62623 22396 16797 64274 92905 86738  
06597 70793 98552 07484 09087 58212 16268 27978 15195 27152  
54019 87355 92049 45540 87933 23751 92800 66518 95619 59647  
77109 99584 55594 17789 84446 45888 67521 41093 27429 33622  
72928 15013 97352 14454 81108 15768 99121 06928 29878 32900  
57765 97778 35885 39578 63712 37088 14166 09097 49040 88231  
71615 01004 11849 18547 04077 65290 30981 41661 51731 38092

38259 47416 92474 27325 40422 80330 77972 11702 07969 52529  
42076 01568 73068 02094 36291 34988 03757 32745 71980 07526  
46577 95826 73998 59152 54869 00502 75435 66717 44896 63108  
11300 00000

Link 10053

**20475/18183/16319 kHz, 01-07, 1650/1700/1710 UTC**

11166 10053 32147 01001 00049 00000 00000 00000 00000

**20475/18183/16319 kHz, 08-07, 1650/1700/1710 UTC**

11166 10053 74523 08001 00049 00000 00000 00000 00000

**20475/18183/16319 kHz, 15-07, 1650/1700/1710 UTC**

11166 10053 82456 15001 00049 00000 00000 00000 00000

**20475/18183/16319 kHz, 22-07, 1650/1700/1710 UTC**

11166 10053 14753 22001 00049 00000 00000 00000 00000

**20475/18183/16319 kHz, 29-07, 1650/1700/1710 UTC**

11166 10053 74523 29001 00049 00000 00000 00000 00000

**20988/18187/16169 kHz, 06-07, 1530/1540/1550 UTC**

11166 10053 15948 06001 00049 00000 00000 00000 00000

**20988/18187/16169 kHz, 13-07, 1530/1540/1550 UTC**

11166 10053 57913 13001 00049 00000 00000 00000 00000

**20988/18187/16169 kHz, 20-07, 1530/1540/1550 UTC**

11166 10053 45732 20001 00049 00000 00000 00000 00000

**20988/18187/16169 kHz, 27-07, 1530/1540/1550 UTC**

Too weak to decode

Link 60070

**13971/11127/20211 kHz, 01-07, 0030/0040/0050 UTC**

11166 60070 15487 01001 00049 00000 00000 00000 00000

**13971/11127/20211 kHz, 08m-07, 0030/0040/0050 UTC**

Too weak to copy

**13971/11127/20211 kHz, 15-07, 0030/0040/0050 UTC**

11166 60070 15487 15001 00049 00000 00000 00000 00000

**13971/11127/20211 kHz, 22-07, 0030/0040/0050 UTC**

11166 60070 13579 22001 00049 00000 00000 00000 00000

**13971/11127/20211 kHz, 29-07, 0030/0040/0050 UTC**

11166 60070 25813 29078 00049 00000 00000 00000 00000

Link 70059

**10538/8107/6791 kHz, 07-07, 0400/0410/0420 UTC**

11166 70059 15948 07001 00049 00000 00000 00000 00000

**10538/8107/6791 kHz, 21-07, 0400/0410/0420 UTC**

11166 70059 95184 21001 00049 00000 00000 00000 00000

**11159/9188/7669 kHz, 01-07, 0700/0710/0720 UTC****10629/8138/6774 kHz, 01-07, 1200/1210/1220 UTC**

11166 70202 23568 30070 01639

16939 39229 58107 10847 97369 24490 59608 92676 69832 61883  
14461 68775 71505 36207 16161 29153 40107 49406 16210 15180  
76804 53870 84338 89457 39296 36604 23128 77650 94760 02720  
79205 93246 87358 31679 18216 81143 99963 04730 55748 41042  
14833 26969 61406 16541 02875 92475 78212 60910 96232 65942  
24530 15451 23847 79252 70691 61393 14697 66436 07523 31268  
98402 85440 48954 90686 57885 00155 35890 26473 13754 21125  
33542 02072 45130 28404 39412 66191 76576 24960 44096 25593  
85833 94092 12114 17993 12035 59289 74945 45987 69113 69964  
53465 57954 94054 61509 51947 86867 84707 63099 90852 82954  
06843 51690 70566 01146 75116 75648 83280 29237 37668 96440  
15214 67720 19004 21833 06340 97209 00879 29027 59835 94400  
45846 01181 18414 82503 93177 25738 49744 27087 81828 28021  
08141 13272 80146 38503 64707 65203 26997 17225 23127 93752  
14017 83761 63283 83374 63653 26203 79902 54065 82698 87575  
08405 59354 96003 53139 55139 06270 90047 87001 74218 08211  
21061 70161 00000

11166 70202 95741 30071 01759

27521 68179 98772 72344 88768 66372 20111 83949 36495 79194  
83582 40200 22660 86824 67008 89843 64219 15137 80196 59143  
53595 06784 14130 66567 75881 25984 58614 79767 37477 20419  
05565 00778 35827 88719 80129 90371 24969 26935 66829 67518  
56571 52456 22910 44880 01137 28815 96078 86270 79080 39795  
88835 97033 56351 86309 36565 83261 84293 04450 91585 40809  
88435 28183 30351 60017 35892 45107 25973 57106 36063 18705  
53272 68166 54328 75551 18530 66674 43408 80889 31142 90496  
22097 51027 59345 89290 56041 75989 37219 28260 20258 50857  
15148 09193 48079 39239 70915 94724 96209 17309 23647 46758  
80583 71845 17757 14983 62713 50714 69114 36430 91209 89229  
90594 32002 28167 60832 39221 10903 15103 25521 52067 18933  
58128 74472 63124 91548 37050 94297 18309 97662 68086 99356  
30803 85094 74875 05582 43914 63619 47486 44239 93643 86557  
94089 39075 88145 16828 15005 95271 46274 88420 53789 73659  
62395 99212 05071 48623 89654 96065 83804 73132 58897 38153  
85640 99343 75409 49446 93096 28203 60687 96290 07218 86486  
31413 51027 09409 71173 00000

**11159/9188/7669 kHz, 02-07, 0700/0715/0730 UTC**

File 44472

**10629/8138/6774 kHz, 02-07, 1200/1215/1230 UTC**

File 44472

**11159/9188/7669 kHz, 03-07, 0700/0710/0720 UTC****10629/8138/6774 kHz, 03-07, 1200/1210/1220 UTC**

11166 70202 19485 02073 01859

75051 07264 70941 14829 48895 53049 71276 16410 70693 03276  
87469 17116 45085 90392 03034 15830 48109 77666 24706 73269  
93475 59321 26904 52991 31373 23277 09159 27346 71965 37420  
71238 71806 50794 45354 35624 96112 78259 82552 72039 85676  
40372 48862 03719 51667 42957 98293 00104 13235 16510 32030  
85645 60299 23882 05604 19421 70336 37977 86159 25221 77614  
81673 20765 76827 18301 47117 01681 68147 99895 36620 39556  
22898 68407 92309 80455 23535 71726 06747 27684 64098 42631  
31683 54330 56679 49850 27149 17465 46183 90641 18071 09945  
13082 23296 50580 10750 68842 63041 65230 19786 73721 89739  
29287 88108 31603 40858 95294 79487 41583 88121 78094 24257  
10974 21290 67490 51391 59426 87516 18746 09737 68847 59694  
88096 14348 58811 32251 05482 78847 92144 67829 01653 19774  
40372 43267 31882 43823 63718 68350 63425 53954 85340 75741

18951 35264 64496 05549 93111 06598 98316 32954 84448 48814  
06883 12346 09810 45644 81294 36401 93482 98093 99407 33533  
48220 98312 38938 52167 90340 73876 42620 05266 56112 38414  
15099 73541 11578 09522 56245 90805 73035 79901 60594 59879  
80350 52652 37574 73183 00000

11166 70202 20479 02074 01719  
44960 10056 69688 25282 48622 08328 27568 80750 23807 10864  
60327 80014 72742 95092 61539 98035 80763 15295 15664 97426  
37469 77153 14575 29811 37277 09284 58940 61499 01566 42671  
99163 96924 89577 33952 95556 98259 90284 93487 02437 24673  
12396 04155 05846 39647 14698 41800 69561 59796 43918 33289  
69098 43635 72285 13093 18392 43716 52000 64346 18834 70594  
28770 55318 85369 42033 81629 07223 29325 15912 81204 54325  
02667 30262 83632 82264 33370 98859 02307 55539 06591 35832  
24640 70083 71320 07706 66045 91890 77226 36323 78294 67600  
71347 01089 54477 17998 09340 13959 97712 50361 60971 65631  
45831 50593 14524 66352 69194 41080 09832 29807 83845 15204  
54597 73494 47187 84455 03714 34060 28355 99082 06252 20997  
70495 28214 49817 57169 87121 10387 56953 79586 59739 10426  
13286 98867 28928 43608 32089 40843 96069 53049 84973 18709  
77907 51251 53364 09198 81125 61743 80475 31183 89133 21766  
28454 50168 78247 31917 70395 57087 05452 63723 71898 94858  
34935 61038 41872 31138 95571 96248 57253 00694 86562 74169  
00000

**11159/9188/7669 kHz, 04-07, 0700/0710/0720 UTC**

11166 70202 23568 03066 00049 00000 00000 00000 00000

**11159/9188/7669 kHz, 07-07, 0700/0715/0730 UTC** File 44475

**10629/8138/6774 kHz, 07-07, 1200/1215/1230 UTC** File 44475

**11159/9188/7669 kHz, 08-07, 0700/0710/0720 UTC**

**10629/8138/6774 kHz, 08-07, 1200/1210/1220 UTC**

11166 70202 25698 07076 01739  
74861 63524 30775 69052 07309 41643 97156 61851 85414 51074  
80532 68314 08125 29009 54129 65976 95119 08876 35267 67292  
12951 19803 26394 43561 88393 22107 36294 49719 26190 64758  
11165 98459 73369 75755 30236 57098 97346 21350 45632 65634  
69973 95050 71163 99442 74733 22355 49726 25024 79269 92139  
54002 22270 40433 50651 00152 71661 34039 19024 79175 29847  
26512 20278 35651 42041 30621 26729 48504 64674 12479 63736  
93534 96734 41997 30744 92354 43238 03994 25544 77451 59262  
12123 82694 28040 47993 92832 62042 56413 11204 31522 48276  
49463 75613 98098 47452 95066 43569 94115 91431 48021 41476  
88678 86170 15219 64417 35311 64783 64749 40411 86958 31338  
88610 62721 51335 06309 73723 63687 53780 09630 60936 28484  
99825 42275 96703 72260 54658 52322 07124 29107 81662 96415  
49036 26260 07235 32588 17850 42010 04053 05360 16801 70734  
09993 09060 17322 43494 24872 40315 65211 77641 52219 75626  
12295 53861 78244 34993 78258 44094 05212 17493 72347 38779  
81383 19792 29614 46847 94744 73484 41406 66903 22674 62226  
84777 76171 00000

11166 70202 78561 07077 01979  
38001 61754 18818 64881 70232 53719 87654 29026 65272 73062  
67882 61692 56068 13505 48004 79887 75101 49630 36856 82347  
63874 03091 88373 42156 79767 95627 60456 69772 54943 62345  
75087 82415 86990 23679 71918 40723 65991 39490 72497 38641  
67704 93727 97327 57470 67551 83095 02947 20007 55081 08156  
31212 05728 53625 90320 87979 12939 74803 63149 93369 78835  
62584 11409 70797 93417 06588 56317 66962 68181 29310 10426  
19980 45539 76959 50558 17849 59892 68599 82257 14435 86312

83274 94175 95166 37751 89812 25844 09618 96719 48994 97248  
13177 92386 42768 73678 84986 59017 10208 64246 14340 36699  
94893 77549 72717 00293 33406 82895 13660 27539 39623 50528  
67662 42268 64503 69299 24267 93638 36047 65214 18561 57355  
09116 69301 64250 69790 79810 08227 00503 30960 44079 16107  
44751 37278 05259 90946 68636 30039 60224 44146 39292 70555  
18841 16510 93132 77900 36402 59196 34367 90175 63751 03049  
75391 35262 44755 64742 61275 21972 15837 63183 45507 87554  
87242 44600 09208 62485 10737 39764 40978 38476 63409 01779  
19585 50648 02286 97865 66665 09799 69417 53602 61637 45709  
52162 73027 36006 47420 28313 83073 89249 11418 50786 75744  
93475 33670 51549 46492 79037 77195 00000

**11159/9188/7669 kHz, 09-07, 0700/0715/0730 UTC** File 44478  
**10629/8138/6774 kHz, 09-07, 1200/1215/1230 UTC** File 44478

**11159/9188/7669 kHz, 10-07, 0700/0710/0720 UTC**  
**10629/8138/6774 kHz, 10-07, 1200/1210/1220 UTC**

11166 70202 68371 09079 01579  
54973 94763 03181 51225 39334 34751 88483 76731 22645 34412  
23310 38437 93955 29391 12906 72710 60769 60510 52860 89895  
11788 31208 35054 97812 03181 82658 41993 67159 54331 16250  
77948 80993 63993 18110 10362 35479 82796 65380 19935 84099  
03031 18909 82848 42507 51663 32054 33553 96207 97505 30298  
81557 78262 08485 41338 80659 09205 19948 80361 74059 16340  
99939 20183 63787 74632 22388 00926 77882 36367 84139 58951  
33768 41762 26782 79705 21253 27724 49183 04187 53598 76940  
21696 43705 60090 74494 37959 82640 18554 64172 65231 73866  
51245 21684 79201 56543 32561 86951 94206 50964 81998 22677  
24798 10129 40813 91356 39590 32758 55796 67950 93338 67406  
18633 30378 48172 62390 34245 95032 19925 41188 16596 89507  
10502 08033 35355 79712 12222 13356 61895 93575 95063 33787  
88030 08508 12766 46391 15958 94834 88707 01832 42814 32366  
67515 26146 88312 42297 43328 05822 38875 01633 00660 35864  
06707 32318 28796 35535 27255 79155 00000

11166 70202 16389 09080 02059  
17533 14766 61640 97828 04164 69486 22662 37961 69709 70355  
36363 71527 54137 32035 25160 31082 97647 17601 89853 22763  
16538 11654 43956 41636 98714 91581 38726 40660 67252 39144  
89879 07954 85470 59588 41885 32046 01947 00462 30800 59805  
58908 87327 31581 76730 12440 18557 00802 64294 37947 86388  
50716 14025 19312 16457 15615 03009 45173 42949 96396 60516  
60779 61607 94299 80418 48836 27742 69739 59095 37808 91454  
87168 63523 61085 87259 31925 59222 15481 20280 09973 52753  
92466 16221 66505 28456 80615 27291 84326 84114 62661 11279  
47955 95227 55632 25951 84391 62590 67481 05981 16479 22858  
68668 14571 89802 26787 02109 86983 59061 14839 79948 08142  
44849 44834 40590 91508 96780 51350 64402 51420 23906 41533  
71576 86058 78352 57037 50528 13267 03112 56753 90318 26374  
79943 00033 15511 62231 38298 35083 46906 98645 11221 22230  
36593 23387 49168 46727 50760 41976 27661 00808 98687 16419  
09733 39656 31379 52092 49098 41001 58248 74957 44980 23002  
55324 66300 84535 00128 63383 47166 33814 81709 99468 29704  
63196 42859 30226 77577 18231 22434 80485 42660 71830 27746  
75549 70176 18746 50689 40591 89493 98266 24989 05637 32741  
56077 79244 89536 48454 81218 65465 61393 02422 79075 67777  
02853 82930 66342 80203 00000

**11159/9188/7669 kHz, 11-07, 0700/0710/0720 UTC**  
11100 70202 85941 11165 00049 00000 00000 00000 00000

**11159/9188/7669 kHz, 14-07, 0700/0715/0730 UTC** File 44481  
**10629/8138/6774 kHz, 14-07, 1200/1215/1230 UTC** File 44481

**11159/9188/7669 kHz, 15-07, 0700/0710/0720 UTC**  
**10629/8138/6774 kHz, 15-07, 1200/1210/1220 UTC**

11166 70202 16328 14082 01519  
22597 14578 31446 42021 58232 41719 25165 66605 90685 99608  
32472 91171 47339 20251 63854 95484 38609 88704 84523 80179  
15602 75133 93409 55506 82563 40775 71787 78208 50044 47539  
49972 78741 39727 25890 65513 46004 76855 80724 11337 61788  
31191 39930 97259 02107 92447 75297 73325 47618 91136 50489  
88388 70310 00757 75746 82398 88652 82269 74018 35804 08378  
56799 88210 24527 91107 17494 84225 53943 17996 16478 29503  
70303 40573 87846 51724 73025 35991 92632 07388 76315 08850  
96676 14933 93534 06789 17352 32099 42760 42040 00072 82219  
96971 36123 10519 59117 27311 29877 53539 65307 12839 26001  
54623 63190 15235 56315 64937 43915 41883 90907 75812 43609  
45761 31366 53654 61660 35594 55275 31196 60732 94696 04180  
16037 53208 31940 32185 02403 03754 13293 57388 97070 02667  
47361 83336 95383 89731 23367 82684 68310 33237 25014 60253  
46466 93861 68662 37662 12058 28113 39262 26744 34660 82149  
00000

11166 70202 21496 14083 02079  
04761 44550 93949 77111 18291 98827 38609 67444 08551 60187  
81153 86149 68223 70436 97591 23107 70904 93526 62540 00702  
49979 78684 08624 89540 70954 90818 22285 06295 14436 94164  
05726 42117 11937 00075 59633 95053 01708 14918 66406 04900  
96774 49002 78549 13942 82363 72486 41933 02005 84917 29182  
08611 69258 79878 44220 18860 65219 30424 86495 57164 87373  
74353 71831 11797 97872 01301 17810 92716 31727 87472 86196  
87436 94947 80086 73901 59587 76063 48712 38414 19826 19453  
45687 68642 23807 33933 42806 37108 76889 35037 36464 94422  
50264 44426 38452 91983 38204 94857 94569 43836 11105 14170  
98275 63629 44022 86695 91530 37607 25380 15568 70041 19575  
75543 34327 35087 58771 29943 41294 59111 96592 66439 55134  
57276 93102 81604 15036 82157 69257 45628 73978 83771 75798  
90520 58483 02124 24743 11297 93316 84464 44403 84848 14571  
44434 43886 36172 19562 05302 97993 06646 26976 94456 88482  
04050 45711 81373 62602 39012 75852 76211 94850 77563 90203  
31248 62903 64494 69830 12335 73626 97206 92042 32556 00138  
54731 94253 65287 15827 11614 62159 78828 36297 91353 15672  
59816 05149 39075 91035 17582 84549 18131 42586 86665 36526  
60314 12564 69653 05919 24373 42439 87538 40933 42513 24171  
29789 12220 59575 14856 21308 83205 00000

**11159/9188/7669 kHz, 16-07, 0700/0715/0730 UTC** File 44484  
**10629/8138/6774 kHz, 16-07, 1200/1215/1230 UTC** File 44484

**10629/8138/6774 kHz, 17-07, 1200/1210/1220 UTC**

11166 70202 20436 16085 01379  
15873 85461 05927 77413 38479 76173 22374 46663 82598 00074  
28231 56844 83583 83425 77243 63864 31886 08044 01321 16401  
91575 72671 61136 27675 52946 24757 48792 07473 86395 98582  
22202 52865 89753 20681 75915 21054 46264 68468 78052 32780  
35389 93046 28031 79739 63641 42089 14792 34447 07620 43780  
80194 85963 86437 37707 17280 49953 05738 63680 58079 26490  
40473 44389 30665 04055 48647 22849 90124 33160 33193 40566  
53151 18048 94196 67369 90932 99881 38624 18834 60025 29887  
39769 22241 75914 55869 63586 17011 58926 70547 04115 00550  
07196 95140 95158 55438 76374 96647 90438 18907 70759 62255  
29381 80539 75539 79312 30736 19126 84842 94308 81223 14624  
05267 49293 11379 96147 39592 19174 75794 11938 80351 98333

79949 32228 67955 09995 20799 20974 93057 36785 33330 37360  
47835 95923 60254 53025 55897 85135 00000

11166 70202 41308 16086 02199  
86141 68044 24676 98640 23471 52691 99143 33277 38923 95097  
05947 86378 25921 67921 11095 76534 95169 88431 94651 47691  
59535 61660 60274 85598 60043 29132 72589 73415 87670 96588  
89579 22425 80632 39162 82186 38767 01839 07417 58298 12161  
26222 82724 33331 37523 92606 55373 14568 05446 99821 23884  
91460 22451 51741 38947 49081 46971 80933 40430 46894 51990  
05614 60884 30057 50279 99581 93998 65423 43176 79840 51427  
19443 78823 41578 56435 20144 30828 95189 47804 70380 33267  
85054 92414 04544 32972 94723 29975 05912 45043 68230 98304  
26838 22523 02198 12625 78948 76158 88435 97289 85557 05215  
11713 93400 13473 25245 32391 90731 26382 03781 08611 57409  
27007 39867 37721 65789 80224 48381 21623 37955 34319 35076  
85737 59287 82573 73283 06268 33535 32383 18214 25456 77830  
74071 19793 59503 81080 66597 19969 28872 74173 82355 45432  
65620 85446 78235 31680 77486 79836 85143 39370 73394 05160  
33165 48892 80074 93970 54566 44103 04483 94404 31805 21159  
21712 28481 82757 83381 93073 01270 00336 08099 44048 09387  
88687 96393 56783 22236 63164 41702 56829 34444 06250 78192  
98805 12925 96629 94878 80673 87010 53596 26376 41312 55084  
63968 56271 21089 06161 83724 94016 90095 79835 31524 11304  
73755 13058 16313 48842 30475 47160 66205 29490 61040 93567  
50807 38665 54436 81648 14202 57984 99776 86217 00000

**11159/9188/7669 kHz, 18-07, 0700/0710/0720 UTC**

11166 70202 95428 18058 00049 00000 00000 00000 00000

**11159/9188/7669 kHz, 21-07, 0700/0715/0730 UTC** File 44487

**10629/8138/6774 kHz, 21-07, 1200/1215/1230 UTC** File 44487

**11159/9188/7669 kHz, 22-07, 0700/0710/0720 UTC**

**10629/8138/6774 kHz, 22-07, 1200/1210/1220 UTC**

11166 70202 20167 21088 01359  
57794 69704 36964 89933 53902 73067 09194 34710 28640 64624  
74184 85053 54087 94395 05158 97672 41788 35121 15884 66787  
64671 35597 46127 45093 30627 32320 38588 22249 43680 99107  
05797 53066 13708 39408 10379 52596 00613 50965 07137 00301  
03924 17533 20391 20490 33738 07337 55007 31215 23942 82950  
64552 78809 73662 52293 25024 00264 27877 15423 87573 80610  
33121 86825 08681 97529 29228 97869 81196 70335 63043 09129  
14713 55557 35053 87261 38681 56277 14851 26116 26717 37439  
86399 16774 65548 64287 09013 96196 17013 06152 04990 29182  
46574 72739 09857 03300 16768 75142 46140 41511 69032 28737  
06614 62146 42358 40163 57950 40934 02184 45577 00731 54772  
77990 92357 46728 11919 33020 81460 99422 98302 14564 12600  
48670 94629 58254 99453 15475 43977 44793 47074 07791 74570  
32567 08695 73302 88133 00000

11166 70202 12678 21089 02179  
27855 12998 56863 24124 10836 75270 70997 38216 46350 17869  
07864 35567 66475 26648 99056 60748 02047 70698 39622 11914  
33457 75098 45545 96994 15377 63285 59386 30618 05102 17504  
46243 82685 49184 30749 47238 14549 08065 48655 82711 63718  
23374 24765 22305 63048 57602 37613 64131 05329 60812 43062  
90216 89230 44100 60332 90387 07527 64473 15161 71820 63544  
50847 88524 96404 26772 25840 44368 13141 63569 03056 34775  
77733 03907 64547 06017 76589 30078 48136 53914 97387 98331  
99287 01961 13428 29336 67222 00631 73928 28441 49954 71317  
17476 21658 17942 43340 50801 18298 71040 57455 60076 36212  
08443 34302 46920 50564 16292 31240 06301 52075 02665 35988

88509 25682 34598 70527 12417 85538 56861 03696 22179 27304  
97146 95902 04592 83658 87378 24421 09272 93969 55821 62674  
38862 24066 69673 11971 01442 97038 32844 09115 42335 21019  
68586 58333 97493 24868 41683 60956 35657 37707 99872 41292  
81466 73243 39195 92127 36722 04807 22965 88296 41972 42057  
09025 41751 45629 45284 65005 96576 72780 38240 76252 87382  
10901 05453 76115 09512 54651 84939 53295 74503 76937 92276  
15920 49247 18429 36950 17054 02265 12729 16926 71318 05560  
89368 02391 17310 65474 21821 44579 05513 80978 12729 70640  
16377 52847 33519 50480 38276 92149 60605 46509 59997 01491  
75354 82242 57481 27452 20016 89215 00000

**11159/9188/7669 kHz, 23-07, 0700/0715/0730 UTC** File 44490  
**10629/8138/6774 kHz, 23-07, 1200/1215/1230 UTC** File 44490

**11159/9188/7669 kHz, 24-07, 0700/0710/0720 UTC**  
**10629/8138/6774 kHz, 24-07, 1200/1210/1220 UTC**

11166 70202 32157 23091 01539  
59558 41402 98993 63610 68916 26333 91596 52583 74740 16007  
21542 04239 12870 56978 33396 75363 12033 91890 10375 07012  
77387 20922 00316 48113 77281 79341 22215 81902 44174 85866  
26765 22375 25657 41512 09345 72947 46504 83608 98869 64515  
67705 24691 70978 15086 53398 30934 58960 78188 81655 19826  
60878 72238 60055 81769 66320 08045 31972 55296 51218 56650  
84532 10580 14172 24694 94162 20940 52706 29473 70674 27018  
02923 90912 85827 23322 90947 82602 97292 21819 69655 09111  
03972 72263 39064 01761 93595 43955 73872 50038 68552 98609  
06560 10841 60867 09028 39486 62745 72288 03257 84439 97480  
00399 38921 53059 65796 36712 37424 46575 19910 47667 32697  
18302 19730 74476 14180 07324 95030 12763 68744 66810 80770  
57908 51210 35394 67750 27074 38179 25059 35785 93811 44846  
23964 61577 96212 09492 37646 18499 04527 75335 17047 10446  
59195 24443 46781 06958 15229 43367 92109 71808 53872 25217  
28030 91151 00000

11166 70202 65487 23092 01619  
97525 95399 11601 98871 52009 53997 32274 24551 11400 03087  
24250 46266 75173 27915 28094 13511 99071 23574 76172 47655  
62675 26607 19448 19699 76914 46332 52815 20699 54963 13048  
24914 54562 94946 85328 43341 07891 47907 83589 11223 76555  
69453 42107 56060 53709 78548 96678 36809 08906 71854 50127  
40109 13017 67089 82811 01618 88643 73818 00352 13379 90701  
15132 35747 03159 46870 48630 48077 96697 12586 60174 84969  
98809 20286 28812 01026 54260 27566 86351 49396 74374 93959  
19987 88678 40303 41015 91429 72343 18885 75357 70994 12862  
52042 79431 10044 37730 05657 99606 00265 79579 88844 86333  
93192 67546 79592 66032 78427 12107 17663 49414 43980 00558  
50738 05918 67185 45320 44713 58934 09612 52271 94088 81536  
14427 01283 93404 97372 29629 56144 55638 16424 05598 46084  
88520 60323 40406 86045 64691 56898 71314 27926 46648 08648  
35895 59964 52412 64834 51231 96453 72855 51869 84610 24976  
76629 41692 14163 03346 63623 62823 02879 23447 52897 92159  
00000

**11159/9188/7669 kHz, 25-07, 0700/0710/0720 UTC**  
11166 70202 68719 24091 00049 00000 00000 00000 00000 (wrong date)

**11159/9188/7669 kHz, 28-07, 0700/0715/0730 UTC** File 44493  
**10629/8138/6774 kHz, 28-07, 1200/1215/1230 UTC** File 44493

**11159/9188/7669 kHz, 29-07, 0700/0710/0720 UTC**

**10629/8138/6774 kHz, 29-07, 1200/1210/1220 UTC**

11166 70202 28167 28094 01479

74881 72734 74631 38590 12412 85008 57064 45807 72521 49315  
15624 15071 57693 52154 28304 38751 16866 48651 97844 41181  
99801 03121 98341 30404 09595 20364 75454 18000 95511 78620  
54924 80396 53350 00118 39072 60141 25507 20156 95983 30540  
17941 40670 71045 72116 76213 79194 75539 34325 87806 49180  
31974 80954 02887 32599 80842 42660 90727 30763 78487 25065  
73948 04312 40777 45862 07787 38293 12261 99359 96569 93279  
65507 71902 64580 28460 60297 56616 23510 07635 17377 40897  
03678 24071 86442 65098 41203 05126 13057 75847 38332 82609  
34167 22421 39089 39796 56943 69634 87445 71038 00583 25667  
60205 14914 05807 08263 91773 46851 41717 97757 33018 42152  
64692 50348 11391 45380 09041 70065 84512 07018 14064 62863  
04401 73353 17239 21285 34526 40531 68205 13127 86894 08692  
43233 72547 71333 97156 64870 17051 74167 06574 56455 38790  
08485 38983 86175 43625 03171 94145 00000

11166 70202 92678 28095 01999

51794 55873 28370 98456 47392 11939 95851 55541 50624 14316  
24679 13568 56205 49450 86400 01936 44413 60113 76784 84033  
29911 83264 73868 91235 50510 87619 94545 49585 19310 28111  
35624 28834 88660 59432 10291 68536 99373 75852 15936 60879  
13626 69481 94243 94937 54995 24191 69527 92045 04053 87357  
76204 86968 22976 86630 11383 34558 07586 83905 73478 46591  
90273 83690 72801 88463 42238 38057 25059 90444 48485 15361  
63700 53158 54006 24916 32053 51998 04599 14818 41172 70155  
30741 85095 04363 14944 47980 83384 84287 97114 72258 75304  
13617 77850 73616 06738 75151 13114 16715 00182 52347 50057  
61609 52376 86204 55167 23218 25384 99420 78827 12915 48322  
73783 86007 10695 71919 91716 07742 41337 43092 77921 93102  
53012 91735 02060 66348 21770 46899 28402 18933 30341 24555  
23396 91064 94691 54121 57068 22511 36775 35960 59226 77319  
26903 47006 16373 72159 44195 36731 20285 62957 28522 80634  
04186 69531 22392 83429 27464 42885 26225 49133 94847 04884  
15428 60235 21004 14967 92739 33134 76475 43604 74255 42033  
75911 57178 32587 28483 94513 43979 45587 38749 23648 36000  
24074 56204 01547 06221 17009 20932 80054 46069 17535 53711  
13343 52742 18350 26597 79533 81078 89821 95197 00000

**11552/9461/7844 kHz, 29-07, 1400/1415/1430 UTC**

Files 44497 (binary contents, empty text header) and 44498 (binary contents, empty text header)

**11552/9461/7844 kHz, 30-07, 1400/1415/1430 UTC**

11166 70202 24691 30036 00049 74861 63524 30875 00000

**11159/9188/7669 kHz, 30-07, 0700/0715/0730 UTC**

File 44401 (off at 0710z for 28sec)

**10629/8138/6774 kHz, 30-07, 1200/1215/1230 UTC**

File 44401

**11159/9188/7669 kHz, 31-07, 0700/0710/0720 UTC**

**10629/8138/6774 kHz, 31-07, 1200/1210/1220 UTC**

11166 70202 46257 30002 02039

43943 30176 50401 74769 27617 45726 24899 85198 40449 68314  
04868 94710 08916 77948 03514 10134 46122 10058 22464 37042  
42132 00868 47416 01754 92668 24679 03262 70681 14640 65219  
79609 21741 21909 88269 62672 47491 59764 07751 34427 94703  
21516 62447 25001 70045 95653 45567 29218 66563 17015 54320  
23248 90655 20392 51707 42276 94216 20019 57697 05167 41647  
63370 11989 97016 66419 32722 75547 45569 96875 92898 63087  
52408 55948 08646 23713 64877 64506 80079 11878 99653 02991  
69626 15871 53928 11039 18920 36013 65115 29795 79059 29740  
05033 16572 02702 65769 19499 86571 71391 54544 49275 61336

56597 47124 93284 28638 37862 19726 00071 43464 26536 86096  
98399 24821 68496 04903 02970 28011 24324 74330 56154 97099  
50347 31079 91712 27232 29009 95933 31420 91510 21987 33111  
50534 12104 44499 15562 73058 80289 84249 13413 82717 55099  
13429 47752 60600 95275 67225 76920 85399 04209 87275 07516  
57179 92554 53497 47299 30626 88214 52730 42167 68703 48363  
57640 64409 52656 53217 14309 44412 09296 86231 61957 63014  
41516 30405 33227 46687 72964 35386 08477 32742 42806 35077  
22510 96738 11536 20396 47189 59294 63751 96919 98362 14467  
18839 82069 40546 46912 85510 21531 87790 30003 21126 29608  
24195 02201 00000

11166 70202 91487 30003 02239  
69088 61553 85194 36568 17225 54118 04978 08084 76766 56462  
14027 10562 28349 75463 40155 25232 63927 74969 97988 77153  
43456 02967 43552 01894 96982 45800 64104 88457 08087 89123  
01670 90688 39611 90287 33693 24306 87607 91829 59266 91776  
74445 30772 64356 02208 17022 23407 64475 78442 31000 30252  
48226 68558 57024 30877 70172 03935 19848 63277 66453 71103  
56302 07483 91594 89547 73054 18100 99948 12648 20091 35460  
20203 93961 90853 30074 96381 86018 84981 60067 93804 63827  
94581 46302 93412 90272 99973 94852 22917 65599 85850 21536  
98194 28160 13778 58180 73386 98624 11985 45320 23111 84833  
68375 41004 05255 89479 37697 00399 77764 87813 98816 05891  
67876 67553 23019 52355 17227 48192 39283 17292 51284 21884  
07478 70514 46526 83100 35385 03069 93811 39246 00532 80092  
81388 19416 62721 47267 45954 23485 78245 45593 65232 78722  
51680 14137 90486 96104 86221 85458 42411 43527 18497 03408  
18838 78100 48779 17964 87702 04714 02557 36815 63698 53050  
84384 38369 92054 90257 09953 75868 87892 11444 27329 27315  
04574 75188 63284 70877 29496 76273 55662 90474 30769 72796  
57718 41226 03201 09871 25368 29449 87045 07097 23289 86896  
57935 01987 10797 43917 11446 66538 93455 31238 90726 39134  
51342 65033 30639 38967 79907 94996 16824 55169 04376 20076  
83167 27835 53615 01584 96061 63129 04421 28347 98936 49662  
32139 03221 00000

Link 80214

**16127/12229/9958 kHz, 03-07, 1330/1340/1350 UTC**

11166 80214 95173 03018 00049 00000 00000 00000 00000

**16127/12229/9958 kHz, 10-07, 1330/1340/1350 UTC**

11166 80214 42536 09010 00049 00000 00000 00000 00000 (wrong date)

**16127/12229/9958 kHz, 17-07, 1330/1340/1350 UTC**

11166 80214 53247 17067 00049 00000 00000 00000 00000

**16127/12229/9958 kHz, 24-07, 1330/1340/1350 UTC**

11166 80214 62481 24031 00049 00000 00000 00000 00000

**16127/12229/9958 kHz, 31-07, 1330/1340/1350 UTC**

11166 80214 65482 30057 00049 00000 00000 00000 00000. Wrong date

## F06a

All files had binary content.

|                                                        |                                                                                                          |
|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| 12073/14073/16129 kHz, 02-07/03-07, 0600/0615/0630 UTC | File 44149                                                                                               |
| 12073/14073/16129 kHz, 09-07/10-07, 0600/0615/0630 UTC | File 45450                                                                                               |
| 12073/14073/16129 kHz, 16-07/16-07, 0600/0615/0630 UTC | File 84451                                                                                               |
| 12073/14073/16129 kHz, 23-07/24-07, 0600/0615/0630 UTC | File 46452                                                                                               |
| 12073/14073/16129 kHz, 30-07/31-07, 0600/0615/0630 UTC | File 44953                                                                                               |
| 7871/9491/10165 kHz, 05-07, 0300/0315/ 0330 UTC        | File 44423                                                                                               |
| 24462/20811/18593 kHz, 05-07, 1600/1615/1630 UTC       | File 44423                                                                                               |
| 7871/9491/10165 kHz, 12-07, 0300/0315/ 0330 UTC        | File 44424                                                                                               |
| 24462/20811/18593 kHz, 12-07, 1600/1615/1630 UTC       | File 44424. Wrong 670Hz shift                                                                            |
| 7871/9491/10165 kHz, 19-07, 0300/0315/ 0330 UTC        | File 48425                                                                                               |
| 24462/20811/18593 kHz, 19-07, 1600/1615/1630 UTC       | File 48425                                                                                               |
| 7871/9491/10165 kHz, 26-07, 0300/0315/ 0330 UTC        | File 14426                                                                                               |
| 24462/20811/18593 kHz, 26-07, 1600/1615/1630 UTC       | File 14426                                                                                               |
| 15611/14379/13389 kHz, 25-07, 1900/1915/1930 UTC       | File 44044                                                                                               |
| 12194/11415/10311 kHz, 26-07, 0600/0615/0630 UTC       | File 44044                                                                                               |
| 10687/7992/5913 kHz, 01-07, 0300/0315/0330 UTC         | File 44450 (1812 bytes) empty text header                                                                |
| 10687/7992/5913 kHz, 02-07, 0300/0315/0330z UTC        | Files 44451 (1984 bytes) and 44452 (1616 bytes) empty text headers                                       |
| 11122/9067/6791 kHz, 02-07, 1900/1915/1930 UTC         | Files 44451 (1984 bytes) and 44452 (1616 bytes) empty text headers                                       |
| 10687/7992/5913 kHz, 03-07, 0300/0315/0330 UTC         | File 44453 (1281 bytes) empty text header                                                                |
| 10687/7992/5913 kHz, 04-07, 0300/0315/0330z UTC        | ~5m TX (waterfall only)                                                                                  |
| 11122/9067/6791 kHz, 04-07, 1900/1915/1930z UTC        | ~12m TX (waterfall only)                                                                                 |
| 10687/7992/5913 kHz, 05-07, 0300/0315/0330z UTC        | Files 44456 (1985 bytes) and 44457 (1762 bytes) empty text headers                                       |
| 11122/9067/6791 kHz, 05-07, 1900/1915/1930zUTC         | Files 44456 (1985 bytes) and 44457 (1762 bytes) empty text headers                                       |
| 10687/7992/5913 kHz, 06-07, 0300/0315/0330z UTC        | Files 44458 (1025 bytes) and 44459 (1550 bytes) empty text headers                                       |
| 11122/9067/6791 kHz, 0-07, 1900/1915/1930 UTC          | Files 44458 (1025 bytes) and 44459 (1550 bytes) empty text headers                                       |
| 10687/7992/5913 kHz, 08-07, 0300/0315/0330 UTC         | File 44460 (1703 bytes) empty text header                                                                |
| 10687 kHz,10-07, 0303 UTC, F06                         | 1 block, 1 msg starting at block #7 (misformed empty transmission), intermittent modulation for a minute |
| 7992 kHz, 10-07, 0315 UTC, F06                         | Message. Too weak to decode                                                                              |
| 5913 kHz, 10-07, 0330 UTC                              | File 44461 (1851 bytes)                                                                                  |
| 10687/7992/5913 kHz, 12-07, 0300/0315/0330 UTC         | Files 44462 (922 bytes) and 44463 (1024 bytes) empty text headers                                        |
| 11122/9067/6791 kHz, 12-07, 1900/1915/1930 UTC         | Files 44462 (922 bytes) and 44463 (1024 bytes) empty text headers                                        |
| 10687/7992/5913 kHz, 13-07, 0300/0315/0330 UTC         | Files 44464 (819 bytes) and 44465 (1126 bytes) empty text headers                                        |
| 11122/9067/6791 kHz, 13-07, 1900/1915/1930 UTC         | Files 44464 (819 bytes) and 44465 (1126 bytes) empty text headers                                        |

## F07

17436 kHz, 01-07/03-07/08-07/10-07/15-07/17-07/22-07/24-07/29-07/31-07, 2000 UTC  
16348 kHz, 01-07/03-07/08-07/10-07/15-07/17-07/22-07/24-07/29-07/31-07, 2020 UTC  
15968 kHz, 01-07/03-07/08-07/10-07/15-07/17-07/22-07/24-07/29-07/31-07, 2020 UTC  
14852 kHz, 01-07/03-07/08-07/10-07/15-07/17-07/22-07/24-07/29-07/31-07, 2030 UTC  
13961 kHz, 01-07/03-07/08-07/10-07/15-07/17-07/22-07/24-07/29-07/31-07, 2040 UTC  
13373 kHz, 01-07/03-07/08-07/10-07/15-07/17-07/22-07/24-07/29-07/31-07, 2050 UTC

## M42

Ends with CFM NIL SK

Opchat followed by at least two messages to UAL

**M42b**

NW QSY 02669 QSY 02669 K =

**13453 kHz, 11-07, 1136 UTC, FSK 50/500**

[illegible]

121746

VVV RDI RDI RDI DE RTK RTK ORK? K

121746

VVV RDI RDI RDI DE RTK RTK ORK 0 ZOR GD K

121746

BK 121

RRQ6: Russian Gov. PtP link 360741.

Callup 121744 to RNM6 on 16180 kHz.

Opchat VVV BNM6 DE BBO6 GD ORK0 ORK?

Problems with link setup: VVV RNM6 DE RRQ6 QRK20 HB 1 640 14 10:27 followed by prerecorded PRIWERKA message. After resolving the technical issues again OOK 121744 and confirmation of correct link parameters with RNM6 DE RRQ6 OK ZOR K

KFUJ RTHZD26CAUJ RTHZLQPCAUJ RTHZLQPCAUJ RTHZLQPCAUJ RTHZLQPCAUJ RTHZLQPCAUJ RTHZLQPCAUJ RTHZLQPCAUJ  
RTHZLOPHKFUJ JTHZLOMQ

RHK6: Russian Gov. PtP link 370741

RVOQ: Russian Gov. PtP link 121751.

Start of daily schedule with RAU2 on 5350 kHz:

VVV RAU2 RAU2 RAU2 DE RVQ RVQ QRK?

VVV RAU2 RAU2 RAU2 DE RVQ RVQ QRK 0 ZOR GD K

RVQ: Russian Gov. PtP link 121751. 3rd shift callup to RAU2 on 5350 kHz:

121752 VVV RAU2 RAU2 RAU2 DE RVO RVO ORK?

RAZ2: Russian Gov. link 290741.

End of day schedule VVV REA DE RAZ2 QRK0 QRK?.

After reply from REA on 9360 kHz RAZ2 ends daily schedulr with VVV REA DE RAZ2 OK QRK0 ZNN GB SK and goes into F1B 50/500 reversals

RVQ: Russian Gov. PtP link 121753.

Closure of daily schedule: RUH DE RVQ QRK0 ZNN GB SK

$$097\ 100\ 24\ 1230\ 6271 =$$

87492 62982 30722 39315 23289 20150 46517 16931 00168 63860

73600 64366 26551 82380 16179 81664 88067 60083 48150 82646

60089 15314 24976 52886 51014 36842 09810 07394 30277 88115

49618 05981 77331 87860 88370 56375 99675 58563 61500 99537

22229 85946 39878 41973 02386 61029 57619 00378 80681 00686 =50=

73252 78072 74566 32612 04871 92557 06453 36619 58713 41281

70075 38487 23011 79885 95458 34769 35932 86580 89680 81357

36146 87278 08414 05002 75724 13388 57689 64892 84888 00335

86976 60413 87633 25497 40295 54126 07093 96108 28301 83439

23479 83099 65594 32995 75714 31816 39103 82549 36551 93486 =100=  
- 1239 k

### **5800 kHz, 28-07, 0816 UTC, FSK 50/500**

RYF2: Russian PTP link 219741 wkg RWI on 8115 kHz

219741 then into OOK and back to FSK 50/500 opchat and closure RWI RWI RWI DE RYF2 RYF2 OK ZNN GB 73 SK

### **7900 kHz, 28-07, 0830 UTC, FSK 50/500**

RNI2: Russian PTP link 121750 opchat and start of the day schedule

RNV 2 RNV2 RNV2 DE RNI2 RNI2 QRK0 ZOR GD K

## **P07**

9368 kHz, 02-07/06-07/09-07/13-07/16-07/20-07/23-07/27-07/30-07, 1400 UTC  
8185 kHz, 02-07/06-07/09-07/13-07/16-07/20-07/23-07/27-07/30-07, 1410 UTC  
7704 kHz, 02-07/06-07/09-07/13-07/16-07/20-07/23-07/27-07/30-07, 1420 UTC  
6872 kHz, 02-07/06-07/09-07/13-07/16-07/20-07/23-07/27-07/30-07, 1430 UTC  
5861 kHz, 02-07/06-07/09-07/13-07/16-07/20-07/23-07/27-07/30-07, 1440 UTC  
5386 kHz, 02-07/06-07/09-07/13-07/16-07/20-07/23-07/27-07/30-07, 1450 UTC

## **XPA1**

### **13368/12168/11168 kHz, 02-07/04-07/09-07/11-07, 1210/1230/1250 UTC**

311 311 311 1 311 311 311 1 311 311 311 1  
00367 00325 92547 55481 02177 52990 71718 97377 43447 48600  
12630 15255 53489 96728 17310 95029 70328 73034 13357 61356  
92928 20267 53427 08196 19766 91103 37131 42276 27103 22064  
79741 27490 07443 00252 11462 42195 08262 45113 18575 89188  
88036 09613 10449 57636 62078 38016 76441 31748 32700 53878  
79421 45848 26360 67447 96431 57707 13222 98136 60761 81505  
22638 10730 71815 69075 51292 72116 87681 60400 17533 98092  
14417 67815 07780 32888 37779 99579 51288 68239 81281 17597  
88733 52951 00688 18095 71829 27192 77896 88287 57535 17631  
74144 15047 92978 40963 21090 18477 13593 15126 95064 63207  
29343 55682 54054 22403 31486 92370 45506 29734 41181 84907  
88865 06206 11191 83124 58800 05813 45436 83895 35844 01399  
33160 84813 85188 59865 90125 56875 33123 99834 70346 93137  
27215 51802 89970 08810 43535 21879 05181 79133 13403 37945  
32353 54560 85001 74458 76360 39933 02729 07288 14754 12571  
01064 59346 30043 08266 38690 16381 49777 57056 86184 64821  
63378 81373 68720 16666 63408 74683 23070 41963 19912 49382  
07991 53761 38142 21975 37448 99801 38743 57111 04164 64841  
44142 74056 22037 73686 99509 32399 66945 73756 40358 20743  
21211 91460 11827 31068 42158 99497 55062 78469 68130 67593  
54903 81639 36500 77282 20637 49765 10225 96567 73251 03096  
62522 44306 25626 38660 06797 23375 58769 66847 51491 56526  
55252 02058 68338 02190 22532 35319 92998 88561 01209 72354  
60298 18931 14847 10685 38419 24093 95495 70551 88090 22898  
21439 10107 74774 14855 87900 80147 59719 77033 47247 52824  
76172 94504 67876 91921 78840 82859 57448 44678 70020 21080  
89809 20317 55679 60994 65304 95981 40400 42462 92953 99282  
28527 65047 54456 97595 72793 95659 20995 91367 40783 90371  
40590 23800 03887 49692 44493 60309 11900 87476 36124 35196  
39111 84579 68455 03904 82825 85479 42475 77852 20346 05790  
25755 69391 92244 23509 11148 49267 00691 37971 19928 97212  
95512 50313 94442 96127 45570 49395 98929 68971 10138 64144  
10412 68663 34912 02043 29792 13840 20996 53430

**13368/12168/11168 kHz, 16-07/18-07/23-07/25-07, 1210/1230/1250 UTC**

311 311 311 1 311 311 311 1 311 311 311 1

09293 00228 52538 61390 00404 40481 27826 70014 51466 16688  
40980 53289 15007 45511 36080 03635 16160 70500 90750 49656  
72967 46248 35809 43144 02772 10679 90977 51072 01517 48681  
07018 19183 98197 05036 83418 39150 95711 45454 05483 07537  
63390 96718 11220 42114 33614 48117 92800 74420 06568 78370  
33023 82850 56656 48414 24157 16824 86088 57116 55064 29093  
04272 55499 92543 00726 68642 15436 30109 80762 65549 55100  
51301 38884 26284 40528 78357 14695 03022 32729 42648 55278  
69551 58094 23325 23659 51971 92493 96641 16428 04951 30761  
92405 10900 74093 99084 85504 79683 09758 79730 28505 63546  
75629 09843 93444 22507 28681 11749 45743 39516 89063 53020  
66604 68806 88242 96989 96387 04446 88964 38837 66106 76429  
75574 43819 55621 20840 08702 31897 53573 23808 42463 82980  
93737 59092 96208 21724 75950 52875 20883 56594 46198 11670  
42287 14207 42609 22516 22982 44664 77239 65108 56512 15158  
17178 03029 74964 54984 82940 41658 53874 41689 72168 87296  
49570 83494 51186 77374 18519 90704 32211 38235 92401 67635  
02763 29350 29643 44453 16966 50810 02632 27721 87718 62333  
19716 89765 66403 55639 87727 34565 55299 53085 08963 95004  
00777 35481 06614 80750 87897 07779 64545 20805 98704 62789  
05908 05435 21420 61773 62290 02294 78492 27991 26332 98007  
98146 27471 40170 22970 92826 41359 16064 22737 37466 59945  
06611 17778 19183 98310 03817 33217 98373 56591 07912 63218  
46064

**13368/12168/11168 kHz, 30-07, 1210/1230/1250 UTC**

311 311 311 1 311 311 311 1 311 311 311 1

03037 00416 90962 26983 35615 39132 80756 91740 73874 31061  
54459 01916 39342 91047 63817 66435 59289 96501 91703 39913  
66014 39033 36903 88788 05477 85525 66895 04811 50940 30901  
81120 31859 46455 44360 80450 59241 86696 64141 66318 19975  
73553 80180 00302 34796 57744 33779 88351 08497 16865 16189  
03871 49840 49316 98336 54444 95826 93689 31951 39261 12021  
68662 71525 36188 06057 69881 17976 08385 46238 45909 87019  
35372 06341 69053 73361 75305 41983 33289 57923 60771 55022  
51202 39161 80789 65315 96236 97467 16913 15640 41174 22336  
55415 04399 90027 46029 12455 75626 38228 17507 38108 21649  
59981 32778 04224 58944 79636 47882 12472 55572 61544 00726  
18718 36968 29533 54170 08066 30466 03724 63972 60796 45385  
75316 79489 72307 58304 14207 53603 55314 79153 57366 49396  
28793 17201 83358 58414 61864 01861 08398 91562 36549 40732  
13467 90808 72276 38823 71436 86370 43223 17786 57197 91388  
41593 91187 07599 16720 08928 22100 21452 89485 67160 50119  
24701 55557 31651 28023 43279 23975 30824 82789 42337 82752  
28896 77093 37252 70832 99441 16660 16295 64334 62737 09398  
14372 42912 59145 14657 24688 71661 50640 97955 61348 23330  
75569 24861 94443 44492 38952 75261 52873 16433 04752 23551  
53486 78354 21165 38016 30602 99191 98295 64265 09714 33057  
20694 06594 03107 52034 37424 64439 48167 03036 18526 80967  
82587 24165 85652 94746 14127 25267 53504 69451 83981 78217  
43596 54055 53607 16471 93842 83546 10519 28339 52250 18921  
13924 42846 35119 02148 76819 87593 83645 52887 68842 27972  
21996 58773 76412 30248 00272 01613 69727 36968 80591 47067  
24218 50052 95599 03771 57964 27300 30196 26625 80131 33444  
58598 79126 08909 84038 25592 21900 96559 85895 10973 03069  
91671 48901 14096 24445 16761 49027 17450 63780 42438 83702  
23747 39014 55809 11657 52143 41128 70854 71139 70700 48595  
84577 50743 69714 27891 12515 31316 36986 87990 73197 74554  
53606 92419 61279 81077 63007 78227 76795 93060 82473 91467  
94549 76114 46992 70127 22261 92935 24741 93985 01738 40176  
29717 88907 97021 24108 59649 57677 23210 78538 91668 59933

65557 65424 30725 23492 57964 02217 96794 58009 11268 31552  
20835 98128 14353 78863 39479 05834 36081 89132 81465 96051  
70832 27537 70848 98265 23622 54508 98041 51844 06251 54544  
90225 09401 17332 19994 35278 63911 31249 20634 40387 86975  
04573 51362 58804 20422 68747 57295 05902 07443 88729 92820  
14415 45291 76329 51404 41453 33068 73543 74245 91499 25808  
38452 15146 95927 93320 80119 29702 49781 01662 89709 57151  
72099 51649 14693 96220 10782 45439 88342 70331 00715

## XPA2

14958/13958/12158 kHz, 1100/1120/1140 UTC

### 14958/13958/12158 kHz, 01-07/04-07, 1100/1120/1140 UTC

06338 00400 97524 22046 97950 43242 11305 29006 31417 51340  
80097 87373 37590 96360 12167 51590 30967 85526 43943 89580  
99619 16633 85769 94444 67742 94346 49331 41243 90136 58415  
19209 83915 89355 33988 28850 88140 44455 29759 56981 61859  
92118 81536 18693 76558 76582 83125 61572 28153 31379 67861  
27302 88862 31430 72276 17508 80105 20104 99649 78951 09550  
00556 40266 24379 43090 00581 02813 56075 52434 72383 04413  
11640 00570 68664 59023 37468 79867 24644 74244 98688 80791  
78015 36211 61901 79779 80798 58886 85218 54445 86667 98842  
84417 70358 89733 85042 29767 13158 86361 54510 99434 48074  
81509 01286 43229 89711 68861 62871 00030 91402 69919 62543  
36424 02067 59443 54878 15470 70896 12473 89565 12005 17513  
69443 43454 99421 42008 64361 68033 36804 75246 06156 44850  
84426 31268 99103 61336 97539 61519 31254 05363 27844 77345  
13283 16021 89551 07981 84400 49579 34368 89837 11010 42956  
49692 74277 25513 25945 85815 19266 45706 15514 31651 42546  
02049 09050 21452 88554 06173 73432 71941 20549 60928 67198  
11273 72046 67453 54120 79027 94594 92242 63289 07154 58936  
85887 17419 12650 50807 18518 40910 55595 85797 16691 54707  
21541 95904 97511 22853 80976 15821 97078 00970 24854 02461  
20332 31439 64604 74991 33609 29858 54733 36496 56349 86112  
63675 16681 93640 53518 46851 57763 56271 30467 11307 77293  
12748 65252 41391 45851 73297 26700 00015 93772 29754 35119  
73604 44558 37313 71028 32771 06873 79179 38348 36404 34727  
53638 06253 18671 68496 98210 93734 10497 22767 30037 43287  
18059 29120 24984 11461 61880 89954 95983 66214 96500 63438  
81614 57979 47751 68340 78663 20276 89643 99354 89981 27802  
18417 27492 90795 98061 67374 51472 87088 42317 62291 62124  
77703 77475 39061 64725 77026 19196 85628 53266 89310 36687  
31925 00135 14476 39910 12596 49478 61406 18873 77839 61978  
06395 27815 81372 62601 30101 72503 28873 72503 88778 73267  
42429 38487 59632 97878 66407 24834 97044 57969 98700 48398  
07142 56371 66073 19678 83678 61363 68195 30760 98598 26590  
04840 50912 79921 57664 48206 49091 71786 54380 14190 98177  
04340 98925 34512 28384 26175 38757 94996 02508 16520 24907  
19343 75084 54185 54032 68598 56179 00066 74411 88603 42870  
14035 37578 98499 15117 97853 00932 11572 54082 30030 34313  
26680 98805 44699 86458 06875 21917 15039 53890 25306 17600  
91711 11796 07179 67605 80874 16232 04753 99796 12363 71819  
86873 38271 73048 20988 02760 39980 40989 56989 84003 16354  
89602 12805 04455

### 14958/13958/12158 kHz, 08-07, 1100/1120/1140 UTC

05482 00001 00000 10140

### 14958/13958/12158 kHz, 11-07, 1100/1120/1140 UTC

05392 00001 00000 10140

**14958/13958/12158 kHz, 15-07, 1100/1120/1140 UTC**

06262 00260 76279 29153 19069 93649 86327 82535 13755 88519  
49513 17870 77684 95258 75264 44918 80531 34233 26216 21147  
81672 69913 27168 92871 41624 88590 92799 58180 02270 02141  
80052 90694 77296 00322 64931 45856 42679 26361 24732 63257  
43278 64250 28179 04968 94567 72356 01467 61348 46691 53248  
14067 81938 54099 89025 33122 39862 05920 93238 95737 87522  
53052 03026 44177 26168 45776 13891 44118 63576 56209 19506  
26618 84473 21865 31999 98267 87264 89148 29937 03016 15218  
96127 87232 67325 64258 56902 14325 82453 81956 39959 45331  
83424 93185 29899 99939 82913 85811 75431 26006 24385 70552  
36951 36666 26387 44655 51837 13886 54082 47045 41442 86551  
91460 96137 81794 92146 92049 04406 25012 33729 42962 81448  
54601 88015 16708 55575 26999 64741 47493 79132 18445 51330  
29619 22393 06897 28390 62799 47176 94287 36964 31913 06239  
34077 03554 94910 45613 49007 10613 58677 04651 55711 60251  
44566 61287 12255 40975 10269 61586 51083 33583 21219 78644  
57403 11303 04931 95952 17643 84861 26007 12640 13393 14164  
13942 13370 00933 61512 20667 98110 99793 95843 73658 25718  
51256 70354 05700 61274 41466 22939 53287 89245 80249 86366  
09838 63849 64876 13364 81388 26868 46117 42925 79701 53952  
88491 09208 30873 04447 15562 50370 24673 97445 42470 36708  
76744 81416 33607 65750 71620 00318 73409 23570 22351 09426  
39370 49824 43778 21243 53928 37177 44717 61338 58273 94578  
27647 53124 74232 29904 74969 56650 52102 63712 62561 23660  
67047 93210 54878 03425 54458 15176 15763 42951 88628 03384  
57055 94096 04067 77308 53779 25879 23023 45986 21703 05632  
83602 22596 53310

**14958/13958/12158 kHz, 23-07, 1100/1120/1140 UTC**

03798 00001 00000 10140

**14958/13958/12158 kHz, 25-07, 1100/1120/1140 UTC**

09572 00001 00000 10140

**14958/13958/12158 kHz, 29-07, 1100/1120/1140 UTC**

01028 00389 91151 27005 35572 87902 45406 55796 85233 02357  
48498 37377 80384 15732 49510 77785 53793 75493 17182 14386  
20635 96271 92819 72414 16267 99272 23165 45707 69185 39181  
59129 98113 10831 69461 15272 33607 37841 31561 07515 18477  
49826 30795 29065 17822 14224 45920 02779 96914 85861 15464  
74551 52880 44152 16960 01829 69377 04886 47737 85965 02455  
20572 00131 75044 06645 71270 25054 01985 60720 54850 62160  
81735 85000 92172 76638 16409 26139 43246 93372 69971 11764  
96870 76721 05856 80087 55159 37289 00617 10450 04417 90929  
71545 67114 22290 85616 90599 77276 67652 12341 15590 17428  
74557 58919 86323 63760 41675 85923 36115 91533 42831 79565  
72966 44712 52763 81019 91969 78374 58703 69795 88586 56978  
17181 15645 59790 78321 99986 35512 76641 01170 87164 73676  
75409 80160 01274 03723 52672 19268 55799 77280 12458 91456  
38645 73709 17608 67645 08211 44232 41138 14466 19650 45362  
15676 72298 66826 20077 87956 56279 78783 61673 33158 65243  
81054 23777 48840 78026 15151 60726 42396 81332 87811 49362  
14641 84541 14172 02975 95917 27320 12873 82154 91856 41650  
59862 80200 44109 05294 36580 81278 85385 37645 87668 08909  
18885 24503 51638 97980 78611 78865 72028 40131 90402 76529  
56045 95464 56512 59251 86352 03130 77199 79952 78174 66692  
07506 77605 90429 17006 17808 70841 82816 40578 56921 93143  
78659 52385 26346 41410 49621 15972 98910 40971 55315 72636  
13809 87629 74988 13954 61609 40140 33747 41452 16928 40455  
24198 57257 68020 17645 73736 00230 12135 28054 11900 94962  
88223 15451 57353 82668 14191 61722 64789 00693 40701 70923  
43095 12423 57677 29309 18658 80242 52806 80180 64107 43811

50319 13576 26916 65107 91158 88916 80033 30387 97376 00918  
48686 44577 58127 35868 58402 97988 86808 88571 78116 87403  
55496 76924 83811 29787 36789 03846 57714 65143 42598 28258  
37033 86939 74007 22854 81425 87915 26185 72902 50462 34064  
41301 90799 97718 13460 91959 85303 46440 31863 05256 28114  
67153 74091 01450 32344 38908 47737 34901 28082 69772 70967  
74480 08956 17065 53742 13550 82093 53268 05403 29514 40905  
51293 70865 33710 19177 25601 32551 94551 25167 05001 01668  
44059 64680 36574 38325 28161 64429 55743 39616 31665 04870  
89754 49495 61207 01653 65352 70577 20642 61588 18293 82601  
04222 48880 31353 66793 29371 84657 39088 61236 53523 62439  
48409 65500 64801 42278 62833 00895 86419 83223 53519 86244  
33609 43424

|                                           |
|-------------------------------------------|
| 18235/17437/16179 kHz, 1700/1720/1740 UTC |
|-------------------------------------------|

**18235/17437/16179 kHz, 01-07/03-07, 1700/1720/1740 UTC**

09049 00190 39352 32142 54446 05186 18390 95459 87135 44413  
58648 24090 14296 70599 97243 88921 09718 28641 98188 21531  
11449 13579 08665 60610 45459 43783 58489 39385 93062 89102  
17243 10106 68804 18271 73053 27234 84615 40730 28425 80160  
89277 55502 76044 76571 14525 89911 78921 96591 70585 11300  
70663 44766 73896 29390 44353 18656 49849 35183 91134 20066  
21273 28633 87170 73670 27110 89685 64164 94456 93662 94717  
61146 31075 12383 90324 51680 46006 48964 45202 13769 33355  
31374 85390 93364 56761 38455 48776 26151 20129 73785 11803  
53724 25143 23007 08452 17622 27345 13372 23612 09136 02004  
01433 29493 87848 77779 84622 19710 23349 16802 01151 54618  
06814 30748 78848 45686 82078 28905 34111 42546 48466 15323  
38155 48808 68048 24321 98625 70412 10027 49408 69022 92439  
38255 65009 53044 83530 44535 69127 43899 43872 11764 39271  
47376 35957 47905 01039 19130 79595 01050 92752 74645 40835  
21457 83107 71467 34675 40823 72081 98758 90582 73352 07649  
36227 83910 23248 43339 57874 90058 37216 36929 13180 44038  
97141 37394 11890 92956 84007 41728 11925 70474 11656 12656  
17580 91162 27095 48424 21158 76715 98284 79889 81370 57000  
83936 28144 53677

**18235/17437/16179 kHz, 08-07, 1700/1720/1740 UTC**

08811 00001 00000 35661

**18235/17437/16179 kHz, 10-07, 1700/1720/1740 UTC**

09514 00001 00000 35662

**18235/17437/16179 kHz, 15-07/17-07, 1700/1720/1740 UTC**

00410 00188 06271 34119 45948 90910 90565 89117 79342 86020  
74953 73534 56020 65887 17924 75472 36091 91465 46740 84965  
00669 80737 71145 96219 22293 89173 85391 92173 79504 37541  
67244 15971 86832 26022 15117 55862 71740 17260 62616 76611  
21341 22216 04470 72079 07305 63590 86903 31393 30045 25731  
75656 60647 04190 65866 91389 63302 35358 03868 67137 83289  
71311 08239 62822 79369 65966 66416 57087 29209 61334 99197  
34047 41356 83294 21066 11820 47330 52715 45858 38464 52885  
78033 32542 22562 11436 46433 57665 46808 16516 13365 27946  
55044 88992 89247 94303 20008 78530 28644 80068 19794 76410  
98235 21224 02187 46278 44482 56008 04564 57906 70966 53787  
95705 45114 15342 58513 09011 15102 74151 08358 96170 21251  
83899 73485 69601 67689 82847 83787 90885 48493 57899 35847  
38659 88808 75684 85614 77254 47664 88533 30684 65286 59377  
96224 83923 73494 32781 00574 17301 19377 47709 20508 90048  
22142 14106 47312 62282 97429 19700 98778 88961 23551 72174  
86665 82483 78023 21647 74518 87014 33366 76414 46572 00113  
35310 23016 13025 84190 78445 72584 97861 63728 84861 17579

05822 72213 09137 27031 19432 53663 14761 19341 75794 65225  
03660

**18235/17437/16179 kHz, 22-07, 1700/1720/1740 UTC**

05123 00001 00000 33257

**18235/17437/16179 kHz, 24-07, 1700/1720/1740 UTC**

09223 00001 00000 33663

**18235/17437/16179 kHz, 29-07/31-07, 1700/1720/1740 UTC**

02558 00195 06248 27386 53752 32494 77858 29701 81702 92726  
01279 69523 52074 84129 74712 11930 26366 72620 00208 52676  
51808 14708 21381 07272 84549 96302 66968 63047 84987 66366  
86241 83971 34614 40839 01129 23498 01492 36477 56201 63618  
82561 95885 25392 16256 19500 10370 34547 85497 07636 53078  
38977 72148 39665 73248 72416 95461 91058 64361 92110 97264  
97081 33022 96014 44502 70882 03904 09592 18466 08564 44972  
89338 43283 31473 94656 36722 83918 71672 59030 23795 48371  
37452 22363 47709 09423 94040 96643 13945 15110 29219 93276  
70659 58383 01358 27901 79306 61657 30228 80267 21007 72542  
10878 44365 09462 90174 17063 30245 37927 43696 96617 46876  
39970 65901 43732 93279 88336 41613 51300 81816 39192 37478  
15625 61373 62367 96143 29233 70316 43941 45616 30211 78532  
48049 72737 09047 46238 97153 02773 33055 17654 20228 96316  
77596 14015 45393 25205 91896 16659 17847 89510 95955 62078  
93978 61910 71885 66053 46423 37807 63843 36220 04459 59444  
16036 30567 24608 03362 19463 83702 69113 50046 11385 58033  
94190 37737 71286 44871 77883 20256 47127 42447 24818 30188  
30546 69441 21667 10201 91564 00497 52719 48640 97980 96692  
71891 60404 84726 03386 49127 90874 44972 47447

|                                           |
|-------------------------------------------|
| 12148/13448/13948 kHz, 0700/0720/0740 UTC |
|-------------------------------------------|

**12148/13448/13948 kHz, 02-07/07-07/09-07, 0700/0720/0740 UTC**

01512 00630 72188 20643 12529 22335 78305 55084 11026 51802  
30075 79053 43818 86576 52244 99508 16401 87478 62325 24845  
20985 50400 87724 84014 15096 88248 44750 25662 16748 65749  
64492 32176 96461 06760 45626 37622 12348 29152 93845 31937  
76712 64309 15599 07411 65547 40537 47621 52125 86836 95346  
06962 74741 12135 51056 51678 07683 64138 41201 25549 05707  
94008 74079 01189 30236 91309 07824 65527 17798 61357 43806  
06454 33713 88466 92869 62093 78204 54453 66707 11295 32915  
53242 03150 31038 97986 05982 30900 03287 33766 06785 01117  
70448 40887 04909 84310 60541 02113 87506 32154 55219 40239  
79654 47504 80018 84357 20090 72404 76290 34020 25226 72689  
13779 62102 91575 34248 20844 02363 23868 90015 98066 46382  
47301 13257 50912 77479 74330 85260 36478 41803 20413 78596  
55153 21921 41126 38239 03786 11089 35377 47293 24763 33767  
62198 01647 89738 79261 24902 35913 80526 66207 17990 46442  
74007 90714 39994 46987 49751 75878 36485 56309 13000 57018  
96090 85171 72935 68391 96459 64297 00654 91752 66791 50203  
38576 50858 01574 91855 37653 89851 60823 65713 85831 31252  
93890 01608 42345 43382 72335 93861 18599 66036 98865 29397  
61430 82129 82222 57106 83382 79595 50528 02799 88290 02966  
92397 27891 99501 79080 87603 46441 67991 19196 78849 38566  
28889 94798 12156 16021 14776 20781 63597 28835 05890 06915  
71249 40150 63676 31786 82511 86629 13753 45321 61260 19175  
12133 85328 18785 02791 39211 34106 06992 36172 46162 25599  
23671 97611 05453 17207 42684 32713 74539 72824 58623 92307  
02399 02474 49340 61028 75740 58284 94679 76340 03048 86732  
72301 75953 10634 02991 99116 08873 17744 21004 67949 32984  
36863 18372 90748 38028 49208 31477 51808 52055 78798 08387  
27970 02582 32043 00871 33843 22433 17036 60715 98076 58050

54148 35893 96123 64493 19323 67062 52887 12577 16145 26477  
08115 99440 34467 89154 09967 33060 58166 71006 95016 85528  
47477 44595 41508 72621 37752 09624 78064 71341 99435 27090  
48545 02594 00302 70973 16852 95974 97156 13856 35486 93848  
57947 51990 37548 29361 91814 57168 67960 80140 23967 63275  
54910 34472 80556 48284 96390 47240 12189 69847 04318 93074  
52149 13004 64056 90201 18086 64354 71512 88905 96252 78681  
72119 73403 30665 06987 63610 65910 68193 85420 70665 48060  
92255 63823 68432 22410 01143 41732 74559 57260 65101 28092  
72345 94316 79868 36629 50677 64195 71198 56104 90558 30423  
50627 83713 94638 04672 04999 09466 82636 39058 95521 75109  
61028 45923 07976 39961 67337 55301 17806 60762 73387 64504  
68191 44745 32147 37236 75865 21380 64630 09293 90455 46390  
37872 48151 86891 70615 20316 10083 39255 36775 94704 23660  
81054 99151 27206 13710 89661 55659 17793 03241 10751 22113  
90426 35124 84715 53777 78712 50581 63012 93594 80446 05621  
33313 40396 96409 34610 87072 31231 42851 96119 83275 69661  
35801 17748 13646 92704 39546 56577 51669 62267 29105 45543  
20191 33753 25120 88317 07176 13490 53210 23102 53345 03436  
03486 87267 15956 51547 45437 73196 77939 38755 26384 37127  
14035 19119 26390 30399 68221 40602 63822 28002 26614 20816  
67178 88156 23571 88362 62142 02756 96792 42378 29380 86449  
68136 32081 41042 92497 62475 82554 90386 79325 68703 90266  
55612 57417 44744 90835 43391 81360 14277 06029 24748 29243  
95449 03647 61662 36688 30060 15429 71657 90381 40929 44560  
36888 77677 01158 54262 11724 76779 61188 23778 00886 32884  
85517 22070 85413 12789 95471 98849 59316 92001 77869 32410  
71500 09651 84984 30098 91273 13830 85324 97911 40608 21531  
41067 00198 89854 36369 50282 62741 69593 89230 81277 86031  
79991 17892 29278 53763 58701 25580 79886 95414 26765 86079  
38056 41304 66530 13095 05720 60824 98423 81330 77752 26825  
48572 58996 87241 53174 97695 35299 74999 65123 33608 12210  
94038 30846 14875 49261 30531 64541 66352 98145 23366 34285  
20487 94146 20834 27522 81646 68514 39908 63931 25986 25621  
56746 16003 70111

**12148/13448/13948 kHz, 14-07/16-07/21-07/23-07, 0700/0720/0740 UTC**

07253 00227 72385 37434 90346 12875 08190 09713 59956 93636  
94460 83409 26813 85394 47140 05675 69570 87328 25989 65190  
83218 40645 52963 54210 94178 88472 75598 85991 16724 42087  
02970 43531 30972 92688 68976 62549 49558 99988 29910 60605  
68292 55385 66211 27859 81590 27846 67191 61113 50343 91081  
67256 47726 37980 77117 97999 13780 59597 41600 49534 17182  
65347 44957 59176 89369 50092 89710 33887 51279 62758 65656  
68057 99433 65075 44900 10655 14940 96851 69318 84172 00479  
71843 47517 03923 59608 80082 68627 71792 52719 50133 19223  
55420 04234 11787 97243 10678 46091 77118 90646 95127 72155  
50846 69254 79860 62244 29023 49217 42144 59701 79814 35774  
90426 58722 83247 00821 24496 85527 74508 28860 98312 30025  
23556 07168 50463 39861 98840 37558 93213 50257 53074 89121  
09119 63261 80558 34059 63486 22043 49466 53840 96220 53532  
66912 03386 39305 21414 86448 62857 22632 14426 96995 41596  
89913 87499 15841 38135 89341 97827 07618 91711 11568 64589  
31799 40182 75756 30628 08745 94023 43325 20827 33572 06225  
19222 69430 79966 56416 69765 74867 75517 26828 60494 95668  
99022 30777 22314 74767 38153 16617 93063 50924 44976 98081  
40308 75488 45040 10325 62821 25718 95100 64786 85431 34614  
86357 36487 37614 49276 36934 94231 76667 83028 87113 10425  
40908 92189 71714 87761 92725 31631 33875 23349 71857 53360  
22955 82433 43643 83601 30615 35836 72171 18133 88681 21430

**12148/13448/13948 kHz, 28-07, 0700/0720/0740 UTC**

07481 00001 00000 33667

**12148/13448/13948 kHz, 30-07, 0700/0720/0740 UTC**  
06149 00001 00000 36262

|                                           |
|-------------------------------------------|
| 17435/16235/14935 kHz, 1100/1120/1150 UTC |
|-------------------------------------------|

**17435/16235/14935 kHz, 02-07, 1100/1120/1150 UTC**  
08295 00001 00000 34671

**17435/16235/14935 kHz, 03-07, 1100/1120/1150 UTC**  
08385 00000 00000 34260

**17435/16235/14935 kHz, 09-07/10-07, 1100/1120/1150 UTC**  
02576 00358 23473 92058 45273 08074 45953 38413 55637 01525  
96999 21814 40124 27879 36193 82934 03424 18568 41909 67548  
96637 31321 48263 41147 95704 06740 20343 48897 59142 10870  
78366 89531 12803 52387 94064 83971 61547 28281 70173 20731  
34319 08275 68928 73153 25282 02765 76342 13185 19052 82302  
80516 57848 46880 39278 35335 41093 17025 39683 99447 74225  
47201 76600 16719 76422 14756 98424 25408 69218 54328 18921  
13014 66294 13564 21091 81413 71661 47698 69403 52455 96809  
69985 58399 57975 80753 59922 15838 71399 18695 34485 83392  
12600 06324 88051 78975 14308 06701 82594 08654 28189 52041  
05845 18677 19216 84020 91978 99820 05968 84650 82768 08042  
06567 12884 50188 97770 83457 70061 21440 16262 44295 99708  
78624 80957 79001 93850 10431 41692 53857 50846 32765 75113  
08064 81787 98478 47216 24936 36443 46419 43967 18259 52911  
40676 19924 64158 16515 92301 32810 24991 76634 53439 66334  
25709 43506 22579 59601 80101 91853 84122 97846 70962 77088  
64936 90114 01177 22587 53633 28589 59466 92614 91419 73459  
60218 99728 41176 25140 89243 06229 82712 85093 70984 96931  
35309 21315 03480 41367 09409 82038 43939 98128 87221 51156  
31206 72352 60408 51165 39334 00517 62110 41670 51041 62851  
42743 86711 90859 33856 33975 60869 45877 98612 46714 31846  
14995 27982 43871 53781 36713 83809 22329 71108 24824 13784  
78267 32257 65623 78615 41273 79357 80225 01656 56906 08593  
77465 19199 07112 24705 98032 94903 04547 45380 31343 00741  
58466 83863 93351 10985 46069 81359 28801 72672 21409 24330  
62644 74651 34345 47488 27870 09877 21129 52610 26122 31184  
47633 07446 90556 57558 08566 12605 28319 37923 25931 48505  
27471 59344 62494 80264 02184 79806 68575 04148 01698 26189  
79765 19414 82066 22628 82913 94817 29324 30261 65284 16509  
03211 27369 73609 65909 13505 81244 95598 37765 89137 61716  
52105 28944 91659 29727 12874 56579 09950 86841 83019 40681  
19893 48316 24922 31031 24116 77431 78143 14920 69309 98048  
62085 80640 91873 59576 78226 84267 48106 53844 24723 99663  
44452 37618 75489 91198 46840 20684 86275 42895 31472 18339  
78648 54710 95034 96648 98651 32715 84190 17128 10203 79655  
49279 35513 73106 50836 09498 23232 89552 57564 72999 81939  
52147

**17435/16235/14935 kHz, 16-07, 1100/1120/1150 UTC**  
03925 00001 00000 40255

**17435/16235/14935 kHz, 17-07, 1100/1120/1150 UTC**  
02760 00001 00000 34660

**17435/16235/14935 kHz, 23-07/24-07, 1100/1120/1150 UTC**  
09539 00654 91618 96444 29396 38409 91747 47408 69762 28950  
70888 99029 16227 35250 16000 38551 55657 44718 98359 47997  
95058 07100 54018 21936 80916 42655 73545 44052 06220 62426  
64479 78953 53267 45155 12314 09889 11733 60171 73080 14233  
84880 11830 59576 08780 90708 61853 32533 57554 68325 73234

92767 83146 23350 62414 77447 27721 33760 86638 43576 12723  
32912 39080 11144 40337 42235 90970 31253 20910 69851 97098  
62788 60739 54337 18463 84729 34542 79159 02615 27161 16578  
77000 83431 10616 82606 83232 12858 63924 28972 30372 39436  
15424 23607 41822 89505 85067 40519 46488 82535 88981 07739  
38045 04766 91417 67096 39751 09693 02020 68007 11232 49121  
37463 41371 29562 87391 44323 84142 85846 97267 76576 14910  
80767 04995 02947 26841 10171 34638 20793 36678 64362 10212  
13430 83720 37180 47145 53823 89694 55296 34492 67029 28972  
90861 34796 66577 55293 33607 91287 20225 86249 23091 40217  
88919 81014 54759 18138 54925 93027 00666 41465 82803 83913  
05873 91331 93523 78195 89887 77499 16595 28916 93239 36876  
40362 90148 10640 26068 28163 86518 71840 06772 28130 60184  
78105 34902 87760 08064 51875 58664 28398 54183 13254 21010  
66912 45318 22420 35434 45429 84021 74919 29577 32259 22471  
60904 92816 19920 54613 75845 68959 28921 82046 62254 30360  
37589 33145 83072 91150 21480 40102 59702 59193 81611 23471  
85108 59058 07532 04296 50309 92494 91628 81398 61615 57870  
42397 76640 63337 61615 62877 97932 83767 22792 91595 52765  
87806 73281 93963 10451 61828 29110 29509 56268 76756 50541  
19483 78186 40182 61767 93091 69384 05565 80562 75852 69493  
34870 57359 13880 84803 33652 49155 12825 54439 57829 61278  
61152 36977 91281 17786 76071 30400 44514 72790 98239 56783  
68457 76486 94254 85556 03088 89239 71590 26061 70655 17276  
96991 84164 56898 02502 88172 82551 05960 16109 27379 19310  
52922 34510 63738 51137 56699 31668 35880 83183 10268 08328  
75739 71150 43265 30891 03535 00505 74324 45952 58174 57822  
91161 36747 66437 43616 38088 62609 51231 98411 98380 14244  
66785 40622 63338 29051 99818 96163 14288 09709 06108 52573  
99908 98233 82719 90793 57334 76339 14073 01262 93760 46545  
08359 34417 25125 30888 04602 74711 87533 30836 57601 26311  
70649 82895 97585 92571 00883 38159 80799 54291 95025 58258  
92086 09422 30512 71010 02193 15683 01670 70471 01155 84181  
13842 94456 22484 73103 45574 60667 10029 14205 37021 54738  
49324 23482 81899 73309 77804 92792 83828 73232 18090 49105  
86147 36648 09800 66279 95488 36300 48072 93494 13973 33595  
06957 97296 60732 77603 98448 73429 83632 72272 95084 71292  
62336 23866 47474 50340 88577 92006 94543 86794 39531 21220  
86985 98527 16320 54065 05805 94852 75126 44275 50648 14808  
52300 12535 78643 04080 53619 71264 44546 80684 80034 01761  
93449 04582 15732 88541 98285 83815 68751 77895 09224 88252  
76403 08591 63837 70317 36303 49551 39550 19865 49599 54958  
39090 83078 57168 48134 56588 12976 55376 57439 79128 49014  
28001 77923 52946 05765 72597 50454 00909 82993 05264 25040  
20792 32480 66149 33790 36601 32550 30437 37082 95925 12547  
08005 96026 32224 86707 36418 52181 98983 99708 16824 36065  
13880 29736 31860 82366 39085 57933 79777 01597 62498 70462  
20448 45289 80520 45075 36118 45137 14764 79578 65126 07664  
60118 33693 08340 78997 81855 54769 74218 26342 73821 63301  
72575 96115 12233 75498 79346 49864 21129 26482 28989 37324  
58511 90832 11075 05694 17556 88880 51497 22448 65369 20203  
44051 96032 03412 70343 89769 82766 07238 65341 12001 01970  
59915 98928 60802 76167 63735 78711 66577 51320 32700 87958  
35390 38835 88310 16859 44101 94853 11841 12222 11090 10749  
01722 61253 66261 06868 38714 63761 42705 59286 11264 64118  
50982 23747 19474 58953 37714 01257 84006 01173 30662 48081  
56201 83459 71723 26410 43717 59552 76257 81510 21556 48982  
34549 21902 29342 46837 87848 11667 12212 40997 65003 25048  
56088 07043 24061 37171 96534 88583 26631 06988 62901 64196  
94228 51194 64773 41113 80394 31512 70015 33778 98979 59486  
11992 30162 00085 74514 17352 66203 67315

**17435/16235/14935 kHz, 30-07/31-07, 1100/1120/1150 UTC**

03062 00537 86153 41058 16381 85545 99738 38682 25263 27317  
99234 71553 07273 97255 21428 31330 92855 83055 08388 94709  
79882 77867 21391 73914 98489 77027 38606 49722 49371 03014  
80068 28349 13067 71331 98045 26861 65946 70043 36632 29315  
18688 87739 00132 71659 09851 30082 46109 97944 98632 17111  
44463 61046 60682 53279 95817 32669 40729 38074 97693 27651  
18597 07787 06357 10940 08066 97117 43905 35369 68300 31183  
27703 67083 81461 77326 57919 41908 92144 09964 31125 50360  
42853 16219 53908 90745 52945 50236 31040 38297 88209 16209  
30317 91412 73982 54784 03526 00205 21319 22924 04602 79487  
23653 43900 50999 16521 74429 15798 66259 26831 99417 73158  
89580 96289 12066 83267 57395 70703 66333 78210 83511 02171  
87001 64658 74142 23155 46350 95747 36777 46427 19963 63027  
46921 16880 48576 25868 57173 52655 68258 40631 35473 40129  
37440 77015 15663 28416 76306 68681 29495 85695 34070 11853  
59141 93148 32108 73776 29786 25133 45413 03362 62796 57865  
40938 87569 07174 50225 59442 75876 42955 92066 84095 01526  
84368 08237 04496 92546 01460 28360 75575 75195 06575 80865  
62665 41446 46327 02703 41308 56809 82755 68043 33850 43401  
10824 64535 19768 29366 56612 09766 57543 38801 08504 93765  
68299 11982 29136 68515 03049 37844 73745 12870 70000 75986  
92752 49249 60211 58540 05242 84134 68192 71187 23294 21718  
94342 76213 95826 98652 82908 08739 84286 32777 60928 27343  
70444 20596 09621 81832 42863 44910 64626 07543 39489 06465  
23583 00129 19577 94516 45932 66837 79299 96377 94486 13190  
55165 90240 42113 14337 75510 91233 95482 30180 24576 75019  
53095 66818 15257 48649 85450 10373 07894 59350 16869 86028  
08577 28204 97790 80414 45015 55698 99029 27148 60403 99821  
82480 16308 62602 01860 19230 28963 10725 95907 12581 16316  
31011 41373 28284 40620 03117 44914 56636 78401 89321 76439  
06961 10388 41577 34725 84662 12023 66538 24164 92427 35451  
97674 68276 83814 97990 55306 07673 40814 53333 84508 52404  
58810 58849 86993 72158 71116 64632 10084 96632 67250 81045  
89904 99061 71667 16844 92076 31444 41128 31716 41701 43521  
75948 16296 27013 31567 57126 13701 27164 04586 22039 49229  
31657 30830 36453 08704 26995 36401 67836 56793 13488 48896  
73437 21337 72618 67416 21596 83735 49430 18336 77718 88550  
50405 44637 90179 13983 38455 26932 61565 85529 80221 67388  
64299 47758 75507 26944 32525 38829 41801 90469 87639 20939  
77012 51956 89799 20333 19777 49476 47859 11425 78671 99483  
80697 64820 95583 48065 48648 77025 31130 87845 83462 06690  
28984 96198 40016 78498 58106 42021 76166 17825 52077 77654  
25640 41635 83288 90011 74469 74922 33020 10950 15024 54234  
25338 47151 33517 60390 23941 47841 34778 72042 62210 99278  
30361 71086 41593 49524 82453 05804 63272 54028 91590 83911  
60877 30767 07662 78750 62283 23216 20369 06497 12047 49869  
67448 96253 99419 17632 60180 89281 72151 46896 76431 15011  
95558 02416 37157 83352 75460 21578 48813 27160 61235 40612  
66311 56639 86458 73271 59912 02826 01710 68162 60620 40582  
01108 26792 84590 64991 12184 96903 68061 51103 01908 39259  
38273 77019 18044 60414 67547 13103 40141 90811 57594 43864  
25211 55923 13792 97324 98139 89428 39731 13980 87769 04483  
88509 10666 26183 02829 83979 06676 76792 22536 76277 15662  
21470 51870 16703 87625 55814 81872 18130 22246 71765 11164

|                                           |
|-------------------------------------------|
| 17474/16274/14574 kHz, 1800/1820/1840 UTC |
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**17474/16274/14574 kHz, 02-07/04-07, 1800/1820/1840 UTC**

04515 00145 63228 69884 16184 39940 55190 31608 19986 69321  
24933 07821 70587 39813 73659 95028 90330 14047 93563 04828  
17774 08673 27938 12623 51390 72408 12638 22431 08781 33455  
09102 45275 05062 83661 84706 71177 66828 46080 43303 13173

67653 88175 01309 19068 96053 03944 01793 12464 76329 35394  
60788 21541 19482 36950 48610 74933 62998 78809 45800 94857  
46081 12285 37772 52642 95999 57288 68773 24342 52616 26112  
21142 40332 19167 46801 60079 70542 35102 15984 78296 68664  
65435 73311 78618 67618 47491 38876 20021 14157 20466 85266  
52261 75593 45748 08100 19215 21070 56162 60741 74258 24795  
66337 27365 08180 03401 87047 54625 19113 10764 17066 24481  
79667 07481 14571 13271 05086 16733 13223 63176 39696 49908  
42732 44278 18488 43845 36512 35640 08873 91691 60332 73152  
70628 45562 30240 02459 88949 81083 47389 37285 43634 33149  
21659 06151 73725 86776 16565 02950 29498 27131

**17474/16274/14574 kHz, 09-07/11-07, 1800/1820/1840 UTC**

00111 00187 11920 05933 58232 23023 02422 61667 26686 72858  
32912 23833 96030 66819 10660 54318 54170 32980 25148 44989  
78482 59606 41350 97123 84996 44271 65917 08468 54129 09864  
20770 13272 55230 17492 69042 29936 68201 07796 78748 56418  
91475 14421 14080 64023 59362 90801 03915 56713 87113 22507  
45166 13469 10108 29676 78009 08732 57655 83264 50165 89375  
60610 80400 55335 46294 34139 58561 89334 38516 74397 22506  
96245 59849 01887 77736 95761 48540 49976 83247 57121 21978  
93769 44648 53995 09088 17879 15899 87400 09259 66905 43384  
23608 28705 43653 21933 05508 71497 78945 78152 66839 17067  
81809 51533 39799 35008 46862 27279 27168 06592 93429 23240  
75345 75951 41895 41998 49559 26276 73988 44839 32843 10274  
24622 75824 24721 24204 20095 29475 26202 79643 97631 74379  
00054 70160 16502 36287 43808 20391 43286 94917 20502 20240  
28956 21579 88490 41847 53402 53668 10236 44923 61294 26356  
77856 30325 25812 50153 53023 22946 93030 24117 86163 29049  
05689 12298 79236 06517 81025 33137 68917 21304 14670 51612  
02444 42792 31093 66569 39459 57154 14991 47916 46816 24969  
52633 26468 64989 15054 54200 99316 29789 75688 84645 67420

**17474/16274/14574 kHz, 16-07/18-07, 1800/1820/1840 UTC**

00833 00203 02604 47853 95212 11054 18659 55808 09217 31237  
31103 38971 20530 50399 80004 62237 57810 74843 45656 52255  
00055 57401 91444 73447 03136 84816 37041 43719 93910 65911  
09968 92191 94307 61678 77833 21132 08239 80659 23403 09982  
17042 38729 20187 75107 92044 93143 25229 98433 21045 68856  
01911 96446 26762 08924 08716 92931 05741 68943 23327 30807  
79206 64615 51467 32840 71392 29967 54101 94171 85424 49566  
37188 32809 56861 76820 58976 19296 28281 60900 94826 51832  
58690 53488 77710 77924 81702 27708 71232 13576 03076 80122  
56810 43165 78606 50919 83658 59364 59065 17124 86394 37660  
29683 46108 11702 58738 19997 16469 94526 47590 38907 86357  
12064 27023 83861 21837 38116 39134 88075 79553 63519 55890  
86350 70508 28527 01485 42780 71685 82813 41643 75832 79048  
92205 40202 58263 04335 88342 33602 64679 43271 43795 87349  
11784 56239 60127 50519 64211 96694 21533 69421 89335 49852  
15756 15607 54130 73657 23019 97364 60165 95627 66815 11759  
15713 99243 86102 79440 48190 29448 87445 31468 82253 98521  
83342 81408 60303 33668 61169 15218 28378 87471 82909 95795  
25369 13988 33345 00981 47016 33888 47621 88479 14296 22974  
96190 64843 28235 16326 27315 26729 84456 12103 63855 36185  
02390 07553 74691 41696 63814 41225

**17474/16274/14574 kHz, 23-07/25-07, 1800/1820/1840 UTC**

01099 00301 45743 12416 74302 99610 85989 84441 03036 80437  
51380 58599 77838 99442 77031 15834 67165 18962 01409 45584  
14117 18993 14268 36610 43312 98941 88063 57332 23587 32408  
73384 09918 09668 68111 68988 22408 56353 50746 85944 45447  
18418 62106 96124 85949 16729 57298 86026 59239 50200 68880  
47247 91051 27537 87666 86991 48933 84870 51955 54209 65527

96783 02691 81843 59283 21978 45334 80168 54568 30611 70262  
33417 56550 06044 25923 38959 66019 21964 43811 77153 00478  
25667 26999 81624 47926 42668 89002 28278 65230 37328 71550  
63295 12343 49974 79889 47724 29437 89787 67490 33127 06528  
29148 29487 18998 61462 25460 57816 40939 58217 44575 01211  
85308 24898 82310 68804 75374 73720 40064 19134 55210 09461  
67298 96949 96093 12472 59641 53224 38086 27370 67788 76832  
19706 93128 08031 44539 77368 77344 53821 76620 32628 60645  
33257 61918 10391 71792 86116 96879 96894 08117 58836 56951  
59382 92659 71946 74720 53835 93810 78888 75637 83858 28035  
88719 86631 95265 95951 06366 23427 06027 50474 03033 35243  
39671 57189 47286 77450 24854 31162 38458 36644 29431 47779  
62064 23897 71811 25000 06444 44573 48813 55753 05008 85482  
14290 96776 10069 98216 29739 83573 55571 03218 26434 28045  
59084 86764 94572 52802 10559 45495 61263 27369 31775 65832  
37298 19802 78038 93430 80512 50022 38202 32702 60036 39824  
55096 24161 33873 43073 06455 48597 47297 98364 46875 82157  
28293 79652 71318 46373 98936 13824 53102 52255 57183 42305  
18860 15319 72945 87228 76144 21419 73248 28630 72604 27222  
51341 60373 20520 02777 40734 20152 96934 85710 27832 52799  
28707 38290 98208 21609 63863 03790 58910 91666 21970 45457  
73867 16377 74295 82192 50691 20048 28946 60194 46187 45468  
68347 75292 89920 01532 13676 64164 11021 10335 09977 13979  
47916 76704 44914 33897 80280 12737 80899 50911 39317 53926  
41373 87208 51515 22115

**17474/16274/14574 kHz, 30-07, 1800/1820/1840 UTC**

00815 00098 28568 68984 11171 67086 50563 81563 49181 94784  
20482 27627 18613 50176 68380 22984 04770 83573 51093 38820  
41076 63357 76626 26841 42607 08771 57188 00296 04166 36041  
04761 78813 48063 17498 50421 83278 16792 22771 66500 64097  
61873 90174 18220 29411 00662 40651 13065 40522 42867 35093  
42328 30859 01380 72849 09703 22791 24883 81690 99589 06817  
80115 25829 02393 69676 57234 43064 28389 19329 99980 85256  
48730 64588 59016 05385 11494 64631 46339 30016 87750 46263  
11009 93548 22601 95852 60395 20692 85553 73248 38093 65952  
57922 51072 06535 06158 99591 12256 85755 42977 90862 24046  
27624

|                                           |
|-------------------------------------------|
| 18371/17457/16279 kHz, 0900/0920/0940 UTC |
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**18371/17457/16279 kHz, 03-07/05-07, 0900/0920/0940 UTC**

01323 00448 46382 24784 92174 64126 70088 12833 59789 48998  
86136 84528 03964 00208 97484 49662 19245 38560 66078 11620  
63805 20470 39324 38254 34598 20671 44562 98840 75774 77554  
73215 72037 71929 22427 59059 56805 19637 29147 55058 03214  
82464 04016 76597 52103 49042 31726 92063 40257 18115 84465  
73767 29933 26409 28459 31700 67036 46644 58169 86462 25428  
56157 88497 24784 99527 34678 15386 50543 31305 21854 24344  
31466 08044 11006 42228 37416 69315 98408 18401 66111 78844  
83115 64424 57028 69691 56425 90757 82851 36348 23289 52827  
57418 43409 88697 31782 68057 46833 75458 79227 20701 85114  
67594 83242 38019 10173 71757 64414 27232 50096 47665 85492  
92234 39539 79520 74615 83139 76448 33928 19470 73148 09450  
01060 09553 52316 62428 05617 79135 19185 68481 46115 65016  
43184 40897 15027 24109 00953 66147 03380 87553 28710 44799  
57840 60474 34889 96753 14956 74002 11023 31424 07191 87792  
83107 86459 30421 10760 82238 81130 43890 79060 18931 84521  
16961 23433 84885 64075 97187 85805 05625 09281 01478 42084  
78335 12138 56774 48437 28598 68245 50767 39201 46949 81111  
98870 73571 06992 80910 53879 40257 60741 22757 45038 49144  
73483 87175 37887 03245 97142 54773 36046 34699 83450 63864  
83633 55513 33245 94390 06899 45397 32318 41673 55674 39444

06510 82620 66404 79894 20225 66281 12727 28292 01290 14527  
87657 45393 04797 80302 53597 07688 21152 73467 01313 38058  
56537 46415 47674 40889 57683 48092 93228 26262 35200 03275  
65659 74397 22357 72571 35901 98594 98891 41430 41884 88772  
26407 98248 46196 79455 37371 60747 44269 27683 39284 15740  
80106 97101 86806 23061 22033 21167 10667 26106 48270 92415  
87880 08432 13032 07936 79706 81107 90931 83838 93465 86690  
60447 23469 20856 79692 94463 65287 51671 45054 65372 17082  
07693 63208 69118 14597 18419 74195 11802 41063 18193 13643  
37117 32284 28217 58965 02203 88465 76143 88938 48045 10435  
82001 96083 39849 50944 11063 20790 22096 70396 18277 40622  
31297 63322 94747 94099 73506 60606 54880 37953 54220 14161  
42784 67502 46688 40879 93417 65192 34183 28309 39869 19675  
80349 31635 08480 03274 20798 48670 62402 04305 35775 31599  
40257 57968 94165 48359 34199 61444 65795 36347 03613 70224  
10722 55033 61569 13228 77132 14148 74942 75147 36182 56462  
37410 35937 96869 76611 89650 93410 37679 77063 22968 32749  
98094 23337 60099 62838 02824 17181 93475 05270 98870 55947  
40047 61314 32020 03544 19500 63373 91314 67899 83229 35711  
33024 42356 35359 34023 29940 37796 12339 37145 73271 99453  
06701 58246 11740 98829 77723 07286 56935 09715 60531 83782  
99579 03738 26831 59166 17498 93100 54209 16041 20999 05122  
53408 11145 66563 15046 62459 26764 56291 78724 98132 22870  
10630 46844 17159 89642 46073 60746 13611 89492 37292 51302  
20457

**18371/17457/16279 kHz, 10-07/12-07, 0900/0920/0940 UTC**

00708 00574 59177 91302 35493 63146 40223 52176 32702 94897  
61986 99817 48826 72859 62617 97021 87353 83902 05786 96466  
98710 58665 74196 44036 05107 78115 07893 99508 47974 16104  
63571 56463 38475 17004 74461 59745 66373 21267 89608 57840  
95089 74223 87570 91889 60005 75548 69710 93820 33353 09283  
63701 53089 78350 98265 00232 03753 20837 27804 73460 64403  
29569 00744 69495 64266 41253 89762 27312 03126 94331 60299  
71928 54139 49296 19627 45806 47493 08829 56927 26635 99045  
28452 85621 15862 20254 99597 95081 80427 66178 02593 76751  
45067 87207 05325 16327 60097 36221 97679 40025 29471 30948  
90967 10908 37892 10014 18102 69072 48099 62841 28444 91918  
01782 28520 78694 07883 19428 36835 24305 24415 41507 21196  
88363 20393 19929 86535 80314 45803 03464 32158 69849 42441  
83982 16748 25211 30287 15306 67015 35272 93438 55361 66607  
52107 43834 02898 79083 29333 49818 44903 98654 43286 63545  
17791 38829 36102 96361 70810 51703 83349 25763 21643 08596  
78333 54575 60313 46594 68714 46058 72582 85019 22895 39766  
17302 64157 71623 45532 86707 40331 51023 79261 10937 22471  
12851 99140 63609 84663 35538 86508 17427 62163 06010 78004  
20432 11250 14975 53634 78364 94042 79362 03721 16790 06941  
55407 56821 97969 87759 97363 60951 28590 03869 44183 80433  
59243 82861 68286 89156 28682 14838 28372 13777 83588 03218  
04526 21328 68265 25929 91431 55749 75747 87523 41396 44411  
65785 56981 78473 74045 64799 20959 38115 68696 21132 30083  
13181 76014 83486 36057 66488 50740 11440 69291 01380 94733  
03945 65832 76653 55519 01604 46829 05081 38195 39188 22861  
59686 90037 30804 51594 04384 57545 62391 60120 98822 81754  
48788 53220 52651 04217 80568 81786 75971 93920 75300 71998  
35978 81643 42780 75123 17491 78670 15352 26829 78038 39732  
24012 98935 29195 78364 09036 96859 19411 89707 44154 01083  
35641 17663 77481 44150 20817 13117 80096 75990 79728 23508  
99006 97451 18785 55247 33391 17939 37582 38701 94914 62305  
05294 60826 01538 26022 12044 15510 12891 81465 17085 17328  
51549 72742 97673 09978 76076 35945 07605 01730 01297 94104  
51958 42690 32379 75996 28175 57746 17897 60656 61608 12471  
22500 43773 02799 82974 40776 03203 71839 00581 46260 00779

23081 34284 38062 76998 17140 56677 28482 03412 14680 71457  
98752 87485 71893 31629 36337 12989 72273 97890 13965 39915  
86288 77934 08587 74136 47369 84955 37040 48923 76676 48734  
93299 00415 68219 68499 52100 46557 36516 86243 09182 60247  
48405 69536 79112 16821 18181 06713 12678 69352 26935 08978  
95915 54544 72350 15770 18088 75035 08882 24581 86003 76001  
56747 89647 36234 14138 54636 00365 97156 25285 62073 01956  
86622 02860 41267 65147 70976 99708 45631 40935 23923 33818  
23562 73077 82063 21586 44898 60336 76219 14244 99537 89444  
98590 54632 45719 57771 40835 94511 46014 88942 80499 58278  
38848 53758 17410 65846 19016 36929 29249 03905 77273 88451  
80423 33452 13798 61159 45826 28417 23858 25226 58895 10076  
29986 36101 26453 54465 55906 56859 91739 99400 54644 76399  
32191 10691 20500 71708 11975 32339 03079 46310 17625 81037  
72526 80002 20506 59196 18032 80098 57108 13843 40481 56384  
43126 35524 38508 72797 24088 11777 12711 55977 40734 88271  
53062 01120 03053 49457 10620 69600 59667 42194 96422 16950  
06426 14434 50331 62040 43265 89728 44030 55660 30067 42607  
07881 06328 45229 07670 15551 28190 18093 52878 51603 57962  
38105 26781 30752 67584 01928 29052 73258 01891 88314 20288  
75180 78745 94045 88087 73760 20189 22147 67431 42987 52352  
59394 27375 64638 86838 87068 62078 15153

**18371/17457/16279 kHz, 17-07, 0900/0920/0940 UTC**  
08977 00001 00000 41267

**18371/17457/16279 kHz, 19-07, 0900/0920/0940 UTC**  
09717 00001 00000 40262

**18371/17457/16279 kHz, 24-07/26-07, 0900/0920/0940 UTC**  
08681 00469 42452 73876 57892 07194 04968 32610 83023 02564  
53126 82394 18159 05769 64577 74790 83423 01400 57326 29749  
04514 42126 56619 38983 93228 25408 42100 54965 55571 75704  
94937 82915 57798 05440 44080 96026 59598 52207 61446 36276  
01986 26210 21318 23458 16248 97281 92476 50548 60929 56064  
74376 14563 12457 57606 60034 84610 72039 31008 48278 99989  
25273 11637 19154 72465 66016 42962 61422 75658 58687 19432  
47272 29981 25748 30766 53104 88082 92101 06031 77901 15638  
58325 58575 00499 37302 57856 30292 91281 67251 57380 57738  
74973 56306 59762 89070 98176 99830 25847 38773 59911 76962  
70345 27829 54842 60990 30439 36089 53140 03691 53554 86563  
69697 01279 81125 50938 13168 44657 67566 62158 41979 43560  
92221 00282 75503 64721 83431 80615 78812 85518 05943 68837  
92561 79716 89817 92926 45659 20968 36201 54629 56161 71533  
00116 12144 08429 07358 49324 69974 28118 64477 86021 83798  
24015 50207 06133 71568 29101 14146 66873 93695 73571 52281  
44286 03659 30398 61465 64514 43895 92000 92403 26808 95781  
82518 21745 86616 25061 64005 03438 88292 45470 49065 14267  
00657 28680 30876 33301 27862 80357 63383 68088 77087 24951  
70351 79258 23589 25479 15507 61162 38725 83800 85860 83101  
48024 69858 08863 77353 80311 32680 05063 99574 49582 83763  
28517 61307 14882 76242 61586 33836 53062 43849 20437 51431  
94881 52808 48535 36694 85968 42657 33341 77637 26264 14969  
49616 46929 17428 66861 70912 57759 61579 46112 45253 14103  
55416 16015 58532 47094 10206 00773 18580 22492 78910 50464  
65541 38714 06358 25072 24405 97738 05080 56585 48800 20542  
02808 03083 66226 81200 60946 58054 23817 18695 48558 39850  
49348 28351 36046 20084 23382 38666 33206 66283 60568 56726  
15600 60273 80360 73606 36036 88803 36568 53533 64020 55648  
00969 95715 64117 24948 68166 02728 87855 50545 06602 83603  
20860 60752 84178 33560 26250 03380 54874 38680 53681 42005  
39451 06642 19386 44128 77199 46838 04256 64562 31407 10796  
60170 99676 32810 26877 54707 79314 65707 03584 90400 90844

32613 99080 58886 86604 20363 07581 49747 49685 59530 81720  
48288 03863 11632 49817 58202 20702 20074 20654 95483 48193  
29900 64830 03652 48242 82192 00517 02477 41247 30609 70394  
41840 85978 22912 66224 63511 76081 20845 49407 73499 26936  
56754 00265 56537 58425 04325 66450 51321 18551 60380 38787  
25384 20028 63603 36039 93168 42744 68688 60665 65056 54801  
32800 40443 64681 82368 64185 12707 32158 92803 78366 68360  
14850 88053 36700 77887 64206 83668 00066 03864 05443 66600  
01807 20807 60308 03485 83081 85204 86634 18133 88660 62080  
63847 82256 87600 78440 83365 58238 28055 28238 33783 01662  
80332 85179 89632 32314 45870 21650 25365 63033 68335 65866  
87760 75542 06864 47158 42268 33308 68038 64730 34138 88281  
46184 08383 86570 08737 54866 80686 07820 66730 83610 16131  
03036 66336 70823 66606 32502 66033 00537 52803 83103 68608  
13828 02566

**18371/17457/16279 kHz, 31-07, 0900/0920/0940 UTC**

00786 00201 49269 20902 97462 87580 26226 82609 98569 27089  
65608 48599 89127 13517 84478 49317 20704 14885 36660 39090  
80870 56281 72288 11918 88077 66332 59871 01751 79439 79401  
62967 45671 81245 40992 47568 11196 23680 01287 50243 53874  
96790 33323 92278 79148 34203 72199 40337 97804 71082 07329  
35259 18861 57588 70568 92397 97921 12995 37312 14739 53993  
09884 81347 54831 34523 79832 10218 09363 39364 71445 30740  
72132 04410 65885 30785 73127 64880 37423 29884 73359 02063  
50572 15357 63751 49674 04796 37966 48144 59380 36187 36171  
00713 35061 32600 41197 98683 41424 52527 80952 86791 62794  
67854 95047 81098 94099 97470 95377 43073 89131 26596 34433  
93506 72832 41005 56078 04619 51269 21840 69263 06073 27529  
12643 60870 73622 01185 21279 97365 33313 41470 03283 51374  
56489 33086 66204 53926 90790 03682 82371 24386 37844 22784  
01603 93312 80239 35031 68460 38662 32992 33704 43968 04810  
62037 30342 10690 10435 69324 32637 98473 45145 92149 71375  
50633 83308 00629 64425 65530 16339 68931 64075 47918 96669  
69451 50461 90425 07589 36038 85162 32339 42429 66663 19094  
10949 12447 01369 25890 14090 19835 73153 27445 65645 78275  
69669 25240 97638 71897 63515 05934 51552 06279 49311 10517  
45901 80676 04150 50407

|                                           |
|-------------------------------------------|
| 17474/16274/14574 kHz, 1800/1820/1840 UTC |
|-------------------------------------------|

**17474/16274/14574 kHz, 02-07/04-07, 1800/1820/1840 UTC**

04515 00145 63228 69884 16184 39940 55190 31608 19986 69321  
24933 07821 70587 39813 73659 95028 90330 14047 93563 04828  
17774 08673 27938 12623 51390 72408 12638 22431 08781 33455  
09102 45275 05062 83661 84706 71177 66828 46080 43303 13173  
67653 88175 01309 19068 96053 03944 01793 12464 76329 35394  
60788 21541 19482 36950 48610 74933 62998 78809 45800 94857  
46081 12285 37772 52642 95999 57288 68773 24342 52616 26112  
21142 40332 19167 46801 60079 70542 35102 15984 78296 68664  
65435 73311 78618 67618 47491 38876 20021 14157 20466 85266  
52261 75593 45748 08100 19215 21070 56162 60741 74258 24795  
66337 27365 08180 03401 87047 54625 19113 10764 17066 24481  
79667 07481 14571 13271 05086 16733 13223 63176 39696 49908  
42732 44278 18488 43845 36512 35640 08873 91691 60332 73152  
70628 45562 30240 02459 88949 81083 47389 37285 43634 33149  
21659 06151 73725 86776 16565 02950 29498 27131

**17474/16274/14574 kHz, 07-07, 1800/1820/1840 UTC**

07964 00001 00000 37665

**13954/12154/11454 kHz, 05-07, 1500/1520/1540 UTC**

09870 00164 56981 71464 56032 95218 74568 59277 71590 26012  
74421 14312 53898 67375 12739 11275 82417 46540 49755 72232  
79628 98481 34678 81034 17047 23884 81307 58951 33269 06077  
78191 92034 30511 32995 71873 28134 39001 74544 62149 14337  
27890 25459 05446 34987 29741 82822 99243 30497 42444 90559  
29761 96794 50260 54247 35104 95329 26920 13817 35590 63299  
07200 72947 51390 04520 45053 87743 35210 43766 85054 96251  
71988 10339 60238 26860 66973 29804 56961 87862 84698 26517  
46524 28800 82668 71608 12797 55608 83726 56825 87734 03169  
80633 61375 44786 64211 60344 83023 02137 59651 43338 93022  
89657 75588 15385 11933 71266 09205 06890 58397 38015 53649  
13640 56068 39662 75896 61577 11369 39649 38064 84072 68424  
98020 13737 29490 47029 01979 31659 99551 38930 84178 61691  
54413 33234 07555 58909 07856 20919 86511 98557 50047 19086  
43797 12629 64958 78615 81272 12352 84815 38620 01366 74640  
51686 45392 00327 27228 10286 27706 54846 91658 15874 24009  
34006 59730 00398 78512 94954 58032 54631

**13954/12154/11454 kHz, 07-07, 1500/1520/1540 UTC**

07964 00001 00000 37665

**13954/12154/11454 kHz, 12-07, 1500/1520/1540 UTC**

01119 00001 00000 36252

**13954/12154/11454 kHz, 14-07/19-07, 1500/1520/1540 UTC**

01061 00123 32531 19393 34751 18210 41525 13414 32472 55939  
00823 86700 51069 38471 93170 94533 04505 92297 88373 09742  
87586 44587 71508 68511 29586 25756 80270 98845 17008 69638  
36537 00745 50099 00215 35586 70947 12408 99361 50363 52906  
40590 87314 53013 55242 35294 41347 87327 42971 13418 81798  
60148 81020 56507 99611 70289 46096 12024 35243 59442 84387  
46037 95711 27580 73219 14042 24593 81454 65644 45966 90311  
99634 31707 67356 47155 04976 65357 49598 60553 80448 73037  
56475 64152 52385 98171 96686 35876 95842 36845 35266 22624  
65044 80404 97843 13926 42849 04555 01038 65327 08646 80248  
01923 10971 52518 41624 23865 90523 75545 02841 18800 73843  
96277 54522 39702 92821 48552 22789 74897 67470 60430 66859  
76688 46190 36265 30013 87066 34113

**13954/12154/11454 kHz, 21-07, 1500/1520/1540 UTC**

09545 00001 00000 36265

**13954/12154/11454 kHz, 26-07, 1500/1520/1540 UTC**

05709 00001 00000 41255

**13954/12154/11454 kHz, 28-07, 1500/1520/1540 UTC**

04634 00177 78598 25866 26792 41098 14084 24879 51814 28085  
14345 08798 17636 87716 57241 94848 44091 05554 35112 54872  
96418 87646 57824 38215 97923 33763 15442 57343 76782 63033  
44902 66809 01888 97061 19216 87711 39608 23116 86526 60276  
00594 26497 28609 37671 21121 49765 40747 90386 21071 05333  
22550 87182 16928 36865 90445 03363 06020 21752 28410 38693  
89482 83894 12049 49033 13429 03462 20114 10455 48011 19275  
60553 77544 58155 38644 03781 94824 62162 69179 10051 41620  
78459 88997 75941 80103 83082 71195 94082 81318 15163 45881  
08802 85009 55941 84880 73237 39259 33082 17443 96315 70121  
52641 89917 49956 44144 35248 63796 62999 32817 95778 10660  
38462 29303 43959 73424 39671 55858 00441 30484 28746 91333  
45635 93940 31540 47543 03238 13478 46797 61641 21869 05625  
07055 57382 14926 95269 78973 77513 02966 54413 20657 38224

61074 23765 69753 38798 25291 90911 83587 84402 47805 31693  
63716 13786 55952 16698 33746 59767 27851 51418 59176 68071  
05810 25207 75690 54692 58740 12818 19134 18508 75295 08875  
86484 89884 18028 97772 67223 94842 57442 27067 19191 12522

19345/18495/16279/ 0910/0930/0950 UTC

**19345/18495/16279 kHz, 07-07/09-07, 0910/0930/0950 UTC**

00795 00310 30978 18001 53292 20124 30458 02374 08148 38460  
04750 52265 29975 99412 13914 48729 43407 55283 82649 03122  
54105 32454 65506 72181 32748 48547 35837 12670 67162 80922  
94148 39654 22849 31279 33926 12948 71306 38523 78536 13020  
52064 21357 20121 34908 82005 38310 59492 07856 68450 22997  
97258 89033 40701 58982 31315 03230 68788 06128 44027 98251  
97853 77640 33193 92741 99914 42735 14567 05168 04874 00997  
04637 15358 89007 12802 78206 92291 61446 48170 34223 26479  
65525 78449 21433 76483 00421 92341 22216 57715 91372 14030  
87947 69433 41425 73377 22244 49624 81980 17466 05557 61423  
11970 95692 20926 33854 57314 49059 08035 33672 39462 29575  
18936 08562 97009 51483 85848 81562 66262 45672 05643 29095  
09530 54628 75647 93531 45802 31156 62908 21027 66040 37568  
30560 25059 70787 15351 12145 96048 77855 63584 93227 41285  
54821 83508 15669 78929 48778 77685 87192 85140 81650 60197  
74398 70470 89791 22865 03026 27022 74876 28357 38326 78095  
03075 63934 56483 58623 52027 75683 04165 35093 36468 60522  
42503 40090 51859 20709 22654 33521 44622 37747 47736 76492  
25131 70722 62750 72863 97534 69700 59885 65191 38290 51172  
92360 50216 45506 18032 20219 09660 66988 47648 91995 76034  
94857 77589 77657 34988 28074 64912 14088 33697 83203 24972  
82337 63597 67728 81565 33207 26982 99714 57702 60470 37010  
05561 33826 88612 11019 04333 73706 83757 54197 88598 01363  
29385 53650 92139 84286 03976 47266 55840 48120 84034 70165  
98006 86118 76097 28377 29852 56824 21693 36626 14703 52374  
06964 42434 00379 49449 77957 12261 25746 71652 03542 46607  
94007 65198 50850 32121 93450 51607 90229 01794 53165 52613  
57786 12578 26488 67891 96537 18167 39709 79276 13279 82331  
14741 73472 89231 33971 33595 48559 20187 60449 75828 50413  
87890 20818 94571 56066 37767 70327 73173 28931 17643 57042  
17629 58156 41084 32831 13492 56720 26669 87737 89219 37547  
62935 65571 73776

**19345/18495/16279 kHz, 14-07/16-07, 0910/0930/0950 UTC**

00720 00130 84955 07721 39581 25801 77465 80907 14004 46752  
44481 73774 72398 71551 27363 72243 86594 58000 77727 28270  
56580 11678 79477 44306 93691 27711 03791 60883 55078 43365  
34496 87809 25124 69032 54842 86685 68866 51732 74902 88031  
08346 97099 52125 05923 96839 41658 37379 46140 37014 96825  
54138 91977 71651 00964 48589 62506 91339 05558 15111 53499  
35501 03747 18725 52284 26110 99459 28468 82240 16272 93594  
51113 08844 08440 66808 42900 84175 82419 20826 31803 77338  
37729 03915 05158 24605 96655 18939 20369 96322 84896 69635  
77690 86319 51282 31822 33036 62451 31238 09666 49669 01953  
95633 02220 45505 70515 66738 74327 77951 59363 51623 95696  
66881 95850 00393 83316 00199 33333 15759 29050 40202 37442  
85895 03172 40911 55526 83092 15136 87085 30644 78663 68556  
53163 42583 47055

**19345/18495/16279 kHz, 21-07/23-07, 0910/0930/0950 UTC**

00143 00288 35404 38304 68893 50588 24179 87870 94521 56527  
52882 69151 83301 17363 57693 06005 28208 35724 30391 38946  
50443 48000 91805 09620 30223 25851 54098 11267 02548 76775  
59072 05515 11343 43265 74065 17117 88484 50739 06166 76523  
26757 34357 70895 91729 35041 07136 07084 76856 49978 01152

20346 79407 32468 91087 87277 26409 80229 95105 65024 95434  
05139 00337 47683 29093 95353 87011 41746 94338 13386 72906  
72578 01780 47216 73108 13396 69807 60091 55462 74419 65663  
53551 87504 71367 53094 80189 31667 49375 70577 65335 61244  
08535 59899 06437 38976 13703 74302 95630 01355 72534 39653  
80545 81659 89649 07493 59067 40741 94264 64040 34996 46177  
62930 08240 48216 72639 45991 32072 37321 84904 77264 51211  
61339 90592 07288 16354 80695 42216 12290 09013 50637 67838  
77224 84240 75964 32703 93205 10952 79296 90831 08766 37218  
94481 73583 51151 23538 47893 64307 05119 57039 84898 53399  
41820 78870 13655 18429 19953 30302 87976 46335 55791 94240  
15641 76561 43963 51959 25381 42093 65521 66583 03415 04534  
07349 27486 21811 06816 54744 95104 97131 50505 00126 62370  
05782 87712 25333 79988 76276 34781 20556 04136 61197 91716  
69573 63750 66238 50576 44315 54315 64956 38531 13326 02621  
99050 08080 49595 05269 80171 15811 69201 10192 50601 94423  
69131 17561 84499 10289 14328 95836 19307 81376 57848 24728  
24870 16818 44834 61344 11364 80481 49333 52664 92143 65483  
86555 84221 09750 05860 29011 40360 73702 78318 19540 60315  
93617 68358 72895 95306 09787 66069 12197 12985 53369 32456  
30703 50426 66751 25783 63252 09829 02146 78079 36851 04892  
82384 40426 47564 89021 37783 54679 13230 66823 81890 36584  
92491 23768 16034 63125 26106 45160 25378 67516 92163 92422  
16936 88307 93001 76019 89640 09493 32583 33289 32783 77241  
24105

**19345/18495/16279 kHz, 28-07/30-07, 0910/0930/0950 UTC**

00846 00651 10915 52561 87051 79066 20672 17268 75739 75015  
76671 33216 07729 93104 48759 91590 34820 62373 72567 16851  
09749 07484 11398 04847 05551 38948 52218 86126 71233 45480  
99077 19864 52586 40966 42140 55905 92683 56814 91177 45462  
23186 24005 53151 59115 75570 72694 67619 14299 24787 43444  
83601 15565 36203 68413 79342 35812 51323 03463 59038 98318  
71405 17343 47300 11999 23911 62977 97637 22478 96301 40337  
42622 78591 52507 71638 48538 09789 21271 99634 01367 61952  
60353 07441 95556 23004 71571 96152 24801 55507 10611 77642  
90465 64745 50533 08625 43801 70778 19156 77495 15046 41441  
13468 91067 33205 71725 96041 83501 64011 66989 75750 99229  
37249 69799 19149 01086 66536 47973 44220 56043 10163 97349  
38720 91587 94337 49140 08538 34876 48047 13493 68679 40983  
17237 36422 65695 73814 65510 50801 49221 10173 56994 99296  
18341 09260 00978 04343 46117 90712 99101 85984 94584 62599  
69118 81635 88603 88224 43054 53041 83649 01361 23858 37567  
30828 78706 68431 83528 27803 78853 00702 45117 61081 52355  
49911 42462 83662 59436 49431 24641 91494 55060 09138 86272  
36481 66310 37690 14954 05853 33409 66830 11078 61467 04726  
60409 46274 46392 56910 94679 37030 68357 83451 71625 63690  
81064 90449 82818 86897 34647 98839 16346 45750 21664 47003  
72414 86728 87108 82997 48820 25388 20166 02522 65940 12808  
54113 58945 92692 03076 12179 47390 74110 55972 26234 28629  
62024 72983 99774 51218 11915 13840 35394 43252 49683 52838  
51583 85626 82234 77398 45894 36691 19323 55566 09340 64326  
96478 15498 45713 02094 51548 41260 02150 60272 10627 62708  
86698 16964 68309 71557 77228 01408 91560 68313 65417 11866  
36034 39679 44470 79018 33720 55758 21428 46030 89300 86639  
25088 66184 08942 44048 58390 99767 36671 75947 61028 24121  
38374 10686 26444 26361 47067 56972 45772 32663 22229 41618  
93366 60440 33294 04167 87780 43557 43800 55289 09581 36538  
42536 33286 97324 35293 86167 63923 23718 23888 83613 40131  
33737 91750 61548 73820 38592 35380 09580 70773 90832 09233  
72093 12636 42044 97360 51518 75225 28754 07105 00469 96214  
72454 94914 30057 17239 43262 96404 30018 18123 68319 76986  
11169 78214 16170 57362 43336 68365 65859 32519 64317 14523

83588 33647 30727 48957 67693 67275 08477 79686 43716 48327  
03500 31276 65629 29000 95319 76925 77534 30436 04990 59021  
94125 78736 74817 10718 05995 65820 88070 49488 78151 71537  
83350 19867 73813 48825 84394 64134 34107 20003 45930 00147  
83887 51270 98143 61355 15504 37438 04867 82220 57031 49681  
96271 92481 17730 27819 38575 38059 51688 06471 79510 10418  
07686 65795 27161 49468 15520 03231 92962 20720 76625 54319  
00322 41975 98454 12289 08008 52027 40272 17355 94135 15365  
84268 39498 64658 99267 55038 71633 45190 10133 83451 52952  
34955 54420 64752 04978 15512 42732 09204 58572 89590 88539  
16810 31229 42198 51714 27800 23101 91611 73703 24005 53587  
06343 52556 93384 85108 77168 57604 68213 12903 91802 93459  
09018 64693 90426 52416 60899 40959 18037 40284 43270 42783  
99817 59630 54813 41837 74894 57562 74105 05815 07108 57202  
74857 61802 06790 88202 00571 31291 41504 31713 91090 50795  
66566 65946 29047 59523 48544 52968 71994 49779 82334 17930  
72218 86016 74132 45155 30285 00250 87623 16686 60174 57694  
90285 43470 23279 02621 33102 26675 94701 37705 66144 18447  
43560 72191 04111 72418 00104 83446 49643 40073 22007 40719  
64582 60879 53133 55499 66726 91539 78227 33728 85799 92634  
79110 98085 32543 86984 71945 25776 15831 94752 29489 73042  
31845 25388 88642 34758 94082 61888 06088 05756 67311 02400  
36462 94110 39833 66497 12867 85999 08477 83211 08759 76253  
45278 44170 22080 95864 13526 88816 73349 05392 75701 11480  
20184 78716 89508 24340 07977 13213 60913 60177 83122 53696  
73983 17359 15512 99475 19186 62551 40960 38268 63476 51752  
76090 68998 30197 12099 38919 34919 67824 06948 38100 92522  
23178 88173 66243 55689 37894 28924 79797 10246 06122 16562  
22075 33090 22326 89277 53162 21733 78639 17141 03472 19267  
14485 67476 44099 01006

#### Exercise / test traffic

We mention this one last month as being active but it appears that we also had the transcript, so here is it now:

**13418/12163/11477 kHz, 09-06, 1400/1410/1420 UTC**

**12122/11504/10750 kHz, 09-06, 1430/1440/1450 UTC**

00521 00112 98029 62777 23694 13899 05006 75227 32201 22566  
10257 73132 92784 63862 04086 86860 97440 35284 42728 85022  
23995 07431 85406 74666 53013 82373 34929 52880 95985 12359  
15903 40187 86148 65491 97740 41626 19249 97445 27543 21130  
53282 10662 59542 00704 51916 69787 73607 13346 81264 28826  
94774 55502 88627 92869 10851 38161 41255 23363 09764 41320  
78969 52125 79240 19841 06663 70069 86983 27292 66120 62458  
67610 99993 07741 21597 31739 13333 47887 84701 22750 83225  
08765 21583 71614 67158 17584 60399 51558 93278 54640 59579  
00371 95884 87681 86222 42160 01157 31420 39701 94039 81846  
82802 46315 47224 18806 61215 94780 47760 67029 61129 97516  
90272 56552 00613 26538 17623

Also in July, a number of test/training transmissions were heard.

**8168/9193/10559/11504/12141/13526 kHz, 28-07, 0600/0610/0620/0630/0640/0650 UTC**

08442 00125 77740 18778 62770 67124 55201 60299 67641 17521  
62701 56480 90949 73263 58617 05955 88401 51100 53718 43678  
00706 26644 61179 73659 83019 29445 62328 84051 11496 37301  
08060 74991 02172 68570 87796 45508 59241 56579 18910 86071  
70147 55855 51582 05537 44301 46472 49967 53847 94481 73129  
44399 74995 88296 07521 47468 32238 66036 04080 35758 33324  
04796 71148 48803 30340 09460 87708 54307 22379 85466 13109  
46712 31821 32190 67645 73540 44840 75060 55641 19357 36546  
79477 08480 89568 38365 01861 33064 86693 94649 21101 55548  
79371 55160 20821 85585 81275 98987 07062 21232 96075 66592

92163 27587 68380 81372 26417 03618 42805 20650 33980 02628  
57186 10395 83721 99210 53836 96314 81579 10437 28478 76495  
01014 59656 01727 29918 33637 91550 10999 71061

**8168/9193/10559/11504/12141/13526 kHz, 29-07, 0800/0810/0820/0830/0840/0850 UTC**

04022 00135 12485 86865 79717 98173 05627 77044 13724 15107  
07935 63906 16677 93070 82925 72245 57207 25994 86669 75881  
32630 94492 33482 30109 57141 88320 43410 21775 98357 29463  
47694 76511 80235 90426 30424 32788 25910 53298 86989 59476  
10181 19235 74414 90504 02016 37910 54043 86901 84555 81247  
25731 23728 10552 19191 61778 71046 44640 82374 29723 91396  
54763 83850 78686 84260 67411 31422 83670 26249 62645 50136  
46334 03909 39993 27192 65699 13395 20077 42976 28093 09231  
34277 56507 37218 17110 03731 23966 65959 61043 28647 59377  
88147 43535 23574 95592 04713 26333 40548 90153 23093 70592  
64239 27793 24256 34419 34912 21822 84723 83358 53491 48383  
50968 01663 54280 20392 57118 98254 46631 61575 80528 43444  
65462 22626 97600 03268 61988 02799 80333 43410 22479 39369  
72845 29922 19882 57499 44990 06483 32251 15061

**8168/9193/10559/11504/12141/13526 kHz, 29-07, 1000/1010/1020/1030/1040/1050 UTC**

09647 00122 77119 09642 51488 13994 28374 50115 33106 01718  
18988 29884 76712 07944 83770 55782 10390 64801 38628 45929  
80282 46961 63216 40865 16164 29915 66092 25424 35940 43638  
12451 30160 08803 65031 33002 33742 22513 70379 68586 02616  
52604 58664 42171 06064 51816 61566 52674 61614 45518 47076  
94200 23931 36010 02397 41817 18684 49172 36254 93477 21573  
47900 02950 14175 89457 89266 88827 21081 11680 74941 50027  
33269 40010 96214 36012 93323 22218 04789 57152 89047 54597  
77239 04478 79904 88863 49446 88518 94149 06406 22214 14317  
84568 86257 76901 47013 54714 49654 43888 52713 16796 62988  
40484 40994 86672 95489 13806 54189 27716 99996 09072 19599  
13895 92019 47206 38879 44332 44342 23045 25310 40010 00748  
94677 14675 88464 60623 23663

**8168/9193/10559/11504/12141/13526 kHz, 29-07, 1200/1210/1220/1230/1240/1250 UTC**

09924 00131 40830 28731 19138 84553 60783 10405 94169 18460  
76666 33005 60210 92581 49078 47907 38957 14321 44526 97573  
76012 54800 47858 11114 63083 40960 83907 15312 19441 67319  
72596 19918 33671 59028 38587 58254 84473 36602 61994 90827  
28740 79580 97145 49062 08257 30418 43351 08930 76374 83607  
12014 98564 53808 56861 62454 16014 07758 29714 65647 78176  
00645 45471 90962 26850 45863 56247 00344 01181 53993 90822  
63433 02355 52326 53697 68832 96430 57653 98794 02857 32664  
97508 74976 38836 35833 55305 74030 66109 76808 96573 22573  
50496 54758 70954 83816 90081 83268 88616 70295 03198 52008  
30074 42269 54936 85550 20174 09659 46238 00110 88027 66022  
58359 08962 26857 32982 80667 25668 06534 55128 71544 71832  
90137 23534 04607 31419 40326 08674 31499 68508 63515 85563  
07813 87357 95596 25460

**8168/9193/10559/11504/12141/13526 kHz, 31-07-2025, 0600/0610/0620/0630/0640/0650 UTC**

05230 00138 78060 63600 88780 83804 08084 82186 53293 88864  
82277 01453 61328 07233 45804 08848 88803 12802 30080 07238  
00352 24814 85086 30847 73280 55330 08800 48180 51662 08122  
22220 65863 16308 35867 08850 46456 88563 50556 32606 68705  
88865 58702 84732 16552 00630 38733 80824 78334 27446 88386  
03055 87385 33086 56883 23056 23353 06328 46003 88308 33348  
63883 58802 30533 33170 66633 26313 85045 25560 87382 88346  
00283 48347 80185 71373 08262 52648 30080 68633 21306 34547  
64516 30365 20633 53264 06066 34833 22877 58323 12800 85385  
30028 52450 61245 88256 85700 38062 28067 50560 38807 83326  
54686 65362 82030 28088 87003 53707 07080 70700 48720 70306

83370 37783 24806 54662 78830 33607 38068 77268 38004 30800  
03335 25620 12650 00886 58308 58830 88000 80837 65660 68088  
23380 78508 28826 36878 78848 88052 48333 82633 66150 52358  
46046

**8168/9193/10559/11504/12141/13526 kHz, 31-07-2025, 0800/0810/0820/0830/0840/0850 UTC**

02169 00135 58613 07972 60896 40847 98971 22012 40612 61138  
99875 89959 68663 51389 94077 83248 65769 86792 03487 88256  
02749 55952 46217 00608 45856 54566 52633 83803 87624 60526  
69443 83513 53037 43720 67029 22094 88317 19033 76607 57224  
02423 48544 59320 02217 92462 12749 41782 51377 11753 58945  
74390 07183 41201 37405 85401 08111 30601 58004 62115 06329  
88213 15168 34386 80085 91693 16361 36922 24943 84359 71982  
94930 46735 10184 46261 85832 54204 96630 43999 08145 33106  
12784 01255 72049 28678 86135 62259 42312 15631 58317 58917  
91492 30312 56917 70278 69009 87254 14157 79234 10522 76101  
75826 16838 67017 39769 64014 27654 96997 94938 51572 31197  
11480 86600 49859 29008 93543 86958 43117 05708 93948 29433  
74048 21290 66624 25441 80489 64617 89816 39905 77250 98577  
40046 17395 33476 32043 57279 95944 34236 41465

**8168/9193/10559/11504/12141/13526 kHz, 31-07-2025, 1000/1010/1020/1030/1040/1050 UTC**

01689 00134 71146 72839 64100 05043 01538 83087 59581 17074  
89135 52413 43815 79683 38077 46099 26971 95434 65641 20670  
95977 13542 08509 46147 22127 05834 89084 31287 76571 91803  
26513 42717 67224 48061 15693 39716 29827 18501 82666 64209  
32025 24366 07848 42894 10786 99246 32615 06321 70769 54635  
09240 94241 51986 51900 45340 77893 63005 24998 50712 58265  
15958 70249 06515 67776 90560 46418 85188 95753 63989 98360  
16272 08470 12768 01432 88643 71610 05693 65614 35361 22879  
73218 82762 60516 21936 82563 32270 90729 15324 02720 37799  
76709 04828 67787 24400 48250 61774 17850 40070 52333 64367  
14058 36861 42331 72408 38363 00769 81473 50554 63255 73728  
72199 97390 89636 27833 85046 33195 09732 84578 85212 58289  
55687 69863 93032 26189 21650 11443 40681 88366 53180 26868  
53759 65621 13281 70993 08820 36357 65374

**8168/9193/10559/11504/12141/13526 kHz, 31-07-2025, 1200/1210/1220/1230/1240/1250 UTC**

02453 00139 33970 75931 32184 29705 62072 96089 49434 30878  
75290 34308 76878 09973 09270 04468 02447 34014 36167 21058  
06993 79742 43078 68523 99209 97149 45787 32416 89767 63993  
47232 63477 86208 40822 35401 50408 66086 00491 73977 08641  
61449 39105 08747 87451 07846 62379 62459 95175 88478 62474  
39464 96762 56401 86942 29513 00993 53329 65446 76720 35033  
83916 29655 06321 85440 83644 11812 48098 36056 74570 58860  
38381 01955 60036 27526 59608 67887 70995 55626 60676 36829  
34690 50610 43937 27293 24528 50469 07076 99265 11308 34407  
97078 00639 23769 38943 24723 31793 32783 23306 03807 96033  
14281 26402 20604 29617 24093 37508 36725 28875 27333 61625  
29997 97702 04769 39891 00343 33306 85717 79026 60911 33175  
04735 48831 24748 40162 61780 37741 78185 21093 02802 27814  
35103 47689 51819 64642 22548 08287 30005 14319 03200 87019  
13743 14555

**XPB1**

18687/ 01-07/07-07/08-07/14-07/15-07/21-07/22-07/28-07/29-07, 0500 UTC  
18287/ 01-07/07-07/08-07/14-07/15-07/21-07/22-07/28-07/29-07, 0510 UTC  
16287/ 01-07/07-07/08-07/14-07/15-07/21-07/22-07/28-07/29-07, 0520 UTC  
15887/ 01-07/07-07/08-07/14-07/15-07/21-07/22-07/28-07/29-07, 0530 UTC  
14487/ 01-07/07-07/08-07/14-07/15-07/21-07/22-07/28-07/29-07, 0540 UTC  
13387/ 01-07/07-07/08-07/14-07/15-07/21-07/22-07/28-07/29-07, 0550 UTC

20024/ 01-07/04-07/08-07/11-07/15-07/22-07/25-07, 1300 UTC  
 19224/ 01-07/04-07/08-07/11-07/15-07/22-07/25-07, 1310 UTC  
 18324/ 01-07/04-07/08-07/11-07/15-07/22-07/25-07, 1320 UTC  
 17424/ 01-07/04-07/08-07/11-07/15-07/22-07/25-07, 1330 UTC  
 16324/ 01-07/04-07/08-07/11-07/15-07/22-07/25-07, 1340 UTC  
 15824/ 01-07/04-07/08-07/11-07/15-07/22-07/25-07, 1350 UTC

13884/ 02-07/05-07/10-07/12-07/16-07/19-07, 1100 UTC  
 13384/ 02-07/05-07/10-07/12-07/16-07/19-07, 1110 UTC  
 12184/ 02-07/05-07/10-07/12-07/16-07/19-07, 1120 UTC  
 11854/ 02-07/05-07/10-07/12-07/16-07/19-07, 1130 UTC  
 11084/ 02-07/05-07/10-07/12-07/16-07/19-07, 1140 UTC  
 10854/ 02-07/05-07/10-07/12-07/16-07/19-07, 1150 UTC  
 Not found on 23-07 and 26-07

#### Test / training transmissions

The following belated May and June logs were all part of the Russian test/training transmissions aired from 30 May till 20 June.  
 All logs were submitted by PY.

|                                         |                                         |                              |
|-----------------------------------------|-----------------------------------------|------------------------------|
| 15821 kHz                               | 30-05 0550 UTC                          |                              |
| 18422/17418/15937/14487 kHz             | 30-05 0720/0730/0740/0750 UTC           | ~7m TX                       |
| 19371/16343/14968/13553/12224 kHz       | 30-05 0910/0920/0930/0940/0950 UTC      | ~7m TX                       |
| 16344/15881/14487/13942/12171/10346 kHz | 30-05 1100/1110/1120/1130/1140/1150 UTC | ~7m TX                       |
| 13437/12181/11572/11157/10449/10288 kHz | 30-05 1300/1310/1320/1330/1340/1350 UTC | ~7m TX                       |
| 15831/14807/13963/13399/12117/11467 kHz | 30-05 1500/1510/1520/1530/1540/1550 UTC | ~7m TX                       |
| 15891/14671/13921/13399/12168/11416 kHz | 30-05 1700/1710/1720/1730/1740/1750 UTC | ~7m TX                       |
| 16302/15804/14529/13485/12109/11514 kHz | 30-05 1900/1910/1920/1930/1940/1950 UTC | ~7m TX                       |
| 14421/13484/12114/11514/10414 kHz       | 30-05 2110/2120/2130/2140/2150 UTC      | ~7m TX                       |
| 17457/16236/15835 kHz                   | 31-05 0430/0440/0450 UTC                | 32Bd (rest of the cycle NRH) |
| 20184/19583/18559/17472/16131/15836 kHz | 31-05 0600/0610/0620/0630/0640/0650 UTC | 32Bd, ~5m TX                 |
| 20322/19613/18392/17423/14923/13402 kHz | 31-05 0800/0810/0820/0830/0840/0850 UTC | 32Bd, ~8m TX                 |
| 17474/16284/15887/14612/13551/11591 kHz | 31-05 1000/1010/1020/1030/1040/1050 UTC | 32Bd, ~5m TX                 |
| 13564/12147/11586/11144/10387/10384 kHz | 31-05 1200/1210/1220/1230/1240/1250 UTC | 32Bd, ~5m TX                 |
| 13564/13364/12129/11548/11169/10284 kHz | 31-05 1400/1410/1420/1430/1440/1450 UTC | 32Bd, ~5m TX                 |
| 15836/14953/13949/13362/12165/11597 kHz | 31-05 1600/1610/1620/1630/1640/1650 UTC | 32Bd, ~5m TX                 |
| 14979/14517/13439/12129/11573/10285 kHz | 31-05 1800/1810/1820/1830/1840/1850 UTC | 32Bd, ~5m TX                 |
| 16298/15803/14454/13384/12116/11541 kHz | 31-05 2000/2010/2020/2030/2040/2050 UTC | 32Bd, ~5m TX                 |
| 13561/12171/11143 kHz                   | 31-05 2200/2220/2240 UTC                | 32Bd, ~13m TX                |
| 17454/15821 kHz                         | 01-06 0540/0550 UTC                     |                              |
| 18422/17418/15937/14487 kHz             | 01-06 0720/0730/0740/0750 UTC           | 32Bd, ~7m TX                 |
| 19371/16343/14968/13553/12224 kHz       | 01-06 0910/0920/0930/0940/0950 UTC      | 32Bd, ~8m TX                 |
| 16344/15881/14487/13942/12171/10346 kHz | 01-06 1100/1110/1120/1130/1140/1150 UTC | 32Bd, ~7m TX                 |
| 13437/12181/11572/11157/10449/10288 kHz | 01-06 1300/1310/1320/1330/1340/1350 UTC | 32Bd, ~7m TX                 |
| 15831/14807/13963/13399/12117/11467 kHz | 01-06 1500/1510/1520/1530/1540/1550 UTC | 32Bd, ~7m TX                 |
| 15891/14671/13921/13399/12168/11416 kHz | 01-06 1700/1710/1720/1730/1740/1750 UTC | 32Bd, ~7m TX                 |
| 16302 kHz                               | 01-06 1900 UTC                          | ~7m TX                       |
| 14904/14421/13484/12114/11514/10414 kHz | 01-06 2100/2110/2120/2130/2140/2150 UTC | ~7m TX                       |
| 18256/17454/15821 kHz                   | 02-06 0530/0540/0550 UTC                | ~7m TX                       |
| 20841/19593/18422/17418/15937/14487 kHz | 02-06 0700/0710/0720/0730/0740/0750 UTC | 32Bd, ~7m TX                 |
| 19371/16343/14968/13553/12224 kHz       | 02-06 0910/0920/0930/0940/0950 UTC      | 32Bd, ~8m TX                 |
| 16344/15881/14487/13942/12171/10346 kHz | 02-06 1100/1110/1120/1130/1140/1150 UTC | 32Bd, ~7m TX                 |
| 13437/12181/11572/11157/10449/10288 kHz | 02-06 1300/1310/1320/1330/1340/1350 UTC | 32Bd, ~7m TX                 |
| 15831/14807/13963/13399/12117/11467 kHz | 02-06 1500/1510/1520/1530/1540/1550 UTC | 32Bd, ~7m TX                 |
| 15891/14671/13921/13399/12168/11416 kHz | 02-06 1700/1710/1720/1730/1740/1750 UTC | 32Bd, ~7m TX                 |
| 16302 kHz                               | 02-06 1900 UTC                          | 32Bd                         |
| 10414 kHz                               | 02-06 2150 UTC                          | 32Bd                         |

|                                         |                                         |                            |
|-----------------------------------------|-----------------------------------------|----------------------------|
| 17457/16236/15835 kHz                   | 03-06 0430/0440/0450 UTC                | (rest of the cycle NRH)    |
| 17472/16131/15836 kHz                   | 03-06 0630/0640/0650 UTC                | 32Bd, ~7m TX (rest NRH)    |
| 18392/17423/14923/13402 kHz             | 03-06 0820/0830/0840/0850 UTC           | 32Bd, ~8m TX (rest NRH)    |
| 17474/16284/15887/14612/13551/11591 kHz | 03-06 1000/1010/1020/1030/1040/1050 UTC | 32Bd, ~7m TX               |
| 13564/12147/11586/11144/10387/10384 kHz | 03-06 1200/1210/1220/1230/1240/1250 UTC | 32Bd, ~7m TX               |
| 13564/13364/12129/11548/11169/10284 kHz | 03-06 1400/1410/1420/1430/1440/1450 UTC | 32Bd, ~7m TX               |
| 15836/14953/13949/13362/12165/11597 kHz | 03-06 1600/1610/1620/1630/1640/1650 UTC | 32Bd, ~7m TX               |
| 14979/14517/13439/12129/11573/10285 kHz | 03-06 1800/1810/1820/1830/1840/1850 UTC | 32Bd, ~7m TX               |
| 16298/15803/14454/13384/12116/11541 kHz | 03-06 2000/2010/2020/2030/2040/2050 UTC | 32Bd, ~7m TX               |
| 13561/13442/12171/11547/11143/10484 kHz | 03-06 2200/2210/2220/2230/2240/2250 UTC | 32Bd, ~7m TX               |
|                                         |                                         |                            |
| 20562/20499/19284/18256/17454/15821 kHz | 04-06 0500/0510/0520/0530/0540/0550 UTC | 32Bd, ~7m TX               |
| 20841/19593/18422/17418/15937/14487 kHz | 04-06 0700/0710/0720/0730/0740/0750 UTC | 32Bd, ~7m TX               |
| 20929/19371/16343/14968/13553/12224 kHz | 04-06 0900/0910/0920/0930/0940/0950 UTC | 32Bd, ~8m TX               |
| 16344/15881/14487/13942/12171/10346 kHz | 04-06 1100/1110/1120/1130/1140/1150 UTC | 32Bd, ~8m TX               |
| 13437/12181/11572/11157/10449/10288 kHz | 04-06 1300/1310/1320/1330/1340/1350 UTC | 32Bd, ~7m TX               |
| 15831/14807/13963/13399/12117/11467 kHz | 04-06 1500/1510/1520/1530/1540/1550 UTC | 32Bd, ~7m TX               |
| 15891/14671/13921/13399/12168/11416 kHz | 04-06 1700/1710/1720/1730/1740/1750 UTC | 32Bd, ~7m TX               |
| 16302/15804/14529/13485/12109/11514 kHz | 04-06 1900/1910/1920/1930/1940/1950 UTC | 32Bd                       |
| 14421/12114/11514 kHz                   | 04-06 2110/2130/2140 UTC                | 32Bd                       |
|                                         |                                         |                            |
| 17457/16236/15835 kHz                   | 05-06 0430/0440/0450 UTC                | (rest of the cycle NRH)    |
| 20184/19583/18559/17472/16131/15836 kHz | 05-06 0600/0610/0620/0630/0640/0650 UTC | ~7m TX                     |
| 20322/19613/18392/17423/14923/13402 kHz | 05-06 0800/0810/0820/0830/0840/0850 UTC | ~7m TX                     |
| 17474/16284/15887/14612/13551 kHz       | 05-06 1000/1010/1020/1030/1040 UTC      | ~7m TX (1050 UTC NRH)      |
| 13564/12147/11586/11144/10387/10384 kHz | 05-06 1200/1210/1220/1230/1240/1250 UTC | ~4m30s TX                  |
| 13564/13364/12129/11548/11169/10284 kHz | 05-06 1400/1410/1420/1430/1440/1450 UTC | ~7m TX                     |
| 15836/14953/13949/13362/12165 kHz       | 05-06 1600/1610/1620/1630/1640 UTC      | ~7m TX (1650 UTC NRH)      |
| 14979/14517/13439/12129/11573/10285 kHz | 05-06 1800/1810/1820/1830/1840/1850 UTC | ~7m TX                     |
| 16298/15803/14454/13384/12116/11541 kHz | 05-06 2000/2010/2020/2030/2040/2050 UTC | ~7m TX                     |
| 13561/13442/12171/11547/11143/10484 kHz | 05-06 2200/2210/2220/2230/2240/2250 UTC | ~7m TX                     |
|                                         |                                         |                            |
| 18256/17454/15821 kHz                   | 06-06 0530/0540/0550 UTC                | ~7m TX                     |
| 20841/19593/18422/17418/15937/14487 kHz | 06-06 0700/0710/0720/0730/0740/0750 UTC | ~7m TX                     |
| 20929/19371/16343/14968/13553/12224 kHz | 06-06 0900/0910/0920/0930/0940/0950 UTC | ~7m TX                     |
| 16344/15881/14487/13942/12171/10346 kHz | 06-06 1100/1110/1120/1130/1140/1150 UTC | ~7m TX                     |
| 13437/12181/11572/11157/10449/10288 kHz | 06-06 1300/1310/1320/1330/1340/1350 UTC | ~4m30s TX <sup>1)</sup>    |
| 15831/14807/13963/13399/12117/11467 kHz | 06-06 1500/1510/1520/1530/1540/1550 UTC | ~7m TX <sup>2)</sup>       |
| 15891/14671/13921/13399/12168/11416 kHz | 06-06 1700/1710/1720/1730/1740/1750 UTC | ~7m TX                     |
| 16302/15804/14529/13485/12109/11514 kHz | 06-06 1900/1910/1920/1930/1940/1950 UTC | ~7m TX                     |
| 14904/14421/13484/12114/11514/10414 kHz | 06-06 2100/2110/2120/2130/2140/2150 UTC | ~7m TX                     |
|                                         |                                         |                            |
| 20514/19638/18656/17457/16236/15835 kHz | 07-06 0400/0410/0420/0430/0440/0450 UTC | 32Bd                       |
| 20184/19583/18559/17472/16131/15836 kHz | 07-06 0600/0610/0620/0630/0640/0650 UTC | 32Bd                       |
| 20322/19613/18392/17423/14923/13402 kHz | 07-06 0800/0810/0820/0830/0840/0850 UTC | 32Bd, ~7m TX               |
| 17474/16284/15887/14612/13551/11591 kHz | 07-06 1000/1010/1020/1030/1040/1050 UTC | 32Bd, ~7m TX               |
| 13564/12147/11586/11144/10387/10384 kHz | 07-06 1200/1210/1220/1230/1240/1250 UTC | 32Bd, ~7m TX               |
| 13564/13364/12129/11548/11169/10284 kHz | 07-06 1400/1410/1420/1430/1440/1450 UTC | 32Bd, ~7m TX <sup>5)</sup> |
| 15836/14953/13949/13362/12165/11597 kHz | 07-06 1600/1610/1620/1630/1640/1650 UTC | 32Bd, ~8m TX               |
| 14979/14517/13439/12129/11573/10285 kHz | 07-06 1800/1810/1820/1830/1840/1850 UTC | 32Bd, ~7m TX               |
| 16298/15803/14454/13384/12116/11541 kHz | 07-06 2000/2010/2020/2030/2040/2050 UTC | 32Bd, ~7m TX               |
| 11547/11143/10484 kHz                   | 07-06 2230/2240/2250 UTC                | 32Bd, ~7m TX (rest NRH)    |
|                                         |                                         |                            |
| 20499/19284/18256/17454/15821 kHz       | 08-06 0510/0520/0530/0540/0550 UTC      | 32Bd, ~7m TX               |
| 20841/19593/18422/17418/15937/14487 kHz | 08-06 0700/0710/0720/0730/0740/0750 UTC | 32Bd, ~7m TX               |
| 20929/19371/16343/14968/13553/12224 kHz | 08-06 0900/0910/0920/0930/0940/0950 UTC | 32Bd, ~7m TX               |
| 16344/15881/14487/13942/12171/10346 kHz | 08-06 1100/1110/1120/1130/1140/1150 UTC | 32Bd, ~7m TX               |
| 13437/12181/11572/11157/10449/10288 kHz | 08-06 1300/1310/1320/1330/1340/1350 UTC | 32Bd, ~7m TX               |
| 15831/14807/13963/13399/12117/11467 kHz | 08-06 1500/1510/1520/1530/1540/1550 UTC | 32Bd, ~7m TX               |
| 15891/14671/13399/12168/11416 kHz       | 08-06 1700/1710/1730/1740/1750 UTC      | 32Bd, ~8m TX <sup>3)</sup> |
| 16302/15804/14529/13485/12109 kHz       | 08-06 1900/1910/1920/1930/1940 UTC      | 32Bd, ~7m TX <sup>4)</sup> |
| 14904/14421/13484/12114/11514/10414 kHz | 08-06 2100/2110/2120/2130/2140/2150 UTC | 32Bd, ~7m TX               |

|                                         |                                         |              |
|-----------------------------------------|-----------------------------------------|--------------|
| 15821 kHz                               | 09-06 0550 UTC                          |              |
| 18422/17418/15937/14487 kHz             | 09-06 0720/0730/0740/0750 UTC           | 32Bd, ~7m TX |
| 20929/19371/16343/14968/13553/12224 kHz | 09-06 0900/0910/0920/0930/0940/0950 UTC | 32Bd, ~7m TX |
| 16344/15881/14487/13942/12171/10346 kHz | 09-06 1100/1110/1120/1130/1140/1150 UTC | 32Bd, ~7m TX |
| 13437/12181/11572/11157/10449/10288 kHz | 09-06 1300/1310/1320/1330/1340/1350 UTC | 32Bd, ~7m TX |
| 15831/14807/13963/13399/12117/11467 kHz | 09-06 1500/1510/1520/1530/1540/1550 UTC | 32Bd, ~7m TX |
| 15891/14671/13921/13399/12168/11416 kHz | 09-06 1700/1710/1720/1730/1740/1750 UTC | 32Bd, ~7m TX |
| 16302/15804/14529/13485/12109/11514 kHz | 09-06 1900/1910/1920/1930/1940/1950 UTC | 32Bd, ~8m TX |
| 14904/14421/13484/12114/11514/10414 kHz | 09-06 2100/2110/2120/2130/2140/2150 UTC | 32Bd, ~7m TX |

- 1) 1300z: cut off after ~2m, 1320z TX cut off after ~1m  
2) 1540z: instant failure upon startup  
3) 1720z: no transmission  
4) 1950z: no transmission  
5) 1400z and 1420z TX cut

## ***X-- Russian intel.***

14375 kHz, 22-07, 0535 UTC, MFSK-13/MFSK-21

## ***DIPLOMATIC STATIONS***

### ***Diplomatic stations: Bulgaria***

14755 kHz, 11-07, 0823 UTC, RFSM-8000  
17440 kHz, 11-07, 1225 UTC, RFSM-8000  
18455 kHz, 11-07, 1258 UTC, RFSM-8000  
14755 kHz, 16-07, 0822 UTC, RFSM-8000  
17440 kHz, 16-07, 1221 UTC, RFSM-8000  
18455 kHz, 16-07, 1254 UTC, RFSM-8000  
13365 kHz, 17-07, 1232 UTC, RFSM-8000  
14755 kHz, 17-07, 0822 UTC, RFSM-8000  
17440 kHz, 17-07, 1231 UTC, RFSM-8000  
18455 kHz, 17-07, 1258 UTC, RFSM-8000  
14755 kHz, 18-07, 0823 UTC, RFSM-8000  
18455 kHz, 18-07, 1254 UTC, RFSM-8000  
14786 kHz, 18-07, 1026 UTC, RFSM-8000  
14755 kHz, 22-07, 0904 UTC, RFSM-8000  
18455 kHz, 22-07, 1256 UTC, RFSM-8000

### ***Diplomatic stations: North Korea***

|                                                   |                                                                  |
|---------------------------------------------------|------------------------------------------------------------------|
| 18530 kHz, 01-07, 0503 UTC, DPRK-ARQ 1200/600 LSB | DPRK embassy Rome wkg DPRK embassy Moscow                        |
| 16120 kHz, 03-07, 0633 UTC, DPRK-ARQ 600/600 LSB  | DPRK embassy Moscow wkg DPRK embassy Rome                        |
| 14300 kHz, 09-07, 0730 UTC, DPRK-ARQ 600/600 LSB  | DPRK embassy Moscow wkg DPRK embassy Berlin                      |
| 14300 kHz, 11-07, 0727 UTC, DPRK-ARQ 600/600 LSB  | DPRK embassy Moscow wkg DPRK embassy Berlin                      |
| 16120 kHz, 22-07, 1238 UTC, DPRK-ARQ 600/600 LSB  | DPRK embassy Moscow wkg DPRK embassy Rome                        |
| 16252 kHz, 25-07, 0710 UTC, DPRK-ARQ 600/600 LSB  | DPRK embassy Moscow wkg DPRK Permanent Mission to the UN, Geneve |
| 13300 kHz, 25-07, 0735 UTC, DPRK-ARQ 600/600 LSB  | DPRK embassy Moscow wkg DPRK Permanent Mission to the UN, Geneve |

### ***Diplomatic stations: Russia***

|                                         |                                                     |
|-----------------------------------------|-----------------------------------------------------|
| 19511 kHz, 03-07, 0730 UTC, MFSK-6      | MFA Moscow clg 314265: Russian embassy Antananarivo |
| 14824 kHz, 04-07, 1018 UTC, MFSK-6      | MFA Moscow clg 625413: Russian embassy Tel Aviv     |
| 11156 kHz, 11-07, 0635 UTC, Serdolik v2 | Russian diplo. Selcal                               |
| 15728 kHz, 11-07, 0637 UTC, Serdolik v2 | Russian diplo. Selcal                               |
| 11156 kHz, 11-07, 0638 UTC, Serdolik v2 | Russian diplo. Selcal                               |
| 11156 kHz, 11-07, 0641 UTC, Serdolik v2 | Russian diplo. Selcal                               |
| 15728 kHz, 11-07, 0642 UTC, Serdolik v2 | Russian diplo.                                      |

11555 kHz, 11-07, 0650 UTC, MFSK-6  
 11158 kHz, 11-07, 0642 UTC, Serdolik v2  
 11158 kHz, 11-07, 0654 UTC, Serdolik v2  
 15728 kHz, 11-07, 0654 UTC, Serdolik v2  
 15726 kHz, 11-07, 0654 UTC, Serdolik v2  
 12193 kHz, 11-07, 0817 UTC, MFSK-66  
 12178 kHz, 11-07, 0818 UTC, MFSK-66  
 11556 kHz, 11-07, 0824 UTC, MFSK-6  
 12177 kHz, 11-07, 0829 UTC, MFSK-6  
 12193 kHz, 11-07, 0834 UTC, MFSK-66  
 9286 kHz, 11-07, 0839 UTC, MFSK-66  
 19235 kHz, 14-07, 0939 UTC, MFSK-6  
 14454 kHz, 16-07, 0637 UTC, Serdolik v2  
 14452 kHz, 16-07, 0638 UTC, Serdolik v2  
 15819 kHz, 16-07, 0647 UTC, MFSK-6  
 14405 kHz, 16-07, 0652 UTC, MFSK-6/AM  
 12150 kHz, 16-07, 0701 UTC, MFSK-6  
 16115 kHz, 16-07, 1111 UTC, MFSK-6  
 18197 kHz, 17-07, 0914 UTC, MFSK-6  
 10453 kHz, 21-07, 0723 UTC, MFSK-6  
 12228 kHz, 21-07, 0737 UTC, MFSK-66  
 10414 kHz, 21-07, 0761 UTC, MFSK-66  
 13395 kHz, 21-07, 0809 UTC, MFSK-6  
 11071 kHz, 22-07, 0801 UTC, Serdolik v2  
 13420 kHz, 22-07, 0806 UTC, MFSK-6  
 17523 kHz, 22-07, 0810 UTC, MFSK-6  
 14970 kHz, 22-07, 0956 UTC, Serdolik v2  
 12164 kHz, 22-07, 1003 UTC, 112-tone modem  
 14970 kHz, 22-07, 1006 UTC, Serdolik v2  
 14970 kHz, 22-07, 1024 UTC, Serdolik v2  
 14970 kHz, 22-07, 1038 UTC, Serdolik v2  
 17470 kHz, 22-07, 1029 UTC, MFSK-6  
 11071 kHz, 22-07, 0805 UTC, Serdolik v2  
 20811 kHz, 22-07, 1002 UTC, Serdolik v2  
 20811 kHz, 22-07, 1004 UTC, Serdolik v2  
 14970 kHz, 22-07, 1006 UTC, Serdolik v2  
 20811 kHz, 22-07, 1017 UTC, Serdolik v2  
 20815 kHz, 22-07, 1019 UTC, Serdolik v2  
 20811 kHz, 22-07, 1021 UTC, Serdolik v2  
 20815 kHz, 22-07, 1022 UTC, Serdolik v2  
 14970 kHz, 22-07, 1024 UTC, Serdolik v2  
 17470 kHz, 22-07, 1029 UTC, MFSK-6  
 20815 kHz, 22-07, 1035 UTC, Serdolik v2  
 19612 kHz, 22-07, 1036 UTC, Serdolik v2  
 14970 kHz, 22-07, 1038 UTC, Serdolik v2  
 20815 kHz, 22-07, 1039 UTC, Serdolik v2  
 20815 kHz, 22-07, 1047 UTC, Serdolik v2  
 12071 kHz, 23-07, 0602 UTC, 112-tone modem  
 12071 kHz, 23-07, 0608 UTC, 112-tone modem  
 10814 kHz, 23-07, 0732 UTC, MFSK-6  
 11152 kHz, 23-07, 0758 UTC, Serdolik v2  
 13460 kHz, 23-07, 0737 UTC, MFSK-66  
 13419 kHz, 23-07, 0810 UTC, MFSK-6  
 13419 kHz, 23-07, 0811 UTC, MFSK-6  
 20334 kHz, 23-07, 0827 UTC, MFSK-6  
 18177 kHz, 23-07, 0829 UTC, MFSK-6  
 9288 kHz, 25-07, 0826 UTC, MFSK-66  
 9288 kHz, 25-07, 0826 UTC, MFSK-66  
 10653 kHz, 25-07, 0821 UTC, MFSK-6  
 11156 kHz, 25-07, 0631 UTC, Serdolik v2  
 11156 kHz, 25-07, 0634 UTC, Serdolik v2  
 11158 kHz, 25-07, 0639 UTC, Serdolik v2  
 11158 kHz, 25-07, 0648 UTC, Serdolik v2

MFA Moscow clg 341265: unid Russian embassy  
 Russian diplo  
 Russian diplo  
 Russian diplo  
 Russian diplo. Test  
 Russian diplo  
 Russian diplo  
 MFA Moscow clg 615243: Russian Permanent Mission to the UN, Geneva  
 MFA Moscow clg 356412: Russian embassy Berlin  
 Russian diplo  
 Russian diplo  
 MFA Moscow clg 463125: Russian embassy Rabat  
 Russian diplo. Selcal  
 Russian diplo  
 MFA Moscow clg 256341: Russian embassy Beirut  
 MFA Moscow clg 256341: Russian embassy Beirut  
 MFA Moscow clg 256341: Russian embassy Beirut  
 MFA Moscow clg 215346: Russian embassy Mumbai  
 MFA Moscow clg 645321: Russian Consulate General Ho Chi Minh City  
 MFA Moscow clg 432516: Russian embassy Bern  
 Russian diplo  
 Russian diplo  
 MFA Moscow clg 532614: Russian embassy Paris  
 Russian diplo  
 MFA Moscow clg 534216: Russian embassy Baghdad  
 MFA Moscow clg 542136: Russian embassy Beijing  
 Russian diplo. Test  
 Russian diplo call up  
 Russian diplo. Test  
 Russian diplo. Test  
 Russian diplo. Test  
 MFA Moscow clg 216354: Russian Consulate General Chennai  
 Russian diplo  
 Russian diplo selcal  
 Russian diplo test  
 Russian diplo test  
 Russian diplo test  
 Russian diplo test  
 Russian diplo  
 Russian diplo selcal  
 Russian diplo test  
 Russian diplo test  
 MFA Moscow clg 216354: Russian Consulate General Chennai  
 Russian diplo test  
 Russian diplo selcal  
 Russian diplo test  
 Russian diplo  
 Russian diplo test  
 Russian diplo call up (on top of F06a)  
 Russian diplo call up (on top of F06a)  
 MFA Moscow clg 412356: Russian embassy Budapest  
 Russian diplo selcal  
 Russian diplo  
 MFA Moscow clg 465132: Russian embassy Sofia  
 MFA Moscow clg 465132: Russian embassy Sofia  
 MFA Moscow clg 164253: Russian embassy Addis Ababa  
 MFA Moscow clg 164253: Russian embassy Addis Ababa  
 Russian diplo  
 Russian diplo  
 MFA Moscow clg 356412: Russian embassy Berlin  
 Russian diplo selcal  
 Russian diplo selcal  
 Russian diplo  
 Russian diplo tone

|                                         |                                                |
|-----------------------------------------|------------------------------------------------|
| 13430 kHz, 25-07, 0630 UTC, Serdolik v2 | Russian diplo selcal                           |
| 13430 kHz, 25-07, 0633 UTC, Serdolik v2 | Russian diplo selcal                           |
| 15920 kHz, 25-07, 0512 UTC, MFSK-6      | MFA Moscow clg 216435: Russian embassy Dhaka   |
| 19610 kHz, 25-07, 0511 UTC, MFSK-6      | MFA Moscow clg 216435: Russian embassy Dhaka   |
| 13427 kHz, 25-07, 0644 UTC, MFSK-6      | MFA Moscow clg 341265: unid Russian embassy    |
| 10653 kHz, 25-07, 0821 UTC, MFSK-6      | MFA Moscow clg 356412: Russian embassy Berlin  |
| 16060 kHz, 27-07, 0910 UTC, MFSK-6      | MFA Moscow clg 261453: Russian embassy Cairo   |
| 15810 kHz, 27-07, 1034 UTC, MFSK-6      | MFA Moscow clg 145632: Russian embassy Algiers |
| 19235 kHz, 28-07, 1007 UTC, MFSK-6      | MFA Moscow clg 463125: Russian embassy Rabat   |

## UTILITY ROUND-UP

### Unid stations

|                                                                               |                                                                                                                                  |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>7973 kHz, 07-07, 1341 UTC, MFSK11</b>                                      | Unid Russian net                                                                                                                 |
| <b>5304 kHz, 29-07, 1933 UTC, CW</b>                                          | Unid, final part of a message.<br>ISION AND ACCURACY. WHILE THE INDUCTOR CRANK HANDLE FACILITATES COARSE<br>ADJUSTMENTS. SSB SSB |
| The last report of the BUGLE was on 25 Feb 2024. It was heard again on 14-07: |                                                                                                                                  |
| <b>12960 kHz, 14-07, 1503 UTC, USB</b>                                        | Bugle tune (R)                                                                                                                   |
| <b>10760 kHz, 14-07, 1900 UTC, USB</b>                                        | Bugle tune (R) followed by PSK data                                                                                              |

## EMERGENCY ACTION MESSAGES & FOXTROT MESSAGES

I recently received an email asking me whether EAMs still exist, as I no longer mention them in N&O.

Yes, they still exist. They are on the air daily, but because I don't have the time, I rarely listen to them these days and therefore I no longer include them in N&O. If you are interested you might be interested in joining UDXF. EAMs are often reported there:  
<https://groups.io/g/UDXF>

This month, I am making an exception and have included a large number of logs from Jeff Haverlah. These include EAMs and other USAF activity on the same frequencies. Jeff has also provided explanatory notes about the messages, for which I am very grateful. Jeff mentioned that he and a couple of fellow hobbyists discovered groups of characters inside messages and they also determined that there were two possible sets within the longer strings. The P numbers in the logs refer to the different groups.

P1: Currently the AA strings. The most common EAMs. All 30 characters. No discernable internal structure that is repeatable.

P2: Currently the NZ strings. Also common. Mostly 30 characters but rarely less (16 and up); and variable counts above 30. The home of the FOR strings. No discernable structure in the 30 character and below strings (like the P1 above); but repeatable structures in strings above 30 characters.

P3: Currently the YP strings; Rare compared to other strings; Usually the longer strings 120 and up, mostly (but not always) with 18/quad repetitive blocks within the strings; and, with structures that are repeatable over strings of the same character count. And, sometimes the same character blocks are reused in later strings of varying lengths (that was true in 1996+ as well). The string count can go as low as 36 and above (very rare at that level);

P4: Currently the GV strings. Not rare. A new series since 01 Oct 24 (new fiscal year). No common character count; but, structured such that the counts start at 22 and work up (22; 25; 27; 29; 30 (rare) and above). Tightly structured internally, repeatable over same character counts. They appear to be a hybrid of the P2 strings with characteristics of the P3 series. (I named them "kaiju" strings because of the way they appeared to morph from the P2/P3 to P4.) It is the most "interesting" series in the bunch.

Both the P2 and P4 strings seem to make things happen.

The above (with the exception of the P4 series) is exactly the format of the 90s.

P1 = 20/26(28/30) character series.

P2 = 6/20/variable (FOR) series.

P3 = Variable series (with a perceived 2 sets active at any one time, one which could be thought of as P4 without the kaiju characteristics).

**Frequencies: 4724, 8992, 11175, 15016 kHz.**

## 20 July

0148z: GILCREST (NCS); AAJ4VO; P1. AAJ4VORF5DUU7O4HACTZ2NMLICUDRV [Fed TACAMO LANT] [A common broadcast window for this activity.]  
[0200z+: 17.8 KHz broadcast indicated on W1VD VLF Grabber.]  
0210z: RESEMBLE; AAJ4VO; h+10/h+40 TACAMO LANT restoral rebroadcast window. UTwente SDR.  
0227z: RING BOLT/BOWL/? (E6B) worked GILCREST to exit the net.  
0230z: RING BOLT exited the net.  
0240z: RESEMBLE; AAJ4VO; restoral. UTwente SDR.  
0310z: RESEMBLE; AAJ4VO; restoral; UTwente.  
0340z: RESEMBLE; AAJ4VO; restoral; UTwente.  
0410z Nothing heard.  
[1310z+/-: ? AF266F E6B launched from TINKER]  
1314z+: SPARE RIB (presumed AF266F; E6B) called GILCREST and MAINSAIL multiple times.  
1319z: SPARE RIB worked MAINSAIL/GILCREST to enter the net.  
1321z: SPARE RIB entered the net.  
1430z: GILCREST; DPJ4QF; 32 characters; P4. DPJ4QFGBBFT4HHQJJJPKGZMS3GZMSD7G  
1435z: GILCREST; disregard.  
1436z: GILCREST; DPVZUX; 27 characters; P4. DPVZUXW4REQ56FJVYX3LDVYLT3W  
1454z: GILCREST; AAWXP2; P1. AAWXP27N7U2Q2YNRCGRUBIQB6GE6QM  
1500z: GILCREST; AAWXP2; h+00/h+30 NCS/ABNCS/Gulf restoral rebroadcast window.  
1517z: GILCREST; AAUQON; P1. AAUQON57IDPAXE6LRU3F6JQXKIJ6AP  
1530z: GILCREST; AAUQON; disregarded early.  
1532z: GILCREST; AAUQON; AAWXP2; restoral.  
1600z: Nothing heard.  
1621z: GILCREST; YPUCQK; 158 characters; P3.  
YPUCQKGSCEBVXTRVQRXRLQ2IBWRXR4A44TDN67DNK2222HRFIB6B6TVFEMZABHGGGGGJOM4CJTZOYZ46233L6HHHHGJMICKCBCS  
WHQ5Z5ZCWWWW3XJTTNEEK2AXELQ7LAOG3C3WC6UC7CZH57DDDD2BSAWCBEW

Reformatted for clarity:

YPUCQK [Preamble; 6]  
GSCEBVXTRVQRXRLQ2 [17]  
IBWRXR4A44TDN67DNK2222 [22]  
HRFIB6B6TVFEMZABHGGGGG [22]  
JOM4CJTZOYZ46233L6HHHH [22]  
GJMICKCBCSWHQ5Z5ZCWWWW [22]  
3XJTTNEEK2AXELQ7 [16]  
LAOG3C3WC6UC7CZH57DDDD [22]  
2BSAWCBEW [9]

1707z: WEST COAST with test count.  
1708z: SPARE RIB called GILCREST and raised MAINSAIL. Did not respond.  
1709z: SPARE RIB called GILCREST (apparently does not hear responses.)  
1711z: Both "MAINSAILS" (male and female operators) try to raised GILCREST.  
1712z: SPARE RIB exits the net in the blind. He at TINKER at the time.  
[2051z+/-: TATUM 17 AEC784 E6B launches from TRAVIS and flies to the Pacific. TACAMO PAC.]  
2053z: GILCREST; AAGXJS; P1. AAGXJSYB4WWZTEVW6ND473OT7TWNIN  
[2108z+/-: ? AF2ECO E6B launched from TINKER and flew to PAX RIVER.]  
2120z: COMPRESS (TATUM 17); AAGXJS; h+20/h+50 TACAMO PAC restoral rebroadcast window.  
2129z: COMPRESS called DEVIL FOX with no response.  
2131z: COMPRESS called DEVIL FOX.  
2139z: COMPRESS called DEVIL FOX 8992.  
2142z: COMPRESS called DEVIL FOX 11175.

[No 274 message traffic logged this date.]

2150z: COMPRESS; AAGXJS; restoral.  
2201z: COMPRESS called and worked GILCREST and requested to enter the net (an hour+/- since launch).  
2204z: COMPRESS entered the net.  
2220z: COMPRESS; AAGXJS; restoral.  
2250z: COMPRESS; AAGXJS; restoral.  
2320z: Nothing heard.

2353z: DRIFTWOOD (E6B AF2EC0) called GILCREST to exit the net. No response noted. AF2EC0 was descending into PAX RIVER at that time.

## 21 July

0004z: MAINSAIL with test count.  
0005z: CHIP SHOT with test count.  
0006z: CHIP SHOT with test count. [USSTRATCOM CP]  
0113z: 0113z: MAINSAIL with test count  
0114z: ANDREWS with test count.  
0115z: ANDREWS with test count.  
0600z: (sounds like "ben ruth" but probably something else; pre 0000z COMPRESS; TATUM 17) called SMITHERS (NCS).  
0602z: Raised MAINSAIL and requested to exit the net.  
0605z: Exited net. TATUM 17 was at TRAVIS at the time.  
0955z-1026z: SUMMO 08 called and eventually raised MAINSAIL to obtain weather for PHNL.  
[1315z+/-: WENCH 02 AF4057 E6B launched from TINKER, flew north to the OFFUTT area, and flew distinctive a distinctive pattern to the northeast, east, and north of OFFUTT. There was an east/west storm system directly to the south of OFFUTT at the time.]  
1320z: WASH TUB (suspected WENCH 02) called and worked SMITHERS to enter the net.  
1321z: WASH TUB entered the net.  
1400z: SMITHERS Standing by for traffic. [WENCH 02/WASH TUB was approximately half way to his pattern work area.]  
1429z: SMITHERS; DPXDXS; 38 characters; P4 DPXDXSQDXERUJVDALZA55STTTTTTQ7JWJYJ6WY [doublet/quad P4] [WENCH 02/WASH TUB entered his pattern work at 1429z+/-.]  
1432z: SMITHERS; DPTKSW; 25 characters; P4 DPTKSWRQBQMELNMAIRA5NM4JG  
1436z: SMITHERS; DPXDXS; echo; 11175 only.  
1439z: SMITHERS; DPTKSW; echo; 11175 only.  
1501z: SMITHERS Standing by for traffic.  
[1520z+/-: STOAT 22 AEDAA5 E6B launched from TRAVIS; flew around western CONUS; crossed California Pacific coast 2049z+/-; see 2103z; TACAMO PAC.]  
1530z: Nothing heard.  
1600z: SMITHERS Standing by for traffic.  
1630z: Nothing heard.  
1630z: STEVEDORE (E6B) called MAINSAIL and SMITHERS.  
1636z: STEVEDORE called CHIP SHOT (USSTRATCOM CP; see 0005z).  
1638z: MAINSAIL with test count.  
1639z: STEVEDORE called SMITHERS.  
1648z: STEVEDORE called NEW BOOK.  
1649z: STEVEDORE called NEW BOOK.  
1650z: STEVEDORE to NEW BOOK (in the blind); message of 3 groups: HZN GDS BOS; time 50; authentication YS; I say again; repeat in full; Out.  
1654z: STEVEDORE called CHIP SHOT; and SMITHERS called STEVEDORE.  
1657z: STEVEDORE to LAST CALLER: "weak and unreadable."  
1708z: WEST COAST with test count.  
1729z: SMITHERS with test count; heard on 11175 UTwente only.  
1729z: SMITHERS again; UTwente.  
1911z: WASH TUB called and raised SMITHERS to exit the net.  
1915z: WASH TUB exited the net. [WASH TUB/WENCH 02 left his pattern at 1911z to fly to OFFUTT.]  
2103z: SMITHERS; FOR LEADR 22, FOR STOAT 22; NZG7XS; P2. NZG7XSXRGQIPRBT4MTHHZFGIU5ENQC  
[2122z+/-: ? AF4F34 E6B launched from PAX RIVER and flew to the Atlantic; TACAMO LANT]  
2124z: ASCENSION with test count; good readable on UTwente 11175; very weak CONUS. [30 minute window]  
2132z: SMITHERS; AAF4ZV; P1. AAF4ZVHMDYJPKL4NDDNKZJXWUENYAQ [Fed to TACAMO LANT and TACAMO PAC.]  
2143z: BIG BURLY (suspected AF4F34); AAF4ZV; h+10/h+40 TACAMO LANT restoral rebroadcast window.  
2149z: BIG BURLY called SMITHERS to enter the net.  
2151z: BIG BURLY called SMITHERS.  
[2130z-2200z: Indication of 22.7 KHz (PAC) VLF FSK broadcast on W1VD VLF Grabber.]  
[2200z+: 17.8 KHz (LANT) VLF FSK broadcast.]  
2202z: SMITHERS with test count.  
2206z: SMITHERS with test count.  
2210z: BIG BURLY; AAF4ZV; restoral.  
2240z: BIG BURLY; AAF4ZV; restoral.  
2250z: TIN ROOF (presumed STOAT 22); AAF4ZV; restoral.  
2310z: BIG BURLY; AAF4ZV; restoral.  
2320z: TIN ROOF; AAF4ZV; restoral.  
2340z: Nothing heard.  
2350z: Nothing heard; STOAT 22/TIN ROOF had crossed the California Pacific coast at 2337z and was descending toward Travis.

23 July  
0010z: BILLY CLUB; AALGW2; h+10/h+40 TACAMO LANT restoral rebroadcast window. [UTC 22 Jul 25 CLASSROOM]  
0024z: SUCCESS but could be SUSPENSE (sounds like or something else) with test count.  
0025z: SUCCESS/SUSPENSE with test count. See 2144z. [USSTRATCOM CP]  
0035z: BILLY CLUB called MAINSAIL.  
0036z: JUNE DAY (NCS) responded to BILLY CLUB. BILLY CLUB requests to exit the net.  
0038z: BILLY CLUB exited the net.  
0113z: FISH HOOK (Female operator; old day DEER MEAT [female operator]) called YULETIDE (old day CLASSROOM) a couple of times.  
0116z: FISH HOOK works YULETIDE and request to meet on the CHARLIE ECHO WINDOW.  
0117z: YULETIDE declines because they are refueling. [Per ADSBExchange YULETIDE was in the AR 200 along the west coast of Florida trailing KC135 tanker AE015D 63-8879 at that time.]  
0251z: FISH HOOK called and worked JUNE DAY to exit the net.  
0253z: FISH HOOK exited the net.  
0628z: JUNE DAY; AAXCIN; P1. AAXCINGH63OPDK4VRECBGAKFP4O6W  
[0645z+/-: 8992.0 traffic string (maybe AAXCIN) from good level station and a slightly delayed very weak station on California SDR. Missed it but saw it on the waterfall.]  
0722z: JUNE DAY; GV2EQ3; 22 characters; P4. GV2EQ3Z64EU6OJOLRYZ4XC [DP 08 Jun 25 - 23 Jul 25; 45 days.]  
0912z: JUNE DAY; NZTPGJ; 35 characters; P2. NZTPGJHN74N3DKZBEHTUTLDML6YTGO6YTSG

[Wednesday h+#3 FOR activity:]

1203z: JUNE DAY; NZH.. Disregard (forgot the FOR).  
1203z: JUNE DAY; FOR TIMOTHY; NZHTSB; P2. NZHTSBXT25HLXTRWRF3KZTHIYDGIR7  
1223z: JUNE DAY; FOR TIMOTHY; NZIRWO; P2. NZIRWO5ETVUASNNXNJ4VJNJIQMQUQP  
1303z: JUNE DAY; FOR TIMOTHY; NZH3UI; P2. NZH3UIUG26JAW7VCACMIMFQ7HLKG5T  
1323z: JUNE DAY; FOR TIMOTHY, FOR JARK; NZ2BHA; P2. NZ2BHAZKXT2UZQPCQNGMJRTT3NJL42  
1459z: JUNE DAY; GVEFYP; 32 characters; P4. GVEFYPWCEUGTOROQEMHQJQOYMIJQOYGXV  
1503z: JUNE DAY; GVFLPQ; 27 characters; P4. GVFLPQKI357ADNOOPW66NVJMLZG  
1517z: JUNE DAY; AABKIN; P1. AABKINSO3W5RUJ7DG325ZYET7IBGQ  
[1537z+/-: BURNS 34 AF1DCG E6B launched from TRAVIS  
1541z: CUE STICK (suspected BURNS 34) called JUNE DAY and raised MAINSAIL. CUE STICK requested to enter the net.  
1544z: CUE STICK entered the net.  
1648z: OUTCLASS (sounds like; unknown E6B) called and raised JUNE DAY.  
1659z: OUTCLASS called MUSTACHE with no response.  
1700z: MAINSAIL called and raised OUTCLASS. OUTCLASS requested to enter the net.  
1704z: OUTCLASS entered the net.  
1705z: COBRA 29 called and raised MAINSAIL for a radio check.  
1726z: ANDREWS with a test count.  
1833z: MAINSAIL with test count.  
[2110z: BURNS 24/CUE STICK is outbound over the Pacific.]

[A common window for TACAMO restoral activity.]

2132z: JUNE DAY; FOR ARROW 34, FOR BURNS 34; NZ6DLU; P2. NZ6DLUTQ3SMLAYBJ5YPCUMGNZ2FOHF

2142z: OUTCLASS called SUSPENSE (sounds like; very weak) on 11175.  
2144z: OUTCLASS (weak/but readable) to SUSPENSE (sounds like); message of 3 groups follows: XCH RLH GWM; time 44; authentication KK; I say again; Repeat in full; Out.  
2151z: WEST COAST with test count.

[30 minute window]

2202z: JUNE DAY; AAFWSN; P1. AAFWSNI4PMTS4XV7S7QPBZ34FOX7Z [Fed to TACAMO PAC and TACAMO LANT]  
2205z: OUTCLASS calling JUNE DAY with no known response.  
2206z: JUNE DAY; AAFWSN; echo.  
2208z: YULETIDE (E6B; TACAMO LANT); AAFWSN.  
2211z: YULETIDE; AAFWSN; suspected h+10/h+40 TACAMO LANT restoral window.  
[2215z: 22.7 KHz (PAC) VLF FSK; AAFWSN broadcast]  
2220z: CUE STICK; AAFWSN; h+20/h+50 TACAMO PAC restoral window.  
[2221z+/-: 22.7 KHz FSK; again, same; W1VD grabber indication]  
2230z: MAINSAIL worked YULETIDE (unheard on SDR). YULETIDE requests to enter the net.  
2234z: YULETIDE (unheard) entered the net.

2240z: YULETIDE (weak/fair); AAFWSN; restoral.  
[2241z+/-: 17.8 KHz (LANT) VLF FSK; W1VD VLF grabber.]  
2250z: CUE STICK; AAFWSN; restoral.  
[2251z: 22.7 KHz VLF FSK; repeat FSK again.]  
2310z: YULETIDE (strong 8992 east coast SDR); AAFWSN; restoral.  
2320z: CUE STICK; AAFWSN; restoral.  
2340z: CUE STICK; AAFWSN; restoral.  
2350z: YULETIDE; AAFWSN; restoral.

## 24 July

The 1600z+ NCS activity on the HFGCS was conducted in DSB, with the LSB side appearing to be noticeably/significantly weaker, yet the LSB voice audio seemed superior/clearer to the USB side. There appeared to be an LSB component at other times but at noise floor levels in the waterfall if there at all. MAINSAIL comms did not appear to be in DSB.

0017z: BOAT DOCK with communication test count.  
0018z: BOAT DOCK with test count. [USSTRATCOM CP]  
0218z: HATHAWAY (E6B; suspected old day CUE STICK) called and raised PARASITE (NCS) to exit the net.  
0229z: HATHAWAY exited the net. [BURNS 34 was at TRAVIS]  
0231z: OUTCURVE (E6B) called and raised PARASITE and requested to enter the net.  
0236Z: During the challenge back and forth, PARASITE, in addition to normal formal responses, added the following question to her response: "What is "rye-point (sounds like) callsign?" and then into normal response. No apparent response to that particular question. I'm unfamiliar with that term.  
0238z: OURCURVE entered the net.  
0658z: OUTCURVE (weak) called PARASITE to exit the net.  
0706z: OUTCURVE exited the net.  
0909z: MAINSAIL with test count.  
0910z: ANDREWS with test count.  
0947z: PARASITE; FOR HURON INDIAN; NZOUZW; P2. NZOUZWJNIXF2HW6MVLNGGG5NOAPCR4  
0958z: PARASITE; FOR HURON INDIAN; NZRY7S; P2. NZRY7SPP7C2WY7EVVRRS3PV3CGL7TS'  
1008z: PARASITE; FOR HURON INDIAN; NZ6QBI; P2. NZ6QBIOV5XU2Q2US5ETVKZPHIWBY4U  
1035z: PARASITE; FOR HURON INDIAN; NZLRZW; P2. NZLRZW24RT2722NGR3PZXHRTJWY6LK  
1619z: PARASITE; AA4SVA; P1. AA4SVAMYKB2KFGBD3PHY2GVY6MXSU7 [2nd operator in his background reading the same string but ahead of the primary reading.]  
[1617z+/-: ZUNO 41 AF3BBC E6B launched from TRAVIS and flew east.]  
1623z: SAFE CALL (presumed ZUNO 41) called PARASITE multiple times.  
1625z: PARASITE; AASWPW; P1. AASWPW4DV3HEQN27HUXKPDIAVOGKIE  
1628z: SAFE CALL called PARASITE.  
1629z: PARASITE; AAJ7HW; P1. AAJ7HWNTVTSW2HFSHUKTWVSJ7OFGI5  
1634z: SAFE CALL called PARASITE.  
1634z: PARASITE; AAJ7HW; AASWPW; AA4SVA; h+00/h+30 NCS restoral rebroadcast window.  
1642z: SAFE CALL called PARASITE.  
1644z: SAFE CALL called PARASITE.  
1645z: PARASITE; AA3NBE; P1. AA3NBENO2CW17AQ3FLZHIICVTR2ZVP  
1648z: PARASITE Standing by for traffic.  
1650z - 1658z: SAFE CALL called PARASITE and eventually raised MAINSAIL (male and female operators) with attempts to enter the net.  
1700z: PARASITE; AA3NBE; AAJ7HW; AASWPW; restoral.  
1709z: PARASITE Standing by for traffic.  
1730z: Nothing heard.

With PARASITE finished with its traffic session...

1711z - 1742z: SAFE CALL eventually enters the net through MAINSAIL at 1742z after many unsuccessful attempts (connectivity).

1930z: PARASITE; GVQZLY; 25 characters; P4. GVQZLYPVH75NJ3ND3DD3M42QO  
1935z: PARASITE; GVCCXL; 38-characters; doublet/quad series; P4. GVCCXL3ALWJBSXLRXQRYETTOOOOUFTHTZTSPH  
[doublet/quad/10-character ending block conforms with previous 38 character P4 strings.]  
1938z: PARASITE Standing by for traffic.  
2000z: Nothing heard  
1939z - 2012z: RESURGENT (presumed E6B; don't see him on mapping sites) called PARASITE many times, often simulcasting on all frequencies. No known resolution.  
2101z: SAFE CALL called PARASITE and raised MAINSAIL to exit the net.  
2106z: SAFE CALL exited the net.  
2107z: COBRA 29 called MAINSAIL for a radio check.

2117z: MAINSAIL with test count.  
2130z: WEST COAST with test count.  
2241z: PARASITE; AAJLH2; P1. AAJLH2O2CNWN3CRTAGBTDSCSLCE3F  
2346z: PARASITE; NZ273F; P2. NZ273FXDYM3J2DSPVE4VF4VTXPSBYF

## 25 July

0013z: MAINSAIL with test count.  
0024z: BIG MACK; AAYWPJ; P1. AAYWPJ7DZSGX53EFOBE3I3AHBTK36C  
0028z: BIG MACK; AAVYJC; P1. AAVYJCBUW2QLDKF4GLAORUPRYGJDOR  
0032z: BIG MACK; AAKCUQ; P1. AAKCUQBY2ZCNFFA7PGUJEJFCIHKSLT  
0037z: OVERGROWN (sounds like; E6B) to ? (missed it): Message of 3 groups; TGC NQT BSC; time 0038; authentication VG Repeat in full. Out.  
0040z: BIG MACK; AAMBB3; P1. AAMBB3W7WLHEW67WTNXP72PIXYJLNG

[No NCS restoral traffic generated by the above activity.]

[0048z: WOOD 24 AE0412 (static hex) E6B launched from TINKER.]  
0109z: MAINSAIL with test count.  
0314z: DECORATOR with their daily test count.  
0315z: DECORATOR with their test count. [USSTRATCOM CP]

1308z: BIG MACK; YPWISL; 120 characters; P3  
YPWISLGH6FNYG4ZHGPITKATEJ4KIXOSI7C4QQQ4JLLLLROI2A7XFHXFRG6ZUUA77774TAABWFZWBKMA336ZARRRRMCQD4BKK7RJM  
HYCH2VVVV566G5UAHI

Reformatted for clarity:

Y P W I S L [P r e a m b l e ; 6 ]  
G H B 6 F N Y G 4 Z H G P I T K A [1 7 ]  
T E J 4 K I X O S I 7 C 4 Q Q Q 4 J L L L L [2 2 ]  
R O I 2 A 7 X F X H F R G 6 Z U U A 7 7 7 7 [2 2 ]  
4 T A A B W F Z W B K M A 3 3 6 Z A R R R R [2 2 ]  
M C Q D 4 B K K 7 R J M H Y Y C H 2 V V V V [2 2 ]  
5 Y 6 G 5 U A H I [9 ]

1611z: BIG MACK; NZCEF2; 64 characters; P2  
NZCEF2OJG35CLX3WNXJGWNZLGATQZDLX44TGWJL5AWO2WHFMYKSI4L5AWO2WHFM6  
2016z: BIG MACK; FOR MELGA 46 (sounds like); NZAPNY; P2. NZAPNY6WP7OODFH5UEWPZDRDLCCQG

[30 minute window]

2046z: BIG MACK; AARKAN; P1. AARKANQOWFOKOBUIZ52US6H4Q4QNAT [Fed ABNCP/Gulf and TACAMO LANT]  
2050z: PROPAGATE (presumed, as initial ID unheard; suspected ABNCP); AARKAN; P1. [Very weak/mostly unreadable on California and western SDRs. Dropped transmission during reading of string. ]  
2104z: PROPAGATE; AARKAN; h+00/h+30 NCS/ABNCP/Gulf restoral rebroadcast. [There's a storm system over the western Gulf.]  
[2119z+/-: ? AF3FE9 E6B launched from PEASE and flew to the Atlantic; TACAMO LANT.]  
2120z: STAR WISH (E6B; presumed AF3FE9; TACAMO LANT) worked BIG MACK to enter the net.  
2124z: STAR WISH entered the net  
2130z: PROPAGATE; AARKAN; restoral.  
2140z: STAR WISH; AARKAN; h+10/h+40 TACAMO LANT restoral rebroadcast window.  
2200z: PROPAGATE; AARKAN; restoral.  
2210z: STAR WISH; AARKAN; restoral.  
[2210z+/-: ? AF50E9 E6B launched from OFFUTT westbound.]  
[2210z+: 17.8 KHz (LANT) VLF broadcast indicated on W1VD VLF Grabber.]  
2218z: STATEMENT (presumed AF50E9) called BIG MACK.  
2220z: STATEMENT worked BIG MACK to enter the net.  
2222z: STATEMENT entered the net.  
2230z: PROPAGATE; AARKAN; restoral.  
2234z: CLIMATIC (suspected E6B) called BIG MACK.  
2240z: STAR WISH; AARKAN; restoral.  
2300z: Nothing heard.  
2310z: Nothing heard.

## 26 July

Very quiet day.

0001z: MAINSAIL with test count.  
 0003z: MAINSAIL with test count.  
 0004z: MAINSAIL with test count.  
 0107z: SQUAD CAR (NCS) with test count.  
 0149z: SQUAD CAR; AANK7B; Disregard  
 0159z: SQUAD CAR; AANK7B; P1. AANK7BT4ZX32C4U6CICVWBIS362ZFJ [Common window for CONUS local night TACAMO restoral strings.] [Fed to TACAMO LANT.]  
 [0157z+/-: 17.8 KHz FSK active per W1VD VLF grabber.]  
 0210z: ANTIQUITY (E6B; suspected AF3FE9; pre 0000 STAR WISH); AANK7B h+10/h+40 TACAMO LANT restoral rebroadcast window.  
 0240z: ANTIQUITY; AANK7B; restoral.  
 0310z: ANTIQUITY; AANK7B; restoral.  
 0340z: ANTIQUITY; AANK7B; restoral.  
 0410z: Nothing heard.  
 0348z: COLORFUL (sounds like) called and raised SQUAD CAR to exit the net.  
 0353z: COLORFUL exited the net.  
 0414z: ANTIQUITY worked SQUAD CAR to exit the net.  
 0418z: ANTIQUITY exited the net.  
 Quiet.  
 [1424z+/-: MUSK 27 AEF5IF E6B launched from KNOXVILLE, TX westbound.]  
 1431z: COURTLAND (presumed MUSK 27) called SQUAD CAR.  
 1432z: COURTLAND called SQUAD CAR.  
 1433z: COURTLAND raised SQUAD CAR and requested to enter the net.  
 1437z: COURTLAND entered the net.  
 1447z: COURTLAND called WILY FOX with no response.  
 1450z: COURTLAND to WILY FOX (apparently in the blind); Message of 3 groups follows; KBP DCQ BSC; time 50; authentication KO; I say again; repeat in full; Out.  
 Quiet.  
 1820z: COURTLAND called WORKOUT (?).  
 1822z: COURTLAND called WORKOUT.  
 1925z: COURTLAND called and raised SQUAD CAR to exit the net.  
 1929z: COURTLAND exited the net.  
 [2038z+/-: EMPTY 54 AEF8B3 E6B launched from TINKER northbound.]  
 2051z: INSURABLE (suspected EMPTY 54) called SQUAD CAR.  
 2100z: INSURABLE called SQUAD CAR, an raised (very weak on SDR) but did not respond.  
 2103z: SQUAD CAR (good levels) called and worked INSURABLE. INSURABLE requested to enter the net.  
 2106z: INSURABLE entered the net.

## ***RUSSIAN MILITARY TRANSCRIPTS***

### ***Morse transmissions***

#### **14556 kHz, 1611 UTC**

VVV RMRV RMRV RMRV DE RMX RMX QSA? K  
 VVV RMRV RMRV RMRV DE RMX RMX QSA? K  
 VVV RMRV RMRV RMRV DE RMX RMX QSA? K  
 QSA? K

#### **9145 kHz, 12-07, 0810 UTC**

RMRV RMRV DE RMX RMX QSA? K (repeated)

## LOGS SECTION

| Code | Date | UTC  | Freq  | Day | Details                                                                       | Mode      | Contributor  |
|------|------|------|-------|-----|-------------------------------------------------------------------------------|-----------|--------------|
| ---  | 14-7 | 1503 | 12960 | Mon | Bugle tune (R)                                                                | USB       | (PY)         |
| ---  | 14-7 | 1900 | 10760 | Mon | Bugle tune (R) followed by PSK data                                           | USB       | (PY)         |
| BUL  | 11-7 | 0823 | 14755 | Fri | Bulgarian diplo                                                               | RFSM-8000 | (AB)         |
| BUL  | 11-7 | 1225 | 17440 | Fri | Bulgarian diplo                                                               | RFSM-8000 | (AB)         |
| BUL  | 11-7 | 1258 | 18455 | Fri | Bulgarian diplo                                                               | RFSM-8000 | (AB)         |
| BUL  | 16-7 | 0822 | 14755 | Wed | Bulgarian diplo                                                               | RFSM-8000 | (AB)         |
| BUL  | 16-7 | 1221 | 17440 | Wed | Bulgarian diplo                                                               | RFSM-8000 | (AB)         |
| BUL  | 16-7 | 1254 | 18455 | Wed | Bulgarian diplo                                                               | RFSM-8000 | (AB)         |
| BUL  | 17-7 | 0822 | 14755 | Thu | Bulgarian diplo                                                               | RFSM-8000 | (AB)         |
| BUL  | 17-7 | 1231 | 17440 | Thu | Bulgarian diplo                                                               | RFSM-8000 | (AB)         |
| BUL  | 17-7 | 1232 | 13365 | Thu | Bulgarian diplo                                                               | RFSM-8000 | (AB)         |
| BUL  | 17-7 | 1258 | 18455 | Thu | Bulgarian diplo                                                               | RFSM-8000 | (AB)         |
| BUL  | 18-7 | 0823 | 14755 | Fri | Bulgarian diplo                                                               | RFSM-8000 | (AB)         |
| BUL  | 18-7 | 1026 | 14786 | Fri | Bulgarian diplo                                                               | RFSM-8000 | (AB)         |
| BUL  | 18-7 | 1254 | 18455 | Fri | Bulgarian diplo                                                               | RFSM-8000 | (AB)         |
| BUL  | 22-7 | 0904 | 14755 | Tue | Bulgarian diplo                                                               | RFSM-8000 | (AB)         |
| BUL  | 22-7 | 1256 | 18455 | Tue | Bulgarian diplo                                                               | RFSM-8000 | (AB)         |
| E07  | 1-7  | 1500 | 16232 | Tue | 231 231 231 000                                                               | USB       | (AB/Lac/HFD) |
| E07  | 1-7  | 1520 | 18332 | Tue | 231 231 231 000                                                               | USB       | (AB/HFD)     |
| E07  | 3-7  | 1000 | 19235 | Thu | 234 234 234 1 516 108 516 108 22302 19111 17519 ... 91698 48388 86797 000 000 | USB       | (HFD/Lac)    |
| E07  | 3-7  | 1020 | 18368 | Thu | 234 234 234 1 516 108 516 108 22302 19111 17519 ... 91698 48388 86797 000 000 | USB       | (HFD/Lzc)    |
| E07  | 3-7  | 1040 | 17421 | Thu | 234 234 234 1 516 108 516 108 22302 19111 17519 ... 91698 48388 86797 000 000 | USB       | (HFD/Lac)    |
| E07  | 4-7  | 1500 | 18332 | Fri | 231 231 231 000                                                               | USB       | (AB)         |
| E07  | 4-7  | 1500 | 16232 | Fri | 231 231 231 000                                                               | USB       | (AB/Lac)     |
| E07  | 5-7  | 1000 | 19235 | Sat | 234 234 234 1 516 108 516 108 22302 19111 17519 ... 91698 48388 86797 000 000 | USB       | (AB-KWT/Lac) |
| E07  | 5-7  | 1020 | 18368 | Sat | 234 234 234 1 516 108 516 108 22302 19111 17519 ... 91698 48388 86797 000 000 | USB       | (AB-KWT/Lac) |
| E07  | 5-7  | 1040 | 17421 | Sat | 234 234 234 1 516 108 516 108 22302 19111 17519 ... 91698 48388 86797 000 000 | USB       | (AB-KWT/Lac) |
| E07  | 8-7  | 1500 | 16232 | Tue | 231 231 231 1 777 190 777 190 06086 69594 02050 ... 80370 53059 83879 000 000 | USB       | (AB-ARS/Lac) |
| E07  | 8-7  | 1520 | 18332 | Tue | 231 231 231 1 777 190 777 190 06086 69594 02050 ... 80370 53059 83879 000 000 | USB       | (AB)         |
| E07  | 8-7  | 1540 | 19132 | Tue | 231 231 231 1 777 190 777 190 06086 69594 02050 ... 80370 53059 83879 000 000 | USB       | (AB/Lac)     |
| E07  | 10-7 | 1000 | 19235 | Thu | 534 234 234 000                                                               | USB       | (AB-KWT)     |
| E07  | 10-7 | 1020 | 18368 | Thu | 534 234 234 000                                                               | USB       | (AB-KWT)     |
| E07  | 11-7 | 1500 | 16232 | Fri | 231 231 231 1 777 190 777 190 06086 69594 02050 ... 80370 53059 83879 000 000 | USB       | (AB)         |
| E07  | 11-7 | 1520 | 18332 | Fri | 231 231 231 1 777 190 777 190 06086 69594 02050 ... 80370 53059 83879 000 000 | USB       | (AB)         |
| E07  | 11-7 | 1540 | 19132 | Fri | 231 231 231 1 777 190 777 190 06086 69594 02050 ... 80370 53059 83879 000 000 | USB       | (AB)         |
| E07  | 12-7 | 1000 | 19235 | Sat | 534 234 234 000                                                               | USB       | (AB-KWT)     |
| E07  | 12-7 | 1020 | 18368 | Sat | 534 234 234 000                                                               | USB       | (AB-KWT)     |
| E07  | 15-7 | 1500 | 16232 | Tue | 231 231 231 000                                                               | USB       | (AB)         |

|     |      |      |       |     |                                                                                 |     |              |
|-----|------|------|-------|-----|---------------------------------------------------------------------------------|-----|--------------|
| E07 | 15-7 | 1520 | 18332 | Tue | 231 231 231 000                                                                 | USB | (AB)         |
| E07 | 17-7 | 1000 | 19235 | Thu | 234 234 234 1 9290 121 9290 121 97368 71391 81087 ... 26286 25331 63318 000 000 | USB | (AB)         |
| E07 | 17-7 | 1020 | 18368 | Thu | 234 234 234 1 9290 121 9290 121 97368 71391 81087 ... 26286 25331 63318 000 000 | USB | (AB)         |
| E07 | 17-7 | 1040 | 17421 | Thu | 234 234 234 1 9290 121 9290 121 97368 71391 81087 ... 26286 25331 63318 000 000 | USB | (AB)         |
| E07 | 18-7 | 1500 | 16232 | Fri | 231 231 231 000                                                                 | USB | (AB)         |
| E07 | 18-7 | 1520 | 18332 | Fri | 231 231 231 000                                                                 | USB | (AB)         |
| E07 | 19-7 | 1000 | 19235 | Sat | 234 234 234 1 9290 121 9290 121 97368 71391 81087 ... 26286 25331 63318 000 000 | USB | (AB)         |
| E07 | 19-7 | 1020 | 18368 | Sat | 234 234 234 1 9290 121 9290 121 97368 71391 81087 ... 26286 25331 63318 000 000 | USB | (AB)         |
| E07 | 19-7 | 1040 | 17421 | Sat | 234 234 234 1 9290 121 9290 121 97368 71391 81087 ... 26286 25331 63318 000 000 | USB | (AB)         |
| E07 | 22-7 | 1500 | 16232 | Tue | 231 231 231 1 264 156 26 156 04754 15525 53720 ... 04491 40347 84244 000 000    | USB | (AB)         |
| E07 | 22-7 | 1520 | 18332 | Tue | 231 231 231 1 264 156 26 156 04754 15525 53720 ... 04491 40347 84244 000 000    | USB | (AB-IRQ/Lac) |
| E07 | 22-7 | 1540 | 19132 | Tue | 231 231 231 1 264 156 26 156 04754 15525 53720 ... 04491 40347 84244 000 000    | USB | (AB-IRQ/Lac) |
| E07 | 24-7 | 1000 | 19235 | Thu | 234 234 234 000                                                                 | USB | (AB)         |
| E07 | 24-7 | 1020 | 18368 | Thu | 234 234 234 000                                                                 | USB | (AB)         |
| E07 | 25-7 | 1500 | 16232 | Fri | 231 231 231 1 264 156 26 156 04754 15525 53720 ... 04491 40347 84244 000 000    | USB | (AB)         |
| E07 | 25-7 | 1520 | 18332 | Fri | 231 231 231 1 264 156 26 156 04754 15525 53720 ... 04491 40347 84244 000 000    | USB | (AB)         |
| E07 | 25-7 | 1540 | 19132 | Fri | 231 231 231 1 264 156 26 156 04754 15525 53720 ... 04491 40347 84244 000 000    | USB | (AB-IRQ)     |
| E07 | 26-7 | 1000 | 19235 | Sat | 234 234 234 000                                                                 | USB | (AB)         |
| E07 | 26-7 | 1020 | 18368 | Sat | 234 234 234 000                                                                 | USB | (AB)         |
| E07 | 29-7 | 1500 | 16232 | Tue | 231 231 231 000                                                                 | USB | (AB)         |
| E07 | 29-7 | 1520 | 18332 | Tue | 231 231 231 000                                                                 | USB | (AB)         |
| E07 | 31-7 | 1000 | 19235 | Thu | 234 234 234 1 648 137 648 137 55651 58782 00998 ... 94554 86514 78035 000 000   | USB | (AB)         |
| E07 | 31-7 | 1020 | 18368 | Thu | 234 234 234 1 648 137 648 137 55651 58782 00998 ... 94554 86514 78035 000 000   | USB | (AB)         |
| E07 | 31-7 | 1040 | 17421 | Thu | 234 234 234 1 648 137 648 137 55651 58782 00998 ... 94554 86514 78035 000 000   | USB | (AB)         |
| E11 | 1-7  | 0700 | 8680  | Tue | 576/00 Out                                                                      | USB | (AB/Lac)     |
| E11 | 1-7  | 0745 | 20640 | Tue | 227/00 Out                                                                      | USB | (AB/Lac)     |
| E11 | 1-7  | 0820 | 17378 | Tue | 135/00 Out                                                                      | USB | (Lac)        |
| E11 | 1-7  | 0845 | 19184 | Tue | 152/00 Out                                                                      | USB | (AB/Lac)     |
| E11 | 1-7  | 1205 | 8274  | Tue | 464/00 Out                                                                      | USB | (AB/Lac)     |
| E11 | 1-7  | 1430 | 12984 | Tue | 912/00 Out                                                                      | USB | (AB/Lac)     |
| E11 | 1-7  | 1605 | 5231  | Tue | 231/00 Out                                                                      | USB | (AB/Lac)     |
| E11 | 1-7  | 1645 | 14575 | Tue | 332/00 Out                                                                      | USB | (AB/Lac)     |
| E11 | 2-7  | 0600 | 21906 | Wed | 946/00 Out                                                                      | USB | (AB-POL)     |
| E11 | 2-7  | 0645 | 10508 | Wed | 411/00 Out                                                                      | USB | (AB/Lac)     |
| E11 | 2-7  | 0715 | 15915 | Wed | 757/00 Out                                                                      | USB | (AB/Lac)     |
| E11 | 2-7  | 0820 | 17378 | Wed | 138/00 Out                                                                      | USB | (AB/Lac)     |
| E11 | 2-7  | 0845 | 12815 | Wed | 711/00 Out                                                                      | USB | (AB/Lac)     |
| E11 | 2-7  | 0900 | 11116 | Wed | 538/00 Out                                                                      | USB | (AB/Lac)     |
| E11 | 2-7  | 0930 | 6923  | Wed | 271/00 Out                                                                      | USB | (AB/Lac)     |
| E11 | 2-7  | 1045 | 10210 | Wed | 690/00 Out                                                                      | USB | (AB/Lac)     |
| E11 | 2-7  | 1605 | 4783  | Wed | 391/00 Out                                                                      | USB | (AB/Lac)     |
| E11 | 3-7  | 0645 | 11092 | Thu | 515/00 Out                                                                      | USB | (AB/Lac)     |

|     |     |      |       |     |            |     |              |
|-----|-----|------|-------|-----|------------|-----|--------------|
| E11 | 3-7 | 0720 | 7984  | Thu | 435/00 Out | USB | (AB)         |
| E11 | 3-7 | 0745 | 20640 | Thu | 229/00 Out | USB | (AB/Lac)     |
| E11 | 3-7 | 0845 | 19184 | Thu | 152/00 Out | USB | (AB/Lac)     |
| E11 | 3-7 | 0930 | 6923  | Thu | 276/00 Out | USB | (AB/Lac)     |
| E11 | 3-7 | 1300 | 5737  | Thu | 316/00 Out | USB | (AB/Lac)     |
| E11 | 3-7 | 1530 | 10356 | Thu | 261/00 Out | USB | (AB/Lac)     |
| E11 | 3-7 | 1645 | 14575 | Thu | 335/00 Out | USB | (AB/Lac)     |
| E11 | 3-7 | 1900 | 7600  | Thu | 649/00 Out | USB | (AB/Lac)     |
| E11 | 3-7 | 2000 | 5409  | Thu | 521/00 Out | USB | (AB/Lac)     |
| E11 | 4-7 | 0600 | 9150  | Fri | 353/00 Out | USB | (AB/Lac)     |
| E11 | 4-7 | 0700 | 8680  | Fri | 573/00 Out | USB | (AB/Lac)     |
| E11 | 4-7 | 0720 | 7984  | Fri | 431/00 Out | USB | (Lac)        |
| E11 | 4-7 | 0830 | 16335 | Fri | 182/00 Out | USB | (AB/Lac)     |
| E11 | 4-7 | 1815 | 12229 | Fri | 927/00 Out | USB | (AB/Lac)     |
| E11 | 4-7 | 1910 | 9610  | Fri | 616/00 Out | USB | (AB/Lac)     |
| E11 | 5-7 | 0700 | 7377  | Sat | 497/00 Out | USB | (AB/Lac)     |
| E11 | 5-7 | 1430 | 12984 | Sat | 914/00 out | USB | (Lac)        |
| E11 | 5-7 | 1610 | 4783  | Sat | 394/00 Out | USB | (AB/Lac)     |
| E11 | 5-7 | 1645 | 5082  | Sat | 360/00 Out | USB | (AB)         |
| E11 | 6-7 | 0600 | 9150  | Sun | 358/00 Out | USB | (AB)         |
| E11 | 6-7 | 0700 | 7377  | Sun | 492/00 Out | USB | (AB/Lac)     |
| E11 | 6-7 | 1605 | 5231  | Sun | 230/00 Out | USB | (AB/Lac)     |
| E11 | 6-7 | 1645 | 5082  | Sun | 364/00 Out | USB | (AB/Lac)     |
| E11 | 6-7 | 1745 | 14410 | Sun | 244/00 Out | USB | (AB/Lac)     |
| E11 | 6-7 | 1815 | 12229 | Sun | 927/00 Out | USB | (AB/Lac)     |
| E11 | 6-7 | 1910 | 9610  | Sun | 614/00 Out | USB | (AB/Lac)     |
| E11 | 6-7 | 2000 | 5409  | Sun | 528/00 Out | USB | (AB/Lac)     |
| E11 | 7-7 | 0600 | 21906 | Mon | 940/00 Out | USB | (AB/Lac)     |
| E11 | 7-7 | 0645 | 10508 | Mon | 410/00 Out | USB | (AB/Lac)     |
| E11 | 7-7 | 0715 | 15915 | Mon | 751/00 Out | USB | (AB)         |
| E11 | 7-7 | 0745 | 9610  | Mon | 262/00 Out | USB | (AB/Lac)     |
| E11 | 7-7 | 0830 | 16335 | Mon | 185/00 Out | USB | (AB)         |
| E11 | 7-7 | 1045 | 10210 | Mon | 693/00 Out | USB | (AB)         |
| E11 | 7-7 | 1745 | 14410 | Mon | 246/00 Out | USB | (AB/Lac)     |
| E11 | 7-7 | 1900 | 7600  | Mon | 649/00 Out | USB | (AB/Lac)     |
| E11 | 8-7 | 0715 | 12530 | Tue | 631/00 Out | USB | (AB/Lac)     |
| E11 | 8-7 | 0820 | 17378 | Tue | 136/00 Out | USB | (AB-POL/Lac) |
| E11 | 8-7 | 0845 | 19184 | Tue | 157/00 Out | USB | (AB-POL/Lac) |
| E11 | 8-7 | 1000 | 12153 | Tue | 306/00 Out | USB | (AB/Lac)     |
| E11 | 8-7 | 1205 | 8274  | Tue | 461/00 Out | USB | (AB/Lac)     |
| E11 | 8-7 | 1430 | 12984 | Tue | 914/00 Out | USB | (AB/Lac)     |
| E11 | 8-7 | 1605 | 5231  | Tue | 231/00 Out | USB | (AB)         |

|     |      |      |       |     |            |     |          |
|-----|------|------|-------|-----|------------|-----|----------|
| E11 | 8-7  | 1645 | 14575 | Tue | 338/00 Out | USB | (AB)     |
| E11 | 9-7  | 0600 | 21906 | Wed | 942/00 Out | USB | (AB/Lac) |
| E11 | 9-7  | 0645 | 10508 | Wed | 418/00 Out | USB | (AB/Lac) |
| E11 | 9-7  | 0715 | 15915 | Wed | 754/00 Out | USB | (AB)     |
| E11 | 9-7  | 0745 | 15720 | Wed | 349/00 Out | USB | (AB)     |
| E11 | 9-7  | 0820 | 17378 | Wed | 134/00 Out | USB | (AB)     |
| E11 | 9-7  | 1045 | 10210 | Wed | 698/00 Out | USB | (AB)     |
| E11 | 9-7  | 1205 | 8274  | Wed | 466/00 Out | USB | (AB)     |
| E11 | 9-7  | 1715 | 7863  | Wed | 974/00 Out | USB | (AB)     |
| E11 | 10-7 | 0720 | 7984  | Thu | 439/00 Out | USB | (AB/Lac) |
| E11 | 10-7 | 0845 | 19184 | Thu | 151/00 Out | USB | (AB)     |
| E11 | 10-7 | 1300 | 5737  | Thu | 311/00 Out | USB | (AB)     |
| E11 | 10-7 | 1530 | 10356 | Thu | 268/00 Out | USB | (AB)     |
| E11 | 10-7 | 1645 | 14575 | Thu | 337/00 Out | USB | (AB/Lac) |
| E11 | 10-7 | 1900 | 7600  | Thu | 646/00 Out | USB | (AB)     |
| E11 | 10-7 | 2000 | 5409  | Thu | 520/00 Out | USB | (AB)     |
| E11 | 11-7 | 0600 | 9150  | Fri | 353/00 Out | USB | (AB/Lac) |
| E11 | 11-7 | 0715 | 12530 | Fri | 636/00 Out | USB | (AB)     |
| E11 | 11-7 | 0720 | 7984  | Fri | 434/00 Out | USB | (Lac)    |
| E11 | 11-7 | 0745 | 15720 | Fri | 343/00 Out | USB | (AB)     |
| E11 | 11-7 | 0830 | 16335 | Fri | 185/00 Out | USB | (AB)     |
| E11 | 11-7 | 1000 | 12153 | Fri | 305/00 Out | USB | (AB/Lac) |
| E11 | 11-7 | 1715 | 7863  | Fri | 975/00 Out | USB | (AB)     |
| E11 | 12-7 | 0700 | 7377  | Sat | 490/00 Out | USB | (AB/Lac) |
| E11 | 12-7 | 1430 | 12984 | Sat | 917/00 Out | USB | (AB)     |
| E11 | 12-7 | 1645 | 5082  | Sat | 365/00 Out | USB | (AB)     |
| E11 | 13-7 | 0600 | 9150  | Sun | 355/00 Out | USB | (AB)     |
| E11 | 13-7 | 0700 | 7377  | Sun | 497/00 Out | USB | (AB/Lac) |
| E11 | 13-7 | 1605 | 5231  | Sun | 233/00 Out | USB | (AB)     |
| E11 | 13-7 | 1645 | 5082  | Sun | 360/00 Out | USB | (AB)     |
| E11 | 13-7 | 1745 | 14410 | Sun | 245/00 Out | USB | (AB/Lac) |
| E11 | 13-7 | 2000 | 5409  | Sun | 520/00 Out | USB | (AB)     |
| E11 | 14-7 | 0645 | 10508 | Mon | 410/00 Out | USB | (AB/Lac) |
| E11 | 14-7 | 0715 | 15915 | Mon | 757/00 Out | USB | (AB/Lac) |
| E11 | 14-7 | 0745 | 9610  | Mon | 260/00 Out | USB | (AB/Lac) |
| E11 | 14-7 | 0830 | 16335 | Mon | 185/00 Out | USB | (AB)     |
| E11 | 14-7 | 0845 | 12815 | Mon | 719/00 Out | USB | (AB/Lac) |
| E11 | 14-7 | 0900 | 11116 | Mon | 535/00 Out | USB | (AB-POL) |
| E11 | 14-7 | 1045 | 10210 | Mon | 694/00 Out | USB | (AB/Lac) |
| E11 | 14-7 | 1300 | 5737  | Mon | 311/00 Out | USB | (Lac)    |
| E11 | 14-7 | 1745 | 14410 | Mon | 248/00 Out | USB | (AB/Lac) |
| E11 | 14-7 | 1900 | 7600  | Mon | 641/00 Out | USB | (AB/Lac) |

|     |      |      |       |     |            |     |          |
|-----|------|------|-------|-----|------------|-----|----------|
| E11 | 15-7 | 0645 | 11092 | Tue | 514/00 Out | USB | (AB)     |
| E11 | 15-7 | 0700 | 8680  | Tue | 575/00 Out | USB | (AB/Lac) |
| E11 | 15-7 | 0715 | 12530 | Tue | 631/00 Out | USB | (AB/Lac) |
| E11 | 15-7 | 0745 | 20640 | Tue | 221/00 Out | USB | (AB/Lac) |
| E11 | 15-7 | 1000 | 12153 | Tue | 305/00 Out | USB | (AB/Lac) |
| E11 | 15-7 | 1605 | 5231  | Tue | 231/00 Out | USB | (AB/Lac) |
| E11 | 16-7 | 0645 | 10508 | Wed | 416/00 Out | USB | (AB/Lac) |
| E11 | 16-7 | 0715 | 15915 | Wed | 759/00 Out | USB | (AB)     |
| E11 | 16-7 | 0745 | 15720 | Wed | 342/00 Out | USB | (AB)     |
| E11 | 16-7 | 0845 | 12815 | Wed | 714/00 Out | USB | (AB/Lac) |
| E11 | 16-7 | 0900 | 11116 | Wed | 532/00 Out | USB | (AB/Lac) |
| E11 | 16-7 | 0930 | 6923  | Wed | 273/00 Out | USB | (AB/Lac) |
| E11 | 16-7 | 1045 | 10210 | Wed | 690/00 Out | USB | (AB)     |
| E11 | 16-7 | 1605 | 4783  | Wed | 392/00 Out | USB | (AB/Lac) |
| E11 | 16-7 | 1715 | 7863  | Wed | 976/00 Out | USB | (AB/Lac) |
| E11 | 17-7 | 0645 | 11092 | Thu | 519/00 Out | USB | (AB/Lac) |
| E11 | 17-7 | 0720 | 7984  | Thu | 434/00 Out | USB | (AB)     |
| E11 | 17-7 | 0745 | 20640 | Thu | 229/00 Out | USB | (AB/Lac) |
| E11 | 17-7 | 0930 | 6923  | Thu | 271/00 Out | USB | (AB/Lac) |
| E11 | 17-7 | 1300 | 5737  | Thu | 310/00 Out | USB | (AB/Lac) |
| E11 | 17-7 | 1530 | 10356 | Thu | 266/00 Out | USB | (AB)     |
| E11 | 17-7 | 1900 | 7600  | Thu | 648/00 Out | USB | (AB)     |
| E11 | 17-7 | 2000 | 5409  | Thu | 520/00 Out | USB | (AB)     |
| E11 | 18-7 | 0700 | 8680  | Fri | 576/00 Out | USB | (AB)     |
| E11 | 18-7 | 0715 | 12530 | Fri | 636/00 Out | USB | (AB)     |
| E11 | 18-7 | 0720 | 7984  | Fri | 432/00 Out | USB | (AB)     |
| E11 | 18-7 | 0830 | 16335 | Fri | 181/00 Out | USB | (AB)     |
| E11 | 18-7 | 1000 | 12153 | Fri | 309/00 Out | USB | (AB)     |
| E11 | 18-7 | 1715 | 7863  | Fri | 976/00 Out | USB | (AB)     |
| E11 | 18-7 | 1815 | 12229 | Fri | 929/00 Out | USB | (Anon)   |
| E11 | 18-7 | 1910 | 9610  | Fri | 618/00 Out | USB | (AB)     |
| E11 | 19-7 | 1610 | 4783  | Sat | 392/00 Out | USB | (AB)     |
| E11 | 19-7 | 1645 | 5082  | Sat | 364/00 Out | USB | (AB)     |
| E11 | 20-7 | 1605 | 5231  | Sun | 231/00 Out | USB | (AB)     |
| E11 | 20-7 | 1645 | 5082  | Sun | 369/00 Out | USB | (AB)     |
| E11 | 20-7 | 1745 | 14410 | Sun | 242/00 Out | USB | (AB)     |
| E11 | 20-7 | 1815 | 12229 | Sun | 926/00 Out | USB | (AB)     |
| E11 | 20-7 | 1910 | 9610  | Sun | 611/00 Out | USB | (AB)     |
| E11 | 20-7 | 2000 | 5409  | Sun | 524/00 Out | USB | (AB)     |
| E11 | 21-7 | 0600 | 21906 | Mon | 946/00 Out | USB | (AB-POL) |
| E11 | 21-7 | 0715 | 15915 | Mon | 753/00 Out | USB | (AB/Lac) |
| E11 | 21-7 | 0745 | 9610  | Mon | 261/00 Out | USB | (AB/Lac) |

|     |      |      |       |     |            |     |          |
|-----|------|------|-------|-----|------------|-----|----------|
| E11 | 21-7 | 0845 | 12815 | Mon | 710/00 Out | USB | (AB/Lac) |
| E11 | 21-7 | 0900 | 11116 | Mon | 533/00 Out | USB | (AB-POL) |
| E11 | 21-7 | 1045 | 10210 | Mon | 694/00 Out | USB | (AB/Lac) |
| E11 | 22-7 | 0645 | 11092 | Tue | 512/00 Out | USB | (AB/Lac) |
| E11 | 22-7 | 0700 | 8680  | Tue | 571/00 Out | USB | (AB/Lac) |
| E11 | 22-7 | 0715 | 12530 | Tue | 631/00 Out | USB | (AB/Lac) |
| E11 | 22-7 | 0745 | 20640 | Tue | 225/00 Out | USB | (AB/Lac) |
| E11 | 22-7 | 0820 | 17378 | Tue | 138/00 Out | USB | (AB/Lac) |
| E11 | 22-7 | 0845 | 19184 | Tue | 150/00 Out | USB | (AB-POL) |
| E11 | 22-7 | 1000 | 12153 | Tue | 308/00 Out | USB | (AB/Lac) |
| E11 | 22-7 | 1205 | 8274  | Tue | 469/00 Out | USB | (AB/Lac) |
| E11 | 22-7 | 1430 | 12984 | Tue | 911/00 Out | USB | (AB/Lac) |
| E11 | 22-7 | 1645 | 14575 | Tue | 330/00 Out | USB | (Lac)    |
| E11 | 23-7 | 0600 | 21906 | Wed | 941/00 Out | USB | (AB-POL) |
| E11 | 23-7 | 0715 | 15915 | Wed | 750/00 Out | USB | (AB)     |
| E11 | 23-7 | 0745 | 15720 | Wed | 349/00 Out | USB | (AB)     |
| E11 | 23-7 | 0820 | 17378 | Wed | 130/00 Out | USB | (AB)     |
| E11 | 23-7 | 0845 | 12815 | Wed | 716/00 Out | USB | (AB)     |
| E11 | 23-7 | 0900 | 11116 | Wed | 533/00 Out | USB | (AB)     |
| E11 | 23-7 | 0930 | 6923  | Wed | 278/00 Out | USB | (AB)     |
| E11 | 23-7 | 1045 | 10210 | Wed | 698/00 Out | USB | (AB)     |
| E11 | 23-7 | 1205 | 8274  | Wed | 461/00 Out | USB | (AB)     |
| E11 | 23-7 | 1605 | 4783  | Wed | 393/00 Out | USB | (AB)     |
| E11 | 23-7 | 1715 | 7863  | Wed | 977/00 Out | USB | (AB)     |
| E11 | 24-7 | 0645 | 11092 | Thu | 510/00 Out | USB | (AB)     |
| E11 | 24-7 | 0720 | 7984  | Thu | 435/00 Out | USB | (AB)     |
| E11 | 24-7 | 0745 | 20640 | Thu | 221/00 Out | USB | (AB-POL) |
| E11 | 24-7 | 0845 | 19184 | Thu | 150/00 Out | USB | (AB-POL) |
| E11 | 24-7 | 0930 | 6923  | Thu | 275/00 Out | USB | (AB)     |
| E11 | 24-7 | 1530 | 10356 | Thu | 264/00 Out | USB | (AB)     |
| E11 | 24-7 | 1645 | 14575 | Thu | 331/00 Out | USB | (AB)     |
| E11 | 25-7 | 0600 | 9150  | Fri | 354/00 Out | USB | (AB)     |
| E11 | 25-7 | 0700 | 8680  | Fri | 573/00 Out | USB | (AB)     |
| E11 | 25-7 | 0715 | 12530 | Fri | 635/00 Out | USB | (AB)     |
| E11 | 25-7 | 0720 | 7984  | Fri | 438/00 Out | USB | (AB)     |
| E11 | 25-7 | 0745 | 15720 | Fri | 346/00 Out | USB | (AB)     |
| E11 | 25-7 | 1000 | 12153 | Fri | 306/00 Out | USB | (AB)     |
| E11 | 25-7 | 1715 | 7863  | Fri | 976/00 Out | USB | (AB)     |
| E11 | 25-7 | 1815 | 12229 | Fri | 929/00 Out | USB | (AB)     |
| E11 | 25-7 | 1910 | 9610  | Fri | 611/00 Out | USB | (AB)     |
| E11 | 26-7 | 0700 | 7377  | Sat | 498/00 Out | USB | (AB)     |
| E11 | 26-7 | 1430 | 12984 | Sat | 917/00 Out | USB | (AB)     |

|     |      |      |       |     |            |     |                 |
|-----|------|------|-------|-----|------------|-----|-----------------|
| E11 | 26-7 | 1610 | 4783  | Sat | 392/00 Out | USB | (AB)            |
| E11 | 27-7 | 0600 | 9150  | Sun | 358/00 Out | USB | (AB)            |
| E11 | 27-7 | 0700 | 7377  | Sun | 495/00 Out | USB | (AB)            |
| E11 | 27-7 | 1815 | 12229 | Sun | 929/00 Out | USB | (AB/Lac)        |
| E11 | 27-7 | 1910 | 9610  | Sun | 617/00 Out | USB | (AB)            |
| E11 | 28-7 | 0600 | 21906 | Mon | 949/00 Out | USB | (AB/Lac)        |
| E11 | 28-7 | 0645 | 10508 | Mon | 418/00 Out | USB | (AB)            |
| E11 | 28-7 | 0830 | 16335 | Mon | 189/00 Out | USB | (AB/Lac)        |
| E11 | 28-7 | 0845 | 12815 | Mon | 718/00 Out | USB | (AB/Lac)        |
| E11 | 28-7 | 0900 | 11116 | Mon | 532/00 Out | USB | (AB-POL/TJ/Lac) |
| E11 | 28-7 | 1045 | 10210 | Mon | 694/00 Out | USB | (AB/Lac)        |
| E11 | 28-7 | 1300 | 5737  | Mon | 313/00 Out | USB | (AB)            |
| E11 | 28-7 | 1745 | 14410 | Mon | 242/00 Out | USB | (AB)            |
| E11 | 28-7 | 1900 | 7600  | Mon | 648/00 Out | USB | (AB)            |
| E11 | 29-7 | 0645 | 11092 | Tue | 510/00 Out | USB | (AB/Lac)        |
| E11 | 29-7 | 0700 | 8680  | Tue | 571/00 Out | USB | (AB)            |
| E11 | 29-7 | 0715 | 12530 | Tue | 631/00 Out | USB | (AB)            |
| E11 | 29-7 | 0820 | 17378 | Tue | 131/00 Out | USB | (AB/Lac)        |
| E11 | 29-7 | 0845 | 19184 | Tue | 151/00 Out | USB | (AB-POL)        |
| E11 | 29-7 | 1000 | 12153 | Tue | 300/00 Out | USB | (AB)            |
| E11 | 29-7 | 1205 | 8274  | Tue | 464/00 Out | USB | (AB)            |
| E11 | 29-7 | 1430 | 12984 | Tue | 910/00 Out | USB | (AB)            |
| E11 | 29-7 | 1605 | 5231  | Tue | 233/00 Out | USB | (AB)            |
| E11 | 30-7 | 0600 | 21906 | Wed | 942/00 Out | USB | (AB-POL)        |
| E11 | 30-7 | 0645 | 10508 | Wed | 415/00 Out | USB | (AB)            |
| E11 | 30-7 | 0820 | 17378 | Wed | 131/00 Out | USB | (AB)            |
| E11 | 30-7 | 0845 | 12815 | Wed | 715/00 Out | USB | (AB)            |
| E11 | 30-7 | 0900 | 11116 | Wed | 533/00 Out | USB | (AB)            |
| E11 | 30-7 | 0930 | 6923  | Wed | 279/00 Out | USB | (AB)            |
| E11 | 30-7 | 1045 | 10210 | Wed | 698/00 Out | USB | (AB)            |
| E11 | 30-7 | 1205 | 8274  | Wed | 462/00 Out | USB | (AB)            |
| E11 | 30-7 | 1605 | 4783  | Wed | 393/00 Out | USB | (AB)            |
| E11 | 30-7 | 1715 | 7863  | Wed | 970/00 Out | USB | (AB)            |
| E11 | 31-7 | 0645 | 11092 | Thu | 518/00 Out | USB | (AB)            |
| E11 | 31-7 | 0720 | 7984  | Thu | 435/00 Out | USB | (AB)            |
| E11 | 31-7 | 0745 | 20640 | Thu | 227/00 Out | USB | (AB)            |
| E11 | 31-7 | 0845 | 19184 | Thu | 156/00 Out | USB | (AB)            |
| E11 | 31-7 | 0930 | 6923  | Thu | 275/00 Out | USB | (AB)            |
| E11 | 31-7 | 1300 | 5737  | Thu | 310/00 Out | USB | (AB)            |
| E11 | 31-7 | 1645 | 14575 | Thu | 332/00 Out | USB | (AB)            |
| E11 | 31-7 | 1900 | 7600  | Thu | 647/00 Out | USB | (AB)            |

|             |      |      |       |     |                                                                                   |     |                  |
|-------------|------|------|-------|-----|-----------------------------------------------------------------------------------|-----|------------------|
| <b>E11</b>  | 31-7 | 2000 | 5409  | Thu | 521/00 Out                                                                        | USB | (AB)             |
| <b>E11a</b> | 1-7  | 0715 | 12530 | Tue | 635/32 Attention 90488 51496 72684 ... 06461 36522 41003 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 1-7  | 1000 | 12153 | Tue | 300/35 Attention 31502 29605 31843 ... 81106 33182 07441 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 2-7  | 0745 | 15720 | Wed | 348/35 Attention 80298 92146 25271 ... 38064 62691 39245 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 2-7  | 1715 | 7863  | Wed | 978/40 Attention 51509 78171 02433 ... 09136 55871 51920 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 4-7  | 0715 | 12530 | Fri | 635/32 Attention 90488 51496 72684 ... 06461 36522 41003 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 4-7  | 0745 | 15720 | Fri | 348/35 Attention 80298 92146 25271 ... 38064 62691 39245 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 4-7  | 1000 | 12153 | Fri | 300/35 Attention 31502 29605 31843 ... 81106 33182 07441 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 4-7  | 1715 | 7863  | Fri | 978/40 Attention 51509 78171 02433 ... 09136 55871 51920 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 7-7  | 0845 | 12815 | Mon | 719/32 Attention 05257 70464 98565 ... 47579 59861 77411 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 7-7  | 0900 | 11116 | Mon | 538/33 Attention 05514 71372 48956 ... 57317 17109 53348 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 8-7  | 0645 | 11092 | Tue | 510/34 Attention 25805 99080 21261 ... 58288 57216 84111 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 8-7  | 0700 | 8680  | Tue | 575/37 Attention 46715 57326 63653 ... 81865 15508 52748 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 8-7  | 0745 | 20640 | Tue | 225/37 Attention 77913 24955 06351 ... 32002 01185 77274 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 9-7  | 0845 | 12815 | Wed | 719/32 Attention 05257 70464 98565 ... 47579 59861 77411 Attention (msg rptd) Out | USB | (AB/Subilo)      |
| <b>E11a</b> | 9-7  | 0900 | 11116 | Wed | 538/33 Attention 05514 71372 48956 ... 57317 17109 53348 Attention (msg rptd) Out | USB | (AB/Subilo)      |
| <b>E11a</b> | 9-7  | 0930 | 6923  | Wed | 276/32 Attention 26289 68426 37651 ... 23555 25740 78846 Attention (msg rptd) Out | USB | (AB/Subilo)      |
| <b>E11a</b> | 9-7  | 1605 | 4783  | Wed | 396/36 Attention 10275 89118 02901 ... 95164 52699 76219 Attention (msg rptd) Out | USB | (AB/Subilo)      |
| <b>E11a</b> | 10-7 | 0645 | 11092 | Thu | 510/34 Attention 25805 99080 21261 ... 58288 57216 84111 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 10-7 | 0745 | 20640 | Thu | 225/37 Attention 77913 24955 06351 ... 32002 01185 77274 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 10-7 | 0930 | 6923  | Thu | 276/32 Attention 26289 68426 37651 ... 23555 25740 78846 Attention (msg rptd) Out | USB | (AB-POL/Su-bilo) |
| <b>E11a</b> | 11-7 | 0700 | 8680  | Fri | 575/37 Attention 46715 57326 63653 ... 81865 15508 52748 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 11-7 | 1815 | 12229 | Fri | 925/39 Attention 12063 95345 70454 ... 63986 31337 81826 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 11-7 | 1910 | 9610  | Fri | 618/31 Attention 62973 47139 28774 ... 51715 80524 41626 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 12-7 | 1610 | 4783  | Sat | 396/36 Attention 10275 89118 02901 ... 95164 52699 76219 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 13-7 | 1815 | 12229 | Sun | 925/39 Attention 12063 95345 70454 ... 63986 31337 81826 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 13-7 | 1910 | 9610  | Sun | 618/31 Attention 62973 47139 28774 ... 51715 80524 41626 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 14-7 | 0600 | 21906 | Mon | 946/32 Attention 43949 71351 75716 ... 37262 98597 21866 Attention (msg rptd) Out | USB | (AB-POL/Su-bilo) |
| <b>E11a</b> | 15-7 | 0820 | 17378 | Tue | 132/39 Attention 79789 05691 70753 ... 45919 28867 37478 Attention (msg rptd) Out | USB | (AB-POL/Su-bilo) |
| <b>E11a</b> | 15-7 | 0845 | 19184 | Tue | 156/36 Attention 70862 00025 09576 ... 94954 71278 87093 Attention (msg rptd) Out | USB | (AB-POL/Su-bilo) |
| <b>E11a</b> | 15-7 | 1205 | 8274  | Tue | 461/39 Attention 68498 43924 05587 ... 09306 30023 10565 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 15-7 | 1430 | 12984 | Tue | 911/32 Attention 27931 03090 06233 ... 55937 44610 21455 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 15-7 | 1645 | 14575 | Tue | 332/39 Attention 36620 24587 63391 ... 68379 50621 97916 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 16-7 | 0600 | 21906 | Wed | 946/32 Attention 43949 71351 75716 ... 37262 98597 21866 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 16-7 | 0820 | 17378 | Wed | 132/39 Attention 79789 05691 70753 ... 45919 28867 37478 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 16-7 | 1205 | 8274  | Wed | 461/39 Attention 68498 43924 05587 ... 09306 30023 10565 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 17-7 | 0845 | 19184 | Thu | 156/36 Attention 70862 00025 09576 ... 94954 71278 87093 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |
| <b>E11a</b> | 17-7 | 1645 | 14575 | Thu | 332/39 Attention 36620 24587 63391 ... 68379 50621 97916 Attention (msg rptd) Out | USB | (AB/Subilo/Lac)  |

|      |      |      |       |     |                                                                                   |             |                 |
|------|------|------|-------|-----|-----------------------------------------------------------------------------------|-------------|-----------------|
| E11a | 18-7 | 0600 | 9150  | Fri | 352/35 Attention 26778 75141 15385 ... 16773 57575 15477 Attention (msg rptd) Out | USB         | (AB/Subilo/Lac) |
| E11a | 19-7 | 0700 | 7377  | Sat | 495/38 Attention 65913 95336 05892 ... 63161 44560 30629 Attention (msg rptd) Out | USB         | (AB/Subilo/Lac) |
| E11a | 19-7 | 1430 | 12984 | Sat | 911/32 Attention 27931 03090 06233 ... 55937 44610 21455 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 20-7 | 0600 | 9150  | Sun | 352/35 Attention 26778 75141 15385 ... 16773 57575 15477 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 20-7 | 0700 | 7377  | Sun | 495/38 Attention 65913 95336 05892 ... 63161 44560 30629 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 21-7 | 0645 | 10508 | Mon | 418/40 Attention 68733 14155 07889 ... 29927 74768 14930 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 21-7 | 0830 | 16335 | Mon | 183/20 Attention 00899 57642 51585 ... 79108 63733 90677 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 21-7 | 1300 | 5737  | Mon | 311/36 Attention 27797 98477 65619 ... 65973 66565 76126 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 21-7 | 1745 | 14410 | Mon | 248/35 Attention 35581 61734 28389 ... 42128 44662 50720 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 21-7 | 1900 | 7600  | Mon | 647/30 Attention 87589 14298 94482 ... 02744 65542 63609 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 22-7 | 1605 | 5231  | Tue | 232/37 Attention 16007 23907 04852 ... 68922 55536 55511 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 23-7 | 0645 | 10508 | Wed | 418/40 Attention 68733 14155 07889 ... 29927 74768 14930 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 24-7 | 1300 | 5737  | Thu | 311/36 Attention 27797 98477 65619 ... 65973 66565 76126 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 24-7 | 1900 | 7600  | Thu | 647/30 Attention 87589 14298 94482 ... 02744 65542 63609 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 24-7 | 2000 | 5409  | Thu | 525/33 Attention 15037 42629 61501 ... 24476 93832 87624 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 25-7 | 0830 | 16335 | Fri | 183/20 Attention 00899 57642 51585 ... 79108 63733 90677 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 26-7 | 1645 | 5082  | Sat | 365/38 Attention 76519 71469 12311 ... 28259 56930 30445 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 27-7 | 1605 | 5231  | Sun | 232/37 Attention 16007 23907 04852 ... 68922 55536 55511 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 27-7 | 1745 | 14410 | Sun | 248/35 Attention 35581 61734 28389 ... 42128 44662 50720 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 27-7 | 2000 | 5409  | Sun | 525/33 Attention 15037 42629 61501 ... 24476 93832 87624 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 28-7 | 0715 | 15915 | Mon | 755/38 Attention 30246 29723 45789 ... 48438 41001 92756 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 28-7 | 0745 | 9610  | Mon | 261/33 Attention 24206 52822 22558 ... 48887 15716 12705 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 30-7 | 0715 | 15915 | Wed | 755/38 Attention 30246 29723 45789 ... 48438 41001 92756 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| E11a | 31-7 | 1530 | 10356 | Thu | 261/33 Attention 24206 52822 22558 ... 48887 15716 12705 Attention (msg rptd) Out | USB         | (AB/Subilo)     |
| F01  | 1-7  | 1015 | 11141 | Tue | Messages 73 and 74                                                                | FSK 200/500 | (AB/HFD)        |
| F01  | 1-7  | 1025 | 9192  | Tue | Messages 73 and 74                                                                | FSK 200/500 | (AB/HFD)        |
| F01  | 1-7  | 1035 | 7363  | Tue | Messages 73 and 74                                                                | FSK 200/500 | (AB/HFD)        |
| F01  | 2-7  | 1015 | 11141 | Wed | Message 75                                                                        | FSK 200/500 | (AB)            |
| F01  | 2-7  | 1025 | 9192  | Wed | Message 75                                                                        | FSK 200/500 | (AB)            |
| F01  | 2-7  | 1035 | 7363  | Wed | Message 75                                                                        | FSK 200/500 | (AB)            |
| F01  | 3-7  | 1015 | 11141 | Thu | Messages 76 and 77                                                                | FSK 200/500 | (AB)            |
| F01  | 3-7  | 1025 | 9192  | Thu | Messages 76 and 77                                                                | FSK 200/500 | (AB)            |
| F01  | 3-7  | 1035 | 7363  | Thu | Messages 76 and 77                                                                | FSK 200/500 | (AB)            |
| F01  | 4-7  | 1015 | 11141 | Fri | 00000 +++++ +++++                                                                 | FSK 200/500 | (AB)            |
| F01  | 4-7  | 1025 | 9192  | Fri | 00000 +++++ +++++                                                                 | FSK 200/500 | (AB)            |
| F01  | 4-7  | 1035 | 7363  | Fri | 00000 +++++ +++++                                                                 | FSK 200/500 | (AB)            |
| F01  | 7-7  | 1015 | 11141 | Mon | Message 78                                                                        | FSK 200/500 | (AB)            |
| F01  | 7-7  | 1025 | 9192  | Mon | Message 78                                                                        | FSK 200/500 | (AB)            |
| F01  | 7-7  | 1035 | 7363  | Mon | Message 78                                                                        | FSK 200/500 | (AB)            |
| F01  | 8-7  | 1015 | 11141 | Tue | Messages 79 and 80                                                                | FSK 200/500 | (AB)            |
| F01  | 8-7  | 1025 | 9192  | Tue | Messages 79 and 80                                                                | FSK 200/500 | (AB)            |
| F01  | 8-7  | 1035 | 7363  | Tue | Messages 79 and 80                                                                | FSK 200/500 | (AB)            |

|     |      |      |       |     |                                                 |             |      |
|-----|------|------|-------|-----|-------------------------------------------------|-------------|------|
| F01 | 9-7  | 1015 | 11141 | Wed | Message 81                                      | FSK 200/500 | (AB) |
| F01 | 9-7  | 1025 | 9192  | Wed | Message 81                                      | FSK 200/500 | (AB) |
| F01 | 9-7  | 1035 | 7363  | Wed | Message 81                                      | FSK 200/500 | (AB) |
| F01 | 10-7 | 1015 | 11141 | Thu | Messages 82 and 83                              | FSK 200/500 | (AB) |
| F01 | 10-7 | 1025 | 9192  | Thu | Messages 82 and 83                              | FSK 200/500 | (AB) |
| F01 | 10-7 | 1035 | 7363  | Thu | Messages 82 and 83                              | FSK 200/500 | (AB) |
| F01 | 11-7 | 1015 | 11141 | Fri | 00000 +++++ +++++                               | FSK 200/500 | (AB) |
| F01 | 11-7 | 1025 | 9192  | Fri | 00000 +++++ +++++                               | FSK 200/500 | (AB) |
| F01 | 11-7 | 1035 | 7363  | Fri | 00000 +++++ +++++                               | FSK 200/500 | (AB) |
| F01 | 14-7 | 1015 | 11141 | Mon | Message 84                                      | FSK 200/500 | (AB) |
| F01 | 14-7 | 1025 | 9192  | Mon | Message 84                                      | FSK 200/500 | (AB) |
| F01 | 14-7 | 1035 | 7363  | Mon | Message 84                                      | FSK 200/500 | (AB) |
| F01 | 15-7 | 1015 | 11141 | Tue | Messages 85 and 86                              | FSK 200/500 | (AB) |
| F01 | 15-7 | 1025 | 9192  | Tue | Messages 85 and 86                              | FSK 200/500 | (AB) |
| F01 | 15-7 | 1035 | 7363  | Tue | Messages 85 and 86                              | FSK 200/500 | (AB) |
| F01 | 16-7 | 1015 | 11141 | Wed | Message 87                                      | FSK 200/500 | (AB) |
| F01 | 16-7 | 1025 | 9192  | Wed | Message 87                                      | FSK 200/500 | (AB) |
| F01 | 16-7 | 1035 | 7363  | Wed | Message 87                                      | FSK 200/500 | (AB) |
| F01 | 17-7 | 1015 | 11141 | Thu | Too weak to decode. Probably messages 88 and 89 | FSK 200/500 | (AB) |
| F01 | 17-7 | 1025 | 9192  | Thu | Too weak to decode. Probably messages 88 and 89 | FSK 200/500 | (AB) |
| F01 | 17-7 | 1035 | 7363  | Thu | Too weak to decode. Probably messages 88 and 89 | FSK 200/500 | (AB) |
| F01 | 18-7 | 1015 | 11141 | Fri | 00000 +++++ +++++                               | FSK 200/500 | (AB) |
| F01 | 18-7 | 1025 | 9192  | Fri | 00000 +++++ +++++                               | FSK 200/500 | (AB) |
| F01 | 18-7 | 1035 | 7363  | Fri | 00000 +++++ +++++                               | FSK 200/500 | (AB) |
| F01 | 21-7 | 1015 | 11141 | Mon | Message 90                                      | FSK 200/500 | (AB) |
| F01 | 21-7 | 1025 | 9192  | Mon | Message 90                                      | FSK 200/500 | (AB) |
| F01 | 21-7 | 1035 | 7363  | Mon | Message 90                                      | FSK 200/500 | (AB) |
| F01 | 22-7 | 1015 | 11141 | Tue | Messages 91 and 92                              | FSK 200/500 | (AB) |
| F01 | 22-7 | 1025 | 9192  | Tue | Messages 91 and 92                              | FSK 200/500 | (AB) |
| F01 | 22-7 | 1035 | 7363  | Tue | Messages 91 and 92                              | FSK 200/500 | (AB) |
| F01 | 23-7 | 1015 | 11141 | Wed | Message 94                                      | FSK 200/500 | (AB) |
| F01 | 23-7 | 1025 | 9192  | Wed | Message 94                                      | FSK 200/500 | (AB) |
| F01 | 23-7 | 1035 | 7363  | Wed | Message 94                                      | FSK 200/500 | (AB) |
| F01 | 24-7 | 1015 | 11141 | Thu | Messages 94 and 95                              | FSK 200/500 | (AB) |
| F01 | 24-7 | 1025 | 9192  | Thu | Messages 94 and 95                              | FSK 200/500 | (AB) |
| F01 | 24-7 | 1035 | 7363  | Thu | Messages 94 and 95                              | FSK 200/500 | (AB) |
| F01 | 25-7 | 1015 | 11141 | Fri | 00000 +++++ +++++                               | FSK 200/500 | (AB) |
| F01 | 25-7 | 1025 | 9192  | Fri | 00000 +++++ +++++                               | FSK 200/500 | (AB) |
| F01 | 25-7 | 1035 | 7363  | Fri | 00000 +++++ +++++                               | FSK 200/500 | (AB) |
| F01 | 28-7 | 0035 | 12185 | Mon | 11177 00117 23658 28030 01939                   | FSK 200/500 | (PY) |
| F01 | 28-7 | 0125 | 14878 | Mon | 11177 00117 23658 28030 01939                   | FSK 200/500 | (PY) |
| F01 | 28-7 | 0135 | 12185 | Mon | 11177 00117 23658 28030 01939                   | FSK 200/500 | (PY) |

|      |      |      |       |     |                    |                         |      |
|------|------|------|-------|-----|--------------------|-------------------------|------|
| F01  | 28-7 | 1015 | 11141 | Mon | Message 96         | FSK 200/500             | (AB) |
| F01  | 28-7 | 1025 | 9192  | Mon | Message 96         | FSK 200/500             | (AB) |
| F01  | 28-7 | 1035 | 7363  | Mon | Message 96         | FSK 200/500             | (AB) |
| F01  | 31-7 | 1015 | 11141 | Thu | Messages 97 and 98 | FSK 200/500             | (AB) |
| F01  | 31-7 | 1025 | 9192  | Thu | Messages 97 and 98 | FSK 200/500             | (AB) |
| F01  | 31-7 | 1035 | 7363  | Thu | Messages 97 and 98 | FSK 200/500             | (AB) |
| F03j | 1-7  | 0430 | 9079  | Tue | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 1-7  | 0435 | 9079  | Tue | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 1-7  | 0800 | 18030 | Tue | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 1-7  | 0805 | 18030 | Tue | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 1-7  | 0835 | 19099 | Tue | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 1-7  | 0840 | 19099 | Tue | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 1-7  | 0945 | 7663  | Tue | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 1-7  | 0950 | 7663  | Tue | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 2-7  | 0530 | 16132 | Wed | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 2-7  | 0535 | 16132 | Wed | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 2-7  | 0915 | 6304  | Wed | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 2-7  | 0920 | 6304  | Wed | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 2-7  | 1010 | 12984 | Wed | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 2-7  | 1015 | 12984 | Wed | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 3-7  | 0430 | 9079  | Thu | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 3-7  | 0430 | 16125 | Thu | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 3-7  | 0435 | 9079  | Thu | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 3-7  | 0435 | 16125 | Thu | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 3-7  | 0725 | 17410 | Thu | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 3-7  | 0730 | 17410 | Thu | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 3-7  | 0735 | 10210 | Thu | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 3-7  | 0740 | 10210 | Thu | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 3-7  | 0835 | 19099 | Thu | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 3-7  | 0840 | 19099 | Thu | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 3-7  | 0915 | 6304  | Thu | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 3-7  | 0920 | 6304  | Thu | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 4-7  | 0810 | 18030 | Fri | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 4-7  | 0815 | 18030 | Fri | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 4-7  | 0930 | 6923  | Fri | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 4-7  | 0935 | 6923  | Fri | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 4-7  | 0945 | 7663  | Fri | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 4-7  | 0950 | 7663  | Fri | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 7-7  | 0735 | 10210 | Mon | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 7-7  | 0740 | 10210 | Mon | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 7-7  | 0810 | 18030 | Mon | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |
| F03j | 7-7  | 0815 | 18030 | Mon | Polish intel.      | FSK-4 100Bd/400Hz/448bp | (AB) |

|      |      |      |       |     |               |                         |          |
|------|------|------|-------|-----|---------------|-------------------------|----------|
| F03j | 7-7  | 0930 | 6923  | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 7-7  | 0935 | 6923  | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 7-7  | 1010 | 12984 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 7-7  | 1015 | 12984 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 8-7  | 0430 | 9079  | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 8-7  | 0435 | 9079  | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 8-7  | 0725 | 17410 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 8-7  | 0730 | 17410 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 8-7  | 0800 | 18030 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 8-7  | 0805 | 18030 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 8-7  | 0835 | 19099 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB-POL) |
| F03j | 8-7  | 0840 | 19099 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB-POL) |
| F03j | 8-7  | 0945 | 7663  | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 8-7  | 0950 | 7663  | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 9-7  | 0530 | 16132 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 9-7  | 0535 | 16132 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 9-7  | 0615 | 15915 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 9-7  | 0620 | 15915 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 9-7  | 0800 | 18030 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 9-7  | 0810 | 18030 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 9-7  | 0915 | 6304  | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 9-7  | 0920 | 6304  | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 9-7  | 1010 | 12984 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 9-7  | 1015 | 12984 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 10-7 | 0430 | 16125 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 10-7 | 0430 | 9079  | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (TM)     |
| F03j | 10-7 | 0435 | 16125 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 10-7 | 0435 | 9079  | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (TM)     |
| F03j | 10-7 | 0725 | 17410 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 10-7 | 0730 | 17410 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 10-7 | 0735 | 10210 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 10-7 | 0740 | 10210 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 10-7 | 0835 | 19099 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 10-7 | 0840 | 19099 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 10-7 | 0915 | 6304  | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 10-7 | 0920 | 6304  | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 11-7 | 0810 | 18030 | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 11-7 | 0815 | 18030 | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 11-7 | 0930 | 6923  | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 11-7 | 0935 | 6923  | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 11-7 | 0945 | 7663  | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 11-7 | 0950 | 7663  | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |

|      |      |      |       |     |               |                         |          |
|------|------|------|-------|-----|---------------|-------------------------|----------|
| F03j | 14-7 | 0530 | 16132 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 14-7 | 0535 | 16132 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 14-7 | 0615 | 15915 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 14-7 | 0620 | 15915 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 14-7 | 0735 | 10210 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 14-7 | 0740 | 10210 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 14-7 | 0810 | 18030 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 14-7 | 0815 | 18030 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 14-7 | 0930 | 6923  | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 14-7 | 0935 | 6923  | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 14-7 | 1010 | 12984 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 14-7 | 1015 | 12984 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 15-7 | 0430 | 9079  | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 15-7 | 0435 | 9079  | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 15-7 | 0725 | 17410 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 15-7 | 0730 | 17410 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 15-7 | 0800 | 18030 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 15-7 | 0805 | 18030 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 15-7 | 0835 | 19099 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB-POL) |
| F03j | 15-7 | 0840 | 19099 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB-POL) |
| F03j | 15-7 | 0945 | 7663  | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 15-7 | 0950 | 7663  | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 16-7 | 0530 | 16132 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 16-7 | 0535 | 16132 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 16-7 | 0615 | 15915 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 16-7 | 0620 | 15915 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 16-7 | 0800 | 18030 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 16-7 | 0810 | 18030 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 16-7 | 0915 | 6304  | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 16-7 | 0920 | 6304  | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 16-7 | 1010 | 12984 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 16-7 | 1015 | 12984 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 17-7 | 0430 | 9079  | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 17-7 | 0430 | 16125 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 17-7 | 0435 | 9079  | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 17-7 | 0435 | 16125 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 17-7 | 0735 | 10210 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 17-7 | 0740 | 10210 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 17-7 | 0835 | 19099 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 17-7 | 0840 | 19099 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 17-7 | 0915 | 6304  | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 17-7 | 0920 | 6304  | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |

|      |      |      |       |     |               |                         |          |
|------|------|------|-------|-----|---------------|-------------------------|----------|
| F03j | 18-7 | 0810 | 18030 | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 18-7 | 0815 | 18030 | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 18-7 | 0930 | 6923  | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 18-7 | 0935 | 6923  | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 18-7 | 0945 | 7663  | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 18-7 | 0950 | 7663  | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 21-7 | 0530 | 16132 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 21-7 | 0535 | 16132 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 21-7 | 0615 | 15915 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 21-7 | 0620 | 15915 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 21-7 | 0735 | 10210 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 21-7 | 0740 | 10210 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 21-7 | 0810 | 18030 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 21-7 | 0815 | 18030 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 21-7 | 0930 | 6923  | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 21-7 | 0935 | 6923  | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 21-7 | 1010 | 12984 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 21-7 | 1015 | 12984 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 22-7 | 0430 | 9079  | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 22-7 | 0435 | 9079  | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 22-7 | 0725 | 17410 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 22-7 | 0730 | 17410 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 22-7 | 0800 | 18030 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 22-7 | 0805 | 18030 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 22-7 | 0835 | 19099 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB-POL) |
| F03j | 22-7 | 0840 | 19099 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB-POL) |
| F03j | 22-7 | 0945 | 7663  | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 22-7 | 0950 | 7663  | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 23-7 | 0530 | 16132 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 23-7 | 0535 | 16132 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 23-7 | 0615 | 15915 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 23-7 | 0620 | 15915 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 23-7 | 0800 | 18030 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 23-7 | 0810 | 18030 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 23-7 | 0915 | 6304  | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 23-7 | 0920 | 6304  | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 23-7 | 1010 | 12984 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 23-7 | 1015 | 12984 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 24-7 | 0430 | 9079  | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 24-7 | 0430 | 16125 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 24-7 | 0435 | 9079  | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 24-7 | 0435 | 16125 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |

|      |      |      |       |     |               |                         |          |
|------|------|------|-------|-----|---------------|-------------------------|----------|
| F03j | 24-7 | 0725 | 17410 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 24-7 | 0730 | 17410 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 24-7 | 0735 | 10210 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 24-7 | 0740 | 10210 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 24-7 | 0835 | 19099 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 24-7 | 0840 | 19099 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 24-7 | 0915 | 6304  | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 24-7 | 0920 | 6304  | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 25-7 | 0810 | 18030 | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 25-7 | 0815 | 18030 | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 25-7 | 0930 | 6923  | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 25-7 | 0935 | 6923  | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 25-7 | 0945 | 7663  | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 25-7 | 0950 | 7663  | Fri | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 28-7 | 0530 | 16132 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 28-7 | 0535 | 16132 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 28-7 | 0615 | 15915 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 28-7 | 0620 | 15915 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 28-7 | 0735 | 10210 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 28-7 | 0740 | 10210 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 28-7 | 0810 | 18030 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 28-7 | 0815 | 18030 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 28-7 | 0930 | 6923  | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB/TJ)  |
| F03j | 28-7 | 0935 | 6923  | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB/TJ)  |
| F03j | 28-7 | 1010 | 12984 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 28-7 | 1015 | 12984 | Mon | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 29-7 | 0430 | 9079  | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 29-7 | 0435 | 9079  | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 29-7 | 0835 | 19099 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB-POL) |
| F03j | 29-7 | 0840 | 19099 | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB-POL) |
| F03j | 29-7 | 0945 | 7663  | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 29-7 | 0950 | 7663  | Tue | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 30-7 | 0530 | 16132 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 30-7 | 0535 | 16132 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 30-7 | 0615 | 15915 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 30-7 | 0620 | 15915 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 30-7 | 0800 | 18030 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 30-7 | 0810 | 18030 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 30-7 | 0915 | 6304  | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 30-7 | 0920 | 6304  | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 30-7 | 1010 | 12984 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |
| F03j | 30-7 | 1015 | 12984 | Wed | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB)     |

|             |      |      |       |     |               |                         |      |
|-------------|------|------|-------|-----|---------------|-------------------------|------|
| <b>F03j</b> | 31-7 | 0430 | 9079  | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB) |
| <b>F03j</b> | 31-7 | 0430 | 16125 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB) |
| <b>F03j</b> | 31-7 | 0435 | 9079  | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB) |
| <b>F03j</b> | 31-7 | 0435 | 16125 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB) |
| <b>F03j</b> | 31-7 | 0725 | 17410 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB) |
| <b>F03j</b> | 31-7 | 0730 | 17410 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB) |
| <b>F03j</b> | 31-7 | 0735 | 10210 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB) |
| <b>F03j</b> | 31-7 | 0740 | 10210 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB) |
| <b>F03j</b> | 31-7 | 0835 | 19099 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB) |
| <b>F03j</b> | 31-7 | 0840 | 19099 | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB) |
| <b>F03j</b> | 31-7 | 0915 | 6304  | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB) |
| <b>F03j</b> | 31-7 | 0920 | 6304  | Thu | Polish intel. | FSK-4 100Bd/400Hz/448bp | (AB) |
| <b>F03I</b> | 1-7  | 0635 | 18978 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 1-7  | 0640 | 18978 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 1-7  | 0810 | 11493 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 1-7  | 0815 | 11493 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 1-7  | 1800 | 12385 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 1-7  | 1805 | 12385 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 2-7  | 0950 | 10125 | Wed | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 2-7  | 0955 | 10125 | Wed | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 3-7  | 0635 | 18978 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 3-7  | 0640 | 18978 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 3-7  | 1800 | 12385 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 3-7  | 1805 | 12385 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 3-7  | 1830 | 6304  | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 3-7  | 1835 | 6304  | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 4-7  | 0700 | 7469  | Fri | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 4-7  | 0705 | 7469  | Fri | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 4-7  | 0850 | 11493 | Fri | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 4-7  | 0855 | 11493 | Fri | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 7-7  | 0950 | 10125 | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 7-7  | 0955 | 10125 | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 7-7  | 1830 | 6304  | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 7-7  | 1835 | 6304  | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 8-7  | 0615 | 12089 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 8-7  | 0620 | 12089 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 8-7  | 0635 | 18978 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 8-7  | 0640 | 18978 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 8-7  | 0810 | 11493 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 8-7  | 0815 | 11493 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 8-7  | 1800 | 12385 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| <b>F03I</b> | 8-7  | 1805 | 12385 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |

|      |      |      |       |     |               |                         |      |
|------|------|------|-------|-----|---------------|-------------------------|------|
| F03I | 9-7  | 0950 | 10125 | Wed | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 9-7  | 0955 | 10125 | Wed | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 10-7 | 0615 | 12089 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 10-7 | 0620 | 12089 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 10-7 | 0635 | 18978 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 10-7 | 0640 | 18978 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 10-7 | 0700 | 7469  | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 10-7 | 0705 | 7469  | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 10-7 | 1800 | 12385 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 10-7 | 1805 | 12385 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 10-7 | 1830 | 6304  | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 10-7 | 1835 | 6304  | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 11-7 | 0700 | 7469  | Fri | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 11-7 | 0705 | 7469  | Fri | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 11-7 | 0850 | 11493 | Fri | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 11-7 | 0855 | 11493 | Fri | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 14-7 | 0950 | 10125 | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 14-7 | 0955 | 10125 | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 14-7 | 1830 | 6304  | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 14-7 | 1835 | 6304  | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 15-7 | 0615 | 12089 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 15-7 | 0620 | 12089 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 15-7 | 0635 | 18978 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 15-7 | 0635 | 18978 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 15-7 | 0640 | 18978 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 15-7 | 0640 | 18978 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 15-7 | 0810 | 11493 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 15-7 | 0815 | 11493 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 15-7 | 1800 | 12385 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 15-7 | 1805 | 12385 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 16-7 | 0950 | 10125 | Wed | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 16-7 | 0955 | 10125 | Wed | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 17-7 | 0615 | 12089 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 17-7 | 0620 | 12089 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 17-7 | 0635 | 18978 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 17-7 | 0640 | 18978 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 17-7 | 0700 | 7469  | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 17-7 | 0705 | 7469  | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 17-7 | 1800 | 12385 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 17-7 | 1805 | 12385 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 17-7 | 1830 | 6304  | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |
| F03I | 17-7 | 1835 | 6304  | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB) |

|             |      |      |       |     |               |                         |         |
|-------------|------|------|-------|-----|---------------|-------------------------|---------|
| <b>F03I</b> | 18-7 | 0700 | 7469  | Fri | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 18-7 | 0705 | 7469  | Fri | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 18-7 | 0850 | 11493 | Fri | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 18-7 | 0855 | 11493 | Fri | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 21-7 | 0950 | 10125 | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 21-7 | 0955 | 10125 | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 21-7 | 1830 | 6304  | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 21-7 | 1835 | 6304  | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 22-7 | 0615 | 12089 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 22-7 | 0620 | 12089 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 22-7 | 0810 | 11493 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 22-7 | 0815 | 11493 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 22-7 | 1800 | 12385 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 22-7 | 1805 | 12385 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 23-7 | 0950 | 10125 | Wed | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 23-7 | 0955 | 10125 | Wed | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 24-7 | 0615 | 12089 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 24-7 | 0620 | 12089 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 24-7 | 0635 | 18978 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 24-7 | 0640 | 18978 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 24-7 | 0700 | 7469  | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 24-7 | 0705 | 7469  | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 24-7 | 1800 | 12385 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 24-7 | 1805 | 12385 | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 24-7 | 1830 | 6304  | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 24-7 | 1835 | 6304  | Thu | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 25-7 | 0700 | 7469  | Fri | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 25-7 | 0705 | 7469  | Fri | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 25-7 | 0850 | 11493 | Fri | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 25-7 | 0855 | 11493 | Fri | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 28-7 | 0615 | 12089 | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 28-7 | 0620 | 12089 | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 28-7 | 0635 | 18978 | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 28-7 | 0640 | 18978 | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 28-7 | 0950 | 10125 | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB/TJ) |
| <b>F03I</b> | 28-7 | 0955 | 10125 | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 28-7 | 1830 | 6304  | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 28-7 | 1835 | 6304  | Mon | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 29-7 | 0810 | 11493 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 29-7 | 0815 | 11493 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 29-7 | 1800 | 12385 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |
| <b>F03I</b> | 29-7 | 1805 | 12385 | Tue | Polish intel. | FSK-2 100Bd/200Hz/448bp | (AB)    |

|      |      |      |       |     |                                                                 |                         |          |
|------|------|------|-------|-----|-----------------------------------------------------------------|-------------------------|----------|
| F03I | 30-7 | 0950 | 10125 | Wed | Polish intel.                                                   | FSK-2 100Bd/200Hz/448bp | (AB)     |
| F03I | 30-7 | 0955 | 10125 | Wed | Polish intel.                                                   | FSK-2 100Bd/200Hz/448bp | (AB)     |
| F03I | 31-7 | 0615 | 12089 | Thu | Polish intel.                                                   | FSK-2 100Bd/200Hz/448bp | (AB)     |
| F03I | 31-7 | 0620 | 12089 | Thu | Polish intel.                                                   | FSK-2 100Bd/200Hz/448bp | (AB)     |
| F03I | 31-7 | 0635 | 18978 | Thu | Polish intel.                                                   | FSK-2 100Bd/200Hz/448bp | (AB)     |
| F03I | 31-7 | 0640 | 18978 | Thu | Polish intel.                                                   | FSK-2 100Bd/200Hz/448bp | (AB)     |
| F03I | 31-7 | 0700 | 7469  | Thu | Polish intel.                                                   | FSK-2 100Bd/200Hz/448bp | (AB)     |
| F03I | 31-7 | 0705 | 7469  | Thu | Polish intel.                                                   | FSK-2 100Bd/200Hz/448bp | (AB)     |
| F03I | 31-7 | 1800 | 12385 | Thu | Polish intel.                                                   | FSK-2 100Bd/200Hz/448bp | (AB)     |
| F03I | 31-7 | 1805 | 12385 | Thu | Polish intel.                                                   | FSK-2 100Bd/200Hz/448bp | (AB)     |
| F03I | 31-7 | 1830 | 6304  | Thu | Polish intel.                                                   | FSK-2 100Bd/200Hz/448bp | (AB)     |
| F03I | 31-7 | 1835 | 6304  | Thu | Polish intel.                                                   | FSK-2 100Bd/200Hz/448bp | (AB)     |
| F06  | 1-7  | 0030 | 13971 | Tue | 11166 60070 15487 01001 00049 00000 00000 00000 00000           | FSK 200/1000            | (AB)     |
| F06  | 1-7  | 0040 | 11127 | Tue | 11166 60070 15487 01001 00049 00000 00000 00000 00000           | FSK 200/1000            | (AB)     |
| F06  | 1-7  | 0050 | 20211 | Tue | 11166 60070 15487 01001 00049 00000 00000 00000 00000           | FSK 200/1000            | (AB)     |
| F06  | 1-7  | 0700 | 11159 | Tue | 11166 70202 23568 30070 01639 and 11166 70202 95741 30071 01759 | FSK 200/1000            | (AB)     |
| F06  | 1-7  | 0710 | 9188  | Tue | 11166 70202 23568 30070 01639 and 11166 70202 95741 30071 01759 | FSK 200/1000            | (AB)     |
| F06  | 1-7  | 0720 | 7669  | Tue | 11166 70202 23568 30070 01639 and 11166 70202 95741 30071 01759 | FSK 200/1000            | (AB)     |
| F06  | 1-7  | 0800 | 10198 | Tue | 11100 00000 42186 27096 01099                                   | FSK 200/1000            | (AB)     |
| F06  | 1-7  | 0810 | 8082  | Tue | 11100 00000 42186 27096 01099                                   | FSK 200/1000            | (AB)     |
| F06  | 1-7  | 0820 | 6833  | Tue | 11100 00000 42186 27096 01099                                   | FSK 200/1000            | (AB)     |
| F06  | 1-7  | 1200 | 10629 | Tue | 11166 70202 23568 30070 01639 and 11166 70202 95741 30071 01759 | FSK 200/1000            | (AB)     |
| F06  | 1-7  | 1210 | 8138  | Tue | 11166 70202 23568 30070 01639 and 11166 70202 95741 30071 01759 | FSK 200/1000            | (AB)     |
| F06  | 1-7  | 1220 | 6774  | Tue | 11166 70202 23568 30070 01639 and 11166 70202 95741 30071 01759 | FSK 200/1000            | (AB)     |
| F06  | 1-7  | 1650 | 20475 | Tue | 11166 10053 32147 01001 00049 00000 00000 00000 00000           | FSK 200/1000            | (AB-ARS) |
| F06  | 1-7  | 1700 | 18183 | Tue | 11166 10053 32147 01001 00049 00000 00000 00000 00000           | FSK 200/1000            | (AB)     |
| F06  | 1-7  | 1710 | 16319 | Tue | 11166 10053 32147 01001 00049 00000 00000 00000 00000           | FSK 200/1000            | (AB)     |
| F06  | 3-7  | 0700 | 11159 | Thu | 11166 70202 19485 02073 01859 and 11166 70202 20479 02074 01719 | FSK 200/1000            | (AB)     |
| F06  | 3-7  | 0710 | 9188  | Thu | 11166 70202 19485 02073 01859 and 11166 70202 20479 02074 01719 | FSK 200/1000            | (AB)     |
| F06  | 3-7  | 0720 | 7669  | Thu | 11166 70202 19485 02073 01859 and 11166 70202 20479 02074 01719 | FSK 200/1000            | (AB)     |
| F06  | 3-7  | 1200 | 10629 | Thu | 11166 70202 19485 02073 01859 and 11166 70202 20479 02074 01719 | FSK 200/1000            | (AB)     |
| F06  | 3-7  | 1210 | 8138  | Thu | 11166 70202 19485 02073 01859 and 11166 70202 20479 02074 01719 | FSK 200/1000            | (AB)     |
| F06  | 3-7  | 1220 | 6774  | Thu | 11166 70202 19485 02073 01859 and 11166 70202 20479 02074 01719 | FSK 200/1000            | (AB)     |
| F06  | 3-7  | 1330 | 16127 | Thu | 11166 80214 95173 03018 00049 00000 00000 00000 00000           | FSK 200/1000            | (AB)     |
| F06  | 3-7  | 1340 | 12229 | Thu | 11166 80214 95173 03018 00049 00000 00000 00000 00000           | FSK 200/1000            | (AB)     |
| F06  | 3-7  | 1350 | 9958  | Thu | 11166 80214 95173 03018 00049 00000 00000 00000 00000           | FSK 200/1000            | (AB)     |
| F06  | 4-7  | 0700 | 11159 | Fri | 11166 70202 23568 03066 00049 00000 00000 00000 00000           | FSK 200/1000            | (AB)     |
| F06  | 4-7  | 0710 | 9188  | Fri | 11166 70202 23568 03066 00049 00000 00000 00000 00000           | FSK 200/1000            | (AB)     |
| F06  | 4-7  | 0720 | 7669  | Fri | 11166 70202 23568 03066 00049 00000 00000 00000 00000           | FSK 200/1000            | (AB)     |
| F06  | 6-7  | 1530 | 20988 | Sun | 11166 10053 15948 06001 00049 00000 00000 00000 00000           | FSK 200/1000            | (AB)     |
| F06  | 6-7  | 1540 | 18187 | Sun | 11166 10053 15948 06001 00049 00000 00000 00000 00000           | FSK 200/1000            | (AB)     |
| F06  | 6-7  | 1550 | 16169 | Sun | 11166 10053 15948 06001 00049 00000 00000 00000 00000           | FSK 200/1000            | (AB)     |

|     |      |      |       |     |                                                                                                          |                     |          |
|-----|------|------|-------|-----|----------------------------------------------------------------------------------------------------------|---------------------|----------|
| F06 | 7-7  | 0400 | 10538 | Mon | 11166 70059 15948 07001 00049 00000 00000 00000 00000                                                    | FSK 200/1000        | (AB)     |
| F06 | 7-7  | 0410 | 8107  | Mon | 11166 70059 15948 07001 00049 00000 00000 00000 00000                                                    | FSK 200/1000        | (AB)     |
| F06 | 7-7  | 0420 | 6791  | Mon | 11166 70059 15948 07001 00049 00000 00000 00000 00000                                                    | FSK 200/1000        | (AB)     |
| F06 | 7-7  | 0800 | 9923  | Mon | 11100 00000 36147 04097 02279                                                                            | FSK 200/1000        | (AB)     |
| F06 | 7-7  | 0810 | 7369  | Mon | 11100 00000 36147 04097 02279                                                                            | FSK 200/1000        | (AB)     |
| F06 | 8-7  | 0700 | 11159 | Tue | 11166 70202 25698 07076 01739 and 11166 70202 78561 07077 01979                                          | FSK 200/1000        | (AB)     |
| F06 | 8-7  | 0710 | 9188  | Tue | 11166 70202 25698 07076 01739 and 11166 70202 78561 07077 01979                                          | FSK 200/1000        | (AB)     |
| F06 | 8-7  | 0720 | 7669  | Tue | 11166 70202 25698 07076 01739 and 11166 70202 78561 07077 01979                                          | FSK 200/1000        | (AB)     |
| F06 | 8-7  | 0800 | 9923  | Tue | 11100 00000 36147 04097 02279                                                                            | FSK 200/1000        | (AB)     |
| F06 | 8-7  | 0810 | 7369  | Tue | 11100 00000 36147 04097 02279                                                                            | FSK 200/1000        | (AB)     |
| F06 | 8-7  | 1200 | 10629 | Tue | 11166 70202 25698 07076 01739 and 11166 70202 78561 07077 01979                                          | FSK 200/1000        | (AB)     |
| F06 | 8-7  | 1210 | 8138  | Tue | 11166 70202 25698 07076 01739 and 11166 70202 78561 07077 01979                                          | FSK 200/1000        | (AB)     |
| F06 | 8-7  | 1220 | 6774  | Tue | 11166 70202 25698 07076 01739 and 11166 70202 78561 07077 01979                                          | FSK 200/1000        | (AB)     |
| F06 | 8-7  | 1650 | 20475 | Tue | 11166 10053 74523 08001 00049 00000 00000 00000 00000                                                    | FSK 200/1000        | (AB-ARS) |
| F06 | 8-7  | 1700 | 18183 | Tue | 11166 10053 74523 08001 00049 00000 00000 00000 00000                                                    | FSK 200/1000        | (AB)     |
| F06 | 8-7  | 1710 | 16319 | Tue | 11166 10053 74523 08001 00049 00000 00000 00000 00000                                                    | FSK 200/1000        | (AB)     |
| F06 | 9-7  | 0930 | 6957  | Wed | 11100 00000 12345 09006 03029                                                                            | FSK 200/1000        | (PY)     |
| F06 | 9-7  | 0940 | 9425  | Wed | 11100 00000 12345 09006 03029                                                                            | FSK 200/1000        | (PY)     |
| F06 | 9-7  | 0950 | 11611 | Wed | 11100 00000 12345 09006 03029                                                                            | FSK 200/1000        | (PY)     |
| F06 | 10-7 | 0300 | 10687 | Thu | 1 block, 1 msg starting at block #7 (misformed empty transmission), intermittent modulation for a minute | FSK 200/1000        | (PY)     |
| F06 | 10-7 | 0315 | 7992  | Thu | Message. Too weak to decode                                                                              | FSK 200/1000        | (PY)     |
| F06 | 10-7 | 0330 | 5913  | Thu | File 44461 (1851 bytes) binary content                                                                   | FSK 200/1000        | (PY)     |
| F06 | 10-7 | 0700 | 11159 | Thu | 11166 70202 68371 09079 01579 and 11166 70202 16389 09080 02059                                          | FSK 200/1000        | (AB)     |
| F06 | 10-7 | 0710 | 9188  | Thu | 11166 70202 68371 09079 01579 and 11166 70202 16389 09080 02059                                          | FSK 200/1000        | (AB)     |
| F06 | 10-7 | 0720 | 7669  | Thu | 11166 70202 68371 09079 01579 and 11166 70202 16389 09080 02059                                          | FSK 200/1000        | (AB)     |
| F06 | 10-7 | 1200 | 10629 | Thu | 11166 70202 68371 09079 01579 and 11166 70202 16389 09080 02059                                          | FSK 200/1000        | (AB)     |
| F06 | 10-7 | 1210 | 8138  | Thu | 11166 70202 68371 09079 01579 and 11166 70202 16389 09080 02059                                          | FSK 200/1000        | (AB)     |
| F06 | 10-7 | 1220 | 6774  | Thu | 11166 70202 68371 09079 01579 and 11166 70202 16389 09080 02059                                          | FSK 200/1000        | (AB)     |
| F06 | 10-7 | 1330 | 16127 | Thu | 11166 80214 42536 09010 00049 00000 00000 00000 00000 (wrong date)                                       | FSK 200/1000        | (AB)     |
| F06 | 10-7 | 1340 | 12229 | Thu | 11166 80214 42536 09010 00049 00000 00000 00000 00000 (wrong date)                                       | FSK 200/1000        | (AB)     |
| F06 | 10-7 | 1350 | 9958  | Thu | 11166 80214 42536 09010 00049 00000 00000 00000 00000 (wrong date)                                       | FSK 200/1000        | (AB)     |
| F06 | 11-7 | 0700 | 11159 | Fri | 11100 70202 85941 11165 00049 00000 00000 00000 00000                                                    | FSK 200/1000        | (AB)     |
| F06 | 11-7 | 0710 | 9188  | Fri | 11100 70202 85941 11165 00049 00000 00000 00000 00000                                                    | FSK 200/1000        | (AB)     |
| F06 | 11-7 | 0720 | 7669  | Fri | 11100 70202 85941 11165 00049 00000 00000 00000 00000                                                    | FSK 200/1000        | (AB)     |
| F06 | 12-7 | 1750 | 5913  | Sat | 11100 00000 12345 12011 03029. wrong asymmetric -500/+160Hz FSK                                          | FSK 200/-500/+160Hz | (PY)     |
| F06 | 12-7 | 1800 | 7992  | Sat | 11100 00000 12345 12011 03029. wrong asymmetric -500/+160Hz FSK                                          | FSK 200/-500/+160Hz | (PY)     |
| F06 | 12-7 | 1810 | 10687 | Sat | 11100 00000 12345 12011 03029. wrong asymmetric -500/+160Hz FSK                                          | FSK 200/-500/+160Hz | (PY)     |
| F06 | 13-7 | 1530 | 20988 | Sun | 11166 10053 57913 13001 00049 00000 00000 00000 00000                                                    | FSK 200/1000        | (AB-S)   |
| F06 | 13-7 | 1540 | 18187 | Sun | 11166 10053 57913 13001 00049 00000 00000 00000 00000                                                    | FSK 200/1000        | (AB-S)   |
| F06 | 13-7 | 1550 | 16169 | Sun | 11166 10053 57913 13001 00049 00000 00000 00000 00000                                                    | FSK 200/1000        | (AB-KWT) |
| F06 | 14-7 | 0800 | 9923  | Mon | 11100 00000 59487 11098 03079                                                                            | FSK 200/1000        | (AB)     |

|     |      |      |       |     |                                                                 |              |          |
|-----|------|------|-------|-----|-----------------------------------------------------------------|--------------|----------|
| F06 | 14-7 | 0810 | 7369  | Mon | 11100 00000 59487 11098 03079                                   | FSK 200/1000 | (AB)     |
| F06 | 15-7 | 0030 | 13971 | Tue | 11166 60070 15487 15001 00049 00000 00000 00000 00000           | FSK 200/1000 | (TM)     |
| F06 | 15-7 | 0040 | 11127 | Tue | 11166 60070 15487 15001 00049 00000 00000 00000 00000           | FSK 200/1000 | (TM)     |
| F06 | 15-7 | 0050 | 10211 | Tue | 11166 60070 15487 15001 00049 00000 00000 00000 00000           | FSK 200/1000 | (TM)     |
| F06 | 15-7 | 0700 | 11159 | Tue | 11166 70202 16328 14082 01519 and 11166 70202 21496 14083 02079 | FSK 200/1000 | (AB)     |
| F06 | 15-7 | 0710 | 9188  | Tue | 11166 70202 16328 14082 01519 and 11166 70202 21496 14083 02079 | FSK 200/1000 | (AB)     |
| F06 | 15-7 | 0720 | 7669  | Tue | 11166 70202 16328 14082 01519 and 11166 70202 21496 14083 02079 | FSK 200/1000 | (AB)     |
| F06 | 15-7 | 0800 | 9923  | Tue | 11100 00000 59487 11098 03079                                   | FSK 200/1000 | (AB)     |
| F06 | 15-7 | 0810 | 7369  | Tue | 11100 00000 59487 11098 03079                                   | FSK 200/1000 | (AB)     |
| F06 | 15-7 | 1200 | 10629 | Tue | 11166 70202 16328 14082 01519 and 11166 70202 21496 14083 02079 | FSK 200/1000 | (AB)     |
| F06 | 15-7 | 1210 | 8138  | Tue | 11166 70202 16328 14082 01519 and 11166 70202 21496 14083 02079 | FSK 200/1000 | (AB)     |
| F06 | 15-7 | 1220 | 6774  | Tue | 11166 70202 16328 14082 01519 and 11166 70202 21496 14083 02079 | FSK 200/1000 | (AB)     |
| F06 | 15-7 | 1650 | 20475 | Tue | 11166 10053 82456 15001 00049 00000 00000 00000 00000           | FSK 200/1000 | (AB)     |
| F06 | 15-7 | 1700 | 18183 | Tue | 11166 10053 82456 15001 00049 00000 00000 00000 00000           | FSK 200/1000 | (AB)     |
| F06 | 15-7 | 1710 | 16319 | Tue | 11166 10053 82456 15001 00049 00000 00000 00000 00000           | FSK 200/1000 | (AB)     |
| F06 | 17-7 | 0700 | 11159 | Thu | 11166 70202 20436 16085 01379 and 11166 70202 41308 16086 02199 | FSK 200/1000 | (AB)     |
| F06 | 17-7 | 0710 | 9188  | Thu | 11166 70202 20436 16085 01379 and 11166 70202 41308 16086 02199 | FSK 200/1000 | (AB)     |
| F06 | 17-7 | 0720 | 7669  | Thu | 11166 70202 20436 16085 01379 and 11166 70202 41308 16086 02199 | FSK 200/1000 | (AB)     |
| F06 | 17-7 | 1200 | 10629 | Thu | 11166 70202 20436 16085 01379 and 11166 70202 41308 16086 02199 | FSK 200/1000 | (AB)     |
| F06 | 17-7 | 1210 | 8138  | Thu | 11166 70202 20436 16085 01379 and 11166 70202 41308 16086 02199 | FSK 200/1000 | (AB)     |
| F06 | 17-7 | 1220 | 6774  | Thu | 11166 70202 20436 16085 01379 and 11166 70202 41308 16086 02199 | FSK 200/1000 | (AB)     |
| F06 | 17-7 | 1330 | 16127 | Thu | 11166 80214 53247 17067 00049 00000 00000 00000 00000           | FSK 200/1000 | (AB)     |
| F06 | 17-7 | 1340 | 12229 | Thu | 11166 80214 53247 17067 00049 00000 00000 00000 00000           | FSK 200/1000 | (AB)     |
| F06 | 17-7 | 1350 | 9958  | Thu | 11166 80214 53247 17067 00049 00000 00000 00000 00000           | FSK 200/1000 | (AB)     |
| F06 | 18-7 | 0700 | 11159 | Fri | 11166 70202 95428 18058 00049 00000 00000 00000 00000           | FSK 200/1000 | (AB)     |
| F06 | 18-7 | 0710 | 9188  | Fri | 11166 70202 95428 18058 00049 00000 00000 00000 00000           | FSK 200/1000 | (AB)     |
| F06 | 18-7 | 0720 | 7669  | Fri | 11166 70202 95428 18058 00049 00000 00000 00000 00000           | FSK 200/1000 | (AB)     |
| F06 | 20-7 | 1530 | 20988 | Sun | 11166 10053 45732 20001 00049 00000 00000 00000 00000           | FSK 200/1000 | (AB-IRQ) |
| F06 | 20-7 | 1540 | 18187 | Sun | 11166 10053 45732 20001 00049 00000 00000 00000 00000           | FSK 200/1000 | (AB-IRQ) |
| F06 | 20-7 | 1550 | 16169 | Sun | 11166 10053 45732 20001 00049 00000 00000 00000 00000           | FSK 200/1000 | (AB)     |
| F06 | 21-7 | 0400 | 10538 | Mon | 11166 70059 95184 21001 00049 00000 00000 00000 00000           | FSK 200/1000 | (AB)     |
| F06 | 21-7 | 0410 | 8107  | Mon | 11166 70059 95184 21001 00049 00000 00000 00000 00000           | FSK 200/1000 | (AB)     |
| F06 | 21-7 | 0420 | 6791  | Mon | 11166 70059 95184 21001 00049 00000 00000 00000 00000           | FSK 200/1000 | (AB)     |
| F06 | 21-7 | 0800 | 9923  | Mon | 11100 00000 26598 18099 00879                                   | FSK 200/1000 | (AB)     |
| F06 | 21-7 | 0810 | 7369  | Mon | 11100 00000 26598 18099 00879                                   | FSK 200/1000 | (AB)     |
| F06 | 21-7 | 0820 | 5341  | Mon | 11100 00000 26598 18099 00879                                   | FSK 200/1000 | (AB)     |
| F06 | 22-7 | 0030 | 13971 | Tue | 11166 60070 13579 22001 00049 00000 00000 00000 00000           | FSK 200/1000 | (TM)     |
| F06 | 22-7 | 0040 | 11127 | Tue | 11166 60070 13579 22001 00049 00000 00000 00000 00000           | FSK 200/1000 | (TM)     |
| F06 | 22-7 | 0050 | 10211 | Tue | 11166 60070 13579 22001 00049 00000 00000 00000 00000           | FSK 200/1000 | (TM)     |
| F06 | 22-7 | 0700 | 11159 | Tue | 11166 70202 20167 21088 01359 and 11166 70202 12678 21089 02179 | FSK 200/1000 | (AB)     |
| F06 | 22-7 | 0710 | 9188  | Tue | 11166 70202 20167 21088 01359 and 11166 70202 12678 21089 02179 | FSK 200/1000 | (AB)     |
| F06 | 22-7 | 0720 | 7669  | Tue | 11166 70202 20167 21088 01359 and 11166 70202 12678 21089 02179 | FSK 200/1000 | (AB)     |

|     |      |      |       |     |                                                                    |              |          |
|-----|------|------|-------|-----|--------------------------------------------------------------------|--------------|----------|
| F06 | 22-7 | 0800 | 9923  | Tue | 11100 00000 26598 18099 00879                                      | FSK 200/1000 | (AB)     |
| F06 | 22-7 | 0810 | 7369  | Tue | 11100 00000 26598 18099 00879                                      | FSK 200/1000 | (AB)     |
| F06 | 22-7 | 0820 | 5341  | Tue | 11100 00000 26598 18099 00879                                      | FSK 200/1000 | (AB)     |
| F06 | 22-7 | 1200 | 10629 | Tue | 11166 70202 20167 21088 01359 and 11166 70202 12678 21089 02179    | FSK 200/1000 | (AB)     |
| F06 | 22-7 | 1210 | 8138  | Tue | 11166 70202 20167 21088 01359 and 11166 70202 12678 21089 02179    | FSK 200/1000 | (AB)     |
| F06 | 22-7 | 1220 | 6774  | Tue | 11166 70202 20167 21088 01359 and 11166 70202 12678 21089 02179    | FSK 200/1000 | (AB)     |
| F06 | 22-7 | 1650 | 20475 | Tue | 11166 10053 14753 22001 00049 00000 00000 00000 00000              | FSK 200/1000 | (AB-IRL) |
| F06 | 22-7 | 1700 | 18183 | Tue | 11166 10053 14753 22001 00049 00000 00000 00000 00000              | FSK 200/1000 | (AB)     |
| F06 | 22-7 | 1710 | 16319 | Tue | 11166 10053 14753 22001 00049 00000 00000 00000 00000              | FSK 200/1000 | (AB)     |
| F06 | 24-7 | 0700 | 11159 | Thu | 11166 70202 32157 23091 01539 and 11166 70202 65487 23092 01619    | FSK 200/1000 | (AB)     |
| F06 | 24-7 | 0710 | 9188  | Thu | 11166 70202 32157 23091 01539 and 11166 70202 65487 23092 01619    | FSK 200/1000 | (AB)     |
| F06 | 24-7 | 0720 | 7669  | Thu | 11166 70202 32157 23091 01539 and 11166 70202 65487 23092 01619    | FSK 200/1000 | (AB)     |
| F06 | 24-7 | 1200 | 10629 | Thu | 11166 70202 32157 23091 01539 and 11166 70202 65487 23092 01619    | FSK 200/1000 | (AB)     |
| F06 | 24-7 | 1210 | 8138  | Thu | 11166 70202 32157 23091 01539 and 11166 70202 65487 23092 01619    | FSK 200/1000 | (AB)     |
| F06 | 24-7 | 1220 | 6774  | Thu | 11166 70202 32157 23091 01539 and 11166 70202 65487 23092 01619    | FSK 200/1000 | (AB)     |
| F06 | 24-7 | 1330 | 16127 | Thu | 11166 80214 62481 24031 00049 00000 00000 00000 00000              | FSK 200/1000 | (AB)     |
| F06 | 24-7 | 1340 | 12229 | Thu | 11166 80214 62481 24031 00049 00000 00000 00000 00000              | FSK 200/1000 | (AB)     |
| F06 | 24-7 | 1350 | 9958  | Thu | 11166 80214 62481 24031 00049 00000 00000 00000 00000              | FSK 200/1000 | (AB)     |
| F06 | 25-7 | 0700 | 11159 | Fri | 11166 70202 68719 24091 00049 00000 00000 00000 00000 (wrong date) | FSK 200/1000 | (AB)     |
| F06 | 25-7 | 0710 | 9188  | Fri | 11166 70202 68719 24091 00049 00000 00000 00000 00000 (wrong date) | FSK 200/1000 | (AB)     |
| F06 | 25-7 | 0720 | 7669  | Fri | 11166 70202 68719 24091 00049 00000 00000 00000 00000 (wrong date) | FSK 200/1000 | (AB)     |
| F06 | 27-7 | 1530 | 20988 | Sun | Too weak to decode                                                 | FSK 200/1000 | (AB)     |
| F06 | 27-7 | 1540 | 18187 | Sun | Too weak to decode                                                 | FSK 200/1000 | (AB)     |
| F06 | 27-7 | 1550 | 16169 | Sun | Too weak to decode                                                 | FSK 200/1000 | (AB)     |
| F06 | 28-7 | 0800 | 9923  | Mon | 11100 00000 21598 25001 01259                                      | FSK 200/1000 | (AB)     |
| F06 | 28-7 | 0800 | 9923  | Mon | 11100 00000 21598 25001 01259                                      | FSK 200/1000 | (AB)     |
| F06 | 28-7 | 0810 | 7369  | Mon | 11100 00000 21598 25001 01259                                      | FSK 200/1000 | (AB)     |
| F06 | 28-7 | 0810 | 7369  | Mon | 11100 00000 21598 25001 01259                                      | FSK 200/1000 | (AB)     |
| F06 | 28-7 | 0820 | 5341  | Mon | 11100 00000 21598 25001 01259                                      | FSK 200/1000 | (AB)     |
| F06 | 28-7 | 0820 | 5341  | Mon | 11100 00000 21598 25001 01259                                      | FSK 200/1000 | (AB)     |
| F06 | 29-7 | 0030 | 13971 | Tue | 11166 60070 25813 29078 00049 00000 00000 00000 00000              | FSK 200/1000 | (AB)     |
| F06 | 29-7 | 0040 | 11127 | Tue | 11166 60070 25813 29078 00049 00000 00000 00000 00000              | FSK 200/1000 | (AB)     |
| F06 | 29-7 | 0050 | 10211 | Tue | 11166 60070 25813 29078 00049 00000 00000 00000 00000              | FSK 200/1000 | (AB)     |
| F06 | 29-7 | 0700 | 11159 | Tue | 11166 70202 28167 28094 01479 and 11166 70202 92678 28095 01999    | FSK 200/1000 | (AB)     |
| F06 | 29-7 | 0710 | 9188  | Tue | 11166 70202 28167 28094 01479 and 11166 70202 92678 28095 01999    | FSK 200/1000 | (AB)     |
| F06 | 29-7 | 0720 | 7669  | Tue | 11166 70202 28167 28094 01479 and 11166 70202 92678 28095 01999    | FSK 200/1000 | (AB)     |
| F06 | 29-7 | 1200 | 10629 | Tue | 11166 70202 28167 28094 01479 and 11166 70202 92678 28095 01999    | FSK 200/1000 | (AB)     |
| F06 | 29-7 | 1210 | 8138  | Tue | 11166 70202 28167 28094 01479 and 11166 70202 92678 28095 01999    | FSK 200/1000 | (AB)     |
| F06 | 29-7 | 1220 | 6774  | Tue | 11166 70202 28167 28094 01479 and 11166 70202 92678 28095 01999    | FSK 200/1000 | (AB)     |
| F06 | 29-7 | 1650 | 20475 | Tue | 11166 10053 74523 29001 00049 00000 00000 00000 00000              | FSK 200/1000 | (AB)     |
| F06 | 29-7 | 1700 | 18183 | Tue | 11166 10053 74523 29001 00049 00000 00000 00000 00000              | FSK 200/1000 | (AB)     |
| F06 | 29-7 | 1710 | 16319 | Tue | 11166 10053 74523 29001 00049 00000 00000 00000 00000              | FSK 200/1000 | (AB)     |

|      |      |      |       |     |                                                                                   |              |      |
|------|------|------|-------|-----|-----------------------------------------------------------------------------------|--------------|------|
| F06  | 30-7 | 1400 | 11552 | Wed | 11166 70202 24691 30036 00049 74861 63524 30875 00000                             | FSK 200/1000 | (PY) |
| F06  | 30-7 | 1415 | 9461  | Wed | 11166 70202 24691 30036 00049 74861 63524 30875 00000                             | FSK 200/1000 | (PY) |
| F06  | 30-7 | 1430 | 7844  | Wed | 11166 70202 24691 30036 00049 74861 63524 30875 00000                             | FSK 200/1000 | (PY) |
| F06  | 31-7 | 0700 | 11159 | Thu | 11166 70202 46257 30002 02039 and 11166 70202 91487 30003 02239                   | FSK 200/1000 | (AB) |
| F06  | 31-7 | 0710 | 9188  | Thu | 11166 70202 46257 30002 02039 and 11166 70202 91487 30003 02239                   | FSK 200/1000 | (AB) |
| F06  | 31-7 | 0720 | 7669  | Thu | 11166 70202 46257 30002 02039 and 11166 70202 91487 30003 02239                   | FSK 200/1000 | (AB) |
| F06  | 31-7 | 1200 | 10629 | Thu | 11166 70202 46257 30002 02039 and 11166 70202 91487 30003 02239                   | FSK 200/1000 | (AB) |
| F06  | 31-7 | 1210 | 8138  | Thu | 11166 70202 46257 30002 02039 and 11166 70202 91487 30003 02239                   | FSK 200/1000 | (AB) |
| F06  | 31-7 | 1220 | 6774  | Thu | 11166 70202 46257 30002 02039 and 11166 70202 91487 30003 02239                   | FSK 200/1000 | (AB) |
| F06  | 31-7 | 1330 | 16127 | Thu | 11166 80214 65482 30057 00049 00000 00000 00000 00000. Wrong date                 | FSK 200/1000 | (AB) |
| F06  | 31-7 | 1340 | 12229 | Thu | 11166 80214 65482 30057 00049 00000 00000 00000 00000. Wrong date                 | FSK 200/1000 | (AB) |
| F06  | 31-7 | 1350 | 9958  | Thu | 11166 80214 65482 30057 00049 00000 00000 00000 00000. Wrong date                 | FSK 200/1000 | (AB) |
| F06a | 1-7  | 0300 | 10687 | Tue | File 44450 (1812 bytes. empty text header, binary content)                        | FSK 200/1000 | (PY) |
| F06a | 1-7  | 0315 | 7992  | Tue | File 44450 (1812 bytes. empty text header, binary content)                        | FSK 200/1000 | (PY) |
| F06a | 1-7  | 0330 | 5913  | Tue | File 44450 (1812 bytes. empty text header, binary content)                        | FSK 200/1000 | (PY) |
| F06a | 2-7  | 0300 | 10687 | Wed | Files 44451 (1984 bytes) and 44452 (1616 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 2-7  | 0315 | 7992  | Wed | Files 44451 (1984 bytes) and 44452 (1616 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 2-7  | 0330 | 5913  | Wed | Files 44451 (1984 bytes) and 44452 (1616 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 2-7  | 0600 | 12073 | Wed | File 44149 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 2-7  | 0615 | 14073 | Wed | File 44149 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 2-7  | 0630 | 16129 | Wed | File 44149 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 2-7  | 0700 | 11159 | Wed | File 44472 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 2-7  | 0715 | 9188  | Wed | File 44472 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 2-7  | 0730 | 7669  | Wed | File 44472 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 2-7  | 1200 | 10629 | Wed | File 44472 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 2-7  | 1215 | 8138  | Wed | File 44472 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 2-7  | 1230 | 6774  | Wed | File 44472 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 2-7  | 1900 | 11122 | Wed | Files 44451 (1984 bytes) and 44452 (1616 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 2-7  | 1915 | 9067  | Wed | Files 44451 (1984 bytes) and 44452 (1616 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 2-7  | 1930 | 6791  | Wed | Files 44451 (1984 bytes) and 44452 (1616 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 3-7  | 0300 | 10687 | Thu | File 44453 (1281 bytes) empty text header, binary contents                        | FSK 200/1000 | (PY) |
| F06a | 3-7  | 0315 | 7992  | Thu | File 44453 (1281 bytes) empty text header, binary contents                        | FSK 200/1000 | (PY) |
| F06a | 3-7  | 0330 | 5913  | Thu | File 44453 (1281 bytes) empty text header, binary contents                        | FSK 200/1000 | (PY) |
| F06a | 3-7  | 0600 | 12073 | Thu | File 44149 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 3-7  | 0615 | 14073 | Thu | File 44149 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 3-7  | 0630 | 16129 | Thu | File 44149 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 4-7  | 0300 | 10687 | Fri | Active ~5m TX                                                                     | FSK 200/1000 | (FD) |
| F06a | 4-7  | 0315 | 7992  | Fri | Active ~5m TX                                                                     | FSK 200/1000 | (FD) |
| F06a | 4-7  | 0330 | 5913  | Fri | Active ~5m TX                                                                     | FSK 200/1000 | (FD) |
| F06a | 4-7  | 1900 | 11122 | Fri | Active ~12m TX                                                                    | FSK 200/1000 | (FD) |
| F06a | 4-7  | 1915 | 9067  | Fri | Active ~12m TX                                                                    | FSK 200/1000 | (FD) |
| F06a | 4-7  | 1930 | 6791  | Fri | Active ~12m TX                                                                    | FSK 200/1000 | (FD) |

|      |      |      |       |     |                                                                                   |              |      |
|------|------|------|-------|-----|-----------------------------------------------------------------------------------|--------------|------|
| F06a | 5-7  | 0300 | 10687 | Sat | Files 44456 (1985 bytes) and 44457 (1762 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 5-7  | 0300 | 7871  | Sat | File 44423 (binary content)                                                       | FSK 200/1000 | (TM) |
| F06a | 5-7  | 0315 | 7992  | Sat | Files 44456 (1985 bytes) and 44457 (1762 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 5-7  | 0315 | 9491  | Sat | File 44423 (binary content)                                                       | FSK 200/1000 | (TM) |
| F06a | 5-7  | 0330 | 5913  | Sat | Files 44456 (1985 bytes) and 44457 (1762 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 5-7  | 0330 | 10165 | Sat | File 44423 (binary content)                                                       | FSK 200/1000 | (TM) |
| F06a | 5-7  | 1600 | 24462 | Sat | File 44423 (binary content)                                                       | FSK 200/1000 | (TM) |
| F06a | 5-7  | 1615 | 20811 | Sat | File 44423 (binary content)                                                       | FSK 200/1000 | (TM) |
| F06a | 5-7  | 1630 | 18593 | Sat | File 44423 (binary content)                                                       | FSK 200/1000 | (TM) |
| F06a | 5-7  | 1900 | 11122 | Sat | Files 44456 (1985 bytes) and 44457 (1762 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 5-7  | 1915 | 9067  | Sat | Files 44456 (1985 bytes) and 44457 (1762 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 5-7  | 1930 | 6791  | Sat | Files 44456 (1985 bytes) and 44457 (1762 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 6-7  | 0300 | 10687 | Sun | Files 44458 (1025 bytes) and 44459 (1550 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 6-7  | 0315 | 7992  | Sun | Files 44458 (1025 bytes) and 44459 (1550 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 6-7  | 0330 | 5913  | Sun | Files 44458 (1025 bytes) and 44459 (1550 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 6-7  | 1900 | 11122 | Sun | Files 44458 (1025 bytes) and 44459 (1550 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 6-7  | 1915 | 9067  | Sun | Files 44458 (1025 bytes) and 44459 (1550 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 6-7  | 1930 | 6791  | Sun | Files 44458 (1025 bytes) and 44459 (1550 bytes) empty text header, binary content | FSK 200/1000 | (PY) |
| F06a | 7-7  | 0700 | 11159 | Mon | File 44475 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 7-7  | 0715 | 9188  | Mon | File 44475 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 7-7  | 0730 | 7669  | Mon | File 44475 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 7-7  | 1200 | 10629 | Mon | File 44475 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 7-7  | 1215 | 8138  | Mon | File 44475 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 7-7  | 1230 | 6774  | Mon | File 44475 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 8-7  | 0300 | 10687 | Tue | File 44460 (1703 bytes) empty text header, binary content                         | FSK 200/1000 | (PY) |
| F06a | 8-7  | 0315 | 7992  | Tue | File 44460 (1703 bytes) empty text header, binary content                         | FSK 200/1000 | (PY) |
| F06a | 8-7  | 0330 | 5913  | Tue | File 44460 (1703 bytes) empty text header, binary content                         | FSK 200/1000 | (PY) |
| F06a | 9-7  | 0600 | 12073 | Wed | File 45450 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 9-7  | 0615 | 14073 | Wed | File 45450 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 9-7  | 0630 | 16129 | Wed | File 45450 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 9-7  | 0700 | 11159 | Wed | File 44478 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 9-7  | 0715 | 9188  | Wed | File 44478 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 9-7  | 0730 | 7669  | Wed | File 44478 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 9-7  | 1200 | 10629 | Wed | File 44478 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 9-7  | 1215 | 8138  | Wed | File 44478 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 9-7  | 1230 | 6774  | Wed | File 44478 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 10-7 | 0600 | 12073 | Thu | File 45450 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 10-7 | 0615 | 14073 | Thu | File 45450 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 10-7 | 0630 | 16129 | Thu | File 45450 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 12-7 | 0300 | 7871  | Sat | File 44424 (binary content)                                                       | FSK 200/1000 | (AB) |
| F06a | 12-7 | 0300 | 10687 | Sat | Files 44462 (922 bytes) and 44463 (1024 bytes) empty text header, binary content  | FSK 200/1000 | (PY) |
| F06a | 12-7 | 0315 | 9491  | Sat | File 44424 (binary content)                                                       | FSK 200/1000 | (AB) |

|      |      |      |       |     |                                                                                  |              |          |
|------|------|------|-------|-----|----------------------------------------------------------------------------------|--------------|----------|
| F06a | 12-7 | 0315 | 7992  | Sat | Files 44462 (922 bytes) and 44463 (1024 bytes) empty text header, binary content | FSK 200/1000 | (PY)     |
| F06a | 12-7 | 0330 | 10165 | Sat | File 44424 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 12-7 | 0330 | 5913  | Sat | Files 44462 (922 bytes) and 44463 (1024 bytes) empty text header, binary content | FSK 200/1000 | (PY)     |
| F06a | 12-7 | 1600 | 24462 | Sat | File 44424 (binary content). Wrong shift                                         | FSK 200/670  | (AB-KWT) |
| F06a | 12-7 | 1615 | 20811 | Sat | File 44424 (binary content). Wrong shift                                         | FSK 200/670  | (AB-KWT) |
| F06a | 12-7 | 1630 | 18593 | Sat | File 44424 (binary content). Wrong shift                                         | FSK 200/670  | (AB-QAT) |
| F06a | 12-7 | 1900 | 11122 | Sat | Files 44462 (922 bytes) and 44463 (1024 bytes) empty text header, binary content | FSK 200/1000 | (PY)     |
| F06a | 12-7 | 1915 | 9067  | Sat | Files 44462 (922 bytes) and 44463 (1024 bytes) empty text header, binary content | FSK 200/1000 | (PY)     |
| F06a | 12-7 | 1930 | 6791  | Sat | Files 44462 (922 bytes) and 44463 (1024 bytes) empty text header, binary content | FSK 200/1000 | (PY)     |
| F06a | 13-7 | 0300 | 10687 | Sun | Files 44464 (819 bytes) and 44465 (1126 bytes) empty text header, binary content | FSK 200/1000 | (PY)     |
| F06a | 13-7 | 0315 | 7992  | Sun | Files 44464 (819 bytes) and 44465 (1126 bytes) empty text header, binary content | FSK 200/1000 | (PY)     |
| F06a | 13-7 | 0330 | 5913  | Sun | Files 44464 (819 bytes) and 44465 (1126 bytes) empty text header, binary content | FSK 200/1000 | (PY)     |
| F06a | 13-7 | 1900 | 11122 | Sun | Files 44464 (819 bytes) and 44465 (1126 bytes) empty text header, binary content | FSK 200/1000 | (PY)     |
| F06a | 13-7 | 1915 | 9067  | Sun | Files 44464 (819 bytes) and 44465 (1126 bytes) empty text header, binary content | FSK 200/1000 | (PY)     |
| F06a | 13-7 | 1930 | 6791  | Sun | Files 44464 (819 bytes) and 44465 (1126 bytes) empty text header, binary content | FSK 200/1000 | (PY)     |
| F06a | 14-7 | 0700 | 11159 | Mon | File 44481 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 14-7 | 0715 | 9188  | Mon | File 44481 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 14-7 | 0730 | 7669  | Mon | File 44481 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 14-7 | 1200 | 10629 | Mon | File 44481 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 14-7 | 1215 | 8138  | Mon | File 44481 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 14-7 | 1230 | 6774  | Mon | File 44481 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 16-7 | 0600 | 12073 | Wed | File 84451 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 16-7 | 0615 | 14073 | Wed | File 84451 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 16-7 | 0630 | 16129 | Wed | File 84451 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 16-7 | 0700 | 11159 | Wed | File 44484 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 16-7 | 0715 | 9188  | Wed | File 44484 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 16-7 | 0730 | 7669  | Wed | File 44484 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 16-7 | 1200 | 10629 | Wed | File 44484 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 16-7 | 1215 | 8138  | Wed | File 44484 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 16-7 | 1230 | 6774  | Wed | File 44484 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 17-7 | 0600 | 12073 | Thu | File 84451 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 17-7 | 0615 | 14073 | Thu | File 84451 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 17-7 | 0630 | 16129 | Thu | File 84451 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 19-7 | 0300 | 7871  | Sat | File 48425 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 19-7 | 0315 | 9491  | Sat | File 48425 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 19-7 | 0330 | 10165 | Sat | File 48425 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 19-7 | 1600 | 24462 | Sat | File 48425 (binary content)                                                      | FSK 200/1000 | (AB-KWT) |
| F06a | 19-7 | 1615 | 20811 | Sat | File 48425 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 19-7 | 1630 | 18593 | Sat | File 48425 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 21-7 | 0700 | 11159 | Mon | File 44487 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 21-7 | 0715 | 9188  | Mon | File 44487 (binary content)                                                      | FSK 200/1000 | (AB)     |
| F06a | 21-7 | 0730 | 7669  | Mon | File 44487 (binary content)                                                      | FSK 200/1000 | (AB)     |

|      |      |      |       |     |                                                                                                |              |          |
|------|------|------|-------|-----|------------------------------------------------------------------------------------------------|--------------|----------|
| F06a | 21-7 | 1200 | 10629 | Mon | File 44487 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 21-7 | 1215 | 8138  | Mon | File 44487 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 21-7 | 1230 | 6774  | Mon | File 44487 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 23-7 | 0600 | 12073 | Wed | File 46452 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 23-7 | 0615 | 14073 | Wed | File 46452 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 23-7 | 0630 | 16129 | Wed | File 46452 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 23-7 | 0700 | 11159 | Wed | File 44490 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 23-7 | 0715 | 9188  | Wed | File 44490 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 23-7 | 0730 | 7669  | Wed | File 44490 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 23-7 | 1200 | 10629 | Wed | File 44490 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 23-7 | 1215 | 8138  | Wed | File 44490 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 23-7 | 1230 | 6774  | Wed | File 44490 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 24-7 | 0600 | 12073 | Thu | File 46452 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 24-7 | 0615 | 14073 | Thu | File 46452 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 24-7 | 0630 | 16129 | Thu | File 46452 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 25-7 | 1900 | 15611 | Fri | File 44044 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 25-7 | 1915 | 14379 | Fri | File 44044 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 25-7 | 1930 | 13389 | Fri | File 44044 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 26-7 | 0300 | 7871  | Sat | File 14426 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 26-7 | 0315 | 9491  | Sat | File 14426 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 26-7 | 0330 | 10165 | Sat | File 14426 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 26-7 | 0600 | 12194 | Sat | File 44044 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 26-7 | 0615 | 11415 | Sat | File 44044 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 26-7 | 0630 | 10311 | Sat | File 44044 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 26-7 | 1600 | 24462 | Sat | File 14426 (binary content)                                                                    | FSK 200/1000 | (AB-KWT) |
| F06a | 26-7 | 1615 | 20811 | Sat | File 14426 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 26-7 | 1630 | 18593 | Sat | File 14426 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 28-7 | 0700 | 11159 | Mon | File 44493 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 28-7 | 0715 | 9188  | Mon | File 44493 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 28-7 | 0730 | 7669  | Mon | File 44493 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 28-7 | 1200 | 10629 | Mon | File 44493 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 28-7 | 1215 | 8138  | Mon | File 44493 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 28-7 | 1230 | 6774  | Mon | File 44493 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 29-7 | 1400 | 11552 | Tue | Files 44497 (binary content, empty text header) and 44498 (binary contents, empty text header) | FSK 200/1000 | (PY)     |
| F06a | 29-7 | 1415 | 9461  | Tue | Files 44497 (binary content, empty text header) and 44498 (binary contents, empty text header) | FSK 200/1000 | (PY)     |
| F06a | 29-7 | 1430 | 7844  | Tue | Files 44497 (binary content, empty text header) and 44498 (binary contents, empty text header) | FSK 200/1000 | (PY)     |
| F06a | 30-7 | 0600 | 12073 | Wed | File 44953 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 30-7 | 0615 | 14073 | Wed | File 44953 (binary content)                                                                    | FSK 200/1000 | (AB)     |
| F06a | 30-7 | 0630 | 16129 | Wed | File 44953 (binary content)                                                                    | FSK 200/1000 | (AB)     |

|             |      |      |       |     |                                                      |                                |         |
|-------------|------|------|-------|-----|------------------------------------------------------|--------------------------------|---------|
| <b>F06a</b> | 30-7 | 0700 | 11159 | Wed | File 44401 (binary content) (off at 0710z for 28sec) | FSK 200/1000                   | (AB)    |
| <b>F06a</b> | 30-7 | 0715 | 9188  | Wed | File 44401 (binary content)                          | FSK 200/1000                   | (AB)    |
| <b>F06a</b> | 30-7 | 0730 | 7669  | Wed | File 44401 (binary content)                          | FSK 200/1000                   | (AB)    |
| <b>F06a</b> | 30-7 | 1200 | 10629 | Wed | File 44401 (binary content)                          | FSK 200/1000                   | (AB)    |
| <b>F06a</b> | 30-7 | 1215 | 8138  | Wed | File 44401 (binary content)                          | FSK 200/1000                   | (AB)    |
| <b>F06a</b> | 30-7 | 1230 | 6774  | Wed | File 44401 (binary content)                          | FSK 200/1000                   | (AB)    |
| <b>F06a</b> | 31-7 | 0600 | 12073 | Thu | File 44953 (binary content)                          | FSK 200/1000                   | (AB)    |
| <b>F06a</b> | 31-7 | 0615 | 14073 | Thu | File 44953 (binary content)                          | FSK 200/1000                   | (AB)    |
| <b>F06a</b> | 31-7 | 0630 | 16129 | Thu | File 44953 (binary content)                          | FSK 200/1000                   | (AB)    |
| <b>F07</b>  | 1-7  | 2000 | 17436 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 1-7  | 2020 | 15968 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 1-7  | 2020 | 16348 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 1-7  | 2030 | 14852 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 1-7  | 2040 | 13961 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 1-7  | 2050 | 13373 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 3-7  | 2000 | 17436 | Thu | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB/RL) |
| <b>F07</b>  | 3-7  | 2020 | 15968 | Thu | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB/RL) |
| <b>F07</b>  | 3-7  | 2020 | 16348 | Thu | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB/RL) |
| <b>F07</b>  | 3-7  | 2030 | 14852 | Thu | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB/RL) |
| <b>F07</b>  | 3-7  | 2040 | 13961 | Thu | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB/RL) |
| <b>F07</b>  | 3-7  | 2050 | 13373 | Thu | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB/RL) |
| <b>F07</b>  | 8-7  | 2000 | 17436 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 8-7  | 2020 | 15968 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 8-7  | 2020 | 16348 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 8-7  | 2030 | 14852 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 8-7  | 2040 | 13961 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 8-7  | 2050 | 13373 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 10-7 | 2000 | 17436 | Thu | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 10-7 | 2020 | 15968 | Thu | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 10-7 | 2020 | 16348 | Thu | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 10-7 | 2030 | 14852 | Thu | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 10-7 | 2040 | 13961 | Thu | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 10-7 | 2050 | 13373 | Thu | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 15-7 | 2000 | 17436 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 15-7 | 2020 | 15968 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 15-7 | 2020 | 16348 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 15-7 | 2030 | 14852 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 15-7 | 2040 | 13961 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 15-7 | 2050 | 13373 | Tue | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 17-7 | 2000 | 17436 | Thu | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 17-7 | 2020 | 15968 | Thu | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |
| <b>F07</b>  | 17-7 | 2020 | 16348 | Thu | Russian intel.                                       | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)    |

|     |      |      |       |     |                                                                                   |                                |          |
|-----|------|------|-------|-----|-----------------------------------------------------------------------------------|--------------------------------|----------|
| F07 | 17-7 | 2030 | 14852 | Thu | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 17-7 | 2040 | 13961 | Thu | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 17-7 | 2050 | 13373 | Thu | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 22-7 | 2000 | 17436 | Tue | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 22-7 | 2020 | 15968 | Tue | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 22-7 | 2020 | 16348 | Tue | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 22-7 | 2030 | 14852 | Tue | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 22-7 | 2040 | 13961 | Tue | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 22-7 | 2050 | 13373 | Tue | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 24-7 | 2000 | 17436 | Thu | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 24-7 | 2020 | 15968 | Thu | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 24-7 | 2020 | 16348 | Thu | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 24-7 | 2030 | 14852 | Thu | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 24-7 | 2040 | 13961 | Thu | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 24-7 | 2050 | 13373 | Thu | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 29-7 | 2000 | 17436 | Tue | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 29-7 | 2020 | 15968 | Tue | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 29-7 | 2020 | 16348 | Tue | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 29-7 | 2030 | 14852 | Tue | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 29-7 | 2040 | 13961 | Tue | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 29-7 | 2050 | 13373 | Tue | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 31-7 | 2000 | 17436 | Thu | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 31-7 | 2020 | 15968 | Thu | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 31-7 | 2020 | 16348 | Thu | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 31-7 | 2030 | 14852 | Thu | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 31-7 | 2040 | 13961 | Thu | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| F07 | 31-7 | 2050 | 13373 | Thu | Russian intel.                                                                    | 5xMFSK-16/10Bd/20Hz+250Bd BPSK | (AB)     |
| KRE | 1-7  | 0503 | 18530 | Tue | DPRK embassy Rome wkg DPRK embassy Moscow                                         | DPRK-ARQ 1200/600 LSB          | (AB)     |
| KRE | 3-7  | 0633 | 16120 | Thu | DPRK embassy Moscow wkg DPRK embassy Rome                                         | DPRK-ARQ 600/600 LSB           | (AB)     |
| KRE | 3-7  | 1234 | 16120 | Thu | DPRK embassy Moscow wkg DPRK embassy Rome                                         | DPRK-ARQ 600/600 LSB           | (AB)     |
| KRE | 9-7  | 0730 | 14300 | Wed | DPRK embassy Moscow wkg DPRK embassy Berlin                                       | DPRK-ARQ 600/600 LSB           | (AB)     |
| KRE | 11-7 | 0727 | 14300 | Fri | DPRK embassy Moscow wkg DPRK embassy Berlin                                       | DPRK-ARQ 600/600 LSB           | (AB)     |
| KRE | 22-7 | 1238 | 16120 | Tue | DPRK embassy Moscow wkg DPRK embassy Rome                                         | DPRK-ARQ 600/600 LSB           | (AB)     |
| KRE | 25-7 | 0710 | 16252 | Fri | DPRK embassy Moscow wkg DPRK Permanent Mission to the UN, Geneve                  | DPRK-ARQ 600/600 LSB           | (AB)     |
| KRE | 25-7 | 0735 | 13300 | Fri | DPRK embassy Moscow wkg DPRK Permanent Mission to the UN, Geneve                  | DPRK-ARQ 600/600 LSB           | (AB)     |
| M01 | 1-7  | 2000 | 4903  | Tue | 025 554 554 30 30 == 64364 64736 64736 ... 74357 74857 75847 == 554 554 30 30 000 | CW                             | (AB)     |
| M01 | 3-7  | 1800 | 5280  | Thu | 025 367 367 30 30 == 07382 ...                                                    | CW                             | (AB)     |
| M01 | 8-7  | 1800 | 5280  | Tue | 025 770 770 30 30 == (too weak to copy)                                           | CW                             | (AB)     |
| M01 | 8-7  | 2000 | 4903  | Tue | 025 915 915 30 30 == 59316 89046 78364 ... 84750 74926 75639 == 915 915 30 30 000 | CW                             | (AB)     |
| M01 | 12-7 | 1500 | 6435  | Sat | 025 697 697 30 30 == 53789 32780 15637 ... 74829 18903 18845 == 679 679 30 30 000 | CW                             | (AB-POL) |
| M01 | 15-7 | 1800 | 5280  | Tue | 025 293 293 30 30 = 64738 64739 90498 (too weak to copy)                          | CW                             | (AB)     |
| M01 | 15-7 | 2000 | 4903  | Tue | 025 158 158 30 30 == 73809 27130 27859 (too weak to copy)                         | CW                             | (AB)     |

|            |      |      |       |     |                                                                                       |    |             |
|------------|------|------|-------|-----|---------------------------------------------------------------------------------------|----|-------------|
| <b>M01</b> | 17-7 | 1800 | 5280  | Thu | 025 215 215 30 30 = = 99876 35649 60989 ... 10968 77098 12044 = = 215 215 30 30 000   | CW | (AB)        |
| <b>M01</b> | 20-7 | 0715 | 9736  | Sun | 475 = = 105 105 50 50 = = 57612 34576 45675 ... 71267 84984 39121 = 105 105 50 50 000 | CW | (PY)        |
| <b>M01</b> | 22-7 | 1800 | 5280  | Tue | 025 612 612 30 30 = = 21341 (very weak)                                               | CW | (AB)        |
| <b>M01</b> | 22-7 | 2000 | 4903  | Tue | 025 901 901 30 30 = = (too weak to copy)                                              | CW | (AB)        |
| <b>M01</b> | 24-7 | 1800 | 5280  | Thu | 025 503 503 30 30 = = (too weak to copy)                                              | CW | (AB)        |
| <b>M01</b> | 24-7 | 2000 | 4903  | Thu | 025 681 681 30 30 = = 31625 18726 16527 ... 20937 46739 29718 = = 681 681 30 30 000   | CW | (AB)        |
| <b>M01</b> | 26-7 | 0715 | 9736  | Sat | 475 (too weak to copy)                                                                | CW | (PY)        |
| <b>M01</b> | 27-7 | 0715 | 9736  | Sun | 475 (too weak to copy)                                                                | CW | (PY)        |
| <b>M01</b> | 29-7 | 2000 | 4903  | Tue | 025 055 055 30 30 = = 12645 54635 54657 ...                                           | CW | (AB)        |
| <b>M12</b> | 1-7  | 0300 | 16272 | Tue | 299 299 299 1 ...                                                                     | CW | (HFD-J)     |
| <b>M12</b> | 1-7  | 0320 | 14972 | Tue | 299 299 299 1 ...                                                                     | CW | (HFD-J)     |
| <b>M12</b> | 1-7  | 0340 | 13972 | Tue | 299 299 299 1 ...                                                                     | CW | (HFD-J)     |
| <b>M12</b> | 1-7  | 1100 | 11519 | Tue | 289 289 289 1 5082 59 5082 59 00310 14777 41763 ... 24499 06846 05154 000 000         | CW | (AB)        |
| <b>M12</b> | 1-7  | 1120 | 12194 | Tue | 289 289 289 1 5082 59 5082 59 00310 14777 41763 ... 24499 06846 05154 000 000         | CW | (AB)        |
| <b>M12</b> | 1-7  | 1140 | 13407 | Tue | 289 289 289 1 5082 59 5082 59 00310 14777 41763 ... 24499 06846 05154 000 000         | CW | (AB)        |
| <b>M12</b> | 2-7  | 1900 | 12162 | Wed | 546 546 546 1 3320 56 3320 56 89812 34880 69438 ... 62157 01084 85880 000 000         | CW | (AB)        |
| <b>M12</b> | 2-7  | 1900 | 14968 | Wed | 943 943 943 1 2525 95 2525 95 52490 96554 65672 ... 02181 80560 97484 000 000         | CW | (AB/HFD)    |
| <b>M12</b> | 2-7  | 1920 | 11566 | Wed | 546 546 546 1 3320 56 3320 56 89812 34880 69438 ... 62157 01084 85880 000 000         | CW | (AB)        |
| <b>M12</b> | 2-7  | 1920 | 14468 | Wed | 943 943 943 1 2525 95 2525 95 52490 96554 65672 ... 02181 80560 97484 000 000         | CW | (AB/HFD)    |
| <b>M12</b> | 2-7  | 1940 | 10711 | Wed | 546 546 546 1 3320 56 3320 56 89812 34880 69438 ... 62157 01084 85880 000 000         | CW | (AB)        |
| <b>M12</b> | 2-7  | 1940 | 13368 | Wed | 943 943 943 1 2525 95 2525 95 52490 96554 65672 ... 02181 80560 97484 000 000         | CW | (AB/HFD)    |
| <b>M12</b> | 2-7  | 2310 | 16158 | Wed | 183 183 183 1 ...                                                                     | CW | (HFD)       |
| <b>M12</b> | 2-7  | 2330 | 14858 | Wed | 183 183 183 1 ...                                                                     | CW | (HFD)       |
| <b>M12</b> | 2-7  | 2350 | 14358 | Wed | 183 183 183 1 ...                                                                     | CW | (HFD)       |
| <b>M12</b> | 3-7  | 0400 | 9176  | Thu | 257 257 257 1 7606 128 7606 128 39692 72446 67707 ... 26442 06543 01924 000 000       | CW | (AB)        |
| <b>M12</b> | 3-7  | 0420 | 7931  | Thu | 257 257 257 1 7606 128 7606 128 39692 72446 67707 ... 26442 06543 01924 000 000       | CW | (AB)        |
| <b>M12</b> | 3-7  | 0440 | 6904  | Thu | 257 257 257 1 7606 128 7606 128 39692 72446 67707 ... 26442 06543 01924 000 000       | CW | (AB)        |
| <b>M12</b> | 3-7  | 1800 | 11435 | Thu | 983 938 938 1 1768 84 1768 84 16407 75064 28287 ... 76167 61428 80841 000 000         | CW | (AB)        |
| <b>M12</b> | 3-7  | 1820 | 10598 | Thu | 983 938 938 1 1768 84 1768 84 16407 75064 28287 ... 76167 61428 80841 000 000         | CW | (AB)        |
| <b>M12</b> | 3-7  | 1840 | 9327  | Thu | 983 938 938 1 1768 84 1768 84 16407 75064 28287 ... 76167 61428 80841 000 000         | CW | (AB)        |
| <b>M12</b> | 3-7  | 2000 | 12217 | Thu | 617 617 617 000                                                                       | CW | (AB/RL/HFD) |
| <b>M12</b> | 3-7  | 2020 | 10817 | Thu | 617 617 617 000                                                                       | CW | (AB/RL/HFD) |
| <b>M12</b> | 4-7  | 0800 | 13931 | Fri | 915 915 915 1 8602 95 8602 95 (too poor to copy)                                      | CW | (PY/HFD)    |
| <b>M12</b> | 4-7  | 0820 | 12153 | Fri | 915 915 915 1 8602 95 8602 95 (too poor to copy)                                      | CW | (PY/HFD)    |
| <b>M12</b> | 4-7  | 0840 | 11536 | Fri | 915 915 915 1 8602 95 8602 95 (too poor to copy)                                      | CW | (PY/HFD)    |
| <b>M12</b> | 4-7  | 1900 | 14968 | Fri | 943 943 943 1 2525 95 2525 95 52490 96554 65672 ... 02181 80560 97484 000 000         | CW | (AB)        |
| <b>M12</b> | 4-7  | 1920 | 14468 | Fri | 943 943 943 1 2525 95 2525 95 52490 96554 65672 ... 02181 80560 97484 000 000         | CW | (AB)        |
| <b>M12</b> | 4-7  | 1940 | 13368 | Fri | 943 943 943 1 2525 95 2525 95 52490 96554 65672 ... 02181 80560 97484 000 000         | CW | (AB)        |
| <b>M12</b> | 4-7  | 2100 | 17453 | Fri | 438 438 438 1 5584 21 5584 21 45762 09914 89130 ... 86217 60041 36234 000 000         | CW | (PY/HFD)    |
| <b>M12</b> | 4-7  | 2120 | 16312 | Fri | 438 438 438 1 5584 21 5584 21 45762 09914 89130 ... 86217 60041 36234 000 000         | CW | (PY/HFD)    |
| <b>M12</b> | 4-7  | 2140 | 15836 | Fri | 438 438 438 1 5584 21 5584 21 45762 09914 89130 ... 86217 60041 36234 000 000         | CW | (PY/HFD)    |

|     |      |      |        |     |                                                                                 |    |             |
|-----|------|------|--------|-----|---------------------------------------------------------------------------------|----|-------------|
| M12 | 5-7  | 1900 | 12162  | Sat | 546 546 546 1 7044 66 7044 66 53219 54351 36451 ... 75393 57138 92106 000 000   | CW | (AB)        |
| M12 | 5-7  | 1920 | 11566  | Sat | 546 546 546 1 7044 66 7044 66 53219 54351 36451 ... 75393 57138 92106 000 000   | CW | (AB)        |
| M12 | 5-7  | 1940 | 10711  | Sat | 546 546 546 1 7044 66 7044 66 53219 54351 36451 ... 75393 57138 92106 000 000   | CW | (AB)        |
| M12 | 5-7  | 2100 | 17453  | Sat | 4438 438 438 1 5584 21 5584 21 45762 09914 89130 ... 86217 60041 36234 000 000  | CW | (AB)        |
| M12 | 5-7  | 2120 | 16312  | Sat | 4438 438 438 1 5584 21 5584 21 45762 09914 89130 ... 86217 60041 36234 000 000  | CW | (AB)        |
| M12 | 5-7  | 2140 | 15836  | Sat | 4438 438 438 1 5584 21 5584 21 45762 09914 89130 ... 86217 60041 36234 000 000  | CW | (AB)        |
| M12 | 7-7  | 0800 | 13931  | Mon | 915 915 915 1 2098 174 2098 174 06719 50548 00378 ... 13370 12472 51809 000 000 | CW | (AB-KOR)    |
| M12 | 7-7  | 0820 | 12153  | Mon | 915 915 915 1 2098 174 2098 174 06719 50548 00378 ... 13370 12472 51809 000 000 | CW | (AB-KOR)    |
| M12 | 7-7  | 0840 | 11536  | Mon | 915 915 915 1 2098 174 2098 174 06719 50548 00378 ... 13370 12472 51809 000 000 | CW | (AB-KOR)    |
| M12 | 7-7  | 1230 | 13386  | Mon | 725 725 725 1 7523 129 7523 129 15810 22632 51723 ... 87653 30477 33529 000 000 | CW | (AB)        |
| M12 | 7-7  | 1250 | 12189  | Mon | 725 725 725 1 7523 129 7523 129 15810 22632 51723 ... 87653 30477 33529 000 000 | CW | (AB)        |
| M12 | 7-7  | 1310 | 11491  | Mon | 725 725 725 1 7523 129 7523 129 15810 22632 51723 ... 87653 30477 33529 000 000 | CW | (AB)        |
| M12 | 7-7  | 1420 | 5355.5 | Mon | =991721??8?????                                                                 | CW | (KX0DW-FIN) |
| M12 | 7-7  | 2000 | 12217  | Mon | 617 617 617 000                                                                 | CW | (AB/RL)     |
| M12 | 7-7  | 2020 | 10817  | Mon | 617 617 617 000                                                                 | CW | (AB/RL)     |
| M12 | 8-7  | 1100 | 11519  | Tue | 289 289 289 1 5530 55 5530 55 38875 32670 02335 ... 05741 08113 57759 000 000   | CW | (AB)        |
| M12 | 8-7  | 1120 | 12194  | Tue | 289 289 289 1 5530 55 5530 55 38875 32670 02335 ... 05741 08113 57759 000 000   | CW | (AB)        |
| M12 | 8-7  | 1140 | 13407  | Tue | 289 289 289 1 5530 55 5530 55 38875 32670 02335 ... 05741 08113 57759 000 000   | CW | (AB)        |
| M12 | 9-7  | 1900 | 12162  | Wed | 546 546 546 1 4814 56 4814 56 53335 49341 16132 ... 92600 96125 51526 000 000   | CW | (AB)        |
| M12 | 9-7  | 1900 | 14968  | Wed | 943 943 943 000                                                                 | CW | (AB)        |
| M12 | 9-7  | 1920 | 11566  | Wed | 546 546 546 1 4814 56 4814 56 53335 49341 16132 ... 92600 96125 51526 000 000   | CW | (AB)        |
| M12 | 9-7  | 1920 | 14468  | Wed | 943 943 943 000                                                                 | CW | (AB)        |
| M12 | 9-7  | 1940 | 10711  | Wed | 546 546 546 1 4814 56 4814 56 53335 49341 16132 ... 92600 96125 51526 000 000   | CW | (AB)        |
| M12 | 10-7 | 0400 | 9176   | Thu | 257 257 257 1 4316 141 4316 141 55987 96975 46972 ... 67025 61688 34325 000 000 | CW | (AB)        |
| M12 | 10-7 | 0420 | 7931   | Thu | 257 257 257 1 4316 141 4316 141 55987 96975 46972 ... 67025 61688 34325 000 000 | CW | (AB)        |
| M12 | 10-7 | 0440 | 6904   | Thu | 257 257 257 1 4316 141 4316 141 55987 96975 46972 ... 67025 61688 34325 000 000 | CW | (AB)        |
| M12 | 10-7 | 1800 | 11435  | Thu | 938 938 938 1 8373 78 8373 78 27849 52626 81370 ... 41679 88089 90250 000 000   | CW | (AB)        |
| M12 | 10-7 | 1820 | 10598  | Thu | 938 938 938 1 8373 78 8373 78 27849 52626 81370 ... 41679 88089 90250 000 000   | CW | (AB)        |
| M12 | 10-7 | 1840 | 9327   | Thu | 938 938 938 1 8373 78 8373 78 27849 52626 81370 ... 41679 88089 90250 000 000   | CW | (AB)        |
| M12 | 10-7 | 2000 | 12217  | Thu | 617 617 617 000                                                                 | CW | (AB)        |
| M12 | 10-7 | 2020 | 10817  | Thu | 617 617 617 000                                                                 | CW | (AB)        |
| M12 | 11-7 | 0800 | 13931  | Fri | 915 915 915 1 2098 174 2098 174 06719 50548 00378 ... 13370 12472 51809 000 000 | CW | (AB-KOR)    |
| M12 | 11-7 | 0820 | 12153  | Fri | 915 915 915 1 2098 174 2098 174 06719 50548 00378 ... 13370 12472 51809 000 000 | CW | (AB-KOR)    |
| M12 | 11-7 | 0840 | 11536  | Fri | 915 915 915 1 2098 174 2098 174 06719 50548 00378 ... 13370 12472 51809 000 000 | CW | (AB-KOR)    |
| M12 | 11-7 | 1900 | 14968  | Fri | 943 943 943 000                                                                 | CW | (AB)        |
| M12 | 11-7 | 1920 | 14468  | Fri | 943 943 943 000                                                                 | CW | (AB)        |
| M12 | 11-7 | 2100 | 17453  | Fri | 4438 438 438 1 5584 21 5584 21 45762 09914 89130 ... 86217 60041 36234 000 000  | CW | (AB)        |
| M12 | 11-7 | 2120 | 16312  | Fri | 4438 438 438 1 5584 21 5584 21 45762 09914 89130 ... 86217 60041 36234 000 000  | CW | (AB)        |
| M12 | 11-7 | 2140 | 15836  | Fri | 4438 438 438 1 5584 21 5584 21 45762 09914 89130 ... 86217 60041 36234 000 000  | CW | (AB)        |
| M12 | 12-7 | 1900 | 12162  | Sat | 546 546 546 1 7300 57 7300 57 52585 22921 09514 ... 95289 17333 24765 000 000   | CW | (AB)        |
| M12 | 12-7 | 1920 | 11566  | Sat | 546 546 546 1 7300 57 7300 57 52585 22921 09514 ... 95289 17333 24765 000 000   | CW | (AB)        |
| M12 | 12-7 | 1940 | 10711  | Sat | 546 546 546 1 7300 57 7300 57 52585 22921 09514 ... 95289 17333 24765 000 000   | CW | (AB)        |

|     |      |      |       |     |                                                                                                       |    |          |
|-----|------|------|-------|-----|-------------------------------------------------------------------------------------------------------|----|----------|
| M12 | 12-7 | 2100 | 17453 | Sat | 4438 438 438 1 5584 21 5584 21 45762 09914 89130 ... 86217 60041 36234 000 000                        | CW | (AB)     |
| M12 | 12-7 | 2120 | 16312 | Sat | 4438 438 438 1 5584 21 5584 21 45762 09914 89130 ... 86217 60041 36234 000 000                        | CW | (AB)     |
| M12 | 12-7 | 2140 | 15836 | Sat | 4438 438 438 1 5584 21 5584 21 45762 09914 89130 ... 86217 60041 36234 000 000                        | CW | (AB)     |
| M12 | 14-7 | 0800 | 13931 | Mon | 915 915 1 2805 152 2805 152 94679 43820 22259 ... 87181 64519 96240 000 000                           | CW | (AB-KOR) |
| M12 | 14-7 | 0820 | 12153 | Mon | 915 915 1 2805 152 2805 152 94679 43820 22259 ... 87181 64519 96240 000 000 Restart<br>after group 40 | CW | (AB-KOR) |
| M12 | 14-7 | 0840 | 11536 | Mon | 915 915 1 2805 152 2805 152 94679 43820 22259 ... 87181 64519 96240 000 000                           | CW | (AB-KOR) |
| M12 | 14-7 | 1230 | 13386 | Mon | 725 725 725 1 6187 137 6187 137 82212 70217 02955 ... 39842 18040 06392 000 000                       | CW | (AB)     |
| M12 | 14-7 | 1250 | 12189 | Mon | 725 725 725 1 6187 137 6187 137 82212 70217 02955 ... 39842 18040 06392 000 000                       | CW | (AB)     |
| M12 | 14-7 | 1310 | 11491 | Mon | 725 725 725 1 6187 137 6187 137 82212 70217 02955 ... 39842 18040 06392 000 000                       | CW | (AB)     |
| M12 | 14-7 | 2000 | 12217 | Mon | 617 617 617 1 6138 187 6138 187 14936 58205 70890 ... 72246 06879 78769 000 000                       | CW | (AB)     |
| M12 | 14-7 | 2020 | 10817 | Mon | 617 617 617 1 6138 187 6138 187 14936 58205 70890 ... 72246 06879 78769 000 000                       | CW | (AB)     |
| M12 | 14-7 | 2040 | 9317  | Mon | 617 617 617 1 6138 187 6138 187 14936 58205 70890 ... 72246 06879 78769 000 000                       | CW | (AB)     |
| M12 | 15-7 | 1100 | 11519 | Tue | 289 289 289 1 1645 55 1645 55 37989 88434 48203 ... 62891 03065 92059 000 000                         | CW | (AB)     |
| M12 | 15-7 | 1120 | 12194 | Tue | 289 289 289 1 1645 55 1645 55 37989 88434 48203 ... 62891 03065 92059 000 000                         | CW | (AB)     |
| M12 | 15-7 | 1140 | 13407 | Tue | 289 289 289 1 1645 55 1645 55 37989 88434 48203 ... 62891 03065 92059 000 000                         | CW | (AB)     |
| M12 | 16-7 | 0600 | 10623 | Wed | 412 412 412 1 5310 58 5310 58 15121 86472 93393 ... 88147 62238 13351 000 000                         | CW | (PY)     |
| M12 | 16-7 | 0610 | 11448 | Wed | 412 412 412 1 5310 58 5310 58 15121 86472 93393 ... 88147 62238 13351 000 000                         | CW | (PY)     |
| M12 | 16-7 | 0620 | 11518 | Wed | 412 412 412 1 5310 58 5310 58 15121 86472 93393 ... 88147 62238 13351 000 000                         | CW | (PY)     |
| M12 | 16-7 | 0630 | 12132 | Wed | 412 412 412 1 5310 58 5310 58 15121 86472 93393 ... 88147 62238 13351 000 000                         | CW | (PY)     |
| M12 | 16-7 | 0640 | 12193 | Wed | 412 412 412 1 5310 58 5310 58 15121 86472 93393 ... 88147 62238 13351 000 000                         | CW | (PY)     |
| M12 | 16-7 | 0650 | 13406 | Wed | 412 412 412 1 5310 58 5310 58 15121 86472 93393 ... 88147 62238 13351 000 000                         | CW | (PY)     |
| M12 | 16-7 | 1900 | 12162 | Wed | 546 546 546 1 1521 54 1521 54 03329 22551 29465 ... 82362 23737 37664 000 000                         | CW | (AB)     |
| M12 | 16-7 | 1900 | 14968 | Wed | 943 943 943 000                                                                                       | CW | (AB)     |
| M12 | 16-7 | 1920 | 11566 | Wed | 546 546 546 1 1521 54 1521 54 03329 22551 29465 ... 82362 23737 37664 000 000                         | CW | (AB)     |
| M12 | 16-7 | 1920 | 14468 | Wed | 943 943 943 000                                                                                       | CW | (AB)     |
| M12 | 16-7 | 1940 | 10711 | Wed | 546 546 546 1 1521 54 1521 54 03329 22551 29465 ... 82362 23737 37664 000 000                         | CW | (AB)     |
| M12 | 17-7 | 0400 | 9176  | Thu | 257 257 257 1 3113 123 3113 123 69856 81498 30755 ... 81835 33488 97668 000 000                       | CW | (AB)     |
| M12 | 17-7 | 0420 | 7931  | Thu | 257 257 257 1 3113 123 3113 123 69856 81498 30755 ... 81835 33488 97668 000 000                       | CW | (AB)     |
| M12 | 17-7 | 0440 | 6904  | Thu | 257 257 257 1 3113 123 3113 123 69856 81498 30755 ... 81835 33488 97668 000 000                       | CW | (AB)     |
| M12 | 17-7 | 1800 | 11435 | Thu | 938 938 938 1 5267 75 5267 75 86385 05805 56719 ... 06222 31037 80099 000 000                         | CW | (AB)     |
| M12 | 17-7 | 1820 | 10598 | Thu | 938 938 938 1 5267 75 5267 75 86385 05805 56719 ... 06222 31037 80099 000 000                         | CW | (AB)     |
| M12 | 17-7 | 1840 | 9327  | Thu | 938 938 938 1 5267 75 5267 75 86385 05805 56719 ... 06222 31037 80099 000 000                         | CW | (AB)     |
| M12 | 17-7 | 2000 | 12217 | Thu | 617 617 617 1 6138 187 6138 187 14936 58205 70890 ... 72246 06879 78769 000 000                       | CW | (AB)     |
| M12 | 17-7 | 2020 | 10817 | Thu | 617 617 617 1 6138 187 6138 187 14936 58205 70890 ... 72246 06879 78769 000 000                       | CW | (AB)     |
| M12 | 17-7 | 2040 | 9317  | Thu | 617 617 617 1 6138 187 6138 187 14936 58205 70890 ... 72246 06879 78769 000 000                       | CW | (AB)     |
| M12 | 18-7 | 0800 | 13931 | Fri | 915 915 1 2805 152 2805 152 94679 43820 22259 ... 87181 64519 96240 000 000                           | CW | (AB-KOR) |
| M12 | 18-7 | 0820 | 12153 | Fri | 915 915 1 2805 152 2805 152 94679 43820 22259 ... 87181 64519 96240 000 000                           | CW | (AB-KOR) |
| M12 | 18-7 | 0840 | 11536 | Fri | 915 915 1 2805 152 2805 152 94679 43820 22259 ... 87181 64519 96240 000 000                           | CW | (AB-KOR) |
| M12 | 18-7 | 1900 | 14968 | Fri | 943 943 943 000                                                                                       | CW | (AB)     |
| M12 | 18-7 | 1920 | 14468 | Fri | 943 943 943 000                                                                                       | CW | (AB)     |
| M12 | 18-7 | 2100 | 17453 | Fri | 438 438 438 1 1299 164 1299 164 66203 93638 68967 ... 42974 31772 90636 000 000                       | CW | (AB)     |

|     |      |      |       |     |                                                                                 |    |          |
|-----|------|------|-------|-----|---------------------------------------------------------------------------------|----|----------|
| M12 | 18-7 | 2120 | 16312 | Fri | 438 438 438 1 1299 164 1299 164 66203 93638 68967 ... 42974 31772 90636 000 000 | CW | (AB)     |
| M12 | 18-7 | 2140 | 15836 | Fri | 438 438 438 1 1299 164 1299 164 66203 93638 68967 ... 42974 31772 90636 000 000 | CW | (AB)     |
| M12 | 19-7 | 1900 | 12162 | Sat | 546 546 546 1 7158 50 7158 50 33449 42443 90514 ... 82371 69783 53742 000 000   | CW | (AB)     |
| M12 | 19-7 | 1920 | 11566 | Sat | 546 546 546 1 7158 50 7158 50 33449 42443 90514 ... 82371 69783 53742 000 000   | CW | (AB)     |
| M12 | 19-7 | 1940 | 10711 | Sat | 546 546 546 1 7158 50 7158 50 33449 42443 90514 ... 82371 69783 53742 000 000   | CW | (AB)     |
| M12 | 19-7 | 2100 | 17453 | Sat | 438 438 438 1 1299 164 1299 164 66203 93638 68967 ... 42974 31772 90636 000 000 | CW | (AB)     |
| M12 | 19-7 | 2120 | 16312 | Sat | 438 438 438 1 1299 164 1299 164 66203 93638 68967 ... 42974 31772 90636 000 000 | CW | (AB)     |
| M12 | 19-7 | 2140 | 15836 | Sat | 438 438 438 1 1299 164 1299 164 66203 93638 68967 ... 42974 31772 90636 000 000 | CW | (AB)     |
| M12 | 21-7 | 0800 | 13931 | Mon | 915 915 915 1 7917 141 7917 141 33584 27301 61226 ... 88385 50336 68555 000 000 | CW | (AB-KOR) |
| M12 | 21-7 | 0820 | 12153 | Mon | 915 915 915 1 7917 141 7917 141 33584 27301 61226 ... 88385 50336 68555 000 000 | CW | (AB-KOR) |
| M12 | 21-7 | 0840 | 11536 | Mon | 915 915 915 1 7917 141 7917 141 33584 27301 61226 ... 88385 50336 68555 000 000 | CW | (AB-KOR) |
| M12 | 21-7 | 1230 | 13386 | Mon | 725 725 725 1 3795 129 3795 129 24808 86179 71360 ... 13949 26065 000 000       | CW | (AB)     |
| M12 | 21-7 | 1250 | 12189 | Mon | 725 725 725 1 3795 129 3795 129 24808 86179 71360 ... 13949 26065 000 000       | CW | (AB)     |
| M12 | 21-7 | 1310 | 11491 | Mon | 725 725 725 1 3795 129 3795 129 24808 86179 71360 ... 13949 26065 000 000       | CW | (AB)     |
| M12 | 21-7 | 2000 | 12217 | Mon | 617 617 617 1 6138 187 6138 187 14936 58205 70890 ... 72246 06879 78769 000 000 | CW | (AB)     |
| M12 | 21-7 | 2020 | 10817 | Mon | 617 617 617 1 6138 187 6138 187 14936 58205 70890 ... 72246 06879 78769 000 000 | CW | (AB)     |
| M12 | 21-7 | 2040 | 9317  | Mon | 617 617 617 1 6138 187 6138 187 14936 58205 70890 ... 72246 06879 78769 000 000 | CW | (AB)     |
| M12 | 22-7 | 1100 | 11519 | Tue | 289 289 289 1 8552 56 8552 56 52107 35499 49426 ... 51231 89609 69404 000 000   | CW | (AB)     |
| M12 | 22-7 | 1120 | 12194 | Tue | 289 289 289 1 8552 56 8552 56 52107 35499 49426 ... 51231 89609 69404 000 000   | CW | (AB)     |
| M12 | 22-7 | 1140 | 13407 | Tue | 289 289 289 1 8552 56 8552 56 52107 35499 49426 ... 51231 89609 69404 000 000   | CW | (AB)     |
| M12 | 23-7 | 1900 | 12162 | Wed | 546 546 546 1 8486 63 8486 63 53801 91026 15670 ... 17091 36372 04130 000 000   | CW | (AB)     |
| M12 | 23-7 | 1900 | 14968 | Wed | 943 943 943 1 3651 126 3651 126 92527 24378 60400 ... 10359 69204 15956 000 000 | CW | (AB)     |
| M12 | 23-7 | 1920 | 11566 | Wed | 546 546 546 1 8486 63 8486 63 53801 91026 15670 ... 17091 36372 04130 000 000   | CW | (AB)     |
| M12 | 23-7 | 1920 | 14468 | Wed | 943 943 943 1 3651 126 3651 126 92527 24378 60400 ... 10359 69204 15956 000 000 | CW | (AB)     |
| M12 | 23-7 | 1940 | 10711 | Wed | 546 546 546 1 8486 63 8486 63 53801 91026 15670 ... 17091 36372 04130 000 000   | CW | (AB)     |
| M12 | 23-7 | 1940 | 13368 | Wed | 943 943 943 1 3651 126 3651 126 92527 24378 60400 ... 10359 69204 15956 000 000 | CW | (AB)     |
| M12 | 24-7 | 0400 | 9176  | Thu | 257 257 257 1 7780 129 7780 129 46637 36109 40490 ... 80944 91560 94532 000 000 | CW | (AB)     |
| M12 | 24-7 | 0420 | 7931  | Thu | 257 257 257 1 7780 129 7780 129 46637 36109 40490 ... 80944 91560 94532 000 000 | CW | (AB)     |
| M12 | 24-7 | 0440 | 6904  | Thu | 257 257 257 1 7780 129 7780 129 46637 36109 40490 ... 80944 91560 94532 000 000 | CW | (AB)     |
| M12 | 24-7 | 1800 | 11435 | Thu | 938 938 938 1 6410 79 6410 79 23508 64629 42128 ... 44776 02615 31522 000 000   | CW | (AB)     |
| M12 | 24-7 | 1820 | 10598 | Thu | 938 938 938 1 6410 79 6410 79 23508 64629 42128 ... 44776 02615 31522 000 000   | CW | (AB)     |
| M12 | 24-7 | 1840 | 9327  | Thu | 938 938 938 1 6410 79 6410 79 23508 64629 42128 ... 44776 02615 31522 000 000   | CW | (AB)     |
| M12 | 24-7 | 2000 | 12217 | Thu | 617 617 617 1 6138 187 6138 187 14936 58205 70890 ... 72246 06879 78769 000 000 | CW | (AB)     |
| M12 | 24-7 | 2020 | 10817 | Thu | 617 617 617 1 6138 187 6138 187 14936 58205 70890 ... 72246 06879 78769 000 000 | CW | (AB)     |
| M12 | 24-7 | 2040 | 9317  | Thu | 617 617 617 1 6138 187 6138 187 14936 58205 70890 ... 72246 06879 78769 000 000 | CW | (AB)     |
| M12 | 25-7 | 0800 | 13931 | Fri | 915 915 915 1 7917 141 7917 141 33584 27301 61226 ... 88385 50336 68555 000 000 | CW | (AB-KOR) |
| M12 | 25-7 | 0820 | 12153 | Fri | 915 915 915 1 7917 141 7917 141 33584 27301 61226 ... 88385 50336 68555 000 000 | CW | (AB-KOR) |
| M12 | 25-7 | 0840 | 11536 | Fri | 915 915 915 1 7917 141 7917 141 33584 27301 61226 ... 88385 50336 68555 000 000 | CW | (AB-KOR) |
| M12 | 25-7 | 1900 | 14968 | Fri | 943 943 943 1 3651 126 3651 126 92527 24378 60400 ... 10359 69204 15956 000 000 | CW | (AB)     |
| M12 | 25-7 | 1920 | 14468 | Fri | 943 943 943 1 3651 126 3651 126 92527 24378 60400 ... 10359 69204 15956 000 000 | CW | (AB)     |
| M12 | 25-7 | 1940 | 13368 | Fri | 943 943 943 1 3651 126 3651 126 92527 24378 60400 ... 10359 69204 15956 000 000 | CW | (AB)     |
| M12 | 25-7 | 2100 | 17453 | Fri | 438 438 438 1 1299 164 1299 164 66203 93638 68967 ... 42974 31772 90636 000 000 | CW | (AB)     |

|     |      |      |       |     |                                                                                                                                                                       |    |          |
|-----|------|------|-------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----------|
| M12 | 25-7 | 2120 | 16312 | Fri | 438 438 438 1 1299 164 1299 164 66203 93638 68967 ... 42974 31772 90636 000 000                                                                                       | CW | (AB)     |
| M12 | 25-7 | 2140 | 15836 | Fri | 438 438 438 1 1299 164 1299 164 66203 93638 68967 ... 42974 31772 90636 000 000                                                                                       | CW | (AB)     |
| M12 | 26-7 | 1900 | 12162 | Sat | 546 546 546 1 3296 57 3296 57 53690 94308 06467 ... 72210 34368 50991 000 000                                                                                         | CW | (AB)     |
| M12 | 26-7 | 1920 | 11566 | Sat | 546 546 546 1 3296 57 3296 57 53690 94308 06467 ... 72210 34368 50991 000 000                                                                                         | CW | (AB)     |
| M12 | 26-7 | 1940 | 10711 | Sat | 546 546 546 1 3296 57 3296 57 53690 94308 06467 ... 72210 34368 50991 000 000                                                                                         | CW | (AB)     |
| M12 | 26-7 | 2100 | 17453 | Sat | 438 438 438 1 1299 164 1299 164 66203 93638 68967 ... 42974 31772 90636 000 000                                                                                       | CW | (AB)     |
| M12 | 26-7 | 2120 | 16312 | Sat | 438 438 438 1 1299 164 1299 164 66203 93638 68967 ... 42974 31772 90636 000 000                                                                                       | CW | (AB)     |
| M12 | 26-7 | 2140 | 15836 | Sat | 438 438 438 1 1299 164 1299 164 66203 93638 68967 ... 42974 31772 90636 000 000                                                                                       | CW | (AB)     |
| M12 | 28-7 | 0800 | 13931 | Mon | 915 915 915 000                                                                                                                                                       | CW | (AB-KOR) |
| M12 | 28-7 | 0820 | 12153 | Mon | 915 915 915 000                                                                                                                                                       | CW | (AB-KOR) |
| M12 | 28-7 | 1230 | 13386 | Mon | 725 725 725 1 8271 127 8271 127 81403 59750 53223 ... 30671 95465 46436 000 000                                                                                       | CW | (AB)     |
| M12 | 28-7 | 1250 | 12189 | Mon | 725 725 725 1 8271 127 8271 127 81403 59750 53223 ... 30671 95465 46436 000 000                                                                                       | CW | (AB/TJ)  |
| M12 | 28-7 | 1310 | 11491 | Mon | 725 725 725 1 8271 127 8271 127 81403 59750 53223 ... 30671 95465 46436 000 000                                                                                       | CW | (AB/TJ)  |
| M12 | 28-7 | 2000 | 12217 | Mon | 617 617 617 000                                                                                                                                                       | CW | (AB)     |
| M12 | 28-7 | 2020 | 10817 | Mon | 617 617 617 000                                                                                                                                                       | CW | (AB)     |
| M12 | 29-7 | 1100 | 11519 | Tue | 289 289 289 1 7442 56 7442 56 63692 85152 88800 ... 85180 87793 31265 000 000                                                                                         | CW | (AB)     |
| M12 | 29-7 | 1120 | 12194 | Tue | 289 289 289 1 7442 56 7442 56 63692 85152 88800 ... 85180 87793 31265 000 000                                                                                         | CW | (AB)     |
| M12 | 29-7 | 1140 | 13407 | Tue | 289 289 289 1 7442 56 7442 56 63692 85152 88800 ... 85180 87793 31265 000 000                                                                                         | CW | (AB)     |
| M12 | 30-7 | 1900 | 12162 | Wed | 546 546 546 1 8204 52 8204 52 83790 01557 41311 ... 58507 54024 32299 28067 000 000                                                                                   | CW | (AB)     |
| M12 | 30-7 | 1900 | 14968 | Wed | 943 943 943 000                                                                                                                                                       | CW | (AB)     |
| M12 | 30-7 | 1920 | 11566 | Wed | 546 546 546 1 8204 52 8204 52 83790 01557 41311 ... 58507 54024 32299 28067 000 000                                                                                   | CW | (AB)     |
| M12 | 30-7 | 1920 | 14468 | Wed | 943 943 943 000                                                                                                                                                       | CW | (AB)     |
| M12 | 30-7 | 1940 | 10711 | Wed | 546 546 546 1 8204 52 8204 52 83790 01557 41311 ... 58507 54024 32299 28067 000 000                                                                                   | CW | (AB)     |
| M12 | 31-7 | 0400 | 9176  | Thu | 257 257 257 1 3600 130 3600 130 40048 04758 38027 ... 66737 87262 42498 000 000                                                                                       | CW | (AB)     |
| M12 | 31-7 | 0420 | 7931  | Thu | 257 257 257 1 3600 130 3600 130 40048 04758 38027 ... 66737 87262 42498 000 000                                                                                       | CW | (AB)     |
| M12 | 31-7 | 0440 | 6904  | Thu | 257 257 257 1 3600 130 3600 130 40048 04758 38027 ... 66737 87262 42498 000 000                                                                                       | CW | (AB)     |
| M12 | 31-7 | 1800 | 11435 | Thu | 938 938 938 1 7210 76 7210 76 77144 86267 67886 ... 43375 90539 31707 000 000                                                                                         | CW | (AB)     |
| M12 | 31-7 | 1820 | 10598 | Thu | 938 938 938 1 7210 76 7210 76 77144 86267 67886 ... 43375 90539 31707 000 000                                                                                         | CW | (AB)     |
| M12 | 31-7 | 1840 | 9327  | Thu | 938 938 938 1 7210 76 7210 76 77144 86267 67886 ... 43375 90539 31707 000 000                                                                                         | CW | (AB)     |
| M12 | 31-7 | 2000 | 12217 | Thu | 617 617 617 000                                                                                                                                                       | CW | (AB)     |
| M12 | 31-7 | 2020 | 10817 | Thu | 617 617 617 000                                                                                                                                                       | CW | (AB)     |
| M14 | 1-7  | 0500 | 12211 | Tue | 952 463 463 51 51 = = 23096 01622 95796 ... 74484 67863 56695 = = 463 463 51 51 00000                                                                                 | CW | (AB-J)   |
| M14 | 1-7  | 0520 | 10243 | Tue | 952 463 463 51 51 = = 23096 01622 95796 ... 74484 67863 56695 = = 463 463 51 51 00000                                                                                 | CW | (AB-J)   |
| M14 | 2-7  | 0500 | 12211 | Wed | No transmission                                                                                                                                                       | CW | (AB-J)   |
| M14 | 2-7  | 0521 | 10243 | Wed | 952 360 360 27 27 = = 13402 35907 83192 ... 07133 93249 80698 = = 360 360 27 27 952 871 871 25 25 = = 59172 44758 07929 ... 49838 77739 95738 = = 871 871 25 25 00000 | CW | (AB-J)   |

|            |      |      |       |     |                                                                                                                                                                                                 |        |        |
|------------|------|------|-------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|
| <b>M14</b> | 3-7  | 0500 | 12211 | Thu | 952 360 360 27 27 = = 13402 35907 83192 ... 07133 93249 80698 = = 360 360 27 27 952 871 871 25 25 = = 59172 44758 07929 ... 49838 77739 95738 = = 871 871 25 25 00000                           | CW     | (AB-J) |
| <b>M14</b> | 3-7  | 0521 | 10243 | Thu | 952 360 360 27 27 = = 13402 35907 83192 ... 07133 93249 80698 = = 360 360 27 27 952 871 871 25 25 = = 59172 44758 07929 ... 49838 77739 95738 = = 871 871 25 25 00000                           | CW     | (AB-J) |
| <b>M14</b> | 4-7  | 0500 | 12211 | Fri | 952 952 952 00000                                                                                                                                                                               | CW     | (AB-J) |
| <b>M14</b> | 4-7  | 0520 | 10243 | Fri | 952 952 952 00000                                                                                                                                                                               | CW     | (AB-J) |
| <b>M14</b> | 7-7  | 0500 | 12211 | Mon | 952 471 471 53 53 = = 37411 07197 64998 ... 74748 45109 08101 = = 471 471 53 53 00000                                                                                                           | CW     | (AB-J) |
| <b>M14</b> | 7-7  | 0520 | 10243 | Mon | 952 471 471 53 53 = = 37411 07197 64998 ... 74748 45109 08101 = = 471 471 53 53 00000                                                                                                           | CW     | (AB-J) |
| <b>M14</b> | 8-7  | 0500 | 12211 | Tue | 952 471 471 53 53 = = 37411 07197 64998 ... 74748 45109 08101 = = 471 471 53 53 00000                                                                                                           | CW     | (AB-J) |
| <b>M14</b> | 8-7  | 0520 | 10243 | Tue | 952 471 471 53 53 = = 37411 07197 64998 ... 74748 45109 08101 = = 471 471 53 53 00000                                                                                                           | CW     | (AB-J) |
| <b>M14</b> | 9-7  | 0500 | 12211 | Wed | 952 467 467 32 32 = = 68930 66613 86322 ... 71081 74591 65846 = = 467 467 32 32 952 830 830 21 21 = = 16871 40278 45393 ... 41093 42129 45402 = = 830 830 21 21 00000                           | CW     | (AB-J) |
| <b>M14</b> | 9-7  | 0521 | 10243 | Wed | 952 467 467 32 32 = = 68930 66613 86322 ... 71081 74591 65846 = = 467 467 32 32 952 830 830 21 21 = = 16871 40278 45393 ... 41093 42129 45402 = = 830 830 21 21 00000                           | CW     | (AB-J) |
| <b>M14</b> | 10-7 | 0500 | 12211 | Thu | 952 467 467 32 32 = = 68930 66613 86322 ... 71081 74591 65846 = = 467 467 32 32 480 952 467 480 467 952 830 830 21 21 = = 16871 40278 45393 ... 952 0 off                                       | CW     | (AB-J) |
| <b>M14</b> | 10-7 | 0521 | 10243 | Thu | 952 467 467 32 32 = = 68930 66613 86322 ... 71081 74591 65846 = = 467 467 32 32 952 830 830 21 21 = = 16871 40278 45393 ... 41093 42129 45402 = = 830 830 21 21 00000                           | CW     | (AB-J) |
| <b>M14</b> | 10-7 | 0930 | 16347 | Thu | 617 617 617 00000                                                                                                                                                                               | CW     | (AB)   |
| <b>M14</b> | 11-7 | 0500 | 12211 | Fri | 952 952 952 00000                                                                                                                                                                               | CW     | (AB-J) |
| <b>M14</b> | 11-7 | 0520 | 10243 | Fri | 952 952 952 00000                                                                                                                                                                               | CW     | (AB-J) |
| <b>M14</b> | 14-7 | 0500 | 12211 | Mon | 952 913 813 52 52 = = 81258 61665 32373 ... 30630 79005 38804 = = 813 813 52 52 00000                                                                                                           | CW     | (AB-J) |
| <b>M14</b> | 14-7 | 0520 | 10243 | Mon | 952 913 813 52 52 = = 81258 61665 32373 ... 30630 79005 38804 = = 813 813 52 52 00000                                                                                                           | CW     | (AB-J) |
| <b>M14</b> | 15-7 | 0500 | 12211 | Tue | 952 913 813 52 52 = = 81258 61665 32373 ... 30630 79005 38804 = = 813 813 52 52 00000                                                                                                           | CW     | (AB-J) |
| <b>M14</b> | 15-7 | 0520 | 10243 | Tue | 952 913 813 52 52 = = 81258 61665 32373 ... 30630 79005 38804 = = 813 813 52 52 00000                                                                                                           | CW     | (AB-J) |
| <b>M14</b> | 16-7 | 0500 | 12211 | Wed | Transmitter issues. Late start and barely audible. Unreadable signal                                                                                                                            | CW     | (AB-J) |
| <b>M14</b> | 16-7 | 0520 | 10243 | Wed | 952 178 178 25 25 = = carrier, off, then resumed halfway group 9: ... 76628 80528 71523 = = 178 178 25 25 952 604 604 28 28 = = 12415 40858 98169 ... 18618 31463 55411 = = 604 604 28 28 00000 | CW     | (AB-J) |
| <b>M14</b> | 17-7 | 0500 | 12211 | Thu | 95, restarts, then right into group two. 81198 48301 ... 76628 80528 71523 = = 178 178 25 25 952 604 604 28 28 = = 12415 40858 98169 ... 18618 31463 55411 = = 604 604 28 28 00000              | CW     | (AB-J) |
| <b>M14</b> | 17-7 | 0522 | 10243 | Thu | 952 (R 18s)(10s silence) 952 (R 37s) carrier (15s) 1m48s silence) carrier (58s), then off                                                                                                       | FSK CW | (AB-J) |
| <b>M14</b> | 18-7 | 0500 | 12211 | Fri | 952 952 952 00000                                                                                                                                                                               | CW     | (AB-J) |
| <b>M14</b> | 18-7 | 0520 | 10243 | Fri | 952 952 952 00000                                                                                                                                                                               | CW     | (AB-J) |

|            |      |      |       |     |                                                                                                                                                                                                                |             |            |
|------------|------|------|-------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------|
| <b>M14</b> | 21-7 | 0500 | 12211 | Mon | No transmission                                                                                                                                                                                                | CW          | (AB-J)     |
| <b>M14</b> | 21-7 | 0520 | 10243 | Mon | 952 346 346 57 57 = = 16975 16403 48985 .. 02343 53092 41089 = =346 346 57 57 00000                                                                                                                            | CW          | (AB-J)     |
| <b>M14</b> | 22-7 | 0500 | 12211 | Tue | 952 346 346 57 57 = = 16975 16403 48985 .. 02343 53092 41089 = =346 346 57 57 00000                                                                                                                            | CW          | (AB-J)     |
| <b>M14</b> | 22-7 | 0520 | 10243 | Tue | 952 346 346 57 57 = = 16975 16403 48985 .. 02343 53092 41089 = =346 346 57 57 00000<br>(restart during callup)                                                                                                 | CW          | (AB-J)     |
| <b>M14</b> | 23-7 | 0500 | 12211 | Wed | Transmitter issues. 952 436 436 25 25 = = 02279 71959 86581 ... 7 (1min silence) 97079<br>93791 77391 = = 436 4306 25 25 952 781 781 32 32 = = 98561 89282 00076 ... 49494<br>45926 49175 = = 781 781 32 32 00 | CW          | (AB-J)     |
| <b>M14</b> | 23-7 | 0520 | 10243 | Wed | 952 436 436 25 25 = = 02279 71959 86581 ... 97279 93791 77391 = = 436 4306 25 25 952<br>781 781 32 32 = = 98561 89282 00076 ... 49494 45926 49175 = = 781 781 32 32 00000                                      | CW          | (AB-J)     |
| <b>M14</b> | 24-7 | 0500 | 12211 | Thu | 952 436 436 25 25 = = 02279 71959 86581 ... 97279 93791 77391 = = 436 4306 25 25 952<br>781 781 32 32 = = 98561 89282 00076 ... 49494 45926 49175 = = 781 781 32 32 00000                                      | CW          | (AB-J)     |
| <b>M14</b> | 24-7 | 0522 | 10243 | Thu | 952 436 436 25 25 = = 02279 71959 86581 ... 97279 93791 77391 = = 436 4306 25 25 952<br>781 781 32 32 = = 98561 89282 00076 ... 49494 45926 49175 = = 781 781 32 32 00000                                      | CW          | (AB-J)     |
| <b>M14</b> | 25-7 | 0500 | 12211 | Fri | 952 952 952 00000                                                                                                                                                                                              | CW          | (AB-J)     |
| <b>M14</b> | 25-7 | 0520 | 10243 | Fri | 952 952 952 00000                                                                                                                                                                                              | CW          | (AB-J)     |
| <b>M14</b> | 25-7 | 0930 | 16347 | Fri | 617 617 617 00000                                                                                                                                                                                              | CW          | (AB/HFD)   |
| <b>M14</b> | 28-7 | 0500 | 12211 | Mon | 952 870 870 51 51 = = 55385 51325 26717 ... 39025 47479 86716 = = 870 870 51 51<br>00000                                                                                                                       | CW          | (AB-J)     |
| <b>M14</b> | 28-7 | 0520 | 10243 | Mon | 952 870 870 51 51 = = 55385 51325 26717 ... 39025 47479 86716 = = 870 870 51 51<br>00000                                                                                                                       | CW          | (AB-J)     |
| <b>M14</b> | 29-7 | 0500 | 12211 | Tue | 952 870 870 51 51 = = 55385 51325 26717 ... 39025 47479 86716 = = 870 870 51 51<br>00000                                                                                                                       | CW          | (AB-J)     |
| <b>M14</b> | 29-7 | 0520 | 10243 | Tue | 952 870 870 51 51 = = 55385 51325 26717 ... 39025 47479 86716 = = 870 870 51 51<br>00000                                                                                                                       | CW          | (AB-J)     |
| <b>M14</b> | 30-7 | 0500 | 12211 | Wed | 952 136 136 24 24 = = 41663 29969 94683 ... 76991 80442 98101 = = 136 136 24 24 952<br>480 480 36 36 = = 25493 68868 38895 ... 93835 31437 75653 = = 480 480 36 36 00000                                       | CW          | (AB-J)     |
| <b>M14</b> | 30-7 | 0520 | 10243 | Wed | 952 136 136 24 24 = = 41663 29969 94683 ... 76991 80442 98101 = = 136 136 24 24 952<br>480 480 36 36 = = 25493 68868 38895 ... 93835 31437 75653 = = 480 480 36 36 00000.<br>Restart during callup             | CW          | (AB-J)     |
| <b>M14</b> | 31-7 | 0500 | 12211 | Thu | 952 136 136 24 24 = = 41663 29969 94683 ... 76991 80442 98101 = = 136 136 24 24 952<br>480 480 36 36 = = 25493 68868 38895 ... 93835 31437 75653 = = 480 480 36 36 00000                                       | CW          | (AB-J)     |
| <b>M14</b> | 31-7 | 0520 | 10243 | Thu | 952 136 136 24 24 = = 41663 29969 94683 ... 76991 80442 98101 = = 136 136 24 24 952<br>480 480 36 36 = = 25493 68868 38895 ... 93835 31437 75653 = = 480 480 36 36 00000                                       | CW          | (AB-J)     |
| <b>M23</b> | 23-7 | 0829 | 10222 | Wed | LO48636017 LA1511114 (R25)                                                                                                                                                                                     | CW          | (AB)       |
| <b>M23</b> | 24-7 | 1459 | 7668  | Thu | LA1511114 LO48636017 (R25m)                                                                                                                                                                                    | CW          | (AB)       |
| <b>M23</b> | 25-7 | 1800 | 8030  | Fri | LO48636017 LA1511114 (R25)                                                                                                                                                                                     | CW          | (Pille)    |
| <b>M23</b> | 26-7 | 1600 | 7668  | Sat | LO48636017 LA1511114 (R25)                                                                                                                                                                                     | CW          | (AB/Pille) |
| <b>M42</b> | 11-7 | 0635 | 11156 | Fri | Russian diplo. Selcal                                                                                                                                                                                          | Serdolik v2 | (AB)       |
| <b>M42</b> | 11-7 | 0637 | 15728 | Fri | Russian diplo. Selcal                                                                                                                                                                                          | Serdolik v2 | (AB)       |
| <b>M42</b> | 11-7 | 0638 | 11156 | Fri | Russian diplo. Selcal                                                                                                                                                                                          | Serdolik v2 | (AB)       |
| <b>M42</b> | 11-7 | 0641 | 11156 | Fri | Russian diplo. Selcal                                                                                                                                                                                          | Serdolik v2 | (AB)       |
| <b>M42</b> | 11-7 | 0642 | 11158 | Fri | Russian diplo                                                                                                                                                                                                  | Serdolik v2 | (AB)       |

|     |      |      |       |     |                                                                 |                |         |
|-----|------|------|-------|-----|-----------------------------------------------------------------|----------------|---------|
| M42 | 11-7 | 0642 | 15728 | Fri | Russian diplo                                                   | Serdolik v2    | (AB)    |
| M42 | 11-7 | 0654 | 11158 | Fri | Russian diplo                                                   | Serdolik v2    | (AB)    |
| M42 | 11-7 | 0654 | 15726 | Fri | Russian diplo. Test                                             | Serdolik v2    | (AB)    |
| M42 | 11-7 | 0654 | 15728 | Fri | Russian diplo                                                   | Serdolik v2    | (AB)    |
| M42 | 11-7 | 0817 | 12193 | Fri | Russian diplo                                                   | MFSK-66        | (AB)    |
| M42 | 11-7 | 0818 | 12178 | Fri | Russian diplo                                                   | MFSK-66        | (AB)    |
| M42 | 11-7 | 0834 | 12193 | Fri | Russian diplo                                                   | MFSK-66        | (AB)    |
| M42 | 11-7 | 0839 | 9286  | Fri | Russian diplo                                                   | MFSK-66        | (AB)    |
| M42 | 16-7 | 0637 | 14454 | Wed | Russian diplo. Selcal                                           | Serdolik v2    | (AB)    |
| M42 | 16-7 | 0638 | 14452 | Wed | Russian diplo                                                   | Serdolik v2    | (AB)    |
| M42 | 21-7 | 0737 | 12228 | Mon | Russian diplo                                                   | MFSK-66        | (RO)    |
| M42 | 21-7 | 0761 | 10414 | Mon | Russian diplo                                                   | MFSK-66        | (RO)    |
| M42 | 22-7 | 0801 | 11071 | Tue | Russian diplo                                                   | Serdolik v2    | (AB/RO) |
| M42 | 22-7 | 0805 | 11071 | Tue | Russian diplo                                                   | Serdolik v2    | (RO)    |
| M42 | 22-7 | 0956 | 14970 | Tue | Russian diplo. Test                                             | Serdolik v2    | (AB)    |
| M42 | 22-7 | 1002 | 20811 | Tue | Russian diplo selcal                                            | Serdolik v2    | (RO)    |
| M42 | 22-7 | 1003 | 12164 | Tue | Russian diplo call up                                           | 112-tone modem | (AB)    |
| M42 | 22-7 | 1004 | 20811 | Tue | Russian diplo test                                              | Serdolik v2    | (RO)    |
| M42 | 22-7 | 1006 | 14970 | Tue | Russian diplo. Test                                             | Serdolik v2    | (AB/RO) |
| M42 | 22-7 | 1006 | 14970 | Tue | Russian diplo test                                              | Serdolik v2    | (RO)    |
| M42 | 22-7 | 1017 | 20811 | Tue | Russian diplo test                                              | Serdolik v2    | (RO)    |
| M42 | 22-7 | 1019 | 20815 | Tue | Russian diplo                                                   | Serdolik v2    | (RO)    |
| M42 | 22-7 | 1021 | 20811 | Tue | Russian diplo selcal                                            | Serdolik v2    | (RO)    |
| M42 | 22-7 | 1022 | 20815 | Tue | Russian diplo test                                              | Serdolik v2    | (RO)    |
| M42 | 22-7 | 1024 | 14970 | Tue | Russian diplo. Test                                             | Serdolik v2    | (AB/RO) |
| M42 | 22-7 | 1024 | 14970 | Tue | Russian diplo test                                              | Serdolik v2    | (RO)    |
| M42 | 22-7 | 1035 | 20815 | Tue | Russian diplo test                                              | Serdolik v2    | (RO)    |
| M42 | 22-7 | 1036 | 19612 | Tue | Russian diplo selcal                                            | Serdolik v2    | (RO)    |
| M42 | 22-7 | 1038 | 14970 | Tue | Russian diplo. Test                                             | Serdolik v2    | (AB)    |
| M42 | 22-7 | 1038 | 14970 | Tue | Russian diplo test                                              | Serdolik v2    | (RO)    |
| M42 | 22-7 | 1039 | 20815 | Tue | Russian diplo                                                   | Serdolik v2    | (Anon)  |
| M42 | 22-7 | 1047 | 20815 | Tue | Russian diplo test                                              | Serdolik v2    | (RO)    |
| M42 | 23-7 | 0602 | 12071 | Wed | Russian diplo call up (on top of F06a)                          | 112-tone modem | (AB)    |
| M42 | 23-7 | 0608 | 12071 | Wed | Russian diplo call up (on top of F06a)                          | 112-tone modem | (AB)    |
| M42 | 23-7 | 0737 | 13460 | Wed | Russian diplo                                                   | MFSK-66        | (RO)    |
| M42 | 23-7 | 0758 | 11152 | Wed | Russian diplo selcal                                            | Serdolik v2    | (RO)    |
| M42 | 24-7 | 1300 | 16156 | Thu | UAL: Russian MFA, Moscow wkg UAG: Russian embassy, Havana Cuba. | FSK 75/500     | (TJ)    |
| M42 | 24-7 | 1300 | 18726 | Thu | UAG: Russian embassy Havana Cuba wkg UAL: MFA Moscow            | FSK 75/500     | (TJ)    |
| M42 | 25-7 | 0630 | 13430 | Fri | Russian diplo selcal                                            | Serdolik v2    | (RO)    |
| M42 | 25-7 | 0631 | 11156 | Fri | Russian diplo selcal                                            | Serdolik v2    | (RO)    |
| M42 | 25-7 | 0633 | 13430 | Fri | Russian diplo selcal                                            | Serdolik v2    | (RO)    |
| M42 | 25-7 | 0634 | 11156 | Fri | Russian diplo selcal                                            | Serdolik v2    | (RO)    |

|             |      |      |       |     |                                                                                                                                               |                 |             |
|-------------|------|------|-------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------|
| <b>M42</b>  | 25-7 | 0639 | 11158 | Fri | Russian diplo                                                                                                                                 | Serdolik v2     | (RO)        |
| <b>M42</b>  | 25-7 | 0648 | 11158 | Fri | Russian diplo tone                                                                                                                            | Serdolik v2     | (RO)        |
| <b>M42</b>  | 25-7 | 0826 | 9288  | Fri | Russian diplo                                                                                                                                 | MFSK-66         | (AB/RO)     |
| <b>M42</b>  | 25-7 | 0826 | 9288  | Fri | Russian diplo                                                                                                                                 | MFSK-66         | (RO)        |
| <b>M42b</b> | 1-7  | ---- | 11080 | Tue | RDI: Russian PtP link 340741 wkg RTK 14485 kHz: ZhZhZh RTK RTK RTK RTK DE RDI RDI RDI RTK?                                                    | FSK 50/500      | (TJ)        |
| <b>M42b</b> | 1-7  | 0718 | 5800  | Tue | RYF2: Russian PtP link 219741 clg RWI                                                                                                         | FSK 50/500      | (TJ)        |
| <b>M42b</b> | 1-7  | 0718 | 8115  | Tue | RWI: Russian PtP link 121747 wkg RYF2: vvv ryf2 de rwi qrk0 zor k                                                                             | FSK 50/500      | (TJ)        |
| <b>M42b</b> | 9-7  | 0631 | 17475 | Wed | RTK2: Russian Gov. PtP link 121742. Opchat with link RGY2 on 11470 kHz. Closes daily schedule with 121742 rgy2 de rtk2 qrk 0 znn gb sk        | FSK CW          | (TJ)        |
| <b>M42b</b> | 9-7  | 0633 | 11470 | Wed | RGY: Russian Gov. PtP link 380741. Opchat with RTK2 on 17475 kHz.                                                                             | FSK CW          | (TJ)        |
| <b>M42b</b> | 9-7  | 1125 | 13920 | Wed | KAUJ RBZDQKCAUJ RTKAUDQJBZ MOOOOOOOOOOOO... (repeated)                                                                                        | FSK 50/500      | (AB)        |
| <b>M42b</b> | 10-7 | 0644 | 11080 | Thu | RDI: Russian Gov. PtP link 340741. Callup to 121746 RTK. Then FSK 50/500 3rd shift after reply from RTK on 14485 kHz: 340741rtk de rdi ok zor | FSK 50/500      | (TJ)        |
| <b>M42b</b> | 10-7 | 0800 | 19101 | Thu | MR4V MR4V MR4V DE 3AZB 3AZB K NW QSY 02669 QSY 02669 K =                                                                                      | CW              | (AB)        |
| <b>M42b</b> | 11-7 | 0641 | 14483 | Fri | Russian PtP link 121746: VVV RDI RDI RDI DE RTK RTK QRK? K. 121746. VVV RDI RDI RDI DE RTK RTK QRK 0 ZOR GD K. 121746 BK 121                  | FSK 50/500      | (AB)        |
| <b>M42b</b> | 11-7 | 1136 | 13453 | Fri | KFUJ RTHZLQPCAUJ RTHZLQPJ RKFUDQPTHZ OOOOOOOOOOOOOOOO ... (repeated)                                                                          | FSK 50/500      | (AB)        |
| <b>M42b</b> | 14-7 | 0733 | 13985 | Mon | RRQ6: Russian Gov. PtP link 360741. Callup 121744 to RNM6 on 16180 kHz. Opchat vvv rnm6 de rrq6 gd qrk0 qrk? ok zor k                         | FSK 50/500      | (TJ)        |
| <b>M42b</b> | 17-7 | 1234 | 16023 | Thu | KFUJ RTHZD26CAUJ JTHZLQMO OVJ O OOOOOOQO OVJ O OOOOOOQO OVJ O OOOOOOOOOO ... (repeated)                                                       | FSK 50/500      | (AB)        |
| <b>M42b</b> | 22-7 | 0619 | 10185 | Tue | RHK6: Russian Gov. PtP link 370741                                                                                                            | FSK 50/500      | (TJ)        |
| <b>M42b</b> | 23-7 | 0750 | 5145  | Wed | RVQ: Russian Gov. PtP link 121751. Start of daily schedule with RAU2 on 5350 kHz: vvv rau2 rau2 rau2 de rvq rvq qrk?                          | FSK 50/500      | (TJ)        |
| <b>M42b</b> | 24-7 | 0737 | 5145  | Thu | RVQ: Russian Gov. PtP link 121751. 3rd shift callup to RAU2 on 5350 kHz 121752 vvv rau2 rau2 rau2 de rvq rvq qrk?                             | FSK 50/500      | (TJ)        |
| <b>M42b</b> | 24-7 | 1200 | 6870  | Thu | RAZ2: Russian Gov. link 290741. End of day schedule vvv rea de raz2 qrk0 qrk?                                                                 | FSK 50/500      | (TJ)        |
| <b>M42b</b> | 24-7 | 1208 | 6995  | Thu | RVQ: Russian Gov. PtP link 121753. Closure of daily schedule: ruh de rvq qrk0 znn gb sk                                                       | FSK 50/500      | (TJ)        |
| <b>M42b</b> | 24-7 | 1230 | 13387 | Thu | NT9P: Russian diplo/intel wkg K4MT. Header: 097 100 24 1230 6271 =                                                                            | CW + FSK 50/500 | (TJ)        |
| <b>M42b</b> | 28-7 | 0816 | 5800  | Mon | RYF2: Russian PTP link 219741 wkg RWI on 8115 kHz: 219741 opchat and closure rwi rwi rwi de ryf2 ryf2 ok znn gb 73 sk                         | FSK 50/500      | (TJ)        |
| <b>M42b</b> | 28-7 | 0830 | 7900  | Mon | RNI2: Russian PTP link 121750 opchat and start of the day sched rnv 2 rnv2 rnv2 de rni2 rni2 qrk0 zor gd k                                    | FSK 50/500      | (TJ)        |
| <b>M51a</b> | 12-7 | 0700 | 3881  | Sat | VVV VVV VVV DE FAV22 FAV22 FAV22 QLH 3881/6825 KHZ followed by two messages. CQ DE FAV22 VA                                                   | CW              | (AB)        |
| <b>M51a</b> | 12-7 | 0700 | 6825  | Sat | VVV VVV VVV DE FAV22 FAV22 FAV22 QLH 3881/6825 KHZ followed by two messages. CQ DE FAV22 VA                                                   | CW              | (AB)        |
| <b>M51b</b> | 7-7  | 1235 | 6825  | Mon | FAV22: 20wpm 5LGs with occasional numbers and punctuation                                                                                     | CW              | (KX0DW-AUT) |
| <b>M89</b>  | 12-7 | 1200 | 5742  | Sat | V 3JWV (x3) DE QSVP (x2)                                                                                                                      | CW              | (JPL)       |
| <b>M89</b>  | 12-7 | 1200 | 8375  | Sat | V 3JWV (x3) DE QSVP (x2)                                                                                                                      | CW              | (JPL)       |
| <b>M89</b>  | 12-7 | 1200 | 12124 | Sat | V 3JWV (x3) DE QSVP (x2)                                                                                                                      | CW              | (JPL)       |

|            |      |      |       |     |                                                                                                       |    |       |
|------------|------|------|-------|-----|-------------------------------------------------------------------------------------------------------|----|-------|
| <b>M89</b> | 12-7 | 1954 | 5742  | Sat | V 3JWV (x3) DE QSVP (x2)                                                                              | CW | (JPL) |
| <b>M89</b> | 13-7 | 1205 | 4357  | Sun | V 3JWV (x3) DE QSVP (x2) NR 0162/MZ 2104 RMKS 2344 TO 2193 =                                          | CW | (JPL) |
| <b>M89</b> | 15-7 | 1135 | 4393  | Tue | WF7U: F NR 65/EX 1940 RMKS CQ = LON8/X1Y8 AR (Working outstations 2JNB, 3BFF, 2E3D, VNV7, and others. | CW | (JPL) |
| <b>M89</b> | 15-7 | 1835 | 5742  | Tue | V 3JWV (x3) DE QSVP (x2)                                                                              | CW | (JPL) |
| <b>M89</b> | 16-7 | 1702 | 5742  | Wed | V 3JWV (x3) DE QSVP (x2)                                                                              | CW | (JPL) |
| <b>M89</b> | 16-7 | 1720 | 4860  | Wed | V Q2M (x3) DE NYZ (x2)                                                                                | CW | (JPL) |
| <b>M89</b> | 16-7 | 1720 | 6840  | Wed | V Q2M (x3) DE NYZ (x2)                                                                                | CW | (JPL) |
| <b>M89</b> | 17-7 | 1453 | 5742  | Thu | V 3JWV (x3) DE QSVP (x2)                                                                              | CW | (JPL) |
| <b>M89</b> | 18-7 | 1200 | 8425  | Fri | V K8N1 FFF NR 1011/EX 2200 = A2FG8/HQ22N AR QSY TO NR 01                                              | CW | (JPL) |
| <b>M89</b> | 18-7 | 1220 | 4860  | Fri | V Q2M (x3) DE NYZ (x2)                                                                                | CW | (JPL) |
| <b>M89</b> | 18-7 | 1220 | 6840  | Fri | V Q2M (x3) DE NYZ (x2)                                                                                | CW | (JPL) |
| <b>M89</b> | 18-7 | 1233 | 5742  | Fri | V 3JWV (x3) DE QSVP (x2)                                                                              | CW | (JPL) |
| <b>M89</b> | 18-7 | 1638 | 4357  | Fri | V 3JWV (x3) DE QSVP (x2)                                                                              | CW | (JPL) |
| <b>M89</b> | 18-7 | 1638 | 5742  | Fri | V 3JWV (x3) DE QSVP (x2)                                                                              | CW | (JPL) |
| <b>M89</b> | 19-7 | 1130 | 7620  | Sat | VVV UIS (x3) DE HV4 (X2)                                                                              | CW | (JPL) |
| <b>M89</b> | 19-7 | 1130 | 8350  | Sat | VVV WNF (x3) DE FXM (X2)                                                                              | CW | (JPL) |
| <b>M89</b> | 19-7 | 1514 | 5742  | Sat | V 3JWV (x3) DE QSVP (x2)                                                                              | CW | (JPL) |
| <b>M89</b> | 20-7 | 1935 | 6840  | Sun | V Q2M (x3) DE NYZ (x2)                                                                                | CW | (JPL) |
| <b>M89</b> | 20-7 | 1954 | 5742  | Sun | V 3JWV (x3) DE QSVP (x2)                                                                              | CW | (JPL) |
| <b>M89</b> | 25-7 | 1730 | 4720  | Fri | VVV WNF (x3) DE FXM (X2)                                                                              | CW | (JPL) |
| <b>M89</b> | 25-7 | 1730 | 5151  | Fri | VVV WNF (x3) DE FXM (X2) Note: Normally on 5150.                                                      | CW | (JPL) |
| <b>M89</b> | 25-7 | 1746 | 4357  | Fri | V 3JWV (x3) DE QSVP (x2)                                                                              | CW | (JPL) |
| <b>M89</b> | 25-7 | 1746 | 5742  | Fri | V 3JWV (x3) DE QSVP (x2)                                                                              | CW | (JPL) |
| <b>M89</b> | 28-7 | 1120 | 4860  | Mon | V Q2M (x3) DE NYZ (x2)                                                                                | CW | (JPL) |
| <b>M89</b> | 28-7 | 1120 | 6840  | Mon | V Q2M (x3) DE NYZ (x2)                                                                                | CW | (JPL) |
| <b>M89</b> | 31-7 | 1020 | 6840  | Thu | V Q2M (x3) DE NYZ (x2) (R5)                                                                           | CW | (JPL) |
| <b>M89</b> | 31-7 | 1020 | 8290  | Thu | V Q2M (x3) DE NYZ (x2) (R5)                                                                           | CW | (JPL) |
| <b>M89</b> | 31-7 | 1040 | 4357  | Thu | V 3JWV (x3) DE QSVP (x2)                                                                              | CW | (JPL) |
| <b>M89</b> | 31-7 | 1040 | 5742  | Thu | V 3JWV (x3) DE QSVP (x2)                                                                              | CW | (JPL) |
| <b>M89</b> | 31-7 | 1040 | 8375  | Thu | V 3JWV (x3) DE QSVP (x2)                                                                              | CW | (JPL) |
| <b>M89</b> | 31-7 | 1040 | 12124 | Thu | V 3JWV (x3) DE QSVP (x2)                                                                              | CW | (JPL) |
| <b>M89</b> | 31-7 | 1120 | 4860  | Thu | V Q2M (x3) DE NYZ (x2) (R5)                                                                           | CW | (JPL) |
| <b>M89</b> | 31-7 | 1120 | 6840  | Thu | V Q2M (x3) DE NYZ (x2) (R5)                                                                           | CW | (JPL) |
| <b>M95</b> | 12-7 | 1154 | 4156  | Sat | NR 24 CK 193 35 0712 1520 = //9042 kHz                                                                | CW | (JPL) |
| <b>M95</b> | 12-7 | 1154 | 9042  | Sat | NR 24 CK 193 35 0712 1520 = //4156 kHz                                                                | CW | (JPL) |
| <b>M95</b> | 12-7 | 1950 | 3903  | Sat | V WCJJ (x3) DE HBDD (x2)                                                                              | CW | (JPL) |
| <b>M95</b> | 12-7 | 1950 | 6886  | Sat | V WCJJ (x3) DE HBDD (x2)                                                                              | CW | (JPL) |
| <b>M95</b> | 13-7 | 1154 | 4156  | Sun | NR 069 CK 32 35 0713 1454 = NR 26 CK 174 35 0713 1518 = //9042 kHz                                    | CW | (JPL) |
| <b>M95</b> | 13-7 | 1154 | 9052  | Sun | NR 069 CK 32 35 0713 1454 = NR 26 CK 174 35 0713 1518 = //4156 kHz                                    | CW | (JPL) |
| <b>M95</b> | 13-7 | 1212 | 6557  | Sun | V WCJJ (x3) DE HBDD (x2)                                                                              | CW | (JPL) |
| <b>M95</b> | 13-7 | 1212 | 11475 | Sun | V WCJJ (x3) DE HBDD (x2)                                                                              | CW | (JPL) |

|     |      |      |       |     |                                                                             |     |       |
|-----|------|------|-------|-----|-----------------------------------------------------------------------------|-----|-------|
| M95 | 15-7 | 1212 | 4156  | Tue | NR 30 CK 199 35 0715 1509 = //9042 kHz                                      | CW  | (JPL) |
| M95 | 15-7 | 1212 | 9052  | Tue | NR 30 CK 199 35 0715 1509 = //4156 kHz                                      | CW  | (JPL) |
| M95 | 15-7 | 1840 | 3903  | Tue | V WCJJ (x3) DE HBDD (x2)                                                    | CW  | (JPL) |
| M95 | 15-7 | 1840 | 6886  | Tue | V WCJJ (x3) DE HBDD (x2)                                                    | CW  | (JPL) |
| M95 | 16-7 | 1659 | 3903  | Wed | V WCJJ (x3) DE HBDD (x2)                                                    | CW  | (JPL) |
| M95 | 16-7 | 1659 | 6886  | Wed | V WCJJ (x3) DE HBDD (x2)                                                    | CW  | (JPL) |
| M95 | 17-7 | 1450 | 3903  | Thu | V WCJJ (x3) DE HBDD (x2)                                                    | CW  | (JPL) |
| M95 | 17-7 | 1450 | 6886  | Thu | V WCJJ (x3) DE HBDD (x2)                                                    | CW  | (JPL) |
| M95 | 18-7 | 1150 | 4542  | Fri | V BNGC DE XS30 NR 0604 CK 672 35 0718 1614 =                                | CW  | (JPL) |
| M95 | 18-7 | 1635 | 3903  | Fri | V WCJJ (x3) DE HBDD (x2)                                                    | CW  | (JPL) |
| M95 | 18-7 | 1635 | 6886  | Fri | V WCJJ (x3) DE HBDD (x2)                                                    | CW  | (JPL) |
| M95 | 19-7 | 1133 | 4542  | Sat | V BNGC DE XS30 NR 0609 CK 061 35 0719 1700 = NR 0610 CK 0549 35 0719 1701 = | CW  | (JPL) |
| M95 | 19-7 | 1202 | 4156  | Sat | Too weak to copy //9042 kHz                                                 | CW  | (JPL) |
| M95 | 19-7 | 1202 | 9042  | Sat | Too weak to copy //4156 kHz                                                 | CW  | (JPL) |
| M95 | 19-7 | 1517 | 3903  | Sat | V WCJJ (x3) DE HBDD (x2)                                                    | CW  | (JPL) |
| M95 | 19-7 | 1517 | 6886  | Sat | V WCJJ (x3) DE HBDD (x2)                                                    | CW  | (JPL) |
| M95 | 19-7 | 1540 | 5656  | Sat | NR 5001/CCK CK 91 89 0719 2355 RMKS 1784 TO 3847 TO 3849 TO 1..8 K          | CW  | (JPL) |
| M95 | 20-7 | 1934 | 3903  | Sun | V WCJJ (x3) DE HBDD (x2)                                                    | CW  | (JPL) |
| M95 | 20-7 | 1934 | 6886  | Sun | V WCJJ (x3) DE HBDD (x2)                                                    | CW  | (JPL) |
| M95 | 20-7 | 1935 | 4860  | Sun | V Q2M (x3) DE NYZ (x2)                                                      | CW  | (JPL) |
| M95 | 25-7 | 1743 | 3903  | Fri | V WCJJ (x3) DE HBDD (x2)                                                    | CW  | (JPL) |
| M95 | 25-7 | 1743 | 6886  | Fri | V WCJJ (x3) DE HBDD (x2)                                                    | CW  | (JPL) |
| M95 | 28-7 | 1130 | 8350  | Mon | VVV WNF (x3) DE FXM (X2)                                                    | CW  | (JPL) |
| M95 | 31-7 | 1028 | 6886  | Thu | V WCJJ (x3) DE HBDD (x2)                                                    | CW  | (JPL) |
| M95 | 31-7 | 1152 | 4156  | Thu | NR 62 CK 184 35 0731 1545 = //9042 kHz                                      | CW  | (JPL) |
| M95 | 31-7 | 1152 | 9042  | Thu | NR 62 CK 184 35 0731 1545 = //4156 kHz                                      | CW  | (JPL) |
| P03 | 1-7  | 1100 | 7727  | Tue | Polish intel.                                                               | CW  | (AB)  |
| P03 | 1-7  | 1105 | 7727  | Tue | Polish intel.                                                               | CW  | (AB)  |
| P03 | 1-7  | 1500 | 9179  | Tue | Polish Intel.                                                               | PSK | (AB)  |
| P03 | 1-7  | 1505 | 9179  | Tue | Polish Intel.                                                               | PSK | (AB)  |
| P03 | 1-7  | 1725 | 14410 | Tue | Polish intel.                                                               | PSK | (AB)  |
| P03 | 1-7  | 1730 | 14410 | Tue | Polish intel.                                                               | PSK | (AB)  |
| P03 | 2-7  | 1030 | 9179  | Wed | Polish intel.                                                               | PSK | (AB)  |
| P03 | 2-7  | 1035 | 9179  | Wed | Polish intel.                                                               | PSK | (AB)  |
| P03 | 2-7  | 1100 | 7727  | Wed | Polish intel.                                                               | PSK | (AB)  |
| P03 | 2-7  | 1105 | 7727  | Wed | Polish intel.                                                               | PSK | (AB)  |
| P03 | 2-7  | 1310 | 13427 | Wed | Polish intel.                                                               | PSK | (AB)  |
| P03 | 2-7  | 1315 | 13427 | Wed | Polish intel.                                                               | PSK | (AB)  |
| P03 | 3-7  | 1950 | 8759  | Thu | Polish intel.                                                               | PSK | (AB)  |
| P03 | 3-7  | 1955 | 8759  | Thu | Polish intel.                                                               | PSK | (AB)  |
| P03 | 4-7  | 0530 | 7894  | Fri | Polish intel.                                                               | PSK | (AB)  |
| P03 | 4-7  | 0535 | 7894  | Fri | Polish intel.                                                               | PSK | (AB)  |

|     |      |      |       |     |               |     |      |
|-----|------|------|-------|-----|---------------|-----|------|
| P03 | 4-7  | 1100 | 9399  | Fri | Polish intel. | PSK | (AB) |
| P03 | 4-7  | 1105 | 9399  | Fri | Polish intel. | PSK | (AB) |
| P03 | 4-7  | 1500 | 9179  | Fri | Polish Intel. | PSK | (AB) |
| P03 | 4-7  | 1505 | 9179  | Fri | Polish Intel. | PSK | (AB) |
| P03 | 4-7  | 1515 | 20167 | Fri | Polish intel. | PSK | (AB) |
| P03 | 4-7  | 1520 | 20167 | Fri | Polish intel. | PSK | (AB) |
| P03 | 5-7  | 1020 | 7504  | Sat | Polish intel. | PSK | (AB) |
| P03 | 5-7  | 1025 | 7504  | Sat | Polish intel. | PSK | (AB) |
| P03 | 5-7  | 1245 | 6304  | Sat | Polish intel. | PSK | (AB) |
| P03 | 5-7  | 1250 | 6304  | Sat | Polish intel. | PSK | (AB) |
| P03 | 5-7  | 1310 | 13427 | Sat | Polish intel. | PSK | (AB) |
| P03 | 5-7  | 1315 | 13427 | Sat | Polish intel. | PSK | (AB) |
| P03 | 6-7  | 0530 | 7894  | Sun | Polish intel. | PSK | (AB) |
| P03 | 6-7  | 0535 | 7894  | Sun | Polish intel. | PSK | (AB) |
| P03 | 6-7  | 1020 | 7504  | Sun | Polish intel. | PSK | (AB) |
| P03 | 6-7  | 1025 | 7504  | Sun | Polish intel. | PSK | (AB) |
| P03 | 6-7  | 1245 | 6304  | Sun | Polish intel. | PSK | (AB) |
| P03 | 6-7  | 1250 | 6304  | Sun | Polish intel. | PSK | (AB) |
| P03 | 6-7  | 1515 | 20167 | Sun | Polish intel. | PSK | (AB) |
| P03 | 6-7  | 1520 | 20167 | Sun | Polish intel. | PSK | (AB) |
| P03 | 6-7  | 1725 | 14410 | Sun | Polish intel. | PSK | (AB) |
| P03 | 6-7  | 1730 | 14410 | Sun | Polish intel. | PSK | (AB) |
| P03 | 6-7  | 1950 | 8759  | Sun | Polish intel. | PSK | (AB) |
| P03 | 6-7  | 1955 | 8759  | Sun | Polish intel. | PSK | (AB) |
| P03 | 7-7  | 1030 | 9179  | Mon | Polish intel. | PSK | (AB) |
| P03 | 7-7  | 1035 | 9179  | Mon | Polish intel. | PSK | (AB) |
| P03 | 8-7  | 1100 | 7727  | Tue | Polish intel. | CW  | (AB) |
| P03 | 8-7  | 1105 | 7727  | Tue | Polish intel. | CW  | (AB) |
| P03 | 8-7  | 1500 | 9179  | Tue | Polish Intel. | PSK | (AB) |
| P03 | 8-7  | 1505 | 9179  | Tue | Polish Intel. | PSK | (AB) |
| P03 | 8-7  | 1725 | 14410 | Tue | Polish intel. | PSK | (AB) |
| P03 | 8-7  | 1730 | 14410 | Tue | Polish intel. | PSK | (AB) |
| P03 | 9-7  | 1030 | 9179  | Wed | Polish intel. | PSK | (AB) |
| P03 | 9-7  | 1035 | 9179  | Wed | Polish intel. | PSK | (AB) |
| P03 | 9-7  | 1100 | 7727  | Wed | Polish intel. | PSK | (AB) |
| P03 | 9-7  | 1105 | 7727  | Wed | Polish intel. | PSK | (AB) |
| P03 | 9-7  | 1310 | 13427 | Wed | Polish intel. | PSK | (AB) |
| P03 | 9-7  | 1315 | 13427 | Wed | Polish intel. | PSK | (AB) |
| P03 | 10-7 | 1950 | 8759  | Thu | Polish intel. | PSK | (AB) |
| P03 | 10-7 | 1955 | 8759  | Thu | Polish intel. | PSK | (AB) |
| P03 | 11-7 | 0530 | 7894  | Fri | Polish intel. | PSK | (AB) |
| P03 | 11-7 | 0535 | 7894  | Fri | Polish intel. | PSK | (AB) |

|     |      |      |       |     |               |     |      |
|-----|------|------|-------|-----|---------------|-----|------|
| P03 | 11-7 | 1100 | 9399  | Fri | Polish intel. | PSK | (AB) |
| P03 | 11-7 | 1105 | 9399  | Fri | Polish intel. | PSK | (AB) |
| P03 | 11-7 | 1500 | 9179  | Fri | Polish Intel. | PSK | (AB) |
| P03 | 11-7 | 1505 | 9179  | Fri | Polish Intel. | PSK | (AB) |
| P03 | 11-7 | 1515 | 20167 | Fri | Polish intel. | PSK | (AB) |
| P03 | 11-7 | 1520 | 20167 | Fri | Polish intel. | PSK | (AB) |
| P03 | 12-7 | 1020 | 7504  | Sat | Polish intel. | PSK | (AB) |
| P03 | 12-7 | 1025 | 7504  | Sat | Polish intel. | PSK | (AB) |
| P03 | 12-7 | 1245 | 6304  | Sat | Polish intel. | PSK | (AB) |
| P03 | 12-7 | 1250 | 6304  | Sat | Polish intel. | PSK | (AB) |
| P03 | 12-7 | 1310 | 13427 | Sat | Polish intel. | PSK | (AB) |
| P03 | 12-7 | 1315 | 13427 | Sat | Polish intel. | PSK | (AB) |
| P03 | 13-7 | 0530 | 7894  | Sun | Polish intel. | PSK | (AB) |
| P03 | 13-7 | 0535 | 7894  | Sun | Polish intel. | PSK | (AB) |
| P03 | 13-7 | 1020 | 7504  | Sun | Polish intel. | PSK | (AB) |
| P03 | 13-7 | 1025 | 7504  | Sun | Polish intel. | PSK | (AB) |
| P03 | 13-7 | 1100 | 9399  | Sun | Polish intel. | PSK | (AB) |
| P03 | 13-7 | 1105 | 9399  | Sun | Polish intel. | PSK | (AB) |
| P03 | 13-7 | 1245 | 6304  | Sun | Polish intel. | PSK | (AB) |
| P03 | 13-7 | 1250 | 6304  | Sun | Polish intel. | PSK | (AB) |
| P03 | 13-7 | 1515 | 20167 | Sun | Polish intel. | PSK | (AB) |
| P03 | 13-7 | 1520 | 20167 | Sun | Polish intel. | PSK | (AB) |
| P03 | 13-7 | 1725 | 14410 | Sun | Polish intel. | PSK | (AB) |
| P03 | 13-7 | 1730 | 14410 | Sun | Polish intel. | PSK | (AB) |
| P03 | 13-7 | 1950 | 8759  | Sun | Polish intel. | PSK | (AB) |
| P03 | 13-7 | 1955 | 8759  | Sun | Polish intel. | PSK | (AB) |
| P03 | 14-7 | 1030 | 9179  | Mon | Polish intel. | PSK | (AB) |
| P03 | 14-7 | 1035 | 9179  | Mon | Polish intel. | PSK | (AB) |
| P03 | 14-7 | 1220 | 18168 | Mon | Polish intel. | PSK | (AB) |
| P03 | 14-7 | 1225 | 18168 | Mon | Polish intel. | PSK | (AB) |
| P03 | 15-7 | 1100 | 7727  | Tue | Polish intel. | CW  | (AB) |
| P03 | 15-7 | 1105 | 7727  | Tue | Polish intel. | CW  | (AB) |
| P03 | 15-7 | 1500 | 9179  | Tue | Polish Intel. | PSK | (AB) |
| P03 | 15-7 | 1505 | 9179  | Tue | Polish Intel. | PSK | (AB) |
| P03 | 15-7 | 1725 | 14410 | Tue | Polish intel. | PSK | (AB) |
| P03 | 15-7 | 1730 | 14410 | Tue | Polish intel. | PSK | (AB) |
| P03 | 16-7 | 1030 | 9179  | Wed | Polish intel. | PSK | (AB) |
| P03 | 16-7 | 1035 | 9179  | Wed | Polish intel. | PSK | (AB) |
| P03 | 16-7 | 1100 | 7727  | Wed | Polish intel. | PSK | (AB) |
| P03 | 16-7 | 1105 | 7727  | Wed | Polish intel. | PSK | (AB) |
| P03 | 16-7 | 1310 | 13427 | Wed | Polish intel. | PSK | (AB) |
| P03 | 16-7 | 1315 | 13427 | Wed | Polish intel. | PSK | (AB) |

|     |      |      |       |     |               |     |      |
|-----|------|------|-------|-----|---------------|-----|------|
| P03 | 17-7 | 1950 | 8759  | Thu | Polish intel. | PSK | (AB) |
| P03 | 17-7 | 1955 | 8759  | Thu | Polish intel. | PSK | (AB) |
| P03 | 18-7 | 0530 | 7894  | Fri | Polish intel. | PSK | (AB) |
| P03 | 18-7 | 0535 | 7894  | Fri | Polish intel. | PSK | (AB) |
| P03 | 18-7 | 1100 | 9399  | Fri | Polish intel. | PSK | (AB) |
| P03 | 18-7 | 1105 | 9399  | Fri | Polish intel. | PSK | (AB) |
| P03 | 18-7 | 1500 | 9179  | Fri | Polish Intel. | PSK | (AB) |
| P03 | 18-7 | 1505 | 9179  | Fri | Polish Intel. | PSK | (AB) |
| P03 | 18-7 | 1515 | 20167 | Fri | Polish intel. | PSK | (AB) |
| P03 | 18-7 | 1520 | 20167 | Fri | Polish intel. | PSK | (AB) |
| P03 | 19-7 | 1020 | 7504  | Sat | Polish intel. | PSK | (AB) |
| P03 | 19-7 | 1025 | 7504  | Sat | Polish intel. | PSK | (AB) |
| P03 | 19-7 | 1245 | 6304  | Sat | Polish intel. | PSK | (AB) |
| P03 | 19-7 | 1250 | 6304  | Sat | Polish intel. | PSK | (AB) |
| P03 | 19-7 | 1310 | 13427 | Sat | Polish intel. | PSK | (AB) |
| P03 | 19-7 | 1315 | 13427 | Sat | Polish intel. | PSK | (AB) |
| P03 | 20-7 | 0530 | 7894  | Sun | Polish intel. | PSK | (AB) |
| P03 | 20-7 | 0535 | 7894  | Sun | Polish intel. | PSK | (AB) |
| P03 | 20-7 | 1020 | 7504  | Sun | Polish intel. | PSK | (AB) |
| P03 | 20-7 | 1025 | 7504  | Sun | Polish intel. | PSK | (AB) |
| P03 | 20-7 | 1100 | 9399  | Sun | Polish intel. | PSK | (AB) |
| P03 | 20-7 | 1105 | 9399  | Sun | Polish intel. | PSK | (AB) |
| P03 | 20-7 | 1220 | 18168 | Sun | Polish intel. | PSK | (AB) |
| P03 | 20-7 | 1225 | 18168 | Sun | Polish intel. | PSK | (AB) |
| P03 | 20-7 | 1245 | 6304  | Sun | Polish intel. | PSK | (AB) |
| P03 | 20-7 | 1250 | 6304  | Sun | Polish intel. | PSK | (AB) |
| P03 | 20-7 | 1515 | 20167 | Sun | Polish intel. | PSK | (AB) |
| P03 | 20-7 | 1520 | 20167 | Sun | Polish intel. | PSK | (AB) |
| P03 | 20-7 | 1725 | 14410 | Sun | Polish intel. | PSK | (AB) |
| P03 | 20-7 | 1730 | 14410 | Sun | Polish intel. | PSK | (AB) |
| P03 | 20-7 | 1950 | 8759  | Sun | Polish intel. | PSK | (AB) |
| P03 | 20-7 | 1955 | 8759  | Sun | Polish intel. | PSK | (AB) |
| P03 | 21-7 | 1030 | 9179  | Mon | Polish intel. | PSK | (AB) |
| P03 | 21-7 | 1035 | 9179  | Mon | Polish intel. | PSK | (AB) |
| P03 | 21-7 | 1220 | 18168 | Mon | Polish intel. | PSK | (AB) |
| P03 | 21-7 | 1225 | 18168 | Mon | Polish intel. | PSK | (AB) |
| P03 | 22-7 | 1100 | 7727  | Tue | Polish intel. | CW  | (AB) |
| P03 | 22-7 | 1105 | 7727  | Tue | Polish intel. | CW  | (AB) |
| P03 | 22-7 | 1500 | 9179  | Tue | Polish Intel. | PSK | (AB) |
| P03 | 22-7 | 1505 | 9179  | Tue | Polish Intel. | PSK | (AB) |
| P03 | 22-7 | 1725 | 14410 | Tue | Polish intel. | PSK | (AB) |
| P03 | 22-7 | 1730 | 14410 | Tue | Polish intel. | PSK | (AB) |

|     |      |      |       |     |               |     |          |
|-----|------|------|-------|-----|---------------|-----|----------|
| P03 | 23-7 | 1030 | 9179  | Wed | Polish intel. | PSK | (AB)     |
| P03 | 23-7 | 1035 | 9179  | Wed | Polish intel. | PSK | (AB)     |
| P03 | 23-7 | 1100 | 7727  | Wed | Polish intel. | PSK | (AB)     |
| P03 | 23-7 | 1105 | 7727  | Wed | Polish intel. | PSK | (AB)     |
| P03 | 23-7 | 1310 | 13427 | Wed | Polish intel. | PSK | (AB)     |
| P03 | 23-7 | 1315 | 13427 | Wed | Polish intel. | PSK | (AB)     |
| P03 | 24-7 | 1950 | 8759  | Thu | Polish intel. | PSK | (AB)     |
| P03 | 24-7 | 1955 | 8759  | Thu | Polish intel. | PSK | (AB)     |
| P03 | 25-7 | 0530 | 7894  | Fri | Polish intel. | PSK | (AB)     |
| P03 | 25-7 | 0535 | 7894  | Fri | Polish intel. | PSK | (AB)     |
| P03 | 25-7 | 1100 | 9399  | Fri | Polish intel. | PSK | (AB)     |
| P03 | 25-7 | 1105 | 9399  | Fri | Polish intel. | PSK | (AB)     |
| P03 | 25-7 | 1500 | 9179  | Fri | Polish Intel. | PSK | (AB)     |
| P03 | 25-7 | 1505 | 9179  | Fri | Polish Intel. | PSK | (AB)     |
| P03 | 25-7 | 1515 | 20167 | Fri | Polish intel. | PSK | (AB-POL) |
| P03 | 25-7 | 1520 | 20167 | Fri | Polish intel. | PSK | (AB-POL) |
| P03 | 26-7 | 1020 | 7504  | Sat | Polish intel. | PSK | (AB)     |
| P03 | 26-7 | 1025 | 7504  | Sat | Polish intel. | PSK | (AB)     |
| P03 | 26-7 | 1245 | 6304  | Sat | Polish intel. | PSK | (AB)     |
| P03 | 26-7 | 1250 | 6304  | Sat | Polish intel. | PSK | (AB)     |
| P03 | 26-7 | 1310 | 13427 | Sat | Polish intel. | PSK | (AB)     |
| P03 | 26-7 | 1315 | 13427 | Sat | Polish intel. | PSK | (AB)     |
| P03 | 27-7 | 0530 | 7894  | Sun | Polish intel. | PSK | (AB)     |
| P03 | 27-7 | 0535 | 7894  | Sun | Polish intel. | PSK | (AB)     |
| P03 | 27-7 | 1020 | 7504  | Sun | Polish intel. | PSK | (AB)     |
| P03 | 27-7 | 1025 | 7504  | Sun | Polish intel. | PSK | (AB)     |
| P03 | 27-7 | 1100 | 9399  | Sun | Polish intel. | PSK | (AB)     |
| P03 | 27-7 | 1105 | 9399  | Sun | Polish intel. | PSK | (AB)     |
| P03 | 27-7 | 1220 | 18168 | Sun | Polish intel. | PSK | (AB)     |
| P03 | 27-7 | 1225 | 18168 | Sun | Polish intel. | PSK | (AB)     |
| P03 | 27-7 | 1245 | 6304  | Sun | Polish intel. | PSK | (AB)     |
| P03 | 27-7 | 1250 | 6304  | Sun | Polish intel. | PSK | (AB)     |
| P03 | 27-7 | 1515 | 20167 | Sun | Polish intel. | PSK | (AB)     |
| P03 | 27-7 | 1520 | 20167 | Sun | Polish intel. | PSK | (AB)     |
| P03 | 27-7 | 1725 | 14410 | Sun | Polish intel. | PSK | (AB)     |
| P03 | 27-7 | 1730 | 14410 | Sun | Polish intel. | PSK | (AB)     |
| P03 | 27-7 | 1950 | 8759  | Sun | Polish intel. | PSK | (AB)     |
| P03 | 27-7 | 1955 | 8759  | Sun | Polish intel. | PSK | (AB)     |
| P03 | 28-7 | 1030 | 9179  | Mon | Polish intel. | PSK | (AB)     |
| P03 | 28-7 | 1035 | 9179  | Mon | Polish intel. | PSK | (AB)     |
| P03 | 28-7 | 1220 | 18168 | Mon | Polish intel. | PSK | (AB)     |
| P03 | 28-7 | 1225 | 18168 | Mon | Polish intel. | PSK | (AB)     |

|      |      |      |       |     |               |                  |      |
|------|------|------|-------|-----|---------------|------------------|------|
| P03  | 29-7 | 1100 | 7727  | Tue | Polish intel. | CW               | (AB) |
| P03  | 29-7 | 1105 | 7727  | Tue | Polish intel. | CW               | (AB) |
| P03  | 29-7 | 1500 | 9179  | Tue | Polish Intel. | PSK              | (AB) |
| P03  | 29-7 | 1505 | 9179  | Tue | Polish Intel. | PSK              | (AB) |
| P03  | 29-7 | 1725 | 14410 | Tue | Polish intel. | PSK              | (AB) |
| P03  | 29-7 | 1730 | 14410 | Tue | Polish intel. | PSK              | (AB) |
| P03  | 30-7 | 1030 | 9179  | Wed | Polish intel. | PSK              | (AB) |
| P03  | 30-7 | 1035 | 9179  | Wed | Polish intel. | PSK              | (AB) |
| P03  | 30-7 | 1100 | 7727  | Wed | Polish intel. | PSK              | (AB) |
| P03  | 30-7 | 1105 | 7727  | Wed | Polish intel. | PSK              | (AB) |
| P03  | 30-7 | 1310 | 13427 | Wed | Polish intel. | PSK              | (AB) |
| P03  | 30-7 | 1315 | 13427 | Wed | Polish intel. | PSK              | (AB) |
| P03  | 31-7 | 1950 | 8759  | Thu | Polish intel. | PSK              | (AB) |
| P03  | 31-7 | 1955 | 8759  | Thu | Polish intel. | PSK              | (AB) |
| P03j | 2-7  | 0630 | 17535 | Wed | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 2-7  | 0635 | 17535 | Wed | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 7-7  | 0630 | 17535 | Mon | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 7-7  | 0635 | 17535 | Mon | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 9-7  | 0630 | 17535 | Wed | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 9-7  | 0635 | 17535 | Wed | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 14-7 | 0630 | 17535 | Mon | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 14-7 | 0635 | 17535 | Mon | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 16-7 | 0630 | 17535 | Wed | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 16-7 | 0635 | 17535 | Wed | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 21-7 | 0630 | 17535 | Mon | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 21-7 | 0635 | 17535 | Mon | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 23-7 | 0630 | 17535 | Wed | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 23-7 | 0635 | 17535 | Wed | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 28-7 | 0630 | 17535 | Mon | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 28-7 | 0635 | 17535 | Mon | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 30-7 | 0630 | 17535 | Wed | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03j | 30-7 | 0635 | 17535 | Wed | Polish intel. | QPSK 100Bd/504bp | (AB) |
| P03k | 1-7  | 1230 | 22998 | Tue | Polish intel. | BPSK 100Bd/480bp | (AB) |
| P03k | 1-7  | 1235 | 22998 | Tue | Polish intel. | BPSK 100Bd/480bp | (AB) |
| P03k | 2-7  | 1730 | 9431  | Wed | Polish intel. | BPSK 100Bd/480bp | (AB) |
| P03k | 2-7  | 1735 | 9431  | Wed | Polish intel. | BPSK 100Bd/480bp | (AB) |
| P03k | 5-7  | 0630 | 8196  | Sat | Polish intel. | BPSK 100Bd/480bp | (AB) |
| P03k | 5-7  | 0635 | 8196  | Sat | Polish intel. | BPSK 100Bd/480bp | (AB) |
| P03k | 6-7  | 0630 | 8196  | Sun | Polish intel. | BPSK 100Bd/480bp | (AB) |
| P03k | 6-7  | 0635 | 8196  | Sun | Polish intel. | BPSK 100Bd/480bp | (AB) |
| P03k | 9-7  | 1730 | 9431  | Wed | Polish intel. | BPSK 100Bd/480bp | (AB) |
| P03k | 9-7  | 1735 | 9431  | Wed | Polish intel. | BPSK 100Bd/480bp | (AB) |

|      |      |      |       |     |               |                  |          |
|------|------|------|-------|-----|---------------|------------------|----------|
| P03k | 12-7 | 0630 | 8196  | Sat | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 12-7 | 0635 | 8196  | Sat | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 12-7 | 1730 | 9431  | Sat | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 12-7 | 1735 | 9431  | Sat | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 13-7 | 0630 | 8196  | Sun | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 13-7 | 0635 | 8196  | Sun | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 16-7 | 1730 | 9431  | Wed | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 16-7 | 1735 | 9431  | Wed | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 19-7 | 0630 | 8196  | Sat | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 19-7 | 0635 | 8196  | Sat | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 19-7 | 1230 | 22998 | Sat | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 19-7 | 1235 | 22998 | Sat | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 19-7 | 1730 | 9431  | Sat | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 19-7 | 1735 | 9431  | Sat | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 20-7 | 0630 | 8196  | Sun | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 20-7 | 0635 | 8196  | Sun | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 22-7 | 1230 | 22998 | Tue | Polish intel. | BPSK 100Bd/480bp | (AB-POL) |
| P03k | 22-7 | 1235 | 22998 | Tue | Polish intel. | BPSK 100Bd/480bp | (AB-POL) |
| P03k | 23-7 | 1730 | 9431  | Wed | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 23-7 | 1735 | 9431  | Wed | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 26-7 | 0630 | 8196  | Sat | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 26-7 | 0635 | 8196  | Sat | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 26-7 | 1730 | 9431  | Sat | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 26-7 | 1735 | 9431  | Sat | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 27-7 | 0630 | 8196  | Sun | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 27-7 | 0635 | 8196  | Sun | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 30-7 | 1730 | 9431  | Wed | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03k | 30-7 | 1735 | 9431  | Wed | Polish intel. | BPSK 100Bd/480bp | (AB)     |
| P03l | 2-7  | 1315 | 16335 | Wed | Polish intel. | QPSK 100Bd/464bp | (AB)     |
| P03l | 2-7  | 1320 | 16335 | Wed | Polish intel. | QPSK 100Bd/464bp | (AB)     |
| P03l | 2-7  | 1345 | 13424 | Wed | Polish intel. | QPSK 100Bd/464bp | (AB)     |
| P03l | 2-7  | 1350 | 13424 | Wed | Polish intel. | QPSK 100Bd/464bp | (AB)     |
| P03l | 3-7  | 1200 | 9968  | Thu | Polish intel. | QPSK 100Bd/464bp | (AB)     |
| P03l | 3-7  | 1205 | 9968  | Thu | Polish intel. | QPSK 100Bd/464bp | (AB)     |
| P03l | 4-7  | 1315 | 16335 | Fri | Polish intel. | QPSK 100Bd/464bp | (AB)     |
| P03l | 4-7  | 1320 | 16335 | Fri | Polish intel. | QPSK 100Bd/464bp | (AB)     |
| P03l | 4-7  | 1345 | 13424 | Fri | Polish intel. | QPSK 100Bd/464bp | (AB)     |
| P03l | 4-7  | 1350 | 13424 | Fri | Polish intel. | QPSK 100Bd/464bp | (AB)     |
| P03l | 7-7  | 1200 | 9968  | Mon | Polish intel. | QPSK 100Bd/464bp | (AB)     |
| P03l | 7-7  | 1205 | 9968  | Mon | Polish intel. | QPSK 100Bd/464bp | (AB)     |
| P03l | 9-7  | 1345 | 13424 | Wed | Polish intel. | QPSK 100Bd/464bp | (AB)     |
| P03l | 9-7  | 1350 | 13424 | Wed | Polish intel. | QPSK 100Bd/464bp | (AB)     |

|      |      |      |       |     |                        |                                |      |
|------|------|------|-------|-----|------------------------|--------------------------------|------|
| P03I | 10-7 | 1200 | 9967  | Thu | Polish intel. off freq | QPSK 100Bd/464bp               | (AB) |
| P03I | 10-7 | 1205 | 9967  | Thu | Polish intel. off freq | QPSK 100Bd/464bp               | (AB) |
| P03I | 11-7 | 1315 | 16335 | Fri | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 11-7 | 1320 | 16335 | Fri | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 11-7 | 1345 | 13424 | Fri | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 11-7 | 1350 | 13424 | Fri | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 14-7 | 1200 | 9968  | Mon | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 14-7 | 1205 | 9968  | Mon | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 16-7 | 1315 | 16335 | Wed | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 16-7 | 1320 | 16335 | Wed | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 16-7 | 1345 | 13424 | Wed | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 16-7 | 1350 | 13424 | Wed | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 17-7 | 1200 | 9968  | Thu | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 17-7 | 1205 | 9968  | Thu | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 18-7 | 1315 | 16335 | Fri | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 18-7 | 1320 | 16335 | Fri | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 18-7 | 1345 | 13424 | Fri | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 18-7 | 1350 | 13424 | Fri | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 21-7 | 1200 | 9968  | Mon | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 21-7 | 1205 | 9968  | Mon | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 23-7 | 1315 | 16335 | Wed | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 23-7 | 1320 | 16335 | Wed | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 23-7 | 1345 | 13424 | Wed | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 23-7 | 1350 | 13424 | Wed | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 24-7 | 1200 | 9968  | Thu | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 24-7 | 1205 | 9968  | Thu | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 25-7 | 1315 | 16335 | Fri | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 25-7 | 1320 | 16335 | Fri | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 25-7 | 1345 | 13424 | Fri | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 25-7 | 1350 | 13424 | Fri | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 28-7 | 1200 | 9968  | Mon | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 28-7 | 1205 | 9968  | Mon | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 30-7 | 1315 | 16335 | Wed | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 30-7 | 1320 | 16335 | Wed | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 30-7 | 1345 | 13424 | Wed | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 30-7 | 1350 | 13424 | Wed | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 31-7 | 1200 | 9968  | Thu | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P03I | 31-7 | 1205 | 9968  | Thu | Polish intel.          | QPSK 100Bd/464bp               | (AB) |
| P07  | 2-7  | 1400 | 9368  | Wed | Russian intel.         | 8xQSPK/62.5Bd/125Hz+250Bd BPSK | (AB) |
| P07  | 2-7  | 1410 | 8185  | Wed | Russian intel.         | 8xQSPK/62.5Bd/125Hz+250Bd BPSK | (AB) |
| P07  | 2-7  | 1420 | 7704  | Wed | Russian intel.         | 8xQSPK/62.5Bd/125Hz+250Bd BPSK | (AB) |
| P07  | 2-7  | 1430 | 6872  | Wed | Russian intel.         | 8xQSPK/62.5Bd/125Hz+250Bd BPSK | (AB) |



|            |      |      |       |     |                                                                                                                           |                                |              |
|------------|------|------|-------|-----|---------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------|
| <b>P07</b> | 27-7 | 1440 | 5861  | Sun | Russian intel.                                                                                                            | 8xQSPK/62.5Bd/125Hz+250Bd BPSK | (AB)         |
| <b>P07</b> | 27-7 | 1450 | 5386  | Sun | Russian intel.                                                                                                            | 8xQSPK/62.5Bd/125Hz+250Bd BPSK | (AB)         |
| <b>P07</b> | 30-7 | 1400 | 9368  | Wed | Russian intel.                                                                                                            | 8xQSPK/62.5Bd/125Hz+250Bd BPSK | (AB)         |
| <b>P07</b> | 30-7 | 1410 | 8185  | Wed | Russian intel.                                                                                                            | 8xQSPK/62.5Bd/125Hz+250Bd BPSK | (AB)         |
| <b>P07</b> | 30-7 | 1420 | 7704  | Wed | Russian intel.                                                                                                            | 8xQSPK/62.5Bd/125Hz+250Bd BPSK | (AB)         |
| <b>P07</b> | 30-7 | 1430 | 6872  | Wed | Russian intel.                                                                                                            | 8xQSPK/62.5Bd/125Hz+250Bd BPSK | (AB)         |
| <b>P07</b> | 30-7 | 1440 | 5861  | Wed | Russian intel.                                                                                                            | 8xQSPK/62.5Bd/125Hz+250Bd BPSK | (AB)         |
| <b>P07</b> | 30-7 | 1450 | 5386  | Wed | Russian intel.                                                                                                            | 8xQSPK/62.5Bd/125Hz+250Bd BPSK | (AB)         |
| <b>Q26</b> | 18-7 | 1139 | 4542  | Fri | Message                                                                                                                   | 4+4 QPSK 75/1000 LSB           | (JPL)        |
| <b>Q26</b> | 19-7 | 1131 | 4542  | Sat | Message                                                                                                                   | 4+4 QPSK 75/1000 LSB           | (JPL)        |
| <b>S06</b> | 1-7  | 0400 | 11616 | Tue | 480 671 51 22723 15403 55473 ... 84726 42382 74852 671 52 00000 (wrong group count)                                       | USB                            | (Subilo)     |
| <b>S06</b> | 1-7  | 0420 | 9322  | Tue | 480 671 52 22723 15403 55473 ... 84726 42382 74852 671 52 00000                                                           | USB                            | (Subilo)     |
| <b>S06</b> | 2-7  | 0400 | 11616 | Wed | 480 932 40 31473 66755 14039 ... 33428 15981 37019 932 40 480 716 20 85217 21388 03176 ... 90659 06466 71420 716 20 00000 | USB                            | (Subilo)     |
| <b>S06</b> | 2-7  | 0420 | 9322  | Wed | 480 932 40 31473 66755 14039 ... 33428 15981 37019 932 40 480 716 20 85217 21388 03176 ... 90659 06466 71420 716 20 00000 | USB                            | (Subilo)     |
| <b>S06</b> | 3-7  | 0400 | 11616 | Thu | 480 932 40 31473 66755 14039 ... 33428 15981 37019 932 40 480 716 20 85217 21388 03176 ... 90659 06466 71420 716 20 00000 | USB                            | (Subilo)     |
| <b>S06</b> | 3-7  | 0420 | 9322  | Thu | 480 932 40 31473 66755 14039 ... 33428 15981 37019 932 40 480 716 20 85217 21388 03176 ... 90659 06466 71420 716 20 00000 | USB                            | (Subilo)     |
| <b>S06</b> | 4-7  | 0400 | 11616 | Fri | 480 480 480 00000                                                                                                         | USB                            | (Subilo)     |
| <b>S06</b> | 4-7  | 0420 | 9322  | Fri | 480 480 480 00000                                                                                                         | USB                            | (Subilo)     |
| <b>S06</b> | 4-7  | 2000 | 11149 | Fri | 842 842 842 00000                                                                                                         | USB                            | (Lac/HFD)    |
| <b>S06</b> | 4-7  | 2100 | 9205  | Fri | 842 842 842 00000                                                                                                         | USB                            | (AB/HFD/Lac) |
| <b>S06</b> | 7-7  | 0400 | 11616 | Mon | 480 952 60 95192 34094 85293 ... 15108 66524 17207 952 60 00000                                                           | USB                            | (Subilo/Lac) |
| <b>S06</b> | 7-7  | 0420 | 9322  | Mon | 480 952 60 95192 34094 85293 ... 15108 66524 17207 952 60 00000                                                           | USB                            | (Subilo/Lac) |
| <b>S06</b> | 8-7  | 0400 | 11616 | Tue | 480 952 60 95192 34094 85293 ... 15108 66524 17207 952 60 00000                                                           | USB                            | (Subilo)     |
| <b>S06</b> | 8-7  | 0420 | 9322  | Tue | 480 952 60 95192 34094 85293 ... 15108 66524 17207 952 60 00000                                                           | USB                            | (Subilo)     |
| <b>S06</b> | 9-7  | 0400 | 11616 | Wed | 480 376 24 31568 11295 06786 ... 35742 75892 26952 376 24 480 512 33 93649 94726 53363 ... 34330 83116 65517 512 33 00000 | USB                            | (Subilo)     |
| <b>S06</b> | 9-7  | 0420 | 9322  | Wed | 480 376 24 31568 11295 06786 ... 35742 75892 26952 376 24 480 512 33 93649 94726 53363 ... 34330 83116 65517 512 33 00000 | USB                            | (Subilo)     |
| <b>S06</b> | 10-7 | 0400 | 11616 | Thu | 480 376 24 31568 11295 06786 ... 35742 75892 26952 376 24 480 512 33 93649 94726 53363 ... 34330 83116 65517 512 33 00000 | USB                            | (Subilo)     |
| <b>S06</b> | 10-7 | 0420 | 9322  | Thu | 480 376 24 31568 11295 06786 ... 35742 75892 26952 376 24 480 512 33 93649 94726 53363 ... 34330 83116 65517 512 33 00000 | USB                            | (Subilo)     |
| <b>S06</b> | 11-7 | 0400 | 11616 | Fri | 480 480 480 00000                                                                                                         | USB                            | (Subilo)     |
| <b>S06</b> | 11-7 | 0420 | 9322  | Fri | 480 480 480 00000                                                                                                         | USB                            | (Subilo)     |
| <b>S06</b> | 14-7 | 0400 | 11616 | Mon | 480 937 51 79761 66275 88448 ... 78853 38077 65496 937 51 00000                                                           | USB                            | (Subilo)     |
| <b>S06</b> | 14-7 | 0420 | 9322  | Mon | 480 937 51 79761 66275 88448 ... 78853 38077 65496 937 51 00000                                                           | USB                            | (Subilo)     |
| <b>S06</b> | 15-7 | 0400 | 11616 | Tue | 480 937 51 79761 66275 88448 ... 78853 38077 65496 937 51 00000                                                           | USB                            | (Subilo)     |

|             |      |      |       |     |                                                                                                                                 |     |                  |
|-------------|------|------|-------|-----|---------------------------------------------------------------------------------------------------------------------------------|-----|------------------|
| <b>S06</b>  | 15-7 | 0420 | 9322  | Tue | 480 937 51 79761 66275 88448 ... 78853 38077 65496 937 51 00000                                                                 | USB | (Subilo)         |
| <b>S06</b>  | 16-7 | 0400 | 11616 | Wed | 480 125 34 18215 03625 04260 ... 78234 79842 20509 125 34 480 693 25 88180 05206 80703 ... 93961 97555 30498 00080 693 25 00000 | USB | (Subilo)         |
| <b>S06</b>  | 16-7 | 0420 | 9322  | Wed | 480 125 34 18215 03625 04260 ... 78234 79842 20509 125 34 480 693 25 88180 05206 80703 ... 93961 97555 30498 00080 693 25 00000 | USB | (Subilo)         |
| <b>S06</b>  | 17-7 | 0400 | 11616 | Thu | 480 125 34 18215 03625 04260 ... 78234 79842 20509 125 34 480 693 25 88180 05206 80703 ... 93961 97555 30498 00080 693 25 00000 | USB | (Subilo)         |
| <b>S06</b>  | 17-7 | 0420 | 9322  | Thu | 480 125 34 18215 03625 04260 ... 78234 79842 20509 125 34 480 693 25 88180 05206 80703 ... 93961 97555 30498 00080 693 25 00000 | USB | (Subilo)         |
| <b>S06</b>  | 18-7 | 0400 | 11616 | Fri | 480 480 480 00000                                                                                                               | USB | (Subilo)         |
| <b>S06</b>  | 18-7 | 0420 | 9322  | Fri | 480 480 480 00000                                                                                                               | USB | (Subilo)         |
| <b>S06</b>  | 18-7 | 2000 | 11149 | Fri | 842 842 842 00000                                                                                                               | USB | (AB)             |
| <b>S06</b>  | 18-7 | 2100 | 9205  | Fri | 842 842 842 00000                                                                                                               | USB | (AB)             |
| <b>S06</b>  | 21-7 | 0400 | 11616 | Mon | 480 751 60 43412 83475 97095 ... 18541 18541 54004 751 60 00000                                                                 | USB | (Subilo)         |
| <b>S06</b>  | 21-7 | 0420 | 9322  | Mon | 480 751 60 43412 83475 97095 ... 18541 18541 54004 751 60 00000                                                                 | USB | (Subilo)         |
| <b>S06</b>  | 22-7 | 0400 | 11616 | Tue | 480 751 60 43412 83475 97095 ... 18541 18541 54004 751 60 00000                                                                 | USB | (Subilo/Lac)     |
| <b>S06</b>  | 22-7 | 0420 | 9322  | Tue | 480 751 60 43412 83475 97095 ... 18541 18541 54004 751 60 00000                                                                 | USB | (Subilo/Lac)     |
| <b>S06</b>  | 23-7 | 0400 | 11616 | Wed | 480 179 20 26218 59959 85652 ... 79121 74756 82925 179 20 480 236 40 06856 34405 53999 ... 32684 43423 26523 236 40 00000       | USB | (Subilo/Lac)     |
| <b>S06</b>  | 23-7 | 0420 | 9322  | Wed | 480 179 20 26218 59959 85652 ... 79121 74756 82925 179 20 480 236 40 06856 34405 53999 ... 32684 43423 26523 236 40 00000       | USB | (Subilo/Lac)     |
| <b>S06</b>  | 24-7 | 0400 | 11616 | Thu | 480 179 20 26218 59959 85652 ... 79121 74756 82925 179 20 480 236 40 06856 34405 53999 ... 32684 43423 26523 236 40 00000       | USB | (Subilo)         |
| <b>S06</b>  | 24-7 | 0420 | 9322  | Thu | 480 179 20 26218 59959 85652 ... 79121 74756 82925 179 20 480 236 40 06856 34405 53999 ... 32684 43423 26523 236 40 00000       | USB | (Subilo)         |
| <b>S06</b>  | 25-7 | 0400 | 11616 | Fri | 480 480 480 00000                                                                                                               | USB | (Subilo)         |
| <b>S06</b>  | 25-7 | 0420 | 9322  | Fri | 480 480 480 00000                                                                                                               | USB | (Subilo)         |
| <b>S06</b>  | 28-7 | 0400 | 11616 | Mon | 480 263 57 44300 87924 84463 ... 55795 99280 76892 263 57 00000                                                                 | USB | (Subilo)         |
| <b>S06</b>  | 28-7 | 0420 | 9322  | Mon | 480 263 57 44300 87924 84463 ... 55795 99280 76892 263 57 00000                                                                 | USB | (Subilo)         |
| <b>S06</b>  | 29-7 | 0400 | 11616 | Tue | 480 263 57 44300 87924 84463 ... 55795 99280 76892 263 57 00000                                                                 | USB | (Subilo/Lac)     |
| <b>S06</b>  | 29-7 | 0420 | 9322  | Tue | 480 263 57 44300 87924 84463 ... 55795 99280 76892 263 57 00000                                                                 | USB | (Subilo/Lac)     |
| <b>S06</b>  | 30-7 | 0400 | 11616 | Wed | 623 19 00000 Nothing else                                                                                                       | USB | (Subilo)         |
| <b>S06</b>  | 31-7 | 0400 | 11616 | Thu | 480 197 36 71551 65328 29280 ... 39319 40533 78262 197 36 480 623 19 08067 88297 60736 ... 09515 19929 06093 623 19 00000       | USB | (Subilo)         |
| <b>S06</b>  | 31-7 | 0420 | 9322  | Thu | 480 197 36 71551 65328 29280 ... 39319 40533 78262 197 36 480 623 19 08067 88297 60736 ... 09515 19929 06093 623 19 00000       | USB | (Subilo)         |
| <b>S11a</b> | 1-7  | 0445 | 9968  | Tue | 798/40 Vnimanaye 72215 24884 46195 ... 80915 56732 02752 Vnimanaye (msg rptd) Konets                                            | USB | (AB-POL/Su-bilo) |
| <b>S11a</b> | 1-7  | 1400 | 9448  | Tue | 422/00 Konets                                                                                                                   | USB | (AB/Lac)         |
| <b>S11a</b> | 2-7  | 0510 | 16357 | Wed | 659/00 Konets                                                                                                                   | USB | (AB/Lac)         |
| <b>S11a</b> | 2-7  | 0725 | 18773 | Wed | 383/33 Vnimanaye 84524 19474 22109 ... 87332 67244 50761 Vnimanaye (msg rptd) Konets                                            | USB | (AB/Subilo)      |
| <b>S11a</b> | 2-7  | 1850 | 12457 | Wed | 284/40 Vnimanaye 94298 30277 92596 ... 19237 67888 29236 Vnimanaye (msg rptd) Konets                                            | USB | (AB/Subilo/Lac)  |

|      |      |      |       |     |                                                                                      |     |                 |
|------|------|------|-------|-----|--------------------------------------------------------------------------------------|-----|-----------------|
| S11a | 3-7  | 0445 | 9968  | Thu | 798/40 Vnimanaye 72215 24884 46195 ... 80915 56732 02752 Vnimanaye (msg rptd) Konets | USB | (AB/Subilo/Lac) |
| S11a | 3-7  | 0700 | 9339  | Thu | 477/00 Konets                                                                        | USB | (AB)            |
| S11a | 4-7  | 0725 | 18773 | Fri | 383/33 Vnimanaye 84524 19474 22109 ... 87332 67244 50761 Vnimanaye (msg rptd) Konets | USB | (AB/Subilo/Lac) |
| S11a | 4-7  | 0915 | 6814  | Fri | 487/00 Konets                                                                        | USB | (AB/Lac)        |
| S11a | 4-7  | 1400 | 9448  | Fri | 420/00 Konets                                                                        | USB | (AB/Lac)        |
| S11a | 5-7  | 0830 | 5149  | Sat | 372/00 Konets                                                                        | USB | (AB/Lac)        |
| S11a | 5-7  | 1430 | 12984 | Sat | 284/40 Vnimanaye 94298 30277 92596 ... 19237 67888 29236 Vnimanaye (msg rptd) Konets | USB | (AB/Subilo)     |
| S11a | 5-7  | 1850 | 12457 | Sat | 284/40 Vnimanaye 94298 30277 92596 ... 19237 67888 29236 Vnimanaye (msg rptd) Konets | USB | (AB/Subilo/Lac) |
| S11a | 6-7  | 0830 | 5149  | Sun | 370/00 Konets                                                                        | USB | (AB/Lac)        |
| S11a | 7-7  | 0510 | 16357 | Mon | 657/38 Vnimanaye 53453 83200 00184 ... 50845 84174 38544 Vnimanaye (msg rptd) Konets | USB | (AB/Subilo/Lac) |
| S11a | 7-7  | 0700 | 9339  | Mon | 475/00 Konets                                                                        | USB | (AB/Lac)        |
| S11a | 7-7  | 0915 | 6814  | Mon | 486/34 Vnimanaye 42493 45795 37533 ... 93116 74619 81428 Vnimanaye (msg rptd) Konets | USB | (AB/Subilo/Lac) |
| S11a | 8-7  | 0445 | 9968  | Tue | 797/00 Konets                                                                        | USB | (AB)            |
| S11a | 8-7  | 1400 | 9448  | Tue | 429/00 Konets                                                                        | USB | (AB/Lac)        |
| S11a | 9-7  | 0510 | 16357 | Wed | 657/38 Vnimanaye 53453 83200 00184 ... 50845 84174 38544 Vnimanaye (msg rptd) Konets | USB | (AB/Subilo)     |
| S11a | 9-7  | 0725 | 18773 | Wed | 380/00 Konets                                                                        | USB | (AB)            |
| S11a | 9-7  | 1850 | 12457 | Wed | 281/00 Konets                                                                        | USB | (AB)            |
| S11a | 10-7 | 0445 | 9968  | Thu | 796/00 Konets                                                                        | USB | (AB)            |
| S11a | 10-7 | 0700 | 9339  | Thu | 477/00 Konets                                                                        | USB | (AB/Lac)        |
| S11a | 11-7 | 0725 | 18773 | Fri | 385/00 Konets                                                                        | USB | (AB/Lac)        |
| S11a | 11-7 | 0915 | 6814  | Fri | 486/34 Vnimanaye 42493 45795 37533 ... 93116 74619 81428 Vnimanaye (msg rptd) Konets | USB | (AB/Subilo/Lac) |
| S11a | 11-7 | 1400 | 9448  | Fri | 424/00 Konets                                                                        | USB | (AB/Lac)        |
| S11a | 12-7 | 0830 | 5149  | Sat | 373/00 Konets                                                                        | USB | (AB/Lac)        |
| S11a | 12-7 | 1850 | 12457 | Sat | 280/00 Konets                                                                        | USB | (AB/Lac)        |
| S11a | 13-7 | 0830 | 5149  | Sun | 371/00 Konets                                                                        | USB | (AB)            |
| S11a | 14-7 | 0510 | 16357 | Mon | 655/00 Konets                                                                        | USB | (AB)            |
| S11a | 14-7 | 0700 | 9339  | Mon | 472/00 Konets                                                                        | USB | (AB/Lac)        |
| S11a | 14-7 | 0915 | 6814  | Mon | 483/00 Konets                                                                        | USB | (AB-POL/Lac)    |
| S11a | 15-7 | 0445 | 9968  | Tue | 794/00 Konets                                                                        | USB | (AB)            |
| S11a | 15-7 | 1400 | 9448  | Tue | 424/00 Konets                                                                        | USB | (AB/Lac)        |
| S11a | 16-7 | 0510 | 16357 | Wed | 651/00 Konets                                                                        | USB | (AB/Lac)        |
| S11a | 16-7 | 0725 | 18773 | Wed | 384/00 Konets                                                                        | USB | (AB)            |
| S11a | 16-7 | 1850 | 12457 | Wed | 281/00 Konets                                                                        | USB | (AB/Lac)        |
| S11a | 17-7 | 0445 | 9968  | Thu | 799/00 Konets                                                                        | USB | (AB)            |
| S11a | 17-7 | 0700 | 9339  | Thu | 472/00 Konets                                                                        | USB | (AB)            |
| S11a | 18-7 | 0725 | 18773 | Fri | 382/00 Konets                                                                        | USB | (AB-POL)        |
| S11a | 18-7 | 0915 | 6814  | Fri | 481/00 Konets                                                                        | USB | (AB-POL)        |
| S11a | 18-7 | 1400 | 9448  | Fri | 422/00 Konets                                                                        | USB | (AB)            |
| S11a | 19-7 | 0830 | 5149  | Sat | 378/36 Vnimanaye 64802 02645 08297 ... 77752 50640 74794 Vnimanaye (msg rptd) Konets | USB | (AB/Subilo)     |
| S11a | 19-7 | 1850 | 12457 | Sat | 280/00 Konets                                                                        | USB | (AB)            |
| S11a | 20-7 | 0830 | 5149  | Sun | 378/36 Vnimanaye 64802 02645 08297 ... 77752 50640 74794 Vnimanaye (msg rptd) Konets | USB | (AB/Subilo/Lac) |
| S11a | 21-7 | 0700 | 9339  | Mon | 471/00 Konets                                                                        | USB | (AB/Lac)        |

|             |      |      |       |     |                                                                                      |     |                 |
|-------------|------|------|-------|-----|--------------------------------------------------------------------------------------|-----|-----------------|
| <b>S11a</b> | 21-7 | 0915 | 6814  | Mon | 487/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 22-7 | 0445 | 9968  | Tue | 798/00 Konets                                                                        | USB | (AB/Lac)        |
| <b>S11a</b> | 22-7 | 1400 | 9448  | Tue | 420/37 Vnimanije 76713 37126 97107 ... 10068 55927 59646 Vnimanije (msg rptd) Konets | USB | (AB/Subilo/Lac) |
| <b>S11a</b> | 23-7 | 0725 | 18773 | Wed | 385/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 23-7 | 1850 | 12457 | Wed | 286/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 24-7 | 0445 | 9968  | Thu | 796/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 24-7 | 0700 | 9339  | Thu | 477/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 25-7 | 0725 | 18773 | Fri | 387/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 25-7 | 0915 | 6814  | Fri | 484/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 25-7 | 1400 | 9448  | Fri | 420/37 Vnimanije 76713 37126 97107 ... 10068 55927 59646 Vnimanije (msg rptd) Konets | USB | (AB/Subilo)     |
| <b>S11a</b> | 26-7 | 0830 | 5149  | Sat | 370/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 26-7 | 1850 | 12457 | Sat | 282/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 27-7 | 0830 | 5149  | Sun | 379/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 28-7 | 0510 | 16357 | Mon | 655/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 28-7 | 0700 | 9339  | Mon | 479/36 Vnimanije 10284 79466 80994 ... 19148 74756 96634 Vnimanije (msg rptd) Konets | USB | (AB/Subilo/Lac) |
| <b>S11a</b> | 28-7 | 0915 | 6814  | Mon | 482/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 29-7 | 0445 | 9968  | Tue | 798/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 29-7 | 1400 | 9448  | Tue | 426/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 30-7 | 0510 | 16357 | Wed | 659/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 30-7 | 0725 | 18773 | Wed | 384/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 30-7 | 1850 | 12457 | Wed | 286/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 31-7 | 0445 | 9968  | Thu | 794/00 Konets                                                                        | USB | (AB)            |
| <b>S11a</b> | 31-7 | 0700 | 9339  | Thu | 479/36 Vnimanije 10284 79466 80994 ... 19148 74756 96634 Vnimanije (msg rptd) Konets | USB | (AB/Subilo)     |
| <b>UM04</b> | 1-7  | 0700 | 4735  | Tue | VVV VVV PROMRCh = 01 07 = 1000 0710 0740 0850 1390 ... 0800 0660 0690 0800 1230 = AR | CW  | (Subilo)        |
| <b>UM04</b> | 2-7  | 0700 | 4735  | Wed | VVV VVV PROMRCh = 02 07 = 1000 0700 0730 0840 1390 ... 0800 0660 0690 0800 1230 = AR | CW  | (Subilo)        |
| <b>UM04</b> | 3-7  | 0700 | 4735  | Thu | VVV VVV PROMRCh = 03 07 = 1000 0700 0730 0850 1390 ... 0800 0660 0690 0800 1230 = AR | CW  | (Subilo)        |
| <b>UM04</b> | 4-7  | 0659 | 4735  | Fri | VVV VVV PROMRCh = 04 07 = 1000 0710 0740 0850 1390 ... 0800 0670 0700 0810 1230 = AR | CW  | (AB-GRC)        |
| <b>UM04</b> | 5-7  | 0700 | 4735  | Sat | VVV VVV PROMRCh = 05 07 = 1000 0720 0750 0860 1390 ... 0800 0680 0710 0820 1230 = AR | CW  | (AB-GRC)        |
| <b>UM04</b> | 6-7  | 0700 | 4735  | Sun | VVV VVV PROMRCh = 06 07 = 1000 0720 0750 0860 1390 ... 0800 0680 0710 0820 1220 = AR | CW  | (AB-HNG)        |
| <b>UM04</b> | 7-7  | 0700 | 4735  | Mon | VVV VVV PROMRCh = 07 07 = 1000 0710 0740 0860 1390 ... 0800 0670 0700 0810 1220 = AR | CW  | (Subilo)        |
| <b>UM04</b> | 8-7  | 0700 | 4735  | Tue | VVV VVV PROMRCh = 08 07 = 1000 0700 0730 0840 1380 ... 0800 0660 0690 0800 1220 = AR | CW  | (AB-HNG)        |
| <b>UM04</b> | 9-7  | 0700 | 4735  | Wed | VVV VVV PROMRCh = 09 07 = 1000 0700 0730 0840 1380 ... 0800 0660 0690 0800 1220 = AR | CW  | (Subilo)        |
| <b>UM04</b> | 10-7 | 0700 | 4735  | Thu | VVV VVV PROMRCh = 10 07 = 1000 0700 0740 0840 1380 ... 0800 0760 0690 0800 1220 = AR | CW  | (AB-HNG)        |
| <b>UM04</b> | 11-7 | 0703 | 4735  | Fri | VVV VVV PROMRCh = 11 07 = 1000 0680 0720 0830 1370 ... 0800 0650 0680 0790 1220 = AR | CW  | (AB-GRC)        |
| <b>UM04</b> | 12-7 | 0700 | 4735  | Sat | VVV VVV PROMRCh = 12 07 = 1000 0680 0710 0830 1380 ... 0800 0650 0680 0790 1220 = AR | CW  | (Subilo)        |
| <b>UM04</b> | 13-7 | 0700 | 4735  | Sun | VVV VVV PROMRCh = 13 07 = 1000 0690 0720 0830 1380 ... 0800 0650 0680 0790 1220 = AR | CW  | (AB-HNG)        |
| <b>UM04</b> | 14-7 | 0701 | 4735  | Mon | VVV VVV PROMRCh = 14 07 = 1000 0690 0720 0840 1380 ... 0800 0650 0680 0790 1220 = AR | CW  | (AB-GRC)        |
| <b>UM04</b> | 15-7 | 0700 | 4735  | Tue | VVV VVV PROMRCh = 15 07 = 1000 0690 0720 0830 1380 ... 0800 0650 0680 0790 1210 = AR | CW  | (AB-HNG)        |
| <b>UM04</b> | 16-7 | 0700 | 4735  | Wed | VVV VVV PROMRCh = 16 07 = 1000 0690 0720 0830 1380 ... 0800 0660 0690 0800 1210 = AR | CW  | (Subilo)        |
| <b>UM04</b> | 17-7 | 0659 | 4735  | Thu | VVV VVV PROMRCh = 17 07 = 1000 0690 0720 0830 1370 ... 0800 0650 0680 0790 1210 = AR | CW  | (AB-GRC)        |
| <b>UM04</b> | 18-7 | 0700 | 4735  | Fri | VVV VVV PROMRCh = 18 07 = 1000 0690 0720 0840 1380 ... 0800 0660 0690 0800 1210 = AR | CW  | (Subilo)        |
| <b>UM04</b> | 19-7 | 0700 | 4735  | Sat | VVV VVV PROMRCh = 19 07 = 1000 0700 0730 0840 1370 ... 0800 0660 0690 0800 1210 = AR | CW  | (AB-GRC)        |

|      |      |      |       |     |                                                                                                                  |     |                  |
|------|------|------|-------|-----|------------------------------------------------------------------------------------------------------------------|-----|------------------|
| UM04 | 20-7 | 0700 | 4735  | Sun | VVV VVV PROMRCh = 20 07 = 1000 0700 0730 0840 1370 ... 0800 0670 0690 0810 1210 = AR                             | CW  | (AB-HNG)         |
| UM04 | 21-7 | 0701 | 4735  | Mon | VVV VVV PROMRCh = 21 07 = 1000 0700 0730 0840 1380 ... 0800 0670 0700 0810 1210 = AR                             | CW  | (AB-GRC)         |
| UM04 | 22-7 | 0700 | 4735  | Tue | VVV VVV PROMRCh = 22 07 = 1000 0700 0740 0850 1370 ... 0800 0670 0700 0810 1210 = AR                             | CW  | (Subilo)         |
| UM04 | 23-7 | 0700 | 4735  | Wed | VVV VVV PROMRCh = 23 07 = 1000 0700 0730 0840 1370 ... 0800 0670 0700 0810 1210 = AR                             | CW  | (AB-HNG)         |
| UM04 | 24-7 | 0700 | 4735  | Thu | VVV VVV PROMRCh = 24 07 = 1000 0700 0740 0840 1370 ... 0800 0670 0700 0810 1210 = AR                             | CW  | (Subilo)         |
| UM04 | 25-7 | 0700 | 4735  | Fri | VVV VVV PROMRCh = 25 07 = 1000 0710 0730 0860 1380 ... 0800 0680 0710 0820 1210 = AR                             | CW  | (AB-GRC)         |
| UM04 | 26-7 | 0700 | 4735  | Sat | VVV VVV PROMRCh = 26 07 = 1000 0710 0740 0850 1370 ... 0800 0680 0700 0810 1200 = AR                             | CW  | (AB-GRC)         |
| UM04 | 27-7 | 0701 | 4735  | Sun | VVV VVV PROMRCh = 27 07 = 1000 0710 0740 0850 1370 ... 0800 0680 0710 0820 1200 = AR                             | CW  | (AB-HNG)         |
| UM04 | 28-7 | 0659 | 4735  | Mon | VVV VVV PROMRCh = 28 07 = 1000 0720 0750 0860 1370 ... 0800 0680 0710 0820 1200 = AR                             | CW  | (AB-GRC)         |
| UM04 | 29-7 | 0700 | 4735  | Tue | VVV VVV PROMRCh = 29 07 = 1000 0720 0750 0860 1370 ... 0800 0690 0720 0830 1200 = AR                             | CW  | (AB)             |
| UM04 | 30-7 | 0700 | 4735  | Wed | VVV VVV PROMRCh = 30 07 = 1000 0730 0760 0870 1370 ... 0800 0690 0700 0830 1200 = AR                             | CW  | (AB-HNG)         |
| UM04 | 31-7 | 0659 | 4735  | Thu | VVV VVV PROMRCh = 31 07 = 1000 0730 0760 0870 1370 ... 0800 0690 0720 0830 1200 = AR                             | CW  | (AB-GRC)         |
| V07  | 6-7  | 0700 | 13978 | Sun | 931 1 4310 103 16103 61050 36949 ... 68663 14250 89009 000 000 cut out middle of group 10                        | USB | (Lac)            |
| V07  | 6-7  | 0720 | 13378 | Sun | 931 1 4310 103 16103 61050 36949 ... 68663 14250 89009 000 000 last zero cut out                                 | USB | (Lac)            |
| V07  | 6-7  | 0740 | 12178 | Sun | 931 1 4310 103 16103 61050 36949 ... 68663 14250 89009 000 000                                                   | USB | (Lac)            |
| V07  | 13-7 | 0700 | 13978 | Sun | 931 931 931 1 8777 110 8777 110 98351 29198 01434 ... 77867 70200 25294 000 000                                  | USB | (AB-KOR/Dan/Lac) |
| V07  | 13-7 | 0720 | 13378 | Sun | 931 931 931 1 8777 110 8777 110 98351 29198 01434 ... 77867 70200 25294 000 000                                  | USB | (AB-KOR/Lac)     |
| V07  | 13-7 | 0740 | 12178 | Sun | 931 931 931 1 8777 110 8777 110 98351 29198 01434 ... 77867 70200 25294 000 000                                  | USB | (AB-KOR/lac)     |
| V07  | 20-7 | 0700 | 13978 | Sun | 931 931 931 1 3589 125 3589 125 69856 62589 64993 ... 14942 65583 06264 000 000                                  | USB | (AB/Dan/Lac)     |
| V07  | 20-7 | 0720 | 13378 | Sun | 931 931 931 1 3589 125 3589 125 69856 62589 64993 ... 14942 65583 06264 000 000                                  | USB | (AB-KOR/lac)     |
| V07  | 20-7 | 0740 | 12178 | Sun | 931 931 931 1 3589 125 3589 125 69856 62589 64993 ... 14942 65583 06264 000 000                                  | USB | (AB-KOR/lac)     |
| V07  | 27-7 | 0700 | 13978 | Sun | 931 931 931 1 3242 104 3242 104 79392 63873 10119 ... 73468 47389 38971 000 000 (restart after the callup)       | USB | (AB/Dan/Lac)     |
| V07  | 27-7 | 0700 | 13978 | Sun | 931 1 3242 104 went off air after preamble, restarted with call ID                                               | USB | (Lac)            |
| V07  | 27-7 | 0720 | 13378 | Sun | 931 931 931 1 3242 104 3242 104 79392 63873 10119 ... 73468 47389 38971 000 000                                  | USB | (AB-KOR/lac)     |
| V07  | 27-7 | 0740 | 12178 | Sun | 931 931 931 1 3242 104 3242 104 79392 63873 10119 ... 73468 47389 38971 000 000                                  | USB | (AB-KOR/lac)     |
| V13  | 2-7  | 0200 | 8169  | Wed | New Star Broadcasting. Station 1b. Messages to units 2073, 5127, 6220                                            | USB | (AVX/FSpy)       |
| V13  | 3-7  | 0000 | 19052 | Thu | New Star Broadcasting. Station 1c. Messages to units 6139, 7800, 9454                                            | USB | (AVX/FSpy)       |
| V13  | 6-7  | 0000 | 18040 | Sun | New Star Broadcasting. Station 4. Messages to units 0304, 4192, 6492                                             | USB | (FSpy)           |
| V13  | 6-7  | 0100 | 21000 | Sun | New Star Broadcasting. Station 1c. Messages to units 0448, 5230, 6533                                            | USB | (FSpy)           |
| V13  | 6-7  | 0130 | 18040 | Sun | New Star Broadcasting. Station 3. Messages to units 2319, 5666, 5807                                             | USB | (FSpy)           |
| V13  | 6-7  | 0300 | 9276  | Sun | New Star Broadcasting. Station 2. Messages to units 3863, 8435, 9762                                             | USB | (FSpy)           |
| V13  | 18-7 | 0000 | 18040 | Fri | New Star Broadcasting. Station 4. Messages to units 0081, 2308, 9031                                             | USB | (FSpy)           |
| V13  | 22-7 | 0030 | 15890 | Tue | New Star Broadcasting. Station 3. Messages to units 0623, 3060, 8731                                             | USB | (FSpy)           |
| V13  | 22-7 | 0100 | 20025 | Tue | New Star Broadcasting. Station 4. Messages to units 2672, 6163, 9739                                             | USB | (FSpy)           |
| V13  | 22-7 | 0200 | 21000 | Tue | New Star Broadcasting. Station 1. Messages to units 3387, 4451, 6448. Changed to 8169 kHz during the intro music | USB | (FSpy)           |
| V13  | 22-7 | 0300 | 9276  | Tue | New Star Broadcasting. Station 2. Messages to units 2407, 3761, 8329                                             | USB | (FSpy/AVX)       |
| V13  | 27-7 | 0000 | 15890 | Sun | New Star Broadcasting. Station 3. Messages to units 0360, 5074, 8455                                             | USB | (FSpy)           |
| V13  | 27-7 | 0030 | 18040 | Sun | New Star Broadcasting. Station 4. Messages to units 0482, 1987, 8252                                             | USB | (FSpy)           |

|      |      |      |       |     |                                                                      |                 |           |
|------|------|------|-------|-----|----------------------------------------------------------------------|-----------------|-----------|
| V13  | 29-7 | 0130 | 21000 | Tue | New Star Broadcasting. Station 1. Messages to units 2291, 6582, 7111 | USB             | (FSpy)    |
| V26  | 12-7 | 1141 | 4156  | Sat | Message //9042 kHz                                                   | USB             | (JPL)     |
| V26  | 12-7 | 1141 | 9042  | Sat | Message //4156 kHz                                                   | USB             | (JPL)     |
| V26  | 13-7 | 1144 | 4156  | Sun | Message //9042 kHz                                                   | USB             | (JPL)     |
| V26  | 13-7 | 1144 | 9052  | Sun | Message //4156 kHz                                                   | USB             | (JPL)     |
| V26  | 31-7 | 1144 | 4156  | Thu | Message //9042 kHz                                                   | USB             | (JPL)     |
| V26  | 31-7 | 1144 | 9042  | Thu | Message //4156 kHz                                                   | USB             | (JPL)     |
| X--  | 22-7 | 0535 | 14375 | Tue | Russian intel.                                                       | MFSK-13/MFSK-21 | (AB)      |
| X06  | 3-7  | 0730 | 19511 | Thu | MFA Moscow clg 314265: Russian embassy Antananarivo                  | MFSK-6          | (Moon)    |
| X06  | 4-7  | 1018 | 14824 | Fri | MFA Moscow clg 625413: Russian embassy Tel Aviv                      | MFSK-6          | (Moon)    |
| X06  | 11-7 | 0650 | 11555 | Fri | MFA Moscow clg 341265: unid Russian embassy                          | MFSK-6          | (AB/Moon) |
| X06  | 11-7 | 0824 | 11556 | Fri | MFA Moscow clg 615243: Russian Permanent Mission to the UN, Geneva   | MFSK-6          | (AB)      |
| X06  | 11-7 | 0829 | 12177 | Fri | MFA Moscow clg 356412: Russian embassy Berlin                        | MFSK-6          | (AB)      |
| X06  | 14-7 | 0939 | 19235 | Mon | MFA Moscow clg 463125: Russian embassy Rabat                         | MFSK-6          | (Moon)    |
| X06  | 16-7 | 0647 | 15819 | Wed | MFA Moscow clg 256341: Russian embassy Beirut                        | MFSK-6          | (AB/Moon) |
| X06  | 16-7 | 0652 | 14405 | Wed | MFA Moscow clg 256341: Russian embassy Beirut                        | MFSK-6/AM       | (AB/Moon) |
| X06  | 16-7 | 0701 | 12150 | Wed | MFA Moscow clg 256341: Russian embassy Beirut                        | MFSK-6          | (AB/T101) |
| X06  | 16-7 | 1111 | 16115 | Wed | MFA Moscow clg 215346: Russian embassy Mumbai                        | MFSK-6          | (Moon)    |
| X06  | 17-7 | 0914 | 18197 | Thu | MFA Moscow clg 645321: Russian Consulate General Ho Chi Minh City    | MFSK-6          | (Moon)    |
| X06  | 21-7 | 0723 | 10453 | Mon | MFA Moscow clg 432516: Russian embassy Bern                          | MFSK-6          | (RO)      |
| X06  | 21-7 | 0809 | 13395 | Mon | MFA Moscow clg 532614: Russian embassy Paris                         | MFSK-6          | (RO)      |
| X06  | 22-7 | 0806 | 13420 | Tue | MFA Moscow clg 534216: Russian embassy Baghdad                       | MFSK-6          | (AB/Moon) |
| X06  | 22-7 | 0810 | 17523 | Tue | MFA Moscow clg 542136: Russian embassy Beijing                       | MFSK-6          | (AB/RO)   |
| X06  | 22-7 | 1029 | 17470 | Tue | MFA Moscow clg 216354: Russian Consulate General Chennai             | MFSK-6          | (AB/RO)   |
| X06  | 22-7 | 1029 | 17470 | Tue | MFA Moscow clg 216354: Russian Consulate General Chennai             | MFSK-6          | (RO)      |
| X06  | 23-7 | 0732 | 10814 | Wed | MFA Moscow clg 412356: Russian embassy Budapest                      | MFSK-6          | (RO)      |
| X06  | 23-7 | 0810 | 13419 | Wed | MFA Moscow clg 465132: Russian embassy Sofia                         | MFSK-6          | (AB/RO)   |
| X06  | 23-7 | 0811 | 13419 | Wed | MFA Moscow clg 465132: Russian embassy Sofia                         | MFSK-6          | (RO)      |
| X06  | 23-7 | 0827 | 20334 | Wed | MFA Moscow clg 164253: Russian embassy Addis Ababa                   | MFSK-6          | (AB/RO)   |
| X06  | 23-7 | 0827 | 20334 | Wed | MFA Moscow clg 164253: Russian embassy Addis Ababa                   | MFSK-6          | (RO)      |
| X06  | 23-7 | 0829 | 18177 | Wed | MFA Moscow clg 164253: Russian embassy Addis Ababa                   | MFSK-6          | (RO)      |
| X06  | 25-7 | 0511 | 19610 | Fri | MFA Moscow clg 216435: Russian embassy Dhaka                         | MFSK-6          | (RO)      |
| X06  | 25-7 | 0512 | 15920 | Fri | MFA Moscow clg 216435: Russian embassy Dhaka                         | MFSK-6          | (RO)      |
| X06  | 25-7 | 0644 | 13427 | Fri | MFA Moscow clg 341265: unid Russian embassy                          | MFSK-6          | (RO)      |
| X06  | 25-7 | 0821 | 10653 | Fri | MFA Moscow clg 356412: Russian embassy Berlin                        | MFSK-6          | (AB/RO)   |
| X06  | 25-7 | 0821 | 10653 | Fri | MFA Moscow clg 356412: Russian embassy Berlin                        | MFSK-6          | (RO)      |
| X06  | 27-7 | 0910 | 16060 | Sun | MFA Moscow clg 261453: Russian embassy Cairo                         | MFSK-6          | (Moon)    |
| X06  | 27-7 | 1034 | 15810 | Sun | MFA Moscow clg 145632: Russian embassy Algiers                       | MFSK-6          | (Moon)    |
| X06  | 28-7 | 1007 | 19235 | Mon | MFA Moscow clg 463125: Russian embassy Rabat                         | MFSK-6          | (Anon)    |
| XPA1 | 2-7  | 1210 | 13368 | Wed | 311 311 311 1 00367 00325 92547 ... 13840 20996 53430                | MFSK-20/10Bd    | (AB)      |
| XPA1 | 2-7  | 1230 | 12168 | Wed | 311 311 311 1 00367 00325 92547 ... 13840 20996 53430                | MFSK-20/10Bd    | (AB/HFD)  |
| XPA1 | 2-7  | 1250 | 11168 | Wed | 311 311 311 1 00367 00325 92547 ... 13840 20996 53430                | MFSK-20/10Bd    | (AB/HFD)  |

|      |      |      |       |     |                                                             |              |          |
|------|------|------|-------|-----|-------------------------------------------------------------|--------------|----------|
| XPA1 | 4-7  | 1210 | 13368 | Fri | 311 311 311 1 00367 00325 92547 ... 13840 20996 53430       | MFSK-20/10Bd | (AB)     |
| XPA1 | 4-7  | 1230 | 12168 | Fri | 311 311 311 1 00367 00325 92547 ... 13840 20996 53430       | MFSK-20/10Bd | (AB)     |
| XPA1 | 4-7  | 1250 | 11168 | Fri | 311 311 311 1 00367 00325 92547 ... 13840 20996 53430       | MFSK-20/10Bd | (AB)     |
| XPA1 | 9-7  | 1210 | 13368 | Wed | 311 311 311 1 00367 00325 92547 ... 13840 20996 53430       | MFSK-20/10Bd | (AB)     |
| XPA1 | 9-7  | 1230 | 12168 | Wed | 311 311 311 1 00367 00325 92547 ... 13840 20996 53430       | MFSK-20/10Bd | (AB)     |
| XPA1 | 9-7  | 1250 | 11168 | Wed | 311 311 311 1 00367 00325 92547 ... 13840 20996 53430       | MFSK-20/10Bd | (AB)     |
| XPA1 | 11-7 | 1210 | 13368 | Fri | 311 311 311 1 00367 00325 92547 ... 13840 20996 53430       | MFSK-20/10Bd | (AB)     |
| XPA1 | 11-7 | 1230 | 12168 | Fri | 311 311 311 1 00367 00325 92547 ... 13840 20996 53430       | MFSK-20/10Bd | (AB)     |
| XPA1 | 11-7 | 1250 | 11168 | Fri | 311 311 311 1 00367 00325 92547 ... 13840 20996 53430       | MFSK-20/10Bd | (AB)     |
| XPA1 | 16-7 | 1210 | 13368 | Wed | 311 311 311 1 09293 00228 52538 ... 07912 63218 46064       | MFSK-20/10Bd | (AB)     |
| XPA1 | 16-7 | 1230 | 12168 | Wed | 311 311 311 1 09293 00228 52538 ... 07912 63218 46064       | MFSK-20/10Bd | (AB)     |
| XPA1 | 16-7 | 1250 | 11168 | Wed | 311 311 311 1 09293 00228 52538 ... 07912 63218 46064       | MFSK-20/10Bd | (AB)     |
| XPA1 | 18-7 | 1210 | 13368 | Fri | 311 311 311 1 09293 00228 52538 ... 07912 63218 46064       | MFSK-20/10Bd | (AB)     |
| XPA1 | 18-7 | 1230 | 12168 | Fri | 311 311 311 1 09293 00228 52538 ... 07912 63218 46064       | MFSK-20/10Bd | (AB)     |
| XPA1 | 18-7 | 1250 | 11168 | Fri | 311 311 311 1 09293 00228 52538 ... 07912 63218 46064       | MFSK-20/10Bd | (AB)     |
| XPA1 | 23-7 | 1210 | 13368 | Wed | 311 311 311 1 09293 00228 52538 ... 07912 63218 46064       | MFSK-20/10Bd | (AB)     |
| XPA1 | 23-7 | 1230 | 12168 | Wed | 311 311 311 1 09293 00228 52538 ... 07912 63218 46064       | MFSK-20/10Bd | (AB)     |
| XPA1 | 23-7 | 1250 | 11168 | Wed | 311 311 311 1 09293 00228 52538 ... 07912 63218 46064       | MFSK-20/10Bd | (AB)     |
| XPA1 | 25-7 | 1210 | 13368 | Fri | 311 311 311 1 09293 00228 52538 ... 07912 63218 46064       | MFSK-20/10Bd | (AB)     |
| XPA1 | 25-7 | 1230 | 12168 | Fri | 311 311 311 1 09293 00228 52538 ... 07912 63218 46064       | MFSK-20/10Bd | (AB)     |
| XPA1 | 25-7 | 1250 | 11168 | Fri | 311 311 311 1 09293 00228 52538 ... 07912 63218 46064       | MFSK-20/10Bd | (AB)     |
| XPA1 | 30-7 | 1210 | 13368 | Wed | 311 311 311 1 03037 00416 90962 ... 45439 88342 70331 00715 | MFSK-20/10Bd | (AB)     |
| XPA1 | 30-7 | 1230 | 12168 | Wed | 311 311 311 1 03037 00416 90962 ... 45439 88342 70331 00715 | MFSK-20/10Bd | (AB)     |
| XPA1 | 30-7 | 1250 | 11168 | Wed | 311 311 311 1 03037 00416 90962 ... 45439 88342 70331 00715 | MFSK-20/10Bd | (AB)     |
| XPA2 | 9-6  | 1400 | 13418 | Mon | 00521 00112 98029 ... 00613 26538 17623                     | MFSK-16/20Bd | (PY)     |
| XPA2 | 9-6  | 1410 | 12163 | Mon | 00521 00112 98029 ... 00613 26538 17623                     | MFSK-16/20Bd | (PY)     |
| XPA2 | 9-6  | 1420 | 11477 | Mon | 00521 00112 98029 ... 00613 26538 17623                     | MFSK-16/20Bd | (PY)     |
| XPA2 | 9-6  | 1430 | 12122 | Mon | 00521 00112 98029 ... 00613 26538 17623                     | MFSK-16/20Bd | (PY)     |
| XPA2 | 9-6  | 1440 | 11504 | Mon | 00521 00112 98029 ... 00613 26538 17623                     | MFSK-16/20Bd | (PY)     |
| XPA2 | 9-6  | 1450 | 10750 | Mon | 00521 00112 98029 ... 00613 26538 17623                     | MFSK-16/20Bd | (PY/HFD) |
| XPA2 | 1-7  | 1100 | 14958 | Tue | 06338 00400 97524 ... 89602 12805 04455                     | MFSK-16/20Bd | (PY/HFD) |
| XPA2 | 1-7  | 1120 | 13958 | Tue | 06338 00400 97524 ... 89602 12805 04455                     | MFSK-16/20Bd | (PY/HFD) |
| XPA2 | 1-7  | 1140 | 12158 | Tue | 06338 00400 97524 ... 89602 12805 04455                     | MFSK-16/20Bd | (AB)     |
| XPA2 | 1-7  | 1700 | 18235 | Tue | 09049 00190 39352 ... 83936 28144 53677                     | MFSK-16/20Bd | (AB)     |
| XPA2 | 1-7  | 1720 | 17437 | Tue | 09049 00190 39352 ... 83936 28144 53677                     | MFSK-16/20Bd | (AB/PY)  |
| XPA2 | 1-7  | 1740 | 16179 | Tue | 09049 00190 39352 ... 83936 28144 53677                     | MFSK-16/20Bd | (AB/PY)  |
| XPA2 | 2-7  | 0700 | 12148 | Wed | 01512 00630 72188 ... 56746 16003 70111                     | MFSK-16/20Bd | (AB)     |
| XPA2 | 2-7  | 0720 | 13448 | Wed | 01512 00630 72188 ... 56746 16003 70111                     | MFSK-16/20Bd | (AB)     |
| XPA2 | 2-7  | 0740 | 13948 | Wed | 01512 00630 72188 ... 56746 16003 70111                     | MFSK-16/20Bd | (AB)     |
| XPA2 | 2-7  | 0910 | 19345 | Wed | Message                                                     | MFSK-16/20Bd | (HFD)    |
| XPA2 | 2-7  | 0930 | 18495 | Wed | msg x14981                                                  | MFSK-16/20Bd | (HFD)    |
| XPA2 | 2-7  | 0950 | 16279 | Wed | msg x13953                                                  | MFSK-16/20Bd | (HFD)    |

|      |     |      |       |     |                                         |              |             |
|------|-----|------|-------|-----|-----------------------------------------|--------------|-------------|
| XPA2 | 2-7 | 1100 | 17435 | Wed | 08295 00001 00000 34671                 | MFSK-16/20Bd | (AB/HFD)    |
| XPA2 | 2-7 | 1120 | 16235 | Wed | 08295 00001 00000 34671                 | MFSK-16/20Bd | (AB/HFD)    |
| XPA2 | 2-7 | 1140 | 14935 | Wed | 08295 00001 00000 34671                 | MFSK-16/20Bd | (AB/HFD)    |
| XPA2 | 2-7 | 1800 | 17474 | Wed | 04515 00145 63228 ... 02950 29498 27131 | MFSK-16/20Bd | (AB/HFD)    |
| XPA2 | 2-7 | 1820 | 16274 | Wed | 04515 00145 63228 ... 02950 29498 27131 | MFSK-16/20Bd | (AB/HFD)    |
| XPA2 | 2-7 | 1840 | 14574 | Wed | 04515 00145 63228 ... 02950 29498 27131 | MFSK-16/20Bd | (AB/HFD)    |
| XPA2 | 3-7 | 0900 | 18371 | Thu | 01323 00448 46382 ... 37292 51302 20457 | MFSK-16/20Bd | (AB/HFD)    |
| XPA2 | 3-7 | 0920 | 17457 | Thu | 01323 00448 46382 ... 37292 51302 20457 | MFSK-16/20Bd | (AB/HFD)    |
| XPA2 | 3-7 | 0940 | 16279 | Thu | 01323 00448 46382 ... 37292 51302 20457 | MFSK-16/20Bd | (AB/HFD)    |
| XPA2 | 3-7 | 1100 | 17435 | Thu | 08385 00000 00000 34260                 | MFSK-16/20Bd | (AB)        |
| XPA2 | 3-7 | 1120 | 16235 | Thu | 08385 00000 00000 34260                 | MFSK-16/20Bd | (AB)        |
| XPA2 | 3-7 | 1140 | 14935 | Thu | 08385 00000 00000 34260                 | MFSK-16/20Bd | (AB)        |
| XPA2 | 3-7 | 1700 | 18235 | Thu | 09049 00190 39352 ... 83936 28144 53677 | MFSK-16/20Bd | (AB/HFD)    |
| XPA2 | 3-7 | 1720 | 17437 | Thu | 09049 00190 39352 ... 83936 28144 53677 | MFSK-16/20Bd | (AB/HFD)    |
| XPA2 | 3-7 | 1740 | 16179 | Thu | 09049 00190 39352 ... 83936 28144 53677 | MFSK-16/20Bd | (AB/HFD)    |
| XPA2 | 4-7 | 1100 | 14958 | Fri | 06338 00400 97524 ... 89602 12805 04455 | MFSK-16/20Bd | (AB)        |
| XPA2 | 4-7 | 1120 | 13958 | Fri | 06338 00400 97524 ... 89602 12805 04455 | MFSK-16/20Bd | (AB)        |
| XPA2 | 4-7 | 1140 | 12158 | Fri | 06338 00400 97524 ... 89602 12805 04455 | MFSK-16/20Bd | (AB)        |
| XPA2 | 4-7 | 1800 | 17474 | Fri | 04515 00145 63228 ... 02950 29498 27131 | MFSK-16/20Bd | (AB)        |
| XPA2 | 4-7 | 1820 | 16274 | Fri | 04515 00145 63228 ... 02950 29498 27131 | MFSK-16/20Bd | (AB)        |
| XPA2 | 4-7 | 1840 | 14574 | Fri | 04515 00145 63228 ... 02950 29498 27131 | MFSK-16/20Bd | (AB)        |
| XPA2 | 5-7 | 0900 | 18371 | Sat | 01323 00448 46382 ... 37292 51302 20457 | MFSK-16/20Bd | (AB)        |
| XPA2 | 5-7 | 0920 | 17457 | Sat | 01323 00448 46382 ... 37292 51302 20457 | MFSK-16/20Bd | (AB)        |
| XPA2 | 5-7 | 0940 | 16279 | Sat | 01323 00448 46382 ... 37292 51302 20457 | MFSK-16/20Bd | (AB)        |
| XPA2 | 5-7 | 1500 | 13954 | Sat | 09870 00164 56981 ... 94954 58032 54631 | MFSK-16/20Bd | (AB/HFD)    |
| XPA2 | 5-7 | 1520 | 12154 | Sat | 09870 00164 56981 ... 94954 58032 54631 | MFSK-16/20Bd | (AB/HFD)    |
| XPA2 | 5-7 | 1540 | 11454 | Sat | 09870 00164 56981 ... 94954 58032 54631 | MFSK-16/20Bd | (AB/HFD)    |
| XPA2 | 7-7 | 0700 | 12148 | Mon | 01512 00630 72188 ... 56746 16003 70111 | MFSK-16/20Bd | (AB/HFD)    |
| XPA2 | 7-7 | 0720 | 13448 | Mon | 01512 00630 72188 ... 56746 16003 70111 | MFSK-16/20Bd | (AB/PY/HFD) |
| XPA2 | 7-7 | 0740 | 13948 | Mon | 01512 00630 72188 ... 56746 16003 70111 | MFSK-16/20Bd | (AB/PY)     |
| XPA2 | 7-7 | 0910 | 19345 | Mon | 00795 00310 30978 ... 62935 65571 73776 | MFSK-16/20Bd | (AB)        |
| XPA2 | 7-7 | 0930 | 18495 | Mon | 00795 00310 30978 ... 62935 65571 73776 | MFSK-16/20Bd | (AB)        |
| XPA2 | 7-7 | 0950 | 16279 | Mon | 00795 00310 30978 ... 62935 65571 73776 | MFSK-16/20Bd | (AB)        |
| XPA2 | 7-7 | 1500 | 13954 | Mon | 07964 00001 00000 37665                 | MFSK-16/20Bd | (AB)        |
| XPA2 | 7-7 | 1520 | 12154 | Mon | 07964 00001 00000 37665                 | MFSK-16/20Bd | (AB)        |
| XPA2 | 7-7 | 1540 | 11454 | Mon | 07964 00001 00000 37665                 | MFSK-16/20Bd | (AB)        |
| XPA2 | 8-7 | 1100 | 14958 | Tue | 05482 00001 00000 10140                 | MFSK-16/20Bd | (AB)        |
| XPA2 | 8-7 | 1120 | 13958 | Tue | 05482 00001 00000 10140                 | MFSK-16/20Bd | (AB)        |
| XPA2 | 8-7 | 1140 | 12158 | Tue | 05482 00001 00000 10140                 | MFSK-16/20Bd | (AB)        |
| XPA2 | 8-7 | 1700 | 18235 | Tue | 08811 00001 00000 35661                 | MFSK-16/20Bd | (AB)        |
| XPA2 | 8-7 | 1720 | 17437 | Tue | 08811 00001 00000 35661                 | MFSK-16/20Bd | (AB)        |
| XPA2 | 8-7 | 1740 | 16179 | Tue | 08811 00001 00000 35661                 | MFSK-16/20Bd | (AB)        |

|      |      |      |       |     |                                         |              |      |
|------|------|------|-------|-----|-----------------------------------------|--------------|------|
| XPA2 | 9-7  | 0700 | 12148 | Wed | 01512 00630 72188 ... 56746 16003 70111 | MFSK-16/20Bd | (AB) |
| XPA2 | 9-7  | 0720 | 13448 | Wed | 01512 00630 72188 ... 56746 16003 70111 | MFSK-16/20Bd | (AB) |
| XPA2 | 9-7  | 0740 | 13948 | Wed | 01512 00630 72188 ... 56746 16003 70111 | MFSK-16/20Bd | (AB) |
| XPA2 | 9-7  | 0910 | 19345 | Wed | 00795 00310 30978 ... 62935 65571 73776 | MFSK-16/20Bd | (AB) |
| XPA2 | 9-7  | 0930 | 18495 | Wed | 00795 00310 30978 ... 62935 65571 73776 | MFSK-16/20Bd | (AB) |
| XPA2 | 9-7  | 0950 | 16279 | Wed | 00795 00310 30978 ... 62935 65571 73776 | MFSK-16/20Bd | (AB) |
| XPA2 | 9-7  | 1100 | 17435 | Wed | 02576 00358 23473 ... 72999 81939 52147 | MFSK-16/20Bd | (AB) |
| XPA2 | 9-7  | 1120 | 16235 | Wed | 02576 00358 23473 ... 72999 81939 52147 | MFSK-16/20Bd | (AB) |
| XPA2 | 9-7  | 1140 | 14935 | Wed | 02576 00358 23473 ... 72999 81939 52147 | MFSK-16/20Bd | (AB) |
| XPA2 | 9-7  | 1800 | 17474 | Wed | 00111 00187 11920 ... 75688 84645 67420 | MFSK-16/20Bd | (AB) |
| XPA2 | 9-7  | 1820 | 16274 | Wed | 00111 00187 11920 ... 75688 84645 67420 | MFSK-16/20Bd | (AB) |
| XPA2 | 9-7  | 1840 | 14574 | Wed | 00111 00187 11920 ... 75688 84645 67420 | MFSK-16/20Bd | (AB) |
| XPA2 | 10-7 | 0900 | 18371 | Thu | 00708 00574 59177 ... 87068 62078 15153 | MFSK-16/20Bd | (AB) |
| XPA2 | 10-7 | 0920 | 17457 | Thu | 00708 00574 59177 ... 87068 62078 15153 | MFSK-16/20Bd | (AB) |
| XPA2 | 10-7 | 0940 | 16279 | Thu | 00708 00574 59177 ... 87068 62078 15153 | MFSK-16/20Bd | (AB) |
| XPA2 | 10-7 | 1100 | 17435 | Thu | 02576 00358 23473 ... 72999 81939 52147 | MFSK-16/20Bd | (AB) |
| XPA2 | 10-7 | 1120 | 16235 | Thu | 02576 00358 23473 ... 72999 81939 52147 | MFSK-16/20Bd | (AB) |
| XPA2 | 10-7 | 1140 | 14935 | Thu | 02576 00358 23473 ... 72999 81939 52147 | MFSK-16/20Bd | (AB) |
| XPA2 | 10-7 | 1700 | 18235 | Thu | 09514 00001 00000 35662                 | MFSK-16/20Bd | (AB) |
| XPA2 | 10-7 | 1720 | 17437 | Thu | 09514 00001 00000 35662                 | MFSK-16/20Bd | (AB) |
| XPA2 | 10-7 | 1740 | 16179 | Thu | 09514 00001 00000 35662                 | MFSK-16/20Bd | (AB) |
| XPA2 | 11-7 | 1100 | 14958 | Fri | 05392 00001 00000 10140                 | MFSK-16/20Bd | (AB) |
| XPA2 | 11-7 | 1120 | 13958 | Fri | 05392 00001 00000 10140                 | MFSK-16/20Bd | (AB) |
| XPA2 | 11-7 | 1140 | 12158 | Fri | 05392 00001 00000 10140                 | MFSK-16/20Bd | (AB) |
| XPA2 | 11-7 | 1800 | 17474 | Fri | 00111 00187 11920 ... 75688 84645 67420 | MFSK-16/20Bd | (AB) |
| XPA2 | 11-7 | 1820 | 16274 | Fri | 00111 00187 11920 ... 75688 84645 67420 | MFSK-16/20Bd | (AB) |
| XPA2 | 11-7 | 1840 | 14574 | Fri | 00111 00187 11920 ... 75688 84645 67420 | MFSK-16/20Bd | (AB) |
| XPA2 | 12-7 | 0900 | 18371 | Sat | 00708 00574 59177 ... 87068 62078 15153 | MFSK-16/20Bd | (AB) |
| XPA2 | 12-7 | 0920 | 17457 | Sat | 00708 00574 59177 ... 87068 62078 15153 | MFSK-16/20Bd | (AB) |
| XPA2 | 12-7 | 0940 | 16279 | Sat | 00708 00574 59177 ... 87068 62078 15153 | MFSK-16/20Bd | (AB) |
| XPA2 | 12-7 | 1500 | 13954 | Sat | 01119 00001 00000 36252                 | MFSK-16/20Bd | (AB) |
| XPA2 | 12-7 | 1520 | 12154 | Sat | 01119 00001 00000 36252                 | MFSK-16/20Bd | (AB) |
| XPA2 | 12-7 | 1540 | 11454 | Sat | 01119 00001 00000 36252                 | MFSK-16/20Bd | (AB) |
| XPA2 | 14-7 | 0700 | 12148 | Mon | 07253 00227 72385 ... 18133 88681 21430 | MFSK-16/20Bd | (AB) |
| XPA2 | 14-7 | 0720 | 13448 | Mon | 07253 00227 72385 ... 18133 88681 21430 | MFSK-16/20Bd | (AB) |
| XPA2 | 14-7 | 0740 | 13948 | Mon | 07253 00227 72385 ... 18133 88681 21430 | MFSK-16/20Bd | (AB) |
| XPA2 | 14-7 | 0910 | 19345 | Mon | 00720 00130 84955 ... 53163 42583 47055 | MFSK-16/20Bd | (AB) |
| XPA2 | 14-7 | 0930 | 18495 | Mon | 00720 00130 84955 ... 53163 42583 47055 | MFSK-16/20Bd | (AB) |
| XPA2 | 14-7 | 0950 | 16279 | Mon | 00720 00130 84955 ... 53163 42583 47055 | MFSK-16/20Bd | (AB) |
| XPA2 | 14-7 | 1500 | 13954 | Mon | 01061 00123 32531 ... 30013 87066 34113 | MFSK-16/20Bd | (AB) |
| XPA2 | 14-7 | 1520 | 12154 | Mon | 01061 00123 32531 ... 30013 87066 34113 | MFSK-16/20Bd | (AB) |
| XPA2 | 14-7 | 1540 | 11454 | Mon | 01061 00123 32531 ... 30013 87066 34113 | MFSK-16/20Bd | (AB) |

|      |      |      |       |     |                                         |              |      |
|------|------|------|-------|-----|-----------------------------------------|--------------|------|
| XPA2 | 15-7 | 1100 | 14958 | Tue | 06262 00260 76279 ... 83602 22596 53310 | MFSK-16/20Bd | (AB) |
| XPA2 | 15-7 | 1120 | 13958 | Tue | 06262 00260 76279 ... 83602 22596 53310 | MFSK-16/20Bd | (AB) |
| XPA2 | 15-7 | 1140 | 12158 | Tue | 06262 00260 76279 ... 83602 22596 53310 | MFSK-16/20Bd | (AB) |
| XPA2 | 15-7 | 1700 | 18235 | Tue | 00410 00188 06271 ... 75794 65225 03660 | MFSK-16/20Bd | (AB) |
| XPA2 | 15-7 | 1720 | 17437 | Tue | 00410 00188 06271 ... 75794 65225 03660 | MFSK-16/20Bd | (AB) |
| XPA2 | 15-7 | 1740 | 16179 | Tue | 00410 00188 06271 ... 75794 65225 03660 | MFSK-16/20Bd | (AB) |
| XPA2 | 16-7 | 0700 | 12148 | Wed | 07253 00227 72385 ... 18133 88681 21430 | MFSK-16/20Bd | (AB) |
| XPA2 | 16-7 | 0720 | 13448 | Wed | 07253 00227 72385 ... 18133 88681 21430 | MFSK-16/20Bd | (AB) |
| XPA2 | 16-7 | 0740 | 13948 | Wed | 07253 00227 72385 ... 18133 88681 21430 | MFSK-16/20Bd | (AB) |
| XPA2 | 16-7 | 0910 | 19345 | Wed | 00720 00130 84955 ... 53163 42583 47055 | MFSK-16/20Bd | (AB) |
| XPA2 | 16-7 | 0930 | 18495 | Wed | 00720 00130 84955 ... 53163 42583 47055 | MFSK-16/20Bd | (AB) |
| XPA2 | 16-7 | 0950 | 16279 | Wed | 00720 00130 84955 ... 53163 42583 47055 | MFSK-16/20Bd | (AB) |
| XPA2 | 16-7 | 1100 | 17435 | Wed | 03925 00001 00000 40255                 | MFSK-16/20Bd | (AB) |
| XPA2 | 16-7 | 1120 | 16235 | Wed | 03925 00001 00000 40255                 | MFSK-16/20Bd | (AB) |
| XPA2 | 16-7 | 1140 | 14935 | Wed | 03925 00001 00000 40255                 | MFSK-16/20Bd | (AB) |
| XPA2 | 16-7 | 1800 | 17474 | Wed | 00833 00203 02604 ... 41696 63814 41225 | MFSK-16/20Bd | (AB) |
| XPA2 | 16-7 | 1820 | 16274 | Wed | 00833 00203 02604 ... 41696 63814 41225 | MFSK-16/20Bd | (AB) |
| XPA2 | 16-7 | 1840 | 14574 | Wed | 00833 00203 02604 ... 41696 63814 41225 | MFSK-16/20Bd | (AB) |
| XPA2 | 17-7 | 0900 | 18371 | Thu | 08977 00001 00000 41267                 | MFSK-16/20Bd | (AB) |
| XPA2 | 17-7 | 0920 | 17457 | Thu | 08977 00001 00000 41267                 | MFSK-16/20Bd | (AB) |
| XPA2 | 17-7 | 0940 | 16279 | Thu | 08977 00001 00000 41267                 | MFSK-16/20Bd | (AB) |
| XPA2 | 17-7 | 1100 | 17435 | Thu | 02760 00001 00000 34660                 | MFSK-16/20Bd | (AB) |
| XPA2 | 17-7 | 1120 | 16235 | Thu | 02760 00001 00000 34660                 | MFSK-16/20Bd | (AB) |
| XPA2 | 17-7 | 1140 | 14935 | Thu | 02760 00001 00000 34660                 | MFSK-16/20Bd | (AB) |
| XPA2 | 17-7 | 1700 | 18235 | Thu | 00410 00188 06271 ... 75794 65225 03760 | MFSK-16/20Bd | (AB) |
| XPA2 | 17-7 | 1720 | 17437 | Thu | 00410 00188 06271 ... 75794 65225 03760 | MFSK-16/20Bd | (AB) |
| XPA2 | 17-7 | 1740 | 16179 | Thu | 00410 00188 06271 ... 75794 65225 03760 | MFSK-16/20Bd | (AB) |
| XPA2 | 18-7 | 1100 | 14958 | Fri | 06262 00260 76279 ... 83602 22596 53310 | MFSK-16/20Bd | (AB) |
| XPA2 | 18-7 | 1120 | 13958 | Fri | 06262 00260 76279 ... 83602 22596 53310 | MFSK-16/20Bd | (AB) |
| XPA2 | 18-7 | 1140 | 12158 | Fri | 06262 00260 76279 ... 83602 22596 53310 | MFSK-16/20Bd | (AB) |
| XPA2 | 18-7 | 1800 | 17474 | Fri | 00833 00203 02604 ... 41696 63814 41225 | MFSK-16/20Bd | (AB) |
| XPA2 | 18-7 | 1820 | 16274 | Fri | 00833 00203 02604 ... 41696 63814 41225 | MFSK-16/20Bd | (AB) |
| XPA2 | 18-7 | 1840 | 14574 | Fri | 00833 00203 02604 ... 41696 63814 41225 | MFSK-16/20Bd | (AB) |
| XPA2 | 19-7 | 0900 | 18371 | Sat | 09717 00001 00000 40262                 | MFSK-16/20Bd | (AB) |
| XPA2 | 19-7 | 0920 | 17457 | Sat | 09717 00001 00000 40262                 | MFSK-16/20Bd | (AB) |
| XPA2 | 19-7 | 0940 | 16279 | Sat | 09717 00001 00000 40262                 | MFSK-16/20Bd | (AB) |
| XPA2 | 19-7 | 1500 | 13954 | Sat | 01061 00123 32531 ... 30013 87066 34113 | MFSK-16/20Bd | (AB) |
| XPA2 | 19-7 | 1520 | 12154 | Sat | 01061 00123 32531 ... 30013 87066 34113 | MFSK-16/20Bd | (AB) |
| XPA2 | 19-7 | 1540 | 11454 | Sat | 01061 00123 32531 ... 30013 87066 34113 | MFSK-16/20Bd | (AB) |
| XPA2 | 21-7 | 0700 | 12148 | Mon | 07253 00227 72385 ... 18133 88681 21430 | MFSK-16/20Bd | (AB) |
| XPA2 | 21-7 | 0720 | 13448 | Mon | 07253 00227 72385 ... 18133 88681 21430 | MFSK-16/20Bd | (AB) |
| XPA2 | 21-7 | 0740 | 13948 | Mon | 07253 00227 72385 ... 18133 88681 21430 | MFSK-16/20Bd | (AB) |

|      |      |      |       |     |                                         |              |      |
|------|------|------|-------|-----|-----------------------------------------|--------------|------|
| XPA2 | 21-7 | 0910 | 19345 | Mon | 00143 00288 35404 ... 32783 77241 24105 | MFSK-16/20Bd | (AB) |
| XPA2 | 21-7 | 0930 | 18495 | Mon | 00143 00288 35404 ... 32783 77241 24105 | MFSK-16/20Bd | (AB) |
| XPA2 | 21-7 | 0950 | 16279 | Mon | 00143 00288 35404 ... 32783 77241 24105 | MFSK-16/20Bd | (AB) |
| XPA2 | 21-7 | 1500 | 13954 | Mon | 09545 00001 00000 36265                 | MFSK-16/20Bd | (AB) |
| XPA2 | 21-7 | 1520 | 12154 | Mon | 09545 00001 00000 36265                 | MFSK-16/20Bd | (AB) |
| XPA2 | 21-7 | 1540 | 11454 | Mon | 09545 00001 00000 36265                 | MFSK-16/20Bd | (AB) |
| XPA2 | 22-7 | 1100 | 14958 | Tue | 03798 00001 00000 10140                 | MFSK-16/20Bd | (AB) |
| XPA2 | 22-7 | 1120 | 13958 | Tue | 03798 00001 00000 10140                 | MFSK-16/20Bd | (AB) |
| XPA2 | 22-7 | 1140 | 12158 | Tue | 03798 00001 00000 10140                 | MFSK-16/20Bd | (AB) |
| XPA2 | 22-7 | 1700 | 18235 | Tue | 05123 00001 00000 33257                 | MFSK-16/20Bd | (AB) |
| XPA2 | 22-7 | 1720 | 17437 | Tue | 05123 00001 00000 33257                 | MFSK-16/20Bd | (AB) |
| XPA2 | 22-7 | 1740 | 16179 | Tue | 05123 00001 00000 33257                 | MFSK-16/20Bd | (AB) |
| XPA2 | 23-7 | 0700 | 12148 | Wed | 07253 00227 72385 ... 18133 88681 21430 | MFSK-16/20Bd | (AB) |
| XPA2 | 23-7 | 0720 | 13448 | Wed | 07253 00227 72385 ... 18133 88681 21430 | MFSK-16/20Bd | (AB) |
| XPA2 | 23-7 | 0740 | 13948 | Wed | 07253 00227 72385 ... 18133 88681 21430 | MFSK-16/20Bd | (AB) |
| XPA2 | 23-7 | 0910 | 19345 | Wed | 00143 00288 35404 ... 32783 77241 24105 | MFSK-16/20Bd | (AB) |
| XPA2 | 23-7 | 0930 | 18495 | Wed | 00143 00288 35404 ... 32783 77241 24105 | MFSK-16/20Bd | (AB) |
| XPA2 | 23-7 | 0950 | 16279 | Wed | 00143 00288 35404 ... 32783 77241 24105 | MFSK-16/20Bd | (AB) |
| XPA2 | 23-7 | 1100 | 17435 | Wed | 09539 00654 91618 ... 17352 66203 67315 | MFSK-16/20Bd | (AB) |
| XPA2 | 23-7 | 1120 | 16235 | Wed | 09539 00654 91618 ... 17352 66203 67315 | MFSK-16/20Bd | (AB) |
| XPA2 | 23-7 | 1140 | 14935 | Wed | 09539 00654 91618 ... 17352 66203 67315 | MFSK-16/20Bd | (AB) |
| XPA2 | 23-7 | 1800 | 17474 | Wed | 01099 00301 45743 ... 87208 51515 22115 | MFSK-16/20Bd | (AB) |
| XPA2 | 23-7 | 1820 | 16274 | Wed | 01099 00301 45743 ... 87208 51515 22115 | MFSK-16/20Bd | (AB) |
| XPA2 | 23-7 | 1840 | 14574 | Wed | 01099 00301 45743 ... 87208 51515 22115 | MFSK-16/20Bd | (AB) |
| XPA2 | 24-7 | 0900 | 18371 | Thu | 08681 00469 42452 ... 68608 13828 02566 | MFSK-16/20Bd | (AB) |
| XPA2 | 24-7 | 0920 | 17457 | Thu | 08681 00469 42452 ... 68608 13828 02566 | MFSK-16/20Bd | (AB) |
| XPA2 | 24-7 | 0940 | 16279 | Thu | 08681 00469 42452 ... 68608 13828 02566 | MFSK-16/20Bd | (AB) |
| XPA2 | 24-7 | 1100 | 17435 | Thu | 09539 00654 91618 ... 17352 66203 67315 | MFSK-16/20Bd | (AB) |
| XPA2 | 24-7 | 1120 | 16235 | Thu | 09539 00654 91618 ... 17352 66203 67315 | MFSK-16/20Bd | (AB) |
| XPA2 | 24-7 | 1140 | 14935 | Thu | 09539 00654 91618 ... 17352 66203 67315 | MFSK-16/20Bd | (AB) |
| XPA2 | 24-7 | 1700 | 18235 | Thu | 09223 00001 00000 33663                 | MFSK-16/20Bd | (AB) |
| XPA2 | 24-7 | 1720 | 17437 | Thu | 09223 00001 00000 33663                 | MFSK-16/20Bd | (AB) |
| XPA2 | 24-7 | 1740 | 16179 | Thu | 09223 00001 00000 33663                 | MFSK-16/20Bd | (AB) |
| XPA2 | 25-7 | 1100 | 14958 | Fri | 09572 00001 00000 10140                 | MFSK-16/20Bd | (AB) |
| XPA2 | 25-7 | 1120 | 13958 | Fri | 09572 00001 00000 10140                 | MFSK-16/20Bd | (AB) |
| XPA2 | 25-7 | 1140 | 12158 | Fri | 09572 00001 00000 10140                 | MFSK-16/20Bd | (AB) |
| XPA2 | 25-7 | 1800 | 17474 | Fri | 01099 00301 45743 ... 87208 51515 22115 | MFSK-16/20Bd | (AB) |
| XPA2 | 25-7 | 1820 | 16274 | Fri | 01099 00301 45743 ... 87208 51515 22115 | MFSK-16/20Bd | (AB) |
| XPA2 | 25-7 | 1840 | 14574 | Fri | 01099 00301 45743 ... 87208 51515 22115 | MFSK-16/20Bd | (AB) |
| XPA2 | 26-7 | 0900 | 18371 | Sat | 08681 00469 42452 ... 68608 13828 02566 | MFSK-16/20Bd | (AB) |
| XPA2 | 26-7 | 0920 | 17457 | Sat | 08681 00469 42452 ... 68608 13828 02566 | MFSK-16/20Bd | (AB) |
| XPA2 | 26-7 | 0940 | 16279 | Sat | 08681 00469 42452 ... 68608 13828 02566 | MFSK-16/20Bd | (AB) |

|      |      |      |       |     |                                         |              |         |
|------|------|------|-------|-----|-----------------------------------------|--------------|---------|
| XPA2 | 26-7 | 1500 | 13954 | Sat | 05709 00001 00000 41255                 | MFSK-16/20Bd | (AB)    |
| XPA2 | 26-7 | 1520 | 12154 | Sat | 05709 00001 00000 41255                 | MFSK-16/20Bd | (AB)    |
| XPA2 | 26-7 | 1540 | 11454 | Sat | 05709 00001 00000 41255                 | MFSK-16/20Bd | (AB)    |
| XPA2 | 28-7 | 0700 | 12148 | Mon | 07481 00001 00000 33667                 | MFSK-16/20Bd | (AB)    |
| XPA2 | 28-7 | 0720 | 13448 | Mon | 07481 00001 00000 33667                 | MFSK-16/20Bd | (AB)    |
| XPA2 | 28-7 | 0740 | 13948 | Mon | 07481 00001 00000 33667                 | MFSK-16/20Bd | (AB)    |
| XPA2 | 28-7 | 0910 | 19345 | Mon | 00846 00651 10915 ... 67476 44099 01006 | MFSK-16/20Bd | (AB)    |
| XPA2 | 28-7 | 0930 | 18495 | Mon | 00846 00651 10915 ... 67476 44099 01006 | MFSK-16/20Bd | (AB/TJ) |
| XPA2 | 28-7 | 0950 | 16279 | Mon | 00846 00651 10915 ... 67476 44099 01006 | MFSK-16/20Bd | (AB/TJ) |
| XPA2 | 28-7 | 1500 | 13954 | Mon | 04634 00177 78598 ... 27067 19191 12522 | MFSK-16/20Bd | (AB)    |
| XPA2 | 28-7 | 1520 | 12154 | Mon | 04634 00177 78598 ... 27067 19191 12522 | MFSK-16/20Bd | (AB)    |
| XPA2 | 28-7 | 1540 | 11454 | Mon | 04634 00177 78598 ... 27067 19191 12522 | MFSK-16/20Bd | (AB)    |
| XPA2 | 29-7 | 0600 | 8168  | Tue | 08442 00125 77740 ... 91550 10999 71061 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 0610 | 9193  | Tue | 08442 00125 77740 ... 91550 10999 71061 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 0620 | 10559 | Tue | 08442 00125 77740 ... 91550 10999 71061 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 0630 | 11504 | Tue | 08442 00125 77740 ... 91550 10999 71061 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 0640 | 12141 | Tue | 08442 00125 77740 ... 91550 10999 71061 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 0650 | 13526 | Tue | 08442 00125 77740 ... 91550 10999 71061 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 0800 | 8168  | Tue | 04022 00135 12485 ... 06483 32251 15061 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 0810 | 9193  | Tue | 04022 00135 12485 ... 06483 32251 15061 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 0820 | 10559 | Tue | 04022 00135 12485 ... 06483 32251 15061 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 0830 | 11504 | Tue | 04022 00135 12485 ... 06483 32251 15061 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 0840 | 12141 | Tue | 04022 00135 12485 ... 06483 32251 15061 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 0850 | 13526 | Tue | 04022 00135 12485 ... 06483 32251 15061 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 1000 | 8168  | Tue | 09647 00122 77119 ... 88464 60623 23663 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 1010 | 9193  | Tue | 09647 00122 77119 ... 88464 60623 23663 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 1020 | 10559 | Tue | 09647 00122 77119 ... 88464 60623 23663 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 1030 | 11504 | Tue | 09647 00122 77119 ... 88464 60623 23663 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 1040 | 12141 | Tue | 09647 00122 77119 ... 88464 60623 23663 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 1050 | 13526 | Tue | 09647 00122 77119 ... 88464 60623 23663 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 1100 | 14958 | Tue | 01028 00389 91151 ... 86244 33609 43424 | MFSK-16/20Bd | (AB)    |
| XPA2 | 29-7 | 1120 | 13958 | Tue | 01028 00389 91151 ... 86244 33609 43424 | MFSK-16/20Bd | (AB)    |
| XPA2 | 29-7 | 1140 | 12158 | Tue | 01028 00389 91151 ... 86244 33609 43424 | MFSK-16/20Bd | (AB)    |
| XPA2 | 29-7 | 1200 | 8168  | Tue | 09924 00131 40830 ... 87357 95596 25460 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 1210 | 9193  | Tue | 09924 00131 40830 ... 87357 95596 25460 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 1220 | 10559 | Tue | 09924 00131 40830 ... 87357 95596 25460 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 1230 | 11504 | Tue | 09924 00131 40830 ... 87357 95596 25460 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 1240 | 12141 | Tue | 09924 00131 40830 ... 87357 95596 25460 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 1250 | 13526 | Tue | 09924 00131 40830 ... 87357 95596 25460 | MFSK-16/20Bd | (PY)    |
| XPA2 | 29-7 | 1700 | 18235 | Tue | 02558 00195 06248 ... 90874 44972 47447 | MFSK-16/20Bd | (AB)    |
| XPA2 | 29-7 | 1720 | 17437 | Tue | 02558 00195 06248 ... 90874 44972 47447 | MFSK-16/20Bd | (AB)    |
| XPA2 | 29-7 | 1740 | 16179 | Tue | 02558 00195 06248 ... 90874 44972 47447 | MFSK-16/20Bd | (AB)    |

|      |      |      |       |     |                                         |              |      |
|------|------|------|-------|-----|-----------------------------------------|--------------|------|
| XPA2 | 30-7 | 0700 | 12148 | Wed | 06149 00001 00000 36262                 | MFSK-16/20Bd | (AB) |
| XPA2 | 30-7 | 0720 | 13448 | Wed | 06149 00001 00000 36262                 | MFSK-16/20Bd | (AB) |
| XPA2 | 30-7 | 0740 | 13948 | Wed | 06149 00001 00000 36262                 | MFSK-16/20Bd | (AB) |
| XPA2 | 30-7 | 0910 | 19345 | Wed | 00846 00651 10915 ... 67476 44099 01006 | MFSK-16/20Bd | (AB) |
| XPA2 | 30-7 | 0930 | 18495 | Wed | 00846 00651 10915 ... 67476 44099 01006 | MFSK-16/20Bd | (AB) |
| XPA2 | 30-7 | 0950 | 16279 | Wed | 00846 00651 10915 ... 67476 44099 01006 | MFSK-16/20Bd | (AB) |
| XPA2 | 30-7 | 1100 | 17435 | Wed | 03062 00537 86153 ... 22246 71765 11164 | MFSK-16/20Bd | (AB) |
| XPA2 | 30-7 | 1120 | 16235 | Wed | 03062 00537 86153 ... 22246 71765 11164 | MFSK-16/20Bd | (AB) |
| XPA2 | 30-7 | 1140 | 14935 | Wed | 03062 00537 86153 ... 22246 71765 11164 | MFSK-16/20Bd | (AB) |
| XPA2 | 30-7 | 1800 | 17474 | Wed | 00815 00098 28568 ... 90862 24046 27624 | MFSK-16/20Bd | (AB) |
| XPA2 | 30-7 | 1820 | 16274 | Wed | 00815 00098 28568 ... 90862 24046 27624 | MFSK-16/20Bd | (AB) |
| XPA2 | 30-7 | 1840 | 14574 | Wed | 00815 00098 28568 ... 90862 24046 27624 | MFSK-16/20Bd | (AB) |
| XPA2 | 31-7 | 0600 | 8168  | Thu | 05230 00138 78060 ... 66150 52358 46046 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 0610 | 9193  | Thu | 05230 00138 78060 ... 66150 52358 46046 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 0620 | 10559 | Thu | 05230 00138 78060 ... 66150 52358 46046 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 0630 | 11504 | Thu | 05230 00138 78060 ... 66150 52358 46046 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 0640 | 12141 | Thu | 05230 00138 78060 ... 66150 52358 46046 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 0650 | 13526 | Thu | 05230 00138 78060 ... 66150 52358 46046 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 0800 | 8168  | Thu | 02169 00135 58613 ... 95944 34236 41465 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 0810 | 9193  | Thu | 02169 00135 58613 ... 95944 34236 41465 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 0820 | 10559 | Thu | 02169 00135 58613 ... 95944 34236 41465 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 0830 | 11504 | Thu | 02169 00135 58613 ... 95944 34236 41465 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 0840 | 12141 | Thu | 02169 00135 58613 ... 95944 34236 41465 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 0850 | 13526 | Thu | 02169 00135 58613 ... 95944 34236 41465 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 0900 | 18371 | Thu | 00786 00201 49269 ... 80676 04150 50407 | MFSK-16/20Bd | (AB) |
| XPA2 | 31-7 | 0920 | 17457 | Thu | 00786 00201 49269 ... 80676 04150 50407 | MFSK-16/20Bd | (AB) |
| XPA2 | 31-7 | 0940 | 16279 | Thu | 00786 00201 49269 ... 80676 04150 50407 | MFSK-16/20Bd | (AB) |
| XPA2 | 31-7 | 1000 | 8168  | Thu | 01689 00134 71146 ... 08820 36357 65374 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 1010 | 9193  | Thu | 01689 00134 71146 ... 08820 36357 65374 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 1020 | 10559 | Thu | 01689 00134 71146 ... 08820 36357 65374 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 1030 | 11504 | Thu | 01689 00134 71146 ... 08820 36357 65374 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 1040 | 12141 | Thu | 01689 00134 71146 ... 08820 36357 65374 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 1050 | 13526 | Thu | 01689 00134 71146 ... 08820 36357 65374 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 1100 | 17435 | Thu | 03062 00537 86153 ... 11245 60654 00053 | MFSK-16/20Bd | (AB) |
| XPA2 | 31-7 | 1120 | 16235 | Thu | 03062 00537 86153 ... 11245 60654 00053 | MFSK-16/20Bd | (AB) |
| XPA2 | 31-7 | 1140 | 14935 | Thu | 03062 00537 86153 ... 11245 60654 00053 | MFSK-16/20Bd | (AB) |
| XPA2 | 31-7 | 1200 | 8168  | Thu | 02453 00139 33970 ... 87019 13743 14555 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 1210 | 9193  | Thu | 02453 00139 33970 ... 87019 13743 14555 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 1220 | 10559 | Thu | 02453 00139 33970 ... 87019 13743 14555 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 1230 | 11504 | Thu | 02453 00139 33970 ... 87019 13743 14555 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 1240 | 12141 | Thu | 02453 00139 33970 ... 87019 13743 14555 | MFSK-16/20Bd | (PY) |
| XPA2 | 31-7 | 1250 | 13526 | Thu | 02453 00139 33970 ... 87019 13743 14555 | MFSK-16/20Bd | (PY) |

|             |      |      |       |     |                                         |              |         |
|-------------|------|------|-------|-----|-----------------------------------------|--------------|---------|
| <b>XPA2</b> | 31-7 | 1700 | 18235 | Thu | 02558 00195 06248 ... 90874 44972 47447 | MFSK-16/20Bd | (AB)    |
| <b>XPA2</b> | 31-7 | 1720 | 17437 | Thu | 02558 00195 06248 ... 90874 44972 47447 | MFSK-16/20Bd | (AB)    |
| <b>XPA2</b> | 31-7 | 1740 | 16179 | Thu | 02558 00195 06248 ... 90874 44972 47447 | MFSK-16/20Bd | (AB)    |
| <b>XPB1</b> | 30-5 | 0550 | 15821 | Fri | Russian intel.                          | MFSK-16      | (PY)    |
| <b>XPB1</b> | 30-5 | 0720 | 18422 | Fri | Russian intel.                          | MFSK-16      | (PY)    |
| <b>XPB1</b> | 30-5 | 0730 | 17418 | Fri | Russian intel.                          | MFSK-16      | (PY)    |
| <b>XPB1</b> | 30-5 | 0740 | 15937 | Fri | Russian intel.                          | MFSK-16      | (PY)    |
| <b>XPB1</b> | 30-5 | 0750 | 14487 | Fri | Russian intel.                          | MFSK-16      | (PY)    |
| <b>XPB1</b> | 30-5 | 0910 | 19371 | Fri | Russian intel.                          | MFSK-16      | (PY)    |
| <b>XPB1</b> | 30-5 | 0920 | 16343 | Fri | Russian intel.                          | MFSK-16      | (PY)    |
| <b>XPB1</b> | 30-5 | 0930 | 14968 | Fri | Russian intel.                          | MFSK-16      | (PY)    |
| <b>XPB1</b> | 30-5 | 0940 | 13553 | Fri | Russian intel.                          | MFSK-16      | (PY)    |
| <b>XPB1</b> | 30-5 | 0950 | 12224 | Fri | Russian intel.                          | MFSK-16      | (PY)    |
| <b>XPB1</b> | 30-5 | 1100 | 16344 | Fri | Russian intel.                          | MFSK-16      | (PY)    |
| <b>XPB1</b> | 30-5 | 1110 | 15881 | Fri | Russian intel.                          | MFSK-16      | (PY)    |
| <b>XPB1</b> | 30-5 | 1120 | 14487 | Fri | Russian intel.                          | MFSK-16      | (PY)    |
| <b>XPB1</b> | 30-5 | 1130 | 13942 | Fri | Russian intel.                          | MFSK-16      | (PY)    |
| <b>XPB1</b> | 30-5 | 1140 | 12171 | Fri | Russian intel.                          | MFSK-16      | (PY)    |
| <b>XPB1</b> | 30-5 | 1150 | 10346 | Fri | Russian intel.                          | MFSK-16      | (PY)    |
| <b>XPB1</b> | 30-5 | 1300 | 13437 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1310 | 12181 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1320 | 11572 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1330 | 11157 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1340 | 10449 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1350 | 10288 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1500 | 15831 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1510 | 14807 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1520 | 13963 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1530 | 13399 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1540 | 12117 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1550 | 11467 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1700 | 15891 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1710 | 14671 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1720 | 13921 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1730 | 13399 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1740 | 12168 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1750 | 11416 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1900 | 16302 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1910 | 15804 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1920 | 14529 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1930 | 13485 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 1940 | 12109 | Fri | Russian intel.                          | MFSK-16      | (AB/PY) |

|             |      |      |       |     |                |              |         |
|-------------|------|------|-------|-----|----------------|--------------|---------|
| <b>XPB1</b> | 30-5 | 1950 | 11514 | Fri | Russian intel. | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 2100 | 14904 | Fri | Russian intel. | MFSK-16      | (AB)    |
| <b>XPB1</b> | 30-5 | 2110 | 14421 | Fri | Russian intel. | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 2120 | 13484 | Fri | Russian intel. | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 2130 | 12214 | Fri | Russian intel. | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 2140 | 11514 | Fri | Russian intel. | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 30-5 | 2150 | 10414 | Fri | Russian intel. | MFSK-16      | (AB/PY) |
| <b>XPB1</b> | 31-5 | 0430 | 17457 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 0440 | 16236 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 0450 | 15835 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 0600 | 20184 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 0610 | 19583 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 0620 | 18559 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 0630 | 17472 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 0640 | 16131 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 0650 | 15836 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 0800 | 20322 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 0810 | 19613 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 0820 | 18392 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 0830 | 17423 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 0840 | 14923 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 0850 | 13402 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1000 | 17474 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1010 | 16284 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1020 | 15887 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1030 | 14612 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1040 | 13551 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1050 | 11591 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1200 | 13564 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1210 | 12147 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1220 | 11586 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1230 | 11144 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1240 | 10387 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1250 | 10384 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1400 | 13564 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1410 | 13364 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1420 | 12129 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1430 | 11548 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1440 | 11169 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1450 | 10284 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1600 | 15836 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |
| <b>XPB1</b> | 31-5 | 1610 | 14953 | Sat | Russian intel. | MSFK-16/32Bd | (PY)    |

|             |      |      |       |     |                |              |      |
|-------------|------|------|-------|-----|----------------|--------------|------|
| <b>XPB1</b> | 31-5 | 1620 | 13949 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 1630 | 13362 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 1640 | 12165 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 1650 | 11597 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 1800 | 14979 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 1810 | 14517 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 1820 | 13439 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 1830 | 12129 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 1840 | 11573 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 1850 | 10285 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 2000 | 16298 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 2010 | 15803 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 2020 | 14454 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 2030 | 13384 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 2040 | 12116 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 2050 | 11541 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 2200 | 13561 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 2220 | 12171 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 31-5 | 2240 | 11143 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 0540 | 17454 | Sun | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 1-6  | 0550 | 15821 | Sun | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 1-6  | 0720 | 18422 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 0730 | 17418 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 0740 | 15937 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 0750 | 14487 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 0910 | 19371 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 0920 | 16343 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 0930 | 14968 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 0940 | 13553 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 0950 | 12224 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 1100 | 16344 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 1110 | 15881 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 1120 | 14487 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 1130 | 13942 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 1140 | 12171 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 1150 | 10346 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 1300 | 13437 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 1310 | 12181 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 1320 | 11572 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 1330 | 11157 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 1340 | 10449 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 1-6  | 1350 | 10288 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |

|      |     |      |       |     |                |              |      |
|------|-----|------|-------|-----|----------------|--------------|------|
| XPB1 | 1-6 | 1500 | 15831 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 1-6 | 1510 | 14807 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 1-6 | 1520 | 13963 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 1-6 | 1530 | 13399 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 1-6 | 1540 | 12117 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 1-6 | 1550 | 11467 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 1-6 | 1700 | 15891 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 1-6 | 1710 | 14671 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 1-6 | 1720 | 13921 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 1-6 | 1730 | 13399 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 1-6 | 1740 | 12168 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 1-6 | 1750 | 11416 | Sun | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 1-6 | 1900 | 16302 | Sun | Russian intel. | MFSK-16/32Bd | (AB) |
| XPB1 | 1-6 | 2100 | 14904 | Sun | Russian intel. | MFSK-16/32Bd | (AB) |
| XPB1 | 1-6 | 2110 | 14421 | Sun | Russian intel. | MFSK-16/32Bd | (AB) |
| XPB1 | 1-6 | 2120 | 13484 | Sun | Russian intel. | MFSK-16/32Bd | (AB) |
| XPB1 | 1-6 | 2130 | 12214 | Sun | Russian intel. | MFSK-16/32Bd | (AB) |
| XPB1 | 1-6 | 2140 | 11514 | Sun | Russian intel. | MFSK-16/32Bd | (AB) |
| XPB1 | 1-6 | 2150 | 10414 | Sun | Russian intel. | MFSK-16/32Bd | (AB) |
| XPB1 | 2-6 | 0530 | 18256 | Mon | Russian intel. | MFSK-16/32Bd | (AB) |
| XPB1 | 2-6 | 0540 | 17454 | Mon | Russian intel. | MFSK-16/32Bd | (AB) |
| XPB1 | 2-6 | 0550 | 15821 | Mon | Russian intel. | MFSK-16/32Bd | (AB) |
| XPB1 | 2-6 | 0700 | 20841 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 0710 | 19593 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 0720 | 18422 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 0730 | 17418 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 0740 | 15937 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 0750 | 14487 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 0910 | 19371 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 0920 | 16343 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 0930 | 14968 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 0940 | 13553 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 0950 | 12224 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 1100 | 16344 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 1110 | 15881 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 1120 | 14487 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 1130 | 13942 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 1140 | 12171 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 1150 | 10346 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 1300 | 13437 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 1310 | 12181 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| XPB1 | 2-6 | 1320 | 11572 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |

|             |     |      |       |     |                |              |      |
|-------------|-----|------|-------|-----|----------------|--------------|------|
| <b>XPB1</b> | 2-6 | 1330 | 11157 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 2-6 | 1340 | 10449 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 2-6 | 1350 | 10288 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 2-6 | 1500 | 15831 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 2-6 | 1510 | 14807 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 2-6 | 1520 | 13963 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 2-6 | 1530 | 13399 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 2-6 | 1540 | 12117 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 2-6 | 1550 | 11467 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 2-6 | 1700 | 15891 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 2-6 | 1710 | 14671 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 2-6 | 1720 | 13921 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 2-6 | 1730 | 13399 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 2-6 | 1740 | 12168 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 2-6 | 1750 | 11416 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 2-6 | 1900 | 16302 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 2-6 | 2150 | 10414 | Mon | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 0430 | 17457 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 0440 | 16236 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 0450 | 15835 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 0630 | 17472 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 0640 | 16131 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 0650 | 15836 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 0820 | 18392 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 0830 | 17423 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 0840 | 14923 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 0850 | 13402 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1000 | 17474 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1010 | 16284 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1020 | 15887 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1030 | 14612 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1040 | 13551 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1050 | 11591 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1200 | 13564 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1210 | 12147 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1220 | 11586 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1230 | 11144 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1240 | 10387 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1250 | 10384 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1400 | 13564 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1410 | 13364 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1420 | 12129 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |

|             |     |      |       |     |                |              |      |
|-------------|-----|------|-------|-----|----------------|--------------|------|
| <b>XPB1</b> | 3-6 | 1430 | 11548 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1440 | 11169 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1450 | 10284 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1600 | 15836 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1610 | 14953 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1620 | 13949 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1630 | 13362 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1640 | 12165 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1650 | 11597 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1800 | 14979 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1810 | 14517 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1820 | 13439 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1830 | 12129 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1840 | 11573 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 1850 | 10285 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 2000 | 16298 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 2010 | 15803 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 2020 | 14454 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 2030 | 13384 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 2040 | 12116 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 2050 | 11541 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 2200 | 13561 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 2210 | 13442 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 2220 | 12171 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 2230 | 11547 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 2240 | 11143 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 3-6 | 2250 | 10484 | Tue | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0500 | 20562 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0510 | 20499 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0520 | 19284 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0530 | 18256 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0540 | 17454 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0550 | 15821 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0700 | 20841 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0710 | 19593 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0720 | 18422 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0730 | 17418 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0740 | 15937 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0750 | 14487 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0900 | 20929 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0910 | 19371 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0920 | 16343 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |

|             |     |      |       |     |                |              |      |
|-------------|-----|------|-------|-----|----------------|--------------|------|
| <b>XPB1</b> | 4-6 | 0930 | 14968 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0940 | 13553 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 0950 | 12224 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 1100 | 16344 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 1110 | 15881 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 1120 | 14487 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 1130 | 13942 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 1140 | 12171 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 1150 | 10346 | Wed | Russian intel. | MFSK-16/32Bd | (PY) |
| <b>XPB1</b> | 4-6 | 1300 | 13437 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1310 | 12181 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1320 | 11572 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1330 | 11157 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1340 | 10449 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1350 | 10288 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1500 | 15831 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1510 | 14807 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1520 | 13963 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1530 | 13399 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1540 | 12117 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1550 | 11467 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1700 | 15891 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1710 | 14671 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1720 | 13921 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1730 | 13399 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1740 | 12168 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1750 | 11416 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1900 | 16302 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1910 | 15804 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1920 | 14529 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1930 | 13485 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1940 | 12109 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 1950 | 11514 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 2110 | 14421 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 2130 | 12214 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 4-6 | 2140 | 11514 | Wed | Russian intel. | MFSK-16/32Bd | (AB) |
| <b>XPB1</b> | 5-6 | 0430 | 17457 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 0440 | 16236 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 0450 | 15835 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 0600 | 20184 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 0610 | 19583 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 0620 | 18559 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |

|             |     |      |       |     |                |              |      |
|-------------|-----|------|-------|-----|----------------|--------------|------|
| <b>XPB1</b> | 5-6 | 0630 | 17472 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 0640 | 16131 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 0650 | 15836 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 0800 | 20322 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 0810 | 19613 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 0820 | 18392 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 0830 | 17423 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 0840 | 14923 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 0850 | 13402 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1000 | 17474 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1010 | 16284 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1020 | 15887 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1030 | 14612 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1040 | 13551 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1200 | 13564 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1210 | 12147 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1220 | 11586 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1230 | 11144 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1240 | 10387 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1250 | 10384 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1400 | 13564 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1410 | 13364 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1420 | 12129 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1430 | 11548 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1440 | 11169 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1450 | 10284 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1600 | 15836 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1610 | 14953 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1620 | 13949 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1630 | 13362 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1640 | 12165 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1800 | 14979 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1810 | 14517 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1820 | 13439 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1830 | 12129 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1840 | 11573 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 1850 | 10285 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 2000 | 16298 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 2010 | 15803 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 2020 | 14454 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 2030 | 13384 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 2040 | 12116 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |

|             |     |      |       |     |                |              |      |
|-------------|-----|------|-------|-----|----------------|--------------|------|
| <b>XPB1</b> | 5-6 | 2050 | 11541 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 2200 | 13561 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 2210 | 13442 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 2220 | 12171 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 2230 | 11547 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 2240 | 11143 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 5-6 | 2250 | 10484 | Thu | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 6-6 | 0530 | 18256 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 0540 | 17454 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 0550 | 15821 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 0700 | 20841 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 0710 | 19593 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 0720 | 18422 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 0730 | 17418 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 0740 | 15937 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 0750 | 14487 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 0900 | 20929 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 0910 | 19371 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 0920 | 16343 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 0930 | 14968 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 0940 | 13553 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 0950 | 12224 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1100 | 16344 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1110 | 15881 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1120 | 14487 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1130 | 13942 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1140 | 12171 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1150 | 10346 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1300 | 13437 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1310 | 12181 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1320 | 11572 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1330 | 11157 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1340 | 10449 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1350 | 10288 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1500 | 15831 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1510 | 14807 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1520 | 13963 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1530 | 13399 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1540 | 12117 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1550 | 11467 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1700 | 15891 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1710 | 14671 | Fri | Russian intel. | MFSK-16      | (PY) |

|             |     |      |       |     |                |              |      |
|-------------|-----|------|-------|-----|----------------|--------------|------|
| <b>XPB1</b> | 6-6 | 1720 | 13921 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1730 | 13399 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1740 | 12168 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1750 | 11416 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1900 | 16302 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1910 | 15804 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1920 | 14529 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1930 | 13485 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1940 | 12109 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 1950 | 11514 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 2100 | 14904 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 2110 | 14421 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 2120 | 13484 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 2130 | 12214 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 2140 | 11514 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 6-6 | 2150 | 10414 | Fri | Russian intel. | MFSK-16      | (PY) |
| <b>XPB1</b> | 7-6 | 0400 | 20514 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0410 | 19638 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0420 | 18656 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0430 | 17457 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0440 | 16236 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0440 | 16236 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0450 | 15835 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0600 | 20184 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0610 | 19583 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0620 | 18559 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0630 | 17472 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0640 | 16131 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0650 | 15836 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0800 | 20322 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0810 | 19613 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0820 | 18392 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0830 | 17423 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0840 | 14923 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 0850 | 13402 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 1000 | 17474 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 1010 | 16284 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 1020 | 15887 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 1030 | 14612 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 1040 | 13551 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 1050 | 11591 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |
| <b>XPB1</b> | 7-6 | 1200 | 13564 | Sat | Russian intel. | MSFK-16/32Bd | (PY) |

|      |     |      |       |     |                |              |            |
|------|-----|------|-------|-----|----------------|--------------|------------|
| XPB1 | 7-6 | 1210 | 12147 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1220 | 11586 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1230 | 11144 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1240 | 10387 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1250 | 10384 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1400 | 13564 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1410 | 13364 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1420 | 12129 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1430 | 11548 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1440 | 11169 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1450 | 10284 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1600 | 15836 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1610 | 14953 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1620 | 13949 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1630 | 13362 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1640 | 12165 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1650 | 11597 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1800 | 14979 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1810 | 14517 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1820 | 13439 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1830 | 12129 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1840 | 11573 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 1850 | 10285 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 2000 | 16298 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 2010 | 15803 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 2020 | 14454 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 2030 | 13384 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 2040 | 12116 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 2050 | 11541 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 2230 | 11547 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 2240 | 11143 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 7-6 | 2250 | 10484 | Sat | Russian intel. | MSFK-16/32Bd | (PY)       |
| XPB1 | 8-6 | 0510 | 20499 | Sun | Russian intel. | MFSK-16/32Bd | (PY)       |
| XPB1 | 8-6 | 0520 | 19284 | Sun | Russian intel. | MFSK-16/32Bd | (PY)       |
| XPB1 | 8-6 | 0530 | 18256 | Sun | Russian intel. | MFSK-16/32Bd | (PY)       |
| XPB1 | 8-6 | 0540 | 17454 | Sun | Russian intel. | MFSK-16/32Bd | (PY)       |
| XPB1 | 8-6 | 0550 | 15821 | Sun | Russian intel. | MFSK-16/32Bd | (PY)       |
| XPB1 | 8-6 | 0700 | 20841 | Sun | Russian intel. | MFSK-16/32Bd | (PY)       |
| XPB1 | 8-6 | 0710 | 19593 | Sun | Russian intel. | MFSK-16/32Bd | (PY)       |
| XPB1 | 8-6 | 0720 | 18422 | Sun | Russian intel. | MFSK-16/32Bd | (PY)       |
| XPB1 | 8-6 | 0730 | 17418 | Sun | Russian intel. | MFSK-16/32Bd | (Hutch/PY) |
| XPB1 | 8-6 | 0740 | 15937 | Sun | Russian intel. | MFSK-16/32Bd | (Hutch/PY) |

|             |     |      |       |     |                 |              |            |
|-------------|-----|------|-------|-----|-----------------|--------------|------------|
| <b>XPB1</b> | 8-6 | 0750 | 14487 | Sun | Russian intel.  | MFSK-16/32Bd | (Hutch/PY) |
| <b>XPB1</b> | 8-6 | 0900 | 20929 | Sun | Russian intel.  | MFSK-16/32Bd | (PY)       |
| <b>XPB1</b> | 8-6 | 0910 | 19371 | Sun | Russian intel.  | MFSK-16/32Bd | (PY)       |
| <b>XPB1</b> | 8-6 | 0920 | 16343 | Sun | Russian intel.  | MFSK-16/32Bd | (PY)       |
| <b>XPB1</b> | 8-6 | 0930 | 14968 | Sun | Russian intel.  | MFSK-16/32Bd | (PY)       |
| <b>XPB1</b> | 8-6 | 0940 | 13553 | Sun | Russian intel.  | MFSK-16/32Bd | (PY)       |
| <b>XPB1</b> | 8-6 | 0950 | 12224 | Sun | Russian intel.  | MFSK-16/32Bd | (PY)       |
| <b>XPB1</b> | 8-6 | 1100 | 16344 | Sun | Russian intel.  | MFSK-16/32Bd | (PY)       |
| <b>XPB1</b> | 8-6 | 1110 | 15881 | Sun | Russian intel.  | MFSK-16/32Bd | (PY)       |
| <b>XPB1</b> | 8-6 | 1120 | 14487 | Sun | Russian intel.  | MFSK-16/32Bd | (PY)       |
| <b>XPB1</b> | 8-6 | 1130 | 13942 | Sun | Russian intel.  | MFSK-16/32Bd | (PY)       |
| <b>XPB1</b> | 8-6 | 1140 | 12171 | Sun | Russian intel.  | MFSK-16/32Bd | (PY)       |
| <b>XPB1</b> | 8-6 | 1150 | 10346 | Sun | Russian intel.  | MFSK-16/32Bd | (PY)       |
| <b>XPB1</b> | 8-6 | 1300 | 13437 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1310 | 12181 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1320 | 11572 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1330 | 11157 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1340 | 10449 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1350 | 10288 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1500 | 15831 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1510 | 14807 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1520 | 13963 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1530 | 13399 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1540 | 12117 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1550 | 11467 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1700 | 15891 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1710 | 14671 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1720 | 13921 | Sun | No transmission | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1730 | 13399 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1740 | 12168 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1750 | 11416 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1900 | 16302 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1910 | 15804 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1920 | 14529 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1930 | 13485 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1940 | 12109 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 1950 | 11514 | Sun | No transmission | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 2100 | 14904 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 2110 | 14421 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 2120 | 13484 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 2130 | 12214 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |
| <b>XPB1</b> | 8-6 | 2140 | 11514 | Sun | Russian intel.  | MFSK-16/32Bd | (AB/PY)    |

|             |     |      |       |     |                |              |         |
|-------------|-----|------|-------|-----|----------------|--------------|---------|
| <b>XPB1</b> | 8-6 | 2150 | 10414 | Sun | Russian intel. | MFSK-16/32Bd | (AB/PY) |
| <b>XPB1</b> | 9-6 | 0550 | 15821 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 0700 | 20841 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 0710 | 19593 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 0720 | 18422 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 0730 | 17418 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 0740 | 15937 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 0750 | 14487 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 0900 | 20929 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 0910 | 19371 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 0920 | 16343 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 0930 | 14968 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 0940 | 13553 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 0950 | 12224 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1100 | 16344 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1110 | 15881 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1120 | 14487 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1130 | 13942 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1140 | 12171 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1150 | 10346 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1300 | 13437 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1310 | 12181 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1320 | 11572 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1330 | 11157 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1340 | 10449 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1350 | 10288 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1500 | 15831 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1510 | 14807 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1520 | 13963 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1530 | 13399 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1540 | 12117 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1550 | 11467 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1700 | 15891 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1710 | 14671 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1720 | 13921 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1730 | 13399 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1740 | 12168 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1750 | 11416 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1900 | 16302 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1910 | 15804 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1920 | 14529 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |
| <b>XPB1</b> | 9-6 | 1930 | 13485 | Mon | Russian intel. | MFSK-16/32Bd | (PY)    |

|             |     |      |       |     |                |              |           |
|-------------|-----|------|-------|-----|----------------|--------------|-----------|
| <b>XPB1</b> | 9-6 | 1940 | 12109 | Mon | Russian intel. | MFSK-16/32Bd | (PY)      |
| <b>XPB1</b> | 9-6 | 1950 | 11514 | Mon | Russian intel. | MFSK-16/32Bd | (PY)      |
| <b>XPB1</b> | 9-6 | 2100 | 14904 | Mon | Russian intel. | MFSK-16/32Bd | (PY)      |
| <b>XPB1</b> | 9-6 | 2110 | 14421 | Mon | Russian intel. | MFSK-16/32Bd | (PY)      |
| <b>XPB1</b> | 9-6 | 2120 | 13484 | Mon | Russian intel. | MFSK-16/32Bd | (PY)      |
| <b>XPB1</b> | 9-6 | 2130 | 12214 | Mon | Russian intel. | MFSK-16/32Bd | (PY)      |
| <b>XPB1</b> | 9-6 | 2140 | 11514 | Mon | Russian intel. | MFSK-16/32Bd | (PY)      |
| <b>XPB1</b> | 9-6 | 2150 | 10414 | Mon | Russian intel. | MFSK-16/32Bd | (PY)      |
| <b>XPB1</b> | 1-7 | 0500 | 18687 | Tue | Russian intel. | MFSK-16      | (HFD-RUS) |
| <b>XPB1</b> | 1-7 | 0510 | 18287 | Tue | Russian intel. | MFSK-16      | (HFD-RUS) |
| <b>XPB1</b> | 1-7 | 0520 | 16287 | Tue | Russian intel. | MFSK-16      | (HFD)     |
| <b>XPB1</b> | 1-7 | 0530 | 15887 | Tue | Russian intel. | MFSK-16      | (HFD)     |
| <b>XPB1</b> | 1-7 | 0540 | 14487 | Tue | Russian intel. | MFSK-16      | (HFD)     |
| <b>XPB1</b> | 1-7 | 0550 | 13387 | Tue | Russian intel. | MFSK-16      | (HFD)     |
| <b>XPB1</b> | 1-7 | 1300 | 20024 | Tue | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 1-7 | 1310 | 19224 | Tue | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 1-7 | 1320 | 18324 | Tue | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 1-7 | 1330 | 17424 | Tue | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 1-7 | 1340 | 16324 | Tue | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 1-7 | 1350 | 15824 | Tue | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 2-7 | 1100 | 13884 | Wed | Russian intel. | MFSK-16      | (HFD)     |
| <b>XPB1</b> | 2-7 | 1110 | 13384 | Wed | Russian intel. | MFSK-16      | (HFD)     |
| <b>XPB1</b> | 2-7 | 1120 | 12184 | Wed | Russian intel. | MFSK-16      | (HFD)     |
| <b>XPB1</b> | 2-7 | 1130 | 11584 | Wed | Russian intel. | MFSK-16      | (HFD)     |
| <b>XPB1</b> | 2-7 | 1140 | 11084 | Wed | Russian intel. | MFSK-16      | (HFD)     |
| <b>XPB1</b> | 2-7 | 1150 | 10584 | Wed | Russian intel. | MFSK-16      | (HFD)     |
| <b>XPB1</b> | 4-7 | 1300 | 20024 | Fri | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 4-7 | 1310 | 19224 | Fri | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 4-7 | 1320 | 18324 | Fri | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 4-7 | 1330 | 17424 | Fri | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 4-7 | 1340 | 16324 | Fri | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 4-7 | 1350 | 15824 | Fri | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 5-7 | 1100 | 13884 | Sat | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 5-7 | 1110 | 13384 | Sat | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 5-7 | 1120 | 12184 | Sat | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 5-7 | 1130 | 11854 | Sat | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 5-7 | 1140 | 11084 | Sat | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 5-7 | 1150 | 10854 | Sat | Russian intel. | MFSK-16      | (AB)      |
| <b>XPB1</b> | 7-7 | 0500 | 18687 | Mon | Russian intel. | MFSK-16      | (AB-POL)  |
| <b>XPB1</b> | 7-7 | 0510 | 18287 | Mon | Russian intel. | MFSK-16      | (AB-POL)  |
| <b>XPB1</b> | 7-7 | 0520 | 16287 | Mon | Russian intel. | MFSK-16      | (AB-POL)  |
| <b>XPB1</b> | 7-7 | 0530 | 15887 | Mon | Russian intel. | MFSK-16      | (AB)      |

|      |      |      |       |     |                |         |          |
|------|------|------|-------|-----|----------------|---------|----------|
| XPB1 | 7-7  | 0540 | 14487 | Mon | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 7-7  | 0550 | 13387 | Mon | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 8-7  | 0500 | 18687 | Tue | Russian intel. | MFSK-16 | (AB-KWT) |
| XPB1 | 8-7  | 0510 | 18287 | Tue | Russian intel. | MFSK-16 | (AB-KWT) |
| XPB1 | 8-7  | 0520 | 16287 | Tue | Russian intel. | MFSK-16 | (AB-KWT) |
| XPB1 | 8-7  | 0530 | 15887 | Tue | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 8-7  | 0540 | 14487 | Tue | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 8-7  | 0550 | 13387 | Tue | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 8-7  | 1300 | 20024 | Tue | Russian intel. | MFSK-16 | (HFD)    |
| XPB1 | 8-7  | 1310 | 19224 | Tue | Russian intel. | MFSK-16 | (HFD)    |
| XPB1 | 8-7  | 1320 | 18324 | Tue | Russian intel. | MFSK-16 | (HFD)    |
| XPB1 | 8-7  | 1330 | 17424 | Tue | Russian intel. | MFSK-16 | (HFD)    |
| XPB1 | 8-7  | 1340 | 16324 | Tue | Russian intel. | MFSK-16 | (HFD)    |
| XPB1 | 8-7  | 1350 | 15824 | Tue | Russian intel. | MFSK-16 | (AB/HFD) |
| XPB1 | 9-7  | 1100 | 13884 | Wed | Russian intel. | MFSK-16 | (Anon)   |
| XPB1 | 9-7  | 1110 | 13384 | Wed | Russian intel. | MFSK-16 | (Anon)   |
| XPB1 | 9-7  | 1120 | 12184 | Wed | Russian intel. | MFSK-16 | (Anon)   |
| XPB1 | 9-7  | 1130 | 11854 | Wed | Russian intel. | MFSK-16 | (Anon)   |
| XPB1 | 9-7  | 1140 | 11084 | Wed | Russian intel. | MFSK-16 | (Anon)   |
| XPB1 | 9-7  | 1150 | 10854 | Wed | Russian intel. | MFSK-16 | (Anon)   |
| XPB1 | 11-7 | 1300 | 20024 | Fri | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 11-7 | 1310 | 19224 | Fri | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 11-7 | 1320 | 18324 | Fri | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 11-7 | 1330 | 17424 | Fri | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 11-7 | 1340 | 16324 | Fri | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 11-7 | 1350 | 15824 | Fri | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 12-7 | 1100 | 13884 | Sat | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 12-7 | 1110 | 13384 | Sat | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 12-7 | 1120 | 12184 | Sat | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 12-7 | 1130 | 11854 | Sat | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 12-7 | 1140 | 11084 | Sat | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 12-7 | 1150 | 10854 | Sat | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 14-7 | 0500 | 18687 | Mon | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 14-7 | 0510 | 18287 | Mon | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 14-7 | 0520 | 16287 | Mon | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 14-7 | 0530 | 15887 | Mon | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 14-7 | 0540 | 14487 | Mon | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 14-7 | 0550 | 13387 | Mon | Russian intel. | MFSK-16 | (AB)     |
| XPB1 | 15-7 | 0500 | 18687 | Tue | Russian intel. | MFSK-16 | (AB-KWT) |
| XPB1 | 15-7 | 0510 | 18287 | Tue | Russian intel. | MFSK-16 | (AB-KWT) |
| XPB1 | 15-7 | 0520 | 16287 | Tue | Russian intel. | MFSK-16 | (AB-KWT) |
| XPB1 | 15-7 | 0530 | 15887 | Tue | Russian intel. | MFSK-16 | (AB)     |

|             |      |      |       |     |                |         |          |
|-------------|------|------|-------|-----|----------------|---------|----------|
| <b>XPB1</b> | 15-7 | 0540 | 14487 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 15-7 | 0550 | 13387 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 15-7 | 1300 | 20024 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 15-7 | 1310 | 19224 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 15-7 | 1320 | 18324 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 15-7 | 1330 | 17424 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 15-7 | 1340 | 16324 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 15-7 | 1350 | 15824 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 16-7 | 1100 | 13884 | Wed | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 16-7 | 1110 | 13384 | Wed | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 16-7 | 1120 | 12184 | Wed | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 16-7 | 1130 | 11854 | Wed | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 16-7 | 1140 | 11084 | Wed | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 16-7 | 1150 | 10854 | Wed | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 18-7 | 1300 | 20024 | Fri | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 18-7 | 1310 | 19224 | Fri | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 18-7 | 1320 | 18324 | Fri | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 18-7 | 1330 | 17424 | Fri | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 18-7 | 1340 | 16324 | Fri | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 18-7 | 1350 | 15824 | Fri | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 19-7 | 1100 | 13884 | Sat | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 19-7 | 1110 | 13384 | Sat | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 19-7 | 1120 | 12184 | Sat | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 19-7 | 1130 | 11854 | Sat | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 19-7 | 1140 | 11084 | Sat | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 19-7 | 1150 | 10854 | Sat | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 21-7 | 0500 | 18687 | Mon | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 21-7 | 0510 | 18287 | Mon | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 21-7 | 0520 | 16287 | Mon | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 21-7 | 0530 | 15887 | Mon | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 21-7 | 0540 | 14487 | Mon | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 21-7 | 0550 | 13387 | Mon | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 22-7 | 0500 | 18687 | Tue | Russian intel. | MFSK-16 | (AB-KWT) |
| <b>XPB1</b> | 22-7 | 0510 | 18287 | Tue | Russian intel. | MFSK-16 | (AB-KWT) |
| <b>XPB1</b> | 22-7 | 0520 | 16287 | Tue | Russian intel. | MFSK-16 | (AB-KWT) |
| <b>XPB1</b> | 22-7 | 0530 | 15887 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 22-7 | 0540 | 14487 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 22-7 | 0550 | 13387 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 22-7 | 1300 | 20024 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 22-7 | 1310 | 19224 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 22-7 | 1320 | 18324 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 22-7 | 1330 | 17424 | Tue | Russian intel. | MFSK-16 | (AB)     |

|             |      |      |       |     |                |         |          |
|-------------|------|------|-------|-----|----------------|---------|----------|
| <b>XPB1</b> | 22-7 | 1340 | 16324 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 22-7 | 1350 | 15824 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 25-7 | 1300 | 20024 | Fri | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 25-7 | 1310 | 19224 | Fri | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 25-7 | 1320 | 18324 | Fri | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 25-7 | 1330 | 17424 | Fri | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 25-7 | 1340 | 16324 | Fri | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 25-7 | 1350 | 15824 | Fri | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 28-7 | 0500 | 18687 | Mon | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 28-7 | 0510 | 18287 | Mon | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 28-7 | 0520 | 16287 | Mon | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 28-7 | 0530 | 15887 | Mon | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 28-7 | 0540 | 14487 | Mon | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 28-7 | 0550 | 13387 | Mon | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 29-7 | 0500 | 18687 | Tue | Russian intel. | MFSK-16 | (AB-KWT) |
| <b>XPB1</b> | 29-7 | 0510 | 18287 | Tue | Russian intel. | MFSK-16 | (AB-KWT) |
| <b>XPB1</b> | 29-7 | 0520 | 16287 | Tue | Russian intel. | MFSK-16 | (AB-KWT) |
| <b>XPB1</b> | 29-7 | 0530 | 15887 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 29-7 | 0540 | 14487 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 29-7 | 0550 | 13387 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 29-7 | 1300 | 20024 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 29-7 | 1310 | 19224 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 29-7 | 1320 | 18324 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 29-7 | 1330 | 17424 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 29-7 | 1340 | 16324 | Tue | Russian intel. | MFSK-16 | (AB)     |
| <b>XPB1</b> | 29-7 | 1350 | 15824 | Tue | Russian intel. | MFSK-16 | (AB)     |

## CONTRIBUTORS

|         |                                             |
|---------|---------------------------------------------|
| AB      | Ary Boender, Netherlands                    |
| AB-ARS  | Ary Boender via remote rx Saudi Arabia      |
| AB-GRC  | Ary Boender via remote rx Greece            |
| AB-HNG  | Ary Boender via remote rx Hungary           |
| AB-IRL  | Ary Boender via remote rx in Ireland        |
| AB-IRQ  | Ary Boender via remote rx Iraq              |
| AB-J    | Ary Boender via remote rx Japan             |
| AB-KOR  | Ary Boender via remote rx South Korea       |
| AB-KWT  | Ary Boender via remote rx Kuwait            |
| AB-POL  | Ary Boender via remote rx Poland            |
| AB-QAT  | Ary Boender via remote rx Qatar             |
| AB-RUS  | Ary Boender via remote rx Russia            |
| AB-S    | Ary Boender via remote rx Sweden            |
| Anon    | Anonymous                                   |
| AVX     | AlphaVax, Germany                           |
| Dan     | Daniel LU5EMM, Argentina                    |
| FD      | Full Day Waterfall, University Twente SDR   |
| Fspy    | Feline Spy SWL                              |
| HFD     | Hans-Friedrich Dumrese, Germany             |
| HFD-J   | Hans-Friedrich Dumrese via remote rx Japan  |
| HFD-RUS | Hans-Friedrich Dumrese via remote rx Russia |
| Hutch   | Hutch, London, UK                           |
| JPL     | JPL, NB, Canada (and various remote rx)     |
| KX0DW   | Dave Wright                                 |
| Lac     | Lazycrypt                                   |
| Moon    | Moonlight (Dave AU)                         |
| Pille   | Pille                                       |
| PY      | Pierre Ynard, France and via remote rx      |
| RO      | Rando One, Sweden                           |
| Subilo  | Subilo                                      |
| T101    | RadiotekhnikaT101 via Priyom                |
| TJ      | Trond Jacobsen, Norway                      |
| TM      | Time Machine                                |

## APPENDIX

### List of active stations

#### Prefixes

|      |                                                                                            |       |                                                  |
|------|--------------------------------------------------------------------------------------------|-------|--------------------------------------------------|
| E    | English language                                                                           | Q     | 4+4 QPSK mode                                    |
| F    | FSK (Frequency Shift Keying) modes                                                         | S     | Slavic languages                                 |
| G    | German language                                                                            | SK    | Various modes used by Cuba, incl. (B)PSK, WinDRM |
| HM   | Hybrid modes                                                                               | UM(C) | Unid Morse station (Chinese)                     |
| M(C) | Morse code (Chinese)                                                                       | V     | Voice broadcasts in other languages              |
| P    | PSK modes. QPSK (Quadrature Phase Shift Keying) and BPSK (Binary Phase-Shift keying) modes | VC    | Voice Chinese                                    |
|      |                                                                                            | XP    | MFSK (polytone) modes                            |

#### Notes :

There is no solid proof that the mentioned operators are correct.

Russian G06, V06 and other variants are not in the list but are occasionally used for exercises

| Code        | Description                                                     | Country | Counterpart                                     | Operator             |
|-------------|-----------------------------------------------------------------|---------|-------------------------------------------------|----------------------|
| <b>E06</b>  | 3-fig id, OM/EE 00000                                           | RUS     | E06, S06, M14, F01, F06, F06a                   | Russian intelligence |
| <b>E06a</b> | 3-fig id, 2 group commencing with 11111                         | RUS     | E06, S06, M14, F01, F06, F06a                   | Russian intelligence |
| <b>E06b</b> | 3-fig id with 5FG group in call, 2 msgs                         | RUS     | E06, S06, M14, F01, F06, F06a                   | Russian intelligence |
| <b>E07</b>  | 3-fig id, OM/EE 000 000                                         | RUS     | E07, V07, V07F, M12, F07, P07, XPA1, XPA2, XPB1 | Russian intelligence |
| <b>E07a</b> | Null msg format. Nnn nnn nnn 000 repeated 20 mins later         | RUS     | E07, V07, V07F, M12, F07, P07, XPA1, XPA2, XPB1 | Russian intelligence |
| <b>E11</b>  | nnn Oblique 00 Out                                              | POL     | E11, E11a, S11a, F03, P03                       | Agencja Wywiadu      |
| <b>E11a</b> | E11 with message                                                | POL     | E11, E11a, S11a, F03, P03                       | Agencja Wywiadu      |
| <b>E25</b>  | Arabic music, 3FGs call, 4FGs, 9450 kHz                         | EGY     | E25, E25a, E25b                                 | GID                  |
| <b>E25a</b> | E25 but 3FG 3FG 2FG 2FG 2FG 2FG call                            | EGY     | E25, E25a, E25b                                 | GID                  |
| <b>E25b</b> | Arab message; callup in English                                 | EGY     | E25, E25a, E25b                                 | GID                  |
| <b>F01</b>  | FSK/ITA2 200Bd/500Hz                                            | RUS     | E06, S06, M14, F01, F06, F06a                   | Russian Diplo/Intel. |
| <b>F02</b>  | MFSK-4 150Bd/4000Hz (12kHz BW)                                  | RUS     |                                                 | Unid Russian net.    |
| <b>F03i</b> | FSK-2 100Bd/800Hz/cf +1200Hz/488-bit period                     | POL     | E11, E11a, S11a, F03, P03                       | Agencja Wywiadu      |
| <b>F03j</b> | FSK-4 100Bd/400Hz/cf +1200Hz/448-bit period                     | POL     | E11, E11a, S11a, F03, P03                       | Agencja Wywiadu      |
| <b>F03l</b> | FSK-2 100Bd/200Hz/cf +700Hz/448-bit period                      | POL     | E11, E11a, S11a, F03, P03                       | Agencja Wywiadu      |
| <b>F06</b>  | FSK 200Bd/1000Hz ACF=288 sending compressed digits              | RUS     | E06, S06, M14, F01, F06, F06a                   | Russian Diplo/Intel. |
| <b>F06a</b> | FSK 200Bd/1000Hz ACF=288 sending uncompressed ASCII files       | RUS     | E06, S06, M14, F01, F06, F06a                   | Russian Diplo/Intel. |
| <b>F07</b>  | 5x16-tone MFSK, 10Bd, 20Hz + BPSK, 250Bd bursts                 | RUS     | E07, V07, V07F, M12, F07, P07, XPA1, XPA2, XPB1 | Russian intelligence |
| <b>HM01</b> | Consists of alternating WinDRM data & V02a repeating sequences. | CUB     |                                                 | DGI                  |
| <b>M01</b>  | 2 tone hand-keyed, ends '000'                                   | RUS     |                                                 | Russian Navy         |
| <b>M01a</b> | End of the month transmission                                   | RUS     |                                                 | Russian Navy         |
| <b>M12</b>  | 5FG, 3 or 4FG DK. Ends with 000 000                             | RUS     | E07, V07, V07F, M12, F07, P07, XPA1, XPA2, XPB1 | Russian intelligence |
| <b>M12a</b> | 3FG DK. 2 Messages. Ends with 000 000                           | RUS     | E07, V07, V07F, M12, F07, P07, XPA1, XPA2, XPB1 | Russian intelligence |
| <b>M14</b>  | Ends 00000 or 5 long dashes                                     | RUS     | E06, S06, M14, F01, F06, F06a                   | Russian intelligence |
| <b>M14a</b> | Dual msg variant                                                | RUS     | E06, S06, M14, F01, F06, F06a                   | Russian intelligence |
| <b>M14b</b> | Rare, added 2nd msg hand keyed                                  | RUS     | E06, S06, M14, F01, F06, F06a                   | Russian intelligence |
| <b>M14c</b> | Rare, dual msg, consecutive id's                                | RUS     | E06, S06, M14, F01, F06, F06a                   | Russian intelligence |
| <b>M14d</b> | 3FG id with 5FG group in call                                   | RUS     | E06, S06, M14, F01, F06, F06a                   |                      |
| <b>M21</b>  | 14 fig msgs. Markers and tracking data                          | RUS     | M21, M41                                        | Russian Air Defense  |
| <b>M22</b>  | 4XZ                                                             | ISR     |                                                 | Israeli Navy         |
| <b>M23</b>  | Letters and/or figures strings in various formats               | F       |                                                 |                      |
| <b>M41</b>  | M21 variant using callsigns and WZD and ABV                     | RUS     | M21, M41                                        | Russian Air Defense  |
| <b>M42</b>  | Various modes                                                   | RUS     |                                                 | Russian Gov/Intel.   |
| <b>M42b</b> | FSK 50/500 (=50= separator)                                     | RUS     |                                                 | Russian Gov/Intel.   |
| <b>M51a</b> | FAV22 transmissions                                             | F       |                                                 | French army          |
| <b>M51b</b> | Non-stop 5-character groups                                     | F       |                                                 | French army          |
| <b>M76</b>  | ABCD de EFGH QTC xx xx = 5FG 3607X RRRRR 201XX NNN              |         |                                                 |                      |

|              |                                                                                                                                       |     |                                                 |                       |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------------------------------------|-----------------------|
| <b>M89</b>   | Markers like V YHXD YHXD YHXD DE SAQC SAQC and 4FG messages. Cut numbers                                                              | CHN |                                                 | Chinese military      |
| <b>M89v</b>  | M89 voice transmissions                                                                                                               | CHN |                                                 | Chinese military      |
| <b>M95</b>   | Markers and 4FG messages. Cut numbers. Morse counterpart of V26 and Q26                                                               | CHN | M95, Q26, V26                                   | Chinese military      |
| <b>MC03</b>  | Tracking data. Various formats                                                                                                        | CHN | VC01                                            | Chinese Air Defense   |
| <b>MVC03</b> | Morse counterpart of VC03                                                                                                             | CHN | VC03                                            | Chinese Air Defense   |
| <b>MX</b>    | Single letter beacons/markers                                                                                                         | RUS |                                                 | Russian military      |
| <b>P03e</b>  | QPSK 100Bd/488-bit period                                                                                                             | POL | E11, E11a, S11a, F03, P03                       |                       |
| <b>P03f</b>  | QPSK 200Bd/496-bit period                                                                                                             | POL | E11, E11a, S11a, F03, P03                       |                       |
| <b>P03g</b>  | BPSK 50Bd/464-bit period                                                                                                              | POL | E11, E11a, S11a, F03, P03                       |                       |
| <b>P03h</b>  | BPSK 100Bd/512-bit period                                                                                                             | POL | E11, E11a, S11a, F03, P03                       |                       |
| <b>P03i</b>  | BPSK 100Bd/512-bit period                                                                                                             | POL | E11, E11a, S11a, F03, P03                       |                       |
| <b>P03j</b>  | QPSK 100Bd/504-bit period                                                                                                             | POL | E11, E11a, S11a, F03, P03                       |                       |
| <b>P03k</b>  | BPSK 100Bd/480-bit period                                                                                                             | POL | E11, E11a, S11a, F03, P03                       |                       |
| <b>P03l</b>  | QPSK 100Bd/464-bit period                                                                                                             | POL | E11, E11a, S11a, F03, P03                       |                       |
| <b>P07</b>   | Russian intel. 8-tone OFDM, QSPK, 62.5Bd, 125Hz + BPSK, 250Bd bursts                                                                  | RUS | E07, V07, V07F, M12, F07, P07, XPA1, XPA2, XPB1 | Russian intelligence  |
| <b>Q26</b>   | Digital counterpart of V26 and M95. Mode: 4+4 QPSK 75/3000 LSB                                                                        | CHN | M95, Q26, V26                                   | Chinese military      |
| <b>S06</b>   | 3-fig id, 00000 OM/RR                                                                                                                 | RUS | E06, S06, M14, F01, F06, F06a                   | Russian intelligence  |
| <b>S06b</b>  | 3-fig id, two group (commencing with 11111, stutter)                                                                                  | RUS | E06, S06, M14, F01, F06, F06a                   | Russian intelligence  |
| <b>S06c</b>  | Repeating single group                                                                                                                | RUS | E06, S06, M14, F01, F06, F06a                   | Russian intelligence  |
| <b>S06e</b>  | 3-fig id, two messages                                                                                                                | RUS | E06, S06, M14, F01, F06, F06a                   | Russian intelligence  |
| <b>S06f</b>  | 3 group msg, ends 00000                                                                                                               | RUS | E06, S06, M14, F01, F06, F06a                   | Russian intelligence  |
| <b>S06s</b>  | YL + slow zero's ending                                                                                                               | UKR | E06, S06, M14, F01, F06, F06a                   | SZRU                  |
| <b>S11a</b>  | nnn Cherta 00 or group count + message. Konets                                                                                        | POL | E11, E11a, S11a, F03, P03                       | Agencja Wywiadu       |
| <b>S28</b>   | Buzzer                                                                                                                                | RUS |                                                 | Russian military      |
| <b>S30</b>   | Pip                                                                                                                                   | RUS |                                                 | Russian military      |
| <b>S32</b>   | Squeaky Wheel                                                                                                                         | RUS |                                                 | Russian military      |
| <b>UM03</b>  | X2M (probably Chinese). Mode: CW                                                                                                      |     |                                                 |                       |
| <b>UM04</b>  | PROMRCh. Daily transmissions. Format: VVVVV PROM-RCh = 27 09 = 1000 0600 0640 0780 1160 ... ABV repeat message = AR. Origin: Bulgaria | BUL |                                                 | Bulgarian military    |
| <b>UM05</b>  | French morse training station                                                                                                         | F   |                                                 |                       |
| <b>UM06</b>  | Various formats morse strings                                                                                                         | F   |                                                 |                       |
| <b>UM10</b>  | 10-minutes net. Callsigns sent for 10 minutes 2x per hour on 2 parallel frequencies. Seldom messages are sent.                        |     |                                                 |                       |
| <b>V07</b>   | Spanish Man 000 000                                                                                                                   | RUS | E07, V07, V07F, M12, F07, P07, XPA1, XPA2, XPB1 | Russian intelligence  |
| <b>V07F</b>  | French version of E07                                                                                                                 | RUS | E07, V07, V07F, M12, F07, P07, XPA1, XPA2, XPB1 | Russian intelligence  |
| <b>V13</b>   | New Star Broadcasting                                                                                                                 | TWN | V13, V13a, V13b                                 | Military Intelligence |
| <b>V13a</b>  | New Star Broadcasting (AM, 5-7 msgs to 5-7 units)                                                                                     | TWN | V13, V13a, V13b                                 | Military Intelligence |
| <b>V13b</b>  | New Star Broadcasting (AM/USB hybrid, intro 2x, 4 msgs to 4 units)                                                                    | TWN | V13, V13a, V13b                                 | Military Intelligence |
| <b>V26</b>   | Voice counterpart of M95 and Q26                                                                                                      | CHN | M95, Q26, V26                                   | Chinese military      |
| <b>VC01</b>  | Chinese Robot (tracking data)                                                                                                         | CHN | MC03                                            | Chinese Air Defense   |
| <b>VC02</b>  | Chinese voice morse stations                                                                                                          | CHN |                                                 | Chinese Air Defense   |
| <b>VC03</b>  | 3FG callup and 4FG messages                                                                                                           |     |                                                 |                       |
| <b>VC05</b>  | Chinese time stamp station. Operator calling a 4-figure callsign for four minutes. At the end the actual Beijing time is mentioned.   | CHN |                                                 |                       |
| <b>VR01</b>  | Russian station passing coded messages. Active sinds at least March 2014. Seldom heard                                                | RUS |                                                 |                       |
| <b>X06</b>   | MFA Moscow. Selcal system for diplomatic missions                                                                                     | RUS |                                                 | Various               |
| <b>XPA1</b>  | MFSK-20/10Bd transmissions                                                                                                            | RUS |                                                 | Russian intelligence  |
| <b>XPA2</b>  | MFSK-16/20Bd transmissions                                                                                                            | RUS |                                                 | Russian intelligence  |
| <b>XPB1</b>  | MFSK-16 transmissions                                                                                                                 | RUS |                                                 | Russian intel         |
| <b>XSL</b>   | QPSK 1500Bd. Slot Machine (Japanese Navy Telemetry)                                                                                   | J   |                                                 | Japanese navy         |

## Morse characters

|   |         |                  |           |                        |            |             |
|---|---------|------------------|-----------|------------------------|------------|-------------|
| A | . -     | 1                | . - - - - | Full stop (period)     | [ . ]      | . - . - . - |
| B | - . . . | 2                | . . - - - | Comma                  | [ , ]      | - - . . - - |
| C | - . - . | 3                | . . . - - | Colon                  | [ : ]      | - - - . . . |
| D | - . .   | 4                | . . . . - | Question mark          | [ ? ]      | . . - - . . |
| E | .       | 5                | . . . . . | Exclamation mark       | [ ! ]      | - . - . - - |
| F | . . - . | 6                | - . . . . | Apostrophe             | [ ' ]      | . - - - . . |
| G | - - .   | 7                | - - . . . | Dash or Hyphen         | [ - ]      | - . . . . - |
| H | . . . . | 8                | - - - . . | Slash                  | [ / ]      | - . . - .   |
| I | . .     | 9                | - - - - . | Left-hand bracket      | [ ( ]      | - . - - .   |
| J | . - - - | 0                | - - - - - | Right-hand bracket     | [ ) ]      | - . - - . - |
| K | - . -   |                  |           | Quotation marks        | [ " " ]    | . - . . - . |
| L | . - . . |                  |           | Equals sign            | [ BT = ]   | - . . . -   |
| M | - -     | Accented letters |           | Understood             |            | . . . - .   |
| N | - .     | Ä                | . - . -   | Plus sign              | [ + ]      | . - . - .   |
| O | - - -   | Á                | . - - - - | Invitation to transmit |            | - . -       |
| P | . - . . | CH               | - - - -   | Wait                   | [ AS ]     | . - . . .   |
| Q | - - . - | É                | . . - . . | End of Transmission    | [ SK, VA ] | . . . - . - |
| R | . - .   | Ö                | - - - .   | End of message         | [ AR ]     | . - . - .   |
| S | . . .   | Ü                | . . - -   | Starting signal        |            | - . . - .   |
| T | -       |                  |           | Multiplication sign    | [ × ]      | - . . -     |
| U | . . -   |                  |           | At sign                | [ @ ]      | . - - . - . |
| V | . . . - |                  |           | Break                  | [ BK ]     | - . . . - . |
| W | . - -   |                  |           | Ampersand              | [ & ]      | . - . . .   |
| X | - . . . |                  |           |                        |            |             |
| Y | - . - - |                  |           |                        |            |             |
| Z | - - . . |                  |           |                        |            |             |

For Cyrillic morse etc., see also  
<http://udxf.nl/Morse-document.pdf>  
<http://udxf.nl/Russian.pdf>

Chinese cut numbers  
(M89, M95, MC03, etc)

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| A | U | 3 | 4 | 5 | 6 | 7 | D | N | T |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

M08a cut numbers

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| A | N | D | U | W | R | I | G | M | T |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

Q26 conversion

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| F | J | B | P | G | U | Y | M | C | W |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

3<sup>rd</sup> shift Cyrillic RTTY as used by M42b

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Q | W | E | R | T | Y | U | I | O | P | ( | K | V | Z |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | K | = | - | + |

| Word      | E11a      | S11a     | M03       |
|-----------|-----------|----------|-----------|
| Attention | Attention | Vnimanye |           |
| Slash /   | Oblique   | Cirta    | - . . - . |
| Out       | Out       | Konets   |           |

| Figure | English | French | German | Mandarin | Spanish | Russian  | Arabic  |
|--------|---------|--------|--------|----------|---------|----------|---------|
| 0      | Zero    | Zero   | Null   | Ling     | Cero    | Null     | Sifr    |
| 1      | One     | Un     | Eins   | Yi       | Uno     | Odín     | Wahid   |
| 2      | Two     | Deux   | Zwei   | Er       | Dos     | Dva      | Itnien  |
| 3      | Three   | Trois  | Drei   | San      | Tres    | Tri      | Talata  |
| 4      | Four    | Quatre | Vier   | Si       | Cuatro  | Chety're | Arba`a  |
| 5      | Five    | Cinq   | Fünf   | Wu       | Cinco   | Pyat'    | Xamsa   |
| 6      | Six     | Six    | Sechs  | Liu      | Seis    | Shest'   | Sitta   |
| 7      | Seven   | Sept   | Sieben | Qi       | Siete   | Sem'     | Sab`a   |
| 8      | Eight   | Huit   | Acht   | Ba       | Ocho    | Vósem'   | Tamanya |
| 9      | Nine    | Neuf   | Neun   | Jiu      | Nueve   | Dévyat'  | Tiss`a  |

| Figure | Morse     | Vietnamese | E17z  | S11a       | G06    | E11   |
|--------|-----------|------------|-------|------------|--------|-------|
| 0      | — — — — — | Số không   | Zero  | nul        | Null   | Zero  |
| 1      | . — — — — | Một        | Van   | adinka     | Eins   | One   |
| 2      | . . — — — | Hai        | To    | dvoyka     | Twso   | Two   |
| 3      | . . . — — | Ba         | Fwee  | troyka     | Drei   | Three |
| 4      | . . . . — | Bồ'n       | Fo    | chetvyorka | Vier   | Four  |
| 5      | . . . . . | Năm        | Fav   | petyorka   | Funuf  | Fiver |
| 6      | — . . . . | Sáu        | Six   | shest      | Sechs  | Six   |
| 7      | — — . . . | Ba   y     | Seven | syem       | Sieben | Seven |
| 8      | — — — . . | Tám        | Eight | vosyem     | Acht   | Eight |
| 9      | — — — — . | Chín       | Nine  | dyevyet    | Neugen | Niner |
| =      | — . . . . |            |       |            |        |       |
| /      | — . . . . |            |       |            |        |       |

Note: E17z, M03 and M08a are defunct.

## COLOPHON

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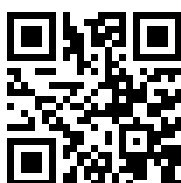
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676 27364 92636 89426 61288 74982 36498 32764 81276 81  
 486 48932 70987 32123 49817 26346 81287 65491 87364 81  
 721 75654 55656 12737 72727 72727 91918 63473 67867 72  
 723 87629 37677 32612 53498 71296 28756 18276 98716 87  
 7269 76329 74698 76857 98678 27681 56781 57681 73648 1  
 591 87364 87265 96718 27638 12673 84769 28743 98127 5  
 8 63298 75698 27465 87326 49876 28376 81273 98615 6  
 67 87432 74328 78674 29867 32867 67867 86786 43266 48  
 57 68768 68763 34234 34238 68768 62342 48273 48768 28  
 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 48  
 343 98798 98754 98754 98754 98754 29867 67543 67986 86  
 76 87698 69876 87698 69876 87612 12341 34867 86798 652  
 867 83298 65656 56756 56123 32143 14321 32143 14321 321  
 82767 58765 76587 58765 76587 58765 76587 58756 765  
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