```
078  27364  92836  09428  61208  74982  36498  32764  81276  81
986  40932  70987  32123  49817  26346  81287  65491  87364  81
721  75654  55656  12737  72727  72727  91918  63473  67867  70
723  87629  37677  32612  53498  71296  28756  18276  98716  87
7269 76329  74698  76857  98670  27601  56701  57601  73648  15
591  87364  87265  96710  27630  12673  84769  28743  98127  5
  8  63298  75698  27465  87326  49876  28376  81273  98615  62
 67  87432  74328  78674  29867  32867  67867  86786  43286  432
 57  68768  68763  34234  34238  68768  62342  48273  48768  234
936  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  435
543  98798  98754  98754  98754  98754  29867  67543  67986  86
 76  87698  69876  87698  69876  87612  12341  34867  86798  632
967  43298  65656  56756  56123  32143  14321  32143  14321  321
     12787  58765  76587  58765  76587  58765  76587  58756  765
     36543  54365  36543  54365  36543  54365  36543  5
```

Numbers & Oddities

a.k.a. The Spooks Newsletter

Edition #193, October 2013

Editor: Ary Boender   email: ary@luna.nl

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

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

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

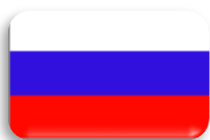**UTILITY DXERS FORUM (UDXF)** http://www.udxf.nl

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

Hello and welcome to the 193rd edition of Numbers & Oddities. I have lots of logs for you as usual. The Russian military sections have been moved to the end, just before the Logs Section. There are a lot of M42, M12 and M89 logs. See the Logs Section and M42 section for these items.

Enjoy and please, send your logs to UDXF and Spooks or directly to me. THANKS.
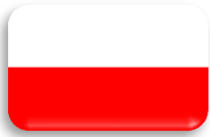

VOICE STATIONS

E06

	date	UTC	frequency	details
E06	3-10-2013	2030	5186	762 762 etc
E06	4-10-2013	0600	16320	186 953 101 = 71303
E06	4-10-2013	0700	18210	186
E06	9-10-2013	1920	4588	218 218 218 00000
E06	9-10-2013	2020	4060	218 218 218 00000
E06	30-10-2013	1940	7943	229 1 561 63 40509 81272 28675 55674 15835 ... 02321 17818 62444 55844 23118 000 000

E07

	date	UTC	frequency	details
E07	2-10-2013	1700	13376	317 0 prior to 1700Z a few sec of English bcing
E07	2-10-2013	1900	10243	229 229 229 000
E07	3-10-2013	2030	5836	584 0
E07	7-10-2013	1900	10243	229 229 229 000
E07	7-10-2013	1900	10243	229 0
E07	7-10-2013	1920	9243	229 0
E07	9-10-2013	1700	13376	317 1 2401 109 = 91598
E07	9-10-2013	1720	12176	317 1
E07	9-10-2013	1740	10776	317 1
E07	9-10-2013	1900	10243	229 229 229 000
E07	9-10-2013	1900	10243	229 0
E07	14-10-2013	1900	10243	229 1 819 80 71157 65303 32160 50186 40862 ... 62385 56093 86681 02105 17724 000 000
E07	21-10-2013	1940	7943	229 352 _2 73057 64180 98302 379_5 95914 ... 21465 86594 26443 56500 226__ 000
E07a	2-10-2013	2000	5864	815 1 39288 3631 92 = 61002
E07a	2-10-2013	2020	5164	815 1 39288
E07a	2-10-2013	2040	4564	815 1 39288
E07a	4-10-2013	1510	11424	411 0
E07a	5-10-2013	0800	11484	413 413 413 000
E07a	10-10-2013	0430	5146	188 0
E07a	10-10-2013	0450	5846	188 0
E07a	11-10-2013	1510	11424	411 411 411 000
E07a	12-10-2013	0800	11484	413 0
E07a	12-10-2013	0820	12184	413 0

E11/ E11a

15915 kHz, 07-10, 1540 UTC: 220/32 Attention
        27467 52176 46660 09388 10105 57358 85504 07997 47557 51679
        54209 82820 48905 79031 44425 28224 68497 67283 66060 24177
        72876 47631 00272 84708 90722 24762 05253 70515 96489 91833
        47918 25153
        Attention, msg rptd, out

9371 kHz, 10-10, 1730 UTC: 418/34 Attention
        97002 76113 47791 45436 9342212947 50743 55815 35373 81937
        60837 65610 20788 57715 97513 91779 66334 06359 72802 25774
        96575 18235 36169 71204 33197 54323 27913 03371 97393 26061
        38205 93588 08267 03580
        Attention, msg rptd, out

	date	UTC	frequency	details
E11	2-10-2013	1045	7449	462/31 attention 12662 61624 72043 69399 25251 ... 88493 02105 54186 50053 37627
E11	2-10-2013	1155	15915	717/36 63128 31049 ..... 45268 ..503 (faded)
E11	2-10-2013	1445	4909	2??/00 Unreadably weak.
E11	7-10-2013	1540	15915	220/32 attention 27467 52176 46660 ...91833 4791825153 attention, msg rptd, out
E11	7-10-2013	1540	15915	220/32 attention 27467 52176 46660 09388 10105 ... 70515 96489 91833 47918 25153
E11	9-10-2013	1045	7449	469/00
E11	10-10-2013	1155	15915	718/00
E11	14-10-2013	1540	15915	228/00
E11	17-10-2013	0900	4909	248/00
E11	17-10-2013	1730	9371	i.p.
E11	18-10-2013	0545	15915	348/00
E11	18-10-2013	2000	7377	576/00
E11	24-10-2013	1730	9371	416/00
E11	25-10-2013	2000	7377	576/00
E11	26-10-2013	1445	4909	287/00
E11	29-10-2013	1045	7449	469/00
E11	30-10-2013	1445	4909	287/00
E11	31-10-2013	1155	15915	718/00
E11	31-10-2013	1730	9371	416/00
E11a	1-10-2013	1400	13375	987/10 Attention 73318 34703 78142 89180 39290 02412 26829 48864 64612 38097
E11a	1-10-2013	1810	13455	985/10 Attention 66478 34905 31623 71900 47449 99866 55894 37543 59176 39502
E11a	4-10-2013	1110	13375	954/33 Attention 92777 20047 06442 93755 19195 ... 97701 89660 53160 41979 95782
E11a	5-10-2013	1400	13375	986/10 attention 57722 42702 27978 63777 22438 78755 21508 21363 16529 71359
E11a	7-10-2013	1710	5194	953/?? attention 60671 04138 30485 70151 96725 ... 06047 95055 12594 19529 93911
E11a	8-10-2013	1400	13375	091/10 attention 58245 02799 89190 13875 96057 67684 14638 73315 54440 16889
E11a	10-10-2013	1730	9371	418/34 attention 97002 76113 47791 ... 93588 08267 03580 attention, rpt msg, out
E11a	11-10-2013	1110	13375	954/.. 98475 58720 41398 78210 32176 ... 98795 22791 46839 63921 86408
E11a	11-10-2013	1710	5194	955/24 attention 31427 07035 65459 09592 72514 ... 05225 77731 04071 92472 59311
E11a	11-10-2013	2000	7377	570/33 14893 33139 15554 00064 04426 ... 12079 36997 05831 77029 74242. Definitely English.

E11a	12-10-2013	1400	13375	987/10 attention 59544 09636 00443 00492 04800 88979 63881 87779 49296 11004
E11a	12-10-2013	1400	13375.0	987/10 attention 59544 09636 00443 00492 04800 88979 63881 87779 49296 11004
E11a	14-10-2013	1110	13375	951/20 attention 85297 21009 56317 59078 85580 … 86804 44509 11110 30436 07523
E11a	15-10-2013	1400	13375	987/10 attention 45088 73964 02566 11529 21811 … 70972 38963 14394 28570 81558
E11a	18-10-2013	1110	13375	952/31 attention 27589 55936 48259 53729 60852 … 92450 48444 60446 64291 50704
E11a	18-10-2013	1710	5194	953/21 attention 76466 10825 90956 84142 27548 … 77139 32068 89669 85548 98527
E11a	21-10-2013	1110	13375	953/21 Attention 67773 01210 20612 95474 85007 … 40732 24990 33861 23275 15175
E11a	22-10-2013	1400	13375	981/10 attention 86517 10420 07645 93960 47039 30223 41023 33391 43381 79380
E11a	22-10-2013	1810	13455	982/10 attention 97412 13752 17508 90888 73627 21963 43976 63971 75852 30013
E11a	25-10-2013	2000	13375	952/31 attention 61065 56181 50280 98426 28817 … 97250 39205 00900 12852 76054
E11a	26-10-2013	1400	13375	984/10 attention 14251 70966 82019 84726 02243 … 96101 50384 34101 04634 89654
E11a	26-10-2013	1810	13455	985/10 attention 87883 78598 02149 44823 … 28653 29888 93398 71392 03152
E11a	29-10-2013	1400	13375	982/10 attention 33304 64647 84363 51169 92308 20676 16293 46210 60457 05715

G06

date	UTC	frequency	remarks
7-10-2013	1800	5424	564 564 564 00000
11-10-2013	1930	5442	947 352 15 03821 28754 86473 03711 10192 88932 53762 29583 04824 94730 93728 93627 83425 57634 58291 352 15 00000
14-10-2013	1700	4569	564 564 564 00000
14-10-2013	1800	5424	564 564 564 00000
25-10-2013	1930	5442	947 352 15 03821 28754 86473 03711 10192 88932 53762 29583 04824 94730 93728 93627 83425 57634 58291 352 15 00000

G11

date	UTC	frequency	remarks
1-10-2013	1755	5815	261/35 Achtung 81109 59329 83301 12530 67958 … Faulty robot digit prob 3.
8-10-2013	1755	5815	270/00
11-10-2013	2000	6433	262/00
13-10-2013	1855	5816	270/00
15-10-2013	1755	5815	270/11
15-10-2013	1755	5815	270/00
18-10-2013	1325	5815	299/00
18-10-2013	2000	6433	262/00
19-10-2013	1325	5815	299/00
20-10-2013	1755	5815	270/00
20-10-2013	2000	6433	252/00

	date	UTC	frequency	remarks
	22-10-2013	1755	5815	270/00
	25-10-2013	1325	5815	Active but too weak to copy
	25-10-2013	2000	6433	262/00
	29-10-2013	1755	5815	270/00

S06

	date	UTC	frequency	remarks
S06	1-10-2013	1800	5890	286 0
S06	2-10-2013	1930	5823	426 938 41 = 69447
S06	3-10-2013	1900	5784	349 0
S06	5-10-2013	1935	4772	426 0
S06	5-10-2013	2000	4967	319 0
S06	5-10-2013	2030	6874	857 0
S06	5-10-2013	2100	4019	319 0
S06	5-10-2013	2130	5902	857
S06	7-10-2013	1905	5127	349 0
S06	10-10-2013	1905	5127	349 349 349 0000
S06	10-10-2013	1905	5127	349 0
S06	12-10-2013	1605	7472	764 0
S06	12-10-2013	1935	4772	426 0
S06	14-10-2013	1815	11125	451 451 451 00000
S06	14-10-2013	1905	5127	349 0
S06	14-10-2013	1915	9244	451 451 451 00000
S06	14-10-2013	1915	9245	451 0
S06	19-10-2013	1605	7472	764 0
S06	19-10-2013	1935	4772	426 0
S06	19-10-2013	1945	4772	426 426 426 00000
S06s	2-10-2013	0730	11854	745 912 6 = 88554
S06s	2-10-2013	0740	12140	745
S06s	2-10-2013	1000	13366.0	729
S06s	2-10-2013	1230	7620	967 ??1 8 = ??0?8
S06s	2-10-2013	1230	8105	967 ??1 8 = ??0?8
S06s	2-10-2013	1240	8105	967
S06s	4-10-2013	0700	7795	196-427/5=34140
S06s	4-10-2013	0710	8695	196
S06s	4-10-2013	0810	5805	278 439 5 = 48115
S06s	11-10-2013	0600	9078	934 207 5 = 43657
S06s	11-10-2013	0610	10148	934
S06s	14-10-2013	0840	8270	371 286 5 21767 53672 11834 81022 36903 286 5 00000
S06s	14-10-2013	0900	14580	872 934 5 46062 68672 97478 39685 30485 934 5 00000
S06s	14-10-2013	1210	11460	831 960 5 88620 58069 61732 74537 57440 960 5 00000
S06s	18-10-2013	0600	9078	934
S06s	28-10-2013	1210	11460	831 562 7 46186 16945 80744 86200 84706 42227 61736 562 7 00000
S06s	29-10-2013	0610	12355	438 438 438 00000

S28 - The Buzzer

Mode: USB
Frequency: 4625 kHz

04-10, 1335	MDZhB 50 980 BAZEDOVIZM 12 28 91 46 RAZDOLJE 06 86 58 06 RAZDEL 89 03 40 13 Priyom
07-10, 0555	MDZhB 18 732 PLUTOVATYY 77 75 54 46 Priyom
07-10, 0558	MDZhB 86 714 FLINTGLAS 47 46 90 10 Priyom
07-10, 0657	MDZhB 88 795 INTUITSIYA 03 50 89 14 Priyom
09-10, 1414	MDZhB 14 072 KAZASKER 25 41 15 50 Priyom
09-10, 1510	MDZhB 12 497 FAZANOVYJ 82 82 48 96 Priyom
14-10, 0834	MDZhB 46 208 NADShIVANIJE 73 85 93 99 Priyom
14-10, 0845	MDZhB 15 180 RADUZhNICA 87 24 95 22 Priyom
14-10, 0851	MDZhB ?? ??1 LADONNIK 88 92 42 79 Priyom
14-10, 1054	MDZhB 60 205 TADIBEI 63 22 97 27 Priyom
14-10, 1056	MDZhB 40 777 BABEJNYJ 43 03 60 50 Priyom
23-10, 0759	MDZhB 99 275 BESSChETNYJ 73 83 63 11 KIZAR 39 87 86 93 FESTUKA 73 28 08 77 Pryom
24-10, 1348	MDZhB 94 158 IZAChYN sboj, sboj sboj sboj MDZhB BDZhB 94 158 IZAChYeN 02 81 31 35

S32 - Squeaky *Wheel*

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

3828 kHz, 16-10, 1455 UTC: Squeaky Wheel with damaged microphone and so transcription is approximate
Al'fa-45 Al'fa-45 72 719 SYeNIOLA 27 53 79 76
Recording on the N&O website.

V07

date	UTC	frequency	remarks	date	UTC	frequency	remarks
6-10-2013	0100	18074	883 883 883 000	13-10-2013	0120	15874	883 014 85 = #51#4
6-10-2013	0120	15874	883 883 883 000	20-10-2013	0100	18074	883 883 883 000
12-10-2013	0100	18074	883 883 883 1 ???	20-10-2013	0120	15874	883 883 883 000
12-10-2013	0120	15874	883 883 883 1 ???	27-10-2013	0100	18074	883 883 883 000
12-10-2013	0140	14374	883 883 883 1 ???	27-10-2013	0120	15874	883 883 883 000

V13 - New Star Broadcasting Station

星星廣播電台 Xīngxīng guǎngbò diàntái

Current schedules
Station #3: 13750 kHz, 0500 and 0600 UTC
Station #4: 15388 kHz, 0700 and 0800 UTC
Station #4: 13750 kHz, 1200 and 1300 UTC

MORSE STATIONS

MX
Russian Military beacons

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

Channel markers:
V : 4508, 6928

M01

4608 kHz, 03-10, 1837 UTC, i.p.

22380 22380 28569 28569 42637 42637 13032 13023 (Reverse last 2 digits) 98314 98314 83069 83069 ......
21144 61295 79816 20818 89087 37422 34251 29751 10872 94988 (QSZ group sent was slighty different)
89340 89340 44520 44520 92497 92497 74522 22773 22773 29368 29368 92561 92561
900 900 30 30 000

	Date	UTC	Frequency	Remarks
M01	1-10-2013	1800	5475	463 019 019 30 30 65773 69236 45643 69710 96705 ... 56051 06638 04404 81901 12104 019 019 30 30 000 //5476
M01	5-10-2013	1500	6261	463 912 30 = = 90373 11857 19821 98921 23597 ... 57467 86302 72452 71278 12314 = = 912 30 000
M01	6-10-2013	0710	6508	ip
M01	8-10-2013	1800	5475	463 186 30 = = 73117 29551 58709 66605 36963 ... 29647 52006 68007 98688 91408 186 30 000 //5474.
M01	12-10-2013	1500	6261	463 221 30 = 77173 68608 51791 87405 77661 ... 43319 74347 34344 04520 03171 = 000. Many errors. //6260
M01	24-10-2013	1800	5475	463 158 30 36039 14799 48873 36762 95019 ... 59491 73895 94_22 32_49 08720 158 30 000 //5476//5478.03
M01	26-10-2013	1500	6261	463 225 30 = = 95077 07826 54880 72375 36546 ... 61323 37465 02622 87567 77454 = = 225 30 000
M01	31-10-2013	1820	5475	463 541 30 68432 09654 69431 60784 79476 ... 35470 16284 00807 56488 13579 541 30 00
M01a	17-10-2013	1607	6957.0	333 80123 333 80123
M01b	3-10-2013	1505	5938	159 194 30 = 42275
M01b	3-10-2013	1837	4608	i.p. 22380 22380 28569 28569 42637 42637 13032 13023 etc
M01b	7-10-2013	1810	3536.12	420 783 34 = = 94228 26156 87381 32641 63552 ... 63276 58909 10563 00564 67879 = = 783 34 000. //3537.26//4592.25//4591.13
M01b	7-10-2013	1915	3646.13	771 783 34 = = 94228 26156 87381 32641 63552 ... 63276 53909 10563 00564 67879 =

				= 783 34 000. //4457.26//4456.14//3647.26
M01b	10-10-2013	1832	3510	201 783 34 = = _4228 26156 87387 32__6 63552 ... (rest unreadable)
M01b	11-10-2013	1515	5811.1	158 275 30 = = 24775 99552 69201 25774 97063 ... 13522 27651 54771 24093 40029 = = 275 30 000
M01b	11-10-2013	1902	3626.11	153 783 34 = = 94228 262_6 87381 32641 63552 ... _3276 58909 10563 00564 67879 = = 783 34 000
M01b	14-10-2013	1810	4591.12	420 783 34 = = 94228 62615 67381 32641 63552 ... 63276 58909 10563 00564 67879 = = 783 34 000 //4592.24
M01b	18-10-2013	1515	5810	158 275 30 = = 24775 99552 69201 25774 97063 ... 13522 28651 54771 24093 40029 = = 275 30 000
M01b	18-10-2013	1902	3625	153 783 34 = = 94228 26156 87381 32641 63552 ... 63276 58909 10563 00564 67879 = = 783 34 000
M01b	21-10-2013	1810	4590	420 783 34 = = 94228 26156 87381 32641 63552 ... 63276 58909 10563 00564 67879 = = 783 34 //3535
M01b	21-10-2013	1915	4455	771 783 34 = = 94228 26156 87381 32641 63552 ... 63276 58909 10563 00564 67879 = = 783 34 000 //3645
M01b	24-10-2013	1832	3510	201 783 34 94228 90_81 26156 87381 32741 ... 63276 58909 10563 00564 67879 783 34 000

M03

date	UTC	frequency	remarks
1-10-2013	1535	6977	798/00
2-10-2013	1115	9150	650/00 = = 000
5-10-2013	1535	6977	798/00
8-10-2013	1535	6977	794/37 = = 52044 65741 22210 19530 69587 ... 29339 62957 24326 11060 25360 = = 794/37 (rpts)
9-10-2013	1115	9150	650/00 = = 000
10-10-2013	1115	9150	650/00 = = 000
10-10-2013	1320	9150	437/00 = = 000
12-10-2013	1535	6977	794/37 = = 52044 65741 22210 19530 69587 ... 29339 62957 24326 11060 25360 = =
15-10-2013	1115	9150	272/00
17-10-2013	1115	9150	650/00
20-10-2013	1320	9150	431/36 31373 55996 75299 72128 56181 ... 62494 56855 27969 94099 53388 = = 431/36
22-10-2013	1115	9150	275/30 = = 86878 96854 11236 72969 42051 ... 40946 02333 38870 42331 18021 = = 275/30 000
24-10-2013	1115	9150	658/30 = = 91503 65027 65516 37020 95966 ... 51342 24506 77157 83999 14266 = = 658/30
24-10-2013	1320	9150	437/00 = = 000
26-10-2013	1535	6977	798/00
29-10-2013	1115	9150	272/00

M14

Date	UTC	Frequency	Remarks
14-10-2013	1100	14721	262 etc. 480 480 137 137 = = 62616 90288 28671 99504 67462 97002 22609 10788 30563 39589 ... 82213 54038 87349 23104 64183 87799 55288 56418 88605 47895 = = 480 480 137 137 00000
14-10-2013	1116	14721	i.p. 44557 44557 18489 41046 07653 61616 20072 00586 94564 97604 84031 24768 58772 420.9 042 26832 95861 94845 26162 25784 69395 91437 29025 16072 83029 82213 54038 87349 23104 64183 87799 55288 56418 88605 57895 = = 480 480 137 137 00000
21-10-2013	0400	6884	834 834 834 920 920 16 16 = = (repeated 5L groups) = = 920 920 16 16 TTTTT
21-10-2013	1905	8115.0	i.p. 32594 = 258 97 00000
21-10-2013	1930	5380.0	i.p. 32594 = 258 97 00000
21-10-2013	1930	5414.0	975 413 92 = 60006 31163...58290 12792 = 413 97 00000
22-10-2013	0402	5380.0	441 258 97 = 95494...32594 = 258 97 00000

M21 + variants
Russian Air Defence Forces
Войска ПВО   Voyska PVO

Id 0: 5202,
Id 8: 4628, 4905, 6910,   6911.5

=11502181563614 =11507181571113 =11508181571514 =991315??8?????

M23

Date	UTC	Frequency	Remarks
2-10-2013	1000	11530.0	333
11-10-2013	1506	8030	i.p. 246 repeated. Stopped at 1515 with a dash
11-10-2013	1609	12170.0	555
17-10-2013	1600	12170.0	222

M24

Date	UTC	Frequency	Remarks
21-10-2013	1940	5380	repeated 5F groups ending = = 413 413 92 92 TTTTT
21-10-2013	1940	5414	repeated 5F groups ending = = 258 258 97 97 TTTTT

M89
Chinese military

Stations and strings:

VVV Q2M Q2M Q2M DE NYZ NYZ
V 7NPE 7NPE 7NPE DE QV5B QV5B
V DKG6 DKG6 DKG6 DE 3A7D 3A7D
V RXP7 RXP7 RXP7 DE CZT2 CZT2
V H2FL H2FL H2FL DE DRV8 DRV8
V DP9J DP9J DP9J DE CQ CQ
V MW3D MW3D MW3D DE 2SLC 2SLC
V YUQW YUQW YUOQ DE ASDF ASDF

NMAU DE ATUP
FBSZ DE 5HDS
FF32 DE 5HDS
F6TS DE 5HDS
P64I DE YET1
CEJ6 DE ZU3O
LD0A DE ZU3O
0OQX
R2AG
ZU3O

Messages

4039 kHz, 01-10, 1606 UTC, i.p.:

NTUA A473 47D. UN.A 563. 73TA 4U37 (Cont'd)
AR QSL ? K
QSL K
QSA 2 0010 K
R UMSG GA K
MSG GA K
HR MSG GA K
R GA K
HR MSG GA 99..37 .1.
MSG NR 004 CK 99 37 10.. 0000 =
.... 545N D3D. (Cont'd)
AR QSL ? K
QSL k
R PT .W K
R RPT 1W
R HR NIL K

5555 kHz, 01-10, 1215 UTC, i.p.:

NR 6868
VV = A463 75TD NUAD N534 T67A U453 6A7D TNU3 A45T 6ND7
(Cont'd)
VV .... Z/39 2392 RK
VV B8D.8N O8N88. 8DZ 8DZ 8NZ 8DZ AAA AAA AAA
VV = S =BN B8D 8DZM O 8DZ R K
N K R K R K R K R K R K R K VV = 57DNR. N
VV = 57DNFEE FR LN
VV = 57DNR.
VV = 57... VV = 57D7. =
VV = 5... VV = 57N VV = 57NNE A..
VV = 5DD.. Z VV = 57D.
VV = (Horrible CW)
VV = 5D.8DGID.
VV = 57DN R/R7DNR5 EEE
VV = 57... VV = 57DNIEIII AR AR AR AR C

4512 kHz, 02-10, 2157 UTC, i.p.:

UGT COMM = 91./....89/1../..AR
UGT COMM = 917..92..18./10.1/..../NDT. U/...02 AR
UGT COMM = 9170/9./189/.0/../.30/8.4./....AR

5555 kHz, 03-10, 1115 UTC:, i.p.:

QSA 2 .. (Handsent - Horrible CW!!)
05 05 QT... (1117z) (Seems to be using 05 as sort of an abbreviated
callsign)
V QSA 2 HCQ... 7456 DUA4 5DDU A456 DUA (Cont'd)
AR K (1119z)
MSG 09/CCK CK 28 64 0 EEEEEEE
MSG 09/CCK CK 28 68 1003 1900 RMKS 883. TO .168.
GNR 09/CK 28 64 1003 0910 RMKS .0550 TO 0044 00.3 AR AR
H95057. /09/CCK CK 29 64 10003 0910 RMKS 8839 TO 6168 .660 ..68
117 =
46N4 A55. TA7NT TN
AR AR AR QSL ? 446D AR
05 05 05 .. QSA 2
VV 05 05 05 05 05 05 (Cont'd)
= MSG NR 09 NR CCK 28 64 1003 0910 RMKS 8839 TO 6168 8660
8..8 .7136 778
= ?
A554 T.N T47N U56T (Cont'd)
AR
.. QSA 2 H.4 = QSA 2 556D 456D U4.. (Cont'd)
.. 446D U45/CW.467/457G
56 56 56 56 (Cont'd – different weaker station – 1136z) (Using
abbreviated callsign?)
56 56 56 56 (Cont'd)
C SK SK C
... 05 05 05 05 (Cont'd)
O5 = AN6U N63U ND6D 65N.. .. A576 (Cont'd - 1147z - 2nd weaker
station in background)
AR
05 05 /001 CK 91
137.. 3 /7UA. 3.
DE 34U3. 6U 347D ... (Silent - 2nd weaker station now in tfc in
background - 1156z)

4225 kHz, 03-10, 1107 UTC, i.p.:

A75U NA45 6A6D 7NA3 7A7D 6553 (Cont'd)
(Checked //5500 – QV5B sending round slip)
K K
R R = ..6. K K (Weaker station)
R R = .. K
R = 35UA = 35UA K
R R R R SK SK US KU SB SB SB
USB USB (1854z - Silent)

4209 kHz, 03-10, 1857 UTC, i.p.:

3343 TU4T 77T. N3.5 DUN7 6NDA 7U4D (Cont'd)
AR K K
QSL 0305 K K
OK

6666 kHz, 03-10, 1513 UTC, i.p.:

4AN3 UTA5 7476 TU5T (Cont'd)
III
R III
= A7UD III
R AGN
= 63N. III
R = .U6 III
III W.
= 57.D III
AS
GA GA
U GA U MSG GA .
GA .. 0 1... GA

7777 kHz, 06-10, 0239 UTC, i.p.

U74T A6. UTN4 3T7A DN54 N77N (Cont'd) AR K
R 12W B753 K
R NAN6 K
R R W EEEE 72W M EEEE 72W A4N5 K
T6DN K
R 86W A6DN K
R F EEE RPT K
R NIL SK
SK
VVVV 55 755 VVV (0247z - Silent)

8888 kHz, 10-10, 0214 UTC

NMAU DE ATUP
WHO ARE YOU ? (Actually sent this!!!)
7U FM 3TTA6 =
3 MSG NR 1599 CK 48 10 10 1000 RMKS 46.4 TO 5975 K
VV QQ 4570 7826 K
M K
VV WHO ARE WHO I ARE U K (Sent a 2nd time - Silent)

8888 kHz, 10-10, 0224 UTC

VVV NMAU DE ATUP K
VVVV NMAU DE ATUP K

5555 kHz, 11-10, 0125 UTC, i.p.

ADT6 7NDT A3U5 N64. (Cont'd - very slow - handsent)
9456 7892 0I? 04..24 2639 13.5 6129 763? 7630 584W? 5841
3246 5789 0123 8 V5689 (Cont'd - using long zero - switched from cut
numbers. Silent 0141z)

7892 kHz, 03-10, 1826 UTC, i.p.:

D3AN A5.. 305 HR NR 305 NIL SK NIL

4209 kHz, 03-10, 1857 UTC, i.p.:

3343 TU4T 77T. N3.5 DUN7 6NDA 7U4D (Cont'd)
AR K K
QSL 0305 K K
OK (1903 – Silent)

6937 kHz, 04-10, 1340 UTC, i.p.:

NDU4 73ND U473 NT.. (Cont'dz)
(Silent – 1342z)

5555 kHz, 05-10, 1630 UTC, i.p.:

5T4N 5AT7 7A63 AUT7 A7A3 NU63 A3A5 (Cont'd)
III = = T35D A3UA 4AAN 3TD3 5D3A (Cont'd)
AR AR
R R
R GA
RR GA

7777 kHz, 06-10, 0302 UTC, i.p.

MSG NR CK 01GATR =
MSG NR .AR K TA I =
NR . CK MSG NR EA CK ..G.. =
MSG 10 CK 30 34
MSG NR 10 CK 10
VVV F1.. ZRR Q..
R R R R ..5873 AR K
7GA NR NR 0150/CCK CK 91 03 1006 1100 RMKS 1AAF 5RMKS 10..
TO ..308 .
NR 015 00 NR NR 0150/CCK
R RHR RPT NR NR 0150/CCK CK
HR RPT ...K K = = (Signal fading badly at times)
7D3A NT4D U7A4 4ADT 46T6 56DT T3UD 4NNT T3UA TTU6 D37N
(Cont'd)
AR K
HR RPT
HR RPT 30W = = 637A AR K K
R HR RPT 29W = = A5N3 AR K K
HR RPT = = UN7A AR K K
HR RPT = = T57T HR RPT 40W = = U7N4 AR K K
HR RPT 31W = = ... K
HR RPT 5.W = = ... K
K K
HR ...W = = 5A45 AR K K
HR RPT 7.W = .7AD AR K K
OK OK (0318z - Silent)

10659 kHz, 15-10, 0105 UTC:

NR 1053/.0. = =
H.../TT.F C
NR 1053/../EX 5
NR 1053/EX 0.95 =
HGRG/TTYF..QSL ? K
R ..TK
AR U E GA K
QSL 0.. K

6666 kHz, 11-10, 0159 UTC

2568
0789 23
= .047 0631 1243 5810 8635 7934 8249 5790
(Cont'd - Handsent - using long zero. (Possibly station previously on 5555 switched freq)
AR
8690 7493 6589 1587 7469 ? 4325 2743 5201 1063 0281 (Cont'd)
TN7D 65UT A434 TNA7 36D5 4DN3 N4N? N456 U374 7DAT AR
(Again switch from number groups to cut numbers)
= D6NT 74N3 65DN A5D7 D? 746N (Cont'd)
(Silent 0216z)

7777 kHz, 14-10, 0602 UTC:

VV FF32 FF32 ...
RG 6..USL....
R R QSA AR
VV FBSZ DE 5HDS K
...DE F... ..
 R R QSA 2 ..
GA
R R 7G NR NR 4110 CK 80 48 10 14 1400 RMKS CQ K
RR =
D657 6U54 35T7 4TD3 6UT4 7DTN 5TD6 .... 5UA3 DUA3 436. (Cont'd)
AR AR
VV FF32 FD DE 5HDS
R QSL ....
F6TS DE 5HDS K (Unsure of F6TS callsign)
R R OK GB GB (Silent – 0610z)

6666 kHz, 15-10, 1132 UTC:

VVV ? 3 EEEEE
VV 0Q5 0OQX 0OQX K
K DE K DE K
R R HR QSL 5 HR QSA 2
R IEC = 4185 AR K (Normally associated with Exercise traffic)
R HR NR 13 K
HR NR 143
R R (1134z)
HR E GA K (The letter E sent is a Barred E)
HR E GA K
NR 10/EX 93 AR RMKS 9069 TO 4679 K
NR 10/EX 193 AR RMKS 909 TO 4679 K
R =
DA4OB/E9RHL AR K = DA4OB/EAS K DAFM E.5 DWB/EJHFM/E15 =
DUT3NU N5A B9TA7UTU EEEE =
EH = DA4OB/E9RHL AR K
R U GA K
R GA
QSL 193 AR
H QSL 1937 HR MSG GA K K
MSG NR 10 CK 30 58 10 15 1938 RMKS 965 RMKS 9069 TO 4689/4679/488 AR
AGN RMKS 9069/468./4679/1
(Another weaker station came up on freq)
AQSP 9069/EEEEEE RMKS QSP 9069 TO 4689/4679/468 AR/4665 K
AS AS =
UA35 4U34 7UTA NDDU 6NNA 674A DU47 U..4 TA74 TTA5 3667 464U N54T (Con'd)
AR AGN
= UA35 AR = UN5T AR = 7TDU AR = T5A. AR = U6T5 AR
AGN 5
AS
SK SK

5555 kHz, 11-10, 1040 UTC, i.p.

3456 DT7N UA34 756A DTUN 345D NT6A 37U4
(Cont'd - handsent - slow CW)
MSG NR 1001 CK 50 (Another station came up on freq and started this message on top of the original station - 1044z)
MSG NR 1001 CK 50 87 1011 1840 =
UT7A ATU4 7A6T A36N 75T4 7...
(Cont'd - machine sent - fast CW.
Original station still trying to send his message)
MSG NR 1001 CK 50 87 1011 1840 =
UT7A ATU4 7A6T A36N 75T4 (Repeats msg)
MSG NR 1002 CK 50 87 1011 1834 =
..... .UT7A DN4T 7A6T A... (Cont'd)
MSG NR 1002 CK 50 87 1011 1849 =
TN34 5TA3 UT7A DN4T 7A6T A36N (Repeats msg) AR AR
MSG NR 1002 CK 50 87 1011 1849 =
TN34 5TA3 UT7A DN4T 7A6T A36N
(Cont'd - Sending much faster now. (Original station still sending in background but now mostly unreadable) AR
 MSG 1001 CK 50 87 1011 1845 =
UT7A ATU4 7A6T A36N (Cont'd - 1100z) (Silent - 1102z. Original station still sending)

8119 kHz, 18-10, 1128 UTC:

3T6A T3D5 .A4N D4A6 U63. (Cont'd – handsent – slow)
AR K
R R = 7W RNR PT 7W = = ..U5 AR K
.4U5 AR
R R 7W = U5. ARPT 7W RK NR RPT 8W = = 6A.N AR
RPT 25 RPT 2.W R NR .. (Signal fading)
RPT 66W = = 76A. AR
RR QSL 1936 AR
U 7G GA K
U MSG GA
VVV 7G NR 56 EEEE
VV 7G NR 55 CK 95 55 1018 192EEE
VV 7G NR 565 CK 95 55 1018 1936 RMKS 3.2. TO 3129 TO 3.EEEE
VV 7G NR 565 CK 95 55 1018 1936 RMKS 3129 TO 3234 K
R K RPT
DATE.
RR R .= 55 4U.. 3TDU 7A4D DU.. (Cont'd)

5566 kHz, 17-10, 1617 UTC:

3737 D3D FM 3 FM 3 FM 3 FM 3 N4N4 FM
63
P64I DE YET1 R QSA 2 QSA ? K K
R P64I DE YET1 QSA AR QSA ? K
R P641 DE YET1 QSA 2 QSA ? K (1625
HR QRJ QSY TO 6677 K (Checked 6677, but N/H)
R AS
R HR QRJ Q EEEE RV EEEE
R HR QRJ 68 QSY NR 1W K
R AS (1627z - Silent)

3330 kHz, 20-10, 1628 UTC:

MSG NR 081 CK 301 34 1021 0030 =
T5T6 3U7T 7DTA 4U4T 5NAT 7UA4 (Cont'd)
III U4U3 AR
MSG NR 081 CK 301 34 1021 0030 = (Repeats MSG 081)
T5T6 3U7T 7DTA 4U4T 5NAT 7UA4 .T6D 66DT TT4D TTTA (Cont'd)
III U4UE AR

5566 kHz, 17-10, 1940 UTC:

CRT = 477.HW? K
QSL QSL 23..
10 = 5EEEE = 7R..RH. NR
0001 1 0 0106 1.0 101 .. 001. K
001 10 1 .0.703 3... NAUD T4.. 7.N. 3DN7 543T (Cont'd)

6666 kHz, 22-10-2013, 0049 UTC:

4335 A45D 37N. N3. (Cont'd)
AR K //A
QSL 0851 K //B
QSL 0851 K//B
R R QSL 084 EEEE QSL 0851 K//B
R NR 1160 K K//A (0056z - Silent)

5536 kHz, 30-10, 0929 UTC:

UINR .799/EX TIMEEEE
NR 7799/EX
BT A.B3/BAD AR
QSL ? K
OK
U E GA K
(Other station on same freq – mostly unreadable)
AGN
R R QSL 04.2 QSL 04.. AS
HR MSG GA K
MSG NR GD EEEE
NR NR .0 RR NR 7 K EEE
MSG NR 7.0. CK 4. 92 1.3 1 EEE
QSL ...
AGN
QSL ... K
OK U 7G GA K
.. NR 8..CK 49 9. 0 30 04.. K
OK QSL 041. EEE QSL 0417 K
NIL SK
GB NIL K
GB GB
VV K... DE ZU.. K
VV CEJ6 DE ZU3O K
VV CE.. DE ZU3O K
VV LD0A DE ZU3O K
VV LDOA DE ZU3O K
VV LDOA
BOZ NIL SK
QSY 7 NR 0A GB
VV CE.. DE ZU3O K
VV CE.6 DE ZU3O K
VV R2AG ZU3O K
DE ... K
R R
DE ... K
... BO. NIL SK QSK 7 NR K K
SK GB SK
VV

7788 kHz, 22-10, 0115 UTC:

R M HR MSG GA K
R GA K
R HR MSG GA NR 009/CCK CK 9 EEEEE
NR 009/CCK CK 9. FM CK ,.185 10 EEEE
NR 009/CCK CK 985 10..0.1. DD54 DD54 N.TA I7.EEEE
DD54 DD54 NI.. S54
AGN
NR 009/CCK CK 91 85 1022 0915 RMKS 6547 TO 6298 =
DD54 D54N ? DD54 N... DD54 .4I3 DD54 DD54 A.W? DD54 DD54
? DD54 5AN3 U.DT U3N7 DD54 T7D4 DD54 ...UA ..D .. (Fading)
47DN A5.. 445. DD54 DD54 DD54 6.AU DD54 .... (Keeps sending
DD54)
(This message format is normally associated with the QV5B family.
Earlier, QV5B sent UGT COMM message referring to G06 which may
equate to this frequency - 7788)
AR
7II = N64.
WK NR .5 QSL ? K
RPT... (Too weak to copy) RPT .W TO 5W = DD54 DD54 N3AU .54 D...
RPT ..W EEEE RPT 10W TO .3W = EAN3 ? .D54 .N3 UADT U..7 AR K
R RPT ...W K
RPT 65W 8398.3.. K
R ...W K
R RPT 64W ... K
RPT 65W K
R RPT 65W ..93 K
R ZNN
SK SK GB
..... RMKS 7116 TO 7102 = =
AS2G ? PSE 3 C AR
R OK PSE U 'E GA HW K K
R HR RPT TIME 0929 0929 K
R PSE U 'E GA HW K
R QSL 0942 HW K
R HR 7G GA HW K
R HR 7G GA NR NR 2075/CCK CK NA HD ATUU TN4
R HR 7G GA NR NR 2075/CCK K (Another weak station in background)
R HR 7G GA NR NR 2075/CCK CK 91 58
R HR MSG GA NR NR 2075/CCK CK 91 58 1022 0944 ? RMKS =
7116 TO 711 AR
R HR MSG GA NR NR 2073/CCK CK 91 58 1022 0944 RMKS 7116 TO
7113 CY SK K
R = = (Message number changed from 2075 to 2073)
DNUA T.UN 7AD5 DU67 75DD T4TA 3T5A AUD5 TA5A TTUT DN5T
A364 (Cont'd)
AR AR K
R HR RPT 44W 2409 2409 K
R OK .. U MSG GA HW K
R PSE GA K R
HR QSL 1015 HR NR 315 U NR GA HW K
R HR RPT QSL 1015 1015 CY HW K (0217z silent)

3330 kHz, 31-10, 1500 UTC:

2330/237NR/0790 AR AR =
01651/7436/2230/237NR/0791 AR AR
V MW3D MW3D MW3D DE 2SLC 2SLC

6666 kHz, 31-10, 1232 UTC:

00 050 50 50 50 IIII III 7NA7 (1232z) (50 possibly abbreviated
callsign?)
UA7U A73U 5 7T73 U4A7 T3AU (Cont'd)

8110 kHz, 22-10, 0033 UTC:

0900/G06/8398 AR
VV UGT COMM = 2417/0900/G06/8372 AR

10180 kHz, 22-10, 0258 UTC:

2 = GN = CRRR 1139/ZD/..2/9EEEE
= CR NR .120 EEEE 1130/ZD/9427 NR 9462 AR QSL ? HR WK NR 43 GB

7740 kHz, 23-10, 0206 UTC:

V DP9J DP9J DP9J DE CQ CQ
HR NIL SK GB (Cont'd)

7889 kHz, 23-10, 1054 UTC:

54NT TNA. 63TN 6T4A TAD4 (Cont'd)
AR K //A
R R RPT //B

8073 kHz, 31-10, 1206 UTC:

In tfc 3573 D74T 3.3. 5.4 ? 47UD U3D7 (Cont'd)
AR
R MSG GA
NR A55 NR NR 1032 CK 51 35 103AA 55
NR NR 1032 CK 51 35 1031 1627 = = = =
KTN5 UT3A N53K DN54 7TTT T57 ? 74? 7466 T56T 7K (Cont'd)

5801//10180 kHz, 31-10, 1147 UTC:

7602Z 757 6817 6707 9434 .46. (Cont'd)
= N4B5 U.3. D.U N37A U634 57DA NT3D (Cont'd)
Switched to cut numbers-
V DKG6 DKG6 DKG6 DE 3A7D 3A7D

MC03
Chinese Air Defense

5435 kHz, 14-10, 2052 UTC: MC03 variant. Chinese tracking station

U4764A 7UN34UN TND 5A
ABB U4765D 6375175 ATT 5U
NT3 U3T635 TNT5U
NT3 U3T635 73N3DN3 TD7 5U
NT3 U4765N 6U745D6 AT5 5U
NT3 U4765A 67N4U7N TDT 5U
NT3 U47647 AAU 53
NT3 U4765N AT5 53
NT3 U47656 56D3U47 AT6 53

VARIOUS MODES

SK01 / HM01
Dirección General de Inteligencia

A report written by Don Schimmel on http://www.dxing.com/intrigue.htm

ENIGMA HM01
My concentrated coverage of this target continues. Over the past several months I monitored each day/sked/time/freq at least twice and more often, multiple times. I plan to devote another month of coverage to eliminate errors and confirm the data. Errors noted included wrong freqs, wrong times, etc. These errors are temporarily recorded but if they do not repeat more than a couple of times, they will not be included in the final chart.

Some interesting information was gleaned from a QSL reply in POP COMM magazine sent by Radio Havana to a US SWLer. The reception report concerned a Radio Havana Broadcast on 5040 kHz during 2336-0000 UTC. The transmitter was 100 KW using an antenna close to the ground which radiates mostly at a very high departure angle to provide the Near Vertical Incidence Skywave

propagation mode for short distance coverage, mainly to the Cuban archipelago and nearby Antilles. The reply also stated that a stronger signal was on 6000 kHz later in the evening when the signal is beamed to the East Coast of North America with a 250 KW transmitter using a high gain curtain array, beaming to 010 degrees at the center of the antenna's horizontal pattern. The next frequency was 6165 kHz which was beamed to 340 degrees, with another 100 KW transmitter and a similar curtain array that has the center of the beam to Central North America.

Comparison of these frequencies with HM01 frequencies may offer a clue regarding the possible location of a few recipients of the HM01 transmissions. The first group of 5F groups changed sometime between 3 and 4 October. Unfortunately I was unable to cover several skeds during that time frame and consequently I can not pinpoint when the change took place. On Oct 4 they messed up and placed the Radio Havana SW Broadcast program on 11635 briefly on the 2100 sked. One can not help but wonder if the prison on Isle of Pines has numerous ex-transmitter operators incarcerated there.

You can find the logs of Don and other dxers in the Logs Section.

M42 & X06   *Russian Government & Intelligence*

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

	Date	UTC	Frequency	Details	Mode
M42	20-3-2013	1538	16305	Russian Intel.	FSK 200/1000
M42	1-10-2013	0150	16320	Russian Intel. Msgs on links 29750, 13366, 32826, 41018	FSK 200/1000
M42	1-10-2013	0230	14880	Russian Intel. Msgs on links 13362, 14429, 41018	FSK 200/1000
M42	1-10-2013	0425	3740	RDP4: Russian Gov. Kirov Kaluga	RUS-ARQ 100/500
M42	1-10-2013	0737	14955.5	Russian diplo	CROWD-36
M42	1-10-2013	1710	9174	Russian Intel	FSK 200/1000
M42	1-10-2013	1750	7850	Russian diplo	CROWD-36
M42	2-10-2013	0150	16320	Russian Intel. Msgs on links 13876, 57471, 41019, 41018, 29371, 53390	FSK 200/1000
M42	2-10-2013	0230	14880	Russian Intel. Msgs on links 13876, 04120, 41016, 41018	FSK 200/1000
M42	2-10-2013	0425	3300	RUU76: Russian Gov. St Peterburg	RUS-ARQ 100/500
M42	2-10-2013	0453	5185	RBW: Russian Gov. Tambov	RUS-ARQ 100/500
M42	2-10-2013	1015	11129	Russian Intel	FSK 200/1000
M42	2-10-2013	1025	9082	Russian Intel	FSK 200/1000
M42	3-10-2013	0150	16320	Russian Intel. Msgs on links 41018, 16708	FSK 200/1000
M42	3-10-2013	0230	14880	Russian Intel. Msgs on links 58947, 41018	FSK 200/1000
M42	3-10-2013	1501	19844.5	Russian diplo	CROWD-36
M42	3-10-2013	1900	8007	Russian Gov/Intel. 00000++++++++++162)5761	FSK 200/1000
M42	3-10-2013	1900	8007	Russian Intel 6 40	FSK 200/500
M42	3-10-2013	1910	5844	Russian Gov/Intel. 00000++++++++++162)5761	FSK 200/1000
M42	3-10-2013	1910	5844	Russian Intel 6 40	FSK 200/500
M42	3-10-2013	1920	4633	Russian Gov/Intel. 00000++++++++++162)5761	FSK 200/1000
M42	3-10-2013	1920	4633	Russian Intel 6 40	FSK 200/500
M42	4-10-2013	0150	16320	Russian Intel. Msgs on links 41018, 16708	FSK 200/1000
M42	4-10-2013	0230	14880	Russian Intel.	FSK 200/1000

M42	7-10-2013	0150	16320	Russian Intel. Msgs on links 13360, 13366, 41145, 00383, 61597	FSK 200/1000
M42	7-10-2013	0230	14880	Russian Intel. Msgs on links 12326, 13330, 13366, 41018, 40986, 64068	FSK 200/1000
M42	8-10-2013	0150	16320	Russian Intel. Msgs on links 49253, 28186, 26815, 17398, 41082	FSK 200/1000
M42	8-10-2013	0230	14880	Russian Intel. Msgs on links 49397, 41008	FSK 200/1000
M42	8-10-2013	1650	13426	Russian Intel	FSK 200/1000
M42	8-10-2013	1700	11116	Russian Intel	FSK 200/1000
M42	8-10-2013	2100	7727	Russian Intel	FSK 200/1000
M42	8-10-2013	2110	6926	Russian Intel	FSK 200/1000
M42	8-10-2013	2120	4631	Russian Intel	FSK 200/1000
M42	9-10-2013	0150	16320	Russian Intel. Msgs on links 32380, 41086, 41018, 00058, 21625	FSK 200/1000
M42	9-10-2013	0230	14880	Russian Intel. Msgs on links 49397, 41008	FSK 200/1000
M42	10-10-2013	0150	16320	Russian Intel. Msgs on links 13366, 17240, 10260	FSK 200/1000
M42	10-10-2013	0230	14880	Russian Intel. Msgs on links 05174, 41082, 41018, 37311, 17548, 00058, 23912	FSK 200/1000
M42	11-10-2013	0150	16320	Russian Intel. Msgs on links 05172, 26879, 41086, 22677, 57642, 25774, 41138	FSK 200/1000
M42	11-10-2013	0230	14880	Russian Intel. Msgs on links 41018, 40328, 41018, 41530, 01845	FSK 200/1000
M42	11-10-2013	1726	10688	Russian Intel	FSK 200/1000
M42	12-10-2013	1200	19526	Russian Intel 6 54	FSK 200/500
M42	12-10-2013	1210	17463	Russian Intel 6 54	FSK 200/500
M42	12-10-2013	1220	15824	Russian Intel 6 54	FSK 200/500
M42	13-10-2013	0816	14770	Russian Intel	FSK 200/1000
M42	13-10-2013	0820	12197	Russian Intel	FSK 200/1000
M42	13-10-2013	0910	16268	Russian Intel	FSK 200/1000
M42	13-10-2013	0920	14486	Russian Intel	FSK 200/1000
M42	14-10-2013	0150	16320	Russian Intel. Msgs on links 13876, 57407, 47308	FSK 200/1000
M42	14-10-2013	0230	14880	Russian Intel. Msgs on links 40976, 00030, 00062	FSK 200/1000
M42	17-10-2013	0150	16320	Russian Intel. Msgs on links 13366, 41080, 61822, 41018, 00026	FSK 200/1000
M42	17-10-2013	0230	14880	Russian Intel. Msgs on links 41018, 41016, 26593, 45070	FSK 200/1000
M42	18-10-2013	0150	16320	Russian Intel. Msgs on links 13366, 13366, 41018, 26849, 18497, 41082, 41018	FSK 200/1000
M42	18-10-2013	0230	14880	Russian Intel. Msgs on links 13366, 00058, 41018, 41147, 00048	FSK 200/1000
M42	18-10-2013	1710	7992	Russian Intel	FSK 200/1000
M42	18-10-2013	1720	10688	Russian Intel	FSK 200/1000
M42	21-10-2013	0150	16320	Russian Intel. Msgs on links 41018, 03021	FSK 200/1000
M42	21-10-2013	0230	14880	Russian Intel. Msgs on links 41018, 61498, 57402, 04152	FSK 200/1000
M42	21-10-2013	1548	11438	Russian diplo	CROWD-36
M42	22-10-2013	0150	16320	Russian Intel. Msgs on links 08341, 41146, 41018, 61599, 13063, 61498	FSK 200/1000
M42	22-10-2013	0230	14880	Russian Intel. Msgs on links 08228, 12037, 06016, 41018	FSK 200/1000
M42	23-10-2013	0150	16320	Russian Intel. Msgs on links 05136, 57457, 61627	FSK 200/1000
M42	23-10-2013	0230	14880	Russian Intel. Msgs on links 13366, 41018, 09019	FSK 200/1000
M42	24-10-2013	0150	16320	Russian Intel. Msgs on links 61498, 61823, 32739, 41018	FSK 200/1000
M42	24-10-2013	0230	14880	Russian Intel. Msgs on links 12310, 04288, 15329, 41018	FSK 200/1000
M42	24-10-2013	0416	5440	RWD59: Russian PtP, Moscow	RUS-ARQ 100/500
M42	25-10-2013	0347	5225	RVR39: Russian PtP station wkg RTW54	RUS-ARQ 100/500
M42	25-10-2013	0646	7813	PRAT: Russian Gov. Crypto message to LKDW into short duplex op-chat: "cfm qru? k ... zvp k" then "bk qrv k rpt k ... r 11t t652 k nil sk"	Baudot 50/500
M42	29-10-2013	0150	16320	Russian Intel. Msgs on links 13366, 13374, 41018, 41023	FSK 200/1000
M42	29-10-2013	0230	14880	Russian Intel. Msgs on links 08242, 32826, 01875, 03084, 41018, 00117, 15381, 53277	FSK 200/1000
M42	30-10-2013	0150	16320	Russian Intel. Msgs on links 13366, 09270, 57640, 41018, 41023, 44449, 41343	FSK 200/1000
M42	30-10-2013	0230	14880	Russian Intel. Msgs on links 18773	FSK 200/1000

M42	31-10-2013	0150	16320	Russian Intel. Msgs on links 41018, 33210		FSK 200/1000
M42	31-10-2013	0230	14880	Russian Intel. Msgs on links 13366, 08250, 41018		FSK 200/1000
M42a	5-10-2013	1201	10814	GRU HFDF station: NW – Es 65637 – 65736 – 44379 K – – – K		CW
M42a	11-10-2013	1735	11082	GRU hfdf net RUS VVVVVVV 3K		CW
X06	21-10-2013	1537	11439	Mazielka. Seuqnce 532614		USB

16320 kHz, 01-10, 0150 UTC, FSK 200/1000

Link ID 29750 Msg Number 000 Msg Type 13366 Group Count 0   16384 00000 00000 01852 15367 03534 00000 15415
Link ID 13366 Msg Number 000 Msg Type 13366 Group Count 0   16384 00000 00000 01852 15371 03468 00000 14382
Link ID 32826 Msg Number 085 Msg Type 07145 Group Count 253   32768 39984 03545 09433 23806 00223 25599 24527
Link ID 41018 Msg Number 116 Msg Type 07145 Group Count 245   32768 40121 19928 09426 05302 00131 16845 24263
Link ID 41018 Msg Number 085 Msg Type 04601 Group Count 253   32776 03321 19929 09435 29878 00135 16845 24263

14880 kHz, 01-10, 01230 UTC, FSK 200/1000

Link ID 13362 Msg Number 000 Msg Type 12326 Group Count 0   00000 00000 00000 01804 15627 03468 00256 30766
Link ID 14429 Msg Number 021 Msg Type 23642 Group Count 128   33382 14492 54705 02552 62189 30543 13347 23602
Link ID 41018 Msg Number 085 Msg Type 07145 Group Count 245   32768 40121 03545 01243 20662 00135 16845 24263

16320 kHz, 02-10, 0150 UTC, FSK 200/1000

Link ID 13876 Msg Number 000 Msg Type 13876 Group Count 0   16384 00000 00000 00057 14273 04014 00000 12624
Link ID 57471 Msg Number 254 Msg Type 07145 Group Count 245   32768 56959 51399 29680 64767 22125 55295 61303
Link ID 41019 Msg Number 095 Msg Type 07145 Group Count 245   32768 55926 34883 12664 30143 00557 50046 59003
Link ID 41018 Msg Number 080 Msg Type 07145 Group Count 245   32768 55926 34881 12656 21694 00558 50046 44603
Link ID 41018 Msg Number 090 Msg Type 07145 Group Count 245   32768 55927 34883 12656 23806 01645 50174 61307
Link ID 29371 Msg Number 026 Msg Type 16317 Group Count 114   11183 02434 63634 17733 01868 03328 44565 11255
Link ID 53390 Msg Number 128 Msg Type 56816 Group Count 14   39365 21253 05808 33376 01662 01472 04068 12391

14880 kHz, 02-10, 01230 UTC, FSK 200/1000

Link ID 13876 Msg Number 000 Msg Type 15988 Group Count 0   57344 00000 00000 00057 14273 04014 00000 12624
Link ID 04120 Msg Number 090 Msg Type 07147 Group Count 245   32768 55922 00099 00304 62646 00556 54142 58939
Link ID 41016 Msg Number 082 Msg Type 07145 Group Count 245   32768 55926 34819 12656 21686 00556 50046 42555
Link ID 41018 Msg Number 090 Msg Type 07145 Group Count 245   32768 55926 34883 12656 21686 00556 51070 42555

16320 kHz, 03-10, 0150 UTC, FSK 200/1000

Link ID 41018 Msg Number 100 Msg Type 07147 Group Count 255   32784 23024 22954 38703 22262 00358 37680 64802
Link ID 41008 Msg Number 096 Msg Type 03049 Group Count 229   32768 22688 22922 38831 22262 00358 37680 63795
Link ID 16708 Msg Number 025 Msg Type 08130 Group Count 251   32784 61809 45573 11278 43116 04812 14176 49989

14880 kHz, 03-10, 01230 UTC, FSK 200/1000

Link ID 58947 Msg Number 065 Msg Type 00128 Group Count 202   04272 49752 11016 00211 60873 03391 33844 41525
Link ID 41018 Msg Number 021 Msg Type 07145 Group Count 245   00000 55368 21179 09775 20612 01024 24640 02624

16320 kHz, 04-10, 0150 UTC, FSK 200/1000

Link ID 41018 Msg Number 100 Msg Type 07147 Group Count 255   32784 23024 22954 38703 22262 00358 37680 64802
Link ID 41008 Msg Number 096 Msg Type 03049 Group Count 229   32768 22688 22922 38831 22262 00358 37680 63795
Link ID 16708 Msg Number 025 Msg Type 08130 Group Count 251   32784 61809 45573 11278 43116 04812 14176 49989

16320 kHz, 07-10, 0150 UTC, FSK 200/1000

Link ID 13360 Msg Number 128 Msg Type 13366 Group Count 0   16384 00000 00000 01854 15877 36430 02048 15383
Link ID 13366 Msg Number 000 Msg Type 13366 Group Count 0   16384 00000 00000 01848 15360 03464 00000 14382
Link ID 41145 Msg Number 241 Msg Type 06377 Group Count 191   32768 07360 51821 00271 22235 37008 32692 31447
Link ID 00383 Msg Number 201 Msg Type 07136 Group Count 255   32768 23616 52969 00796 21686 00304 28024 26046
Link ID 61597 Msg Number 180 Msg Type 08175 Group Count 255   49152 56520 60732 00014 08923 32912 16052 14551

14880 kHz, 07-10, 0230 UTC, FSK 200/1000

Link ID 12326 Msg Number 000 Msg Type 12324 Group Count 0   16384 00000 00000 01596 15371 03468 00000 14382
Link ID 13330 Msg Number 000 Msg Type 08214 Group Count 0   16384 00000 00000 00540 15371 03468 00000 14382
Link ID 13366 Msg Number 000 Msg Type 13314 Group Count 0   16384 00000 00000 01852 15371 01292 00000 06190
Link ID 41018 Msg Number 105 Msg Type 07145 Group Count 255   33024 63971 22353 20308 21686 00304 52213 52056

Link ID 41018 Msg Number 105 Msg Type 07017 Group Count 248   32768 61667 22353 20308 21686 00048 53749 50008
Link ID 40986 Msg Number 041 Msg Type 06496 Group Count 240   32768 61539 18257 20308 20635 00016 18930 51468
Link ID 64068 Msg Number 081 Msg Type 00130 Group Count 0   16384 00023 00122 12422 43008 24641 04111 45601

16320 kHz, 08-10, 0150 UTC, FSK 200/1000
Link ID 49253 Msg Number 205 Msg Type 16363 Group Count 255   36880 65305 26188 00020 43389 04589 58492 52649
Link ID 28186 Msg Number 125 Msg Type 23239 Group Count 8   50153 39797 29124 10637 29571 37330 50240 15408
Link ID 26815 Msg Number 158 Msg Type 38233 Group Count 144   65288 55504 06399 04279 16139 31720 53959 65095
Link ID 17398 Msg Number 146 Msg Type 16693 Group Count 3   02188 00992 57086 15602 60647 31196 64577 06066
Link ID 41082 Msg Number 238 Msg Type 07019 Group Count 245   32768 61973 32622 00018 21686 02302 64062 26324

14880 kHz, 08-10, 0230 UTC, FSK 200/1000
Link ID 49397 Msg Number 205 Msg Type 06912 Group Count 245   32768 62473 25676 00020 43387 04589 60664 52721
Link ID 41008 Msg Number 108 Msg Type 07145 Group Count 245   32768 62980 15150 00000 00127 00237 57468 19881
Link ID 41018 Msg Number 110 Msg Type 07145 Group Count 117   32768 62980 06958 00002 21554 02230 63502 25284
Link ID 41018 Msg Number 110 Msg Type 06633 Group Count 245   32768 46596 32550 00000 01046 00255 62014 25340
Link ID 41018 Msg Number 110 Msg Type 02912 Group Count 241   32768 62980 15150 00002 21686 02302 64062 26324

16320 kHz, 09-10, 0150 UTC, FSK 200/1000
Link ID 32380 Msg Number 000 Msg Type 15924 Group Count 0   26112 00006 00000 00121 14305 02990 00000 12624
Link ID 41086 Msg Number 015 Msg Type 07145 Group Count 245   32768 55830 42347 12286 64766 08143 53215 01999
Link ID 41018 Msg Number 005 Msg Type 05097 Group Count 245   32768 55830 42281 12156 21686 01351 52045 00710
Link ID 41018 Msg Number 005 Msg Type 02537 Group Count 245   32768 55862 42281 12156 21686 01351 52045 00710
Link ID 00058 Msg Number 004 Msg Type 05101 Group Count 244   32768 39058 01065 12076 05302 01347 52041 00706
Link ID 21625 Msg Number 245 Msg Type 37504 Group Count 144   44893 52866 51985 03839 07177 01583 26700 04420

14880 kHz, 09-10, 0230 UTC, FSK 200/1000
Link ID 49397 Msg Number 205 Msg Type 06912 Group Count 245   32768 62473 25676 00020 43387 04589 60664 52721
Link ID 41008 Msg Number 108 Msg Type 07145 Group Count 245   32768 62980 15150 00000 00127 00237 57468 19881
Link ID 41018 Msg Number 110 Msg Type 07145 Group Count 117   32768 62980 06958 00002 21554 02230 63502 25284
Link ID 41018 Msg Number 110 Msg Type 06633 Group Count 245   32768 46596 32550 00000 01046 00255 62014 25340
Link ID 41018 Msg Number 110 Msg Type 02912 Group Count 241   32768 62980 15150 00002 21686 02302 64062 26324

16320 kHz, 10-10, 0150 UTC, FSK 200/1000
Link ID 13366 Msg Number 000 Msg Type 13318 Group Count 0   24576 00000 00000 01832 15371 01420 00048 12412
Link ID 17240 Msg Number 145 Msg Type 01731 Group Count 208   00081 04185 30464 57409 08393 01655 29070 36883
Link ID 10260 Msg Number 048 Msg Type 07080 Group Count 245   32768 12472 00141 17932 29878 36612 35824 50200

14880 kHz, 10-10, 0230 UTC, FSK 200/1000
Link ID 05174 Msg Number 000 Msg Type 13367 Group Count 0   16512 00000 00000 01852 15371 03468 00000 14382
Link ID 41082 Msg Number 248 Msg Type 07147 Group Count 245   32784 12792 04813 24444 21686 03861 35823 50200
Link ID 41018 Msg Number 120 Msg Type 07017 Group Count 240   32768 12464 04813 03964 21686 03841 35823 17416
Link ID 37311 Msg Number 254 Msg Type 34021 Group Count 162   25435 56585 20721 09215 56307 58048 04880 11980
Link ID 17548 Msg Number 235 Msg Type 56944 Group Count 144   54890 07284 50860 50819 59207 28295 01911 32998
Liink ID 00058 Msg Number 120 Msg Type 07144 Group Count 245   32768 12304 00205 06012 21682 03845 36751 50184
Link ID 23912 Msg Number 023 Msg Type 56711 Group Count 169   44417 55665 18344 07168 08766 00738 00006 01119

16320 kHz, 11-10, 0150 UTC, FSK 200/1000
Link ID 05172 Msg Number 000 Msg Type 13876 Group Count 0   24577 02050 00000 00313 14273 04014 00000 12624
Link ID 26879 Msg Number 254 Msg Type 12272 Group Count 212   62688 39239 05629 39294 62569 61865 30207 65208
Link ID 41086 Msg Number 061 Msg Type 07145 Group Count 245   32768 11424 58111 13182 21686 03125 28401 09023
Link ID 22677 Msg Number 130 Msg Type 05364 Group Count 240   49160 48344 55799 04255 08795 34450 14328 04503
Link ID 57642 Msg Number 020 Msg Type 07147 Group Count 247   32784 11761 57599 28734 62655 35895 28408 25535
Link ID 25774 Msg Number 222 Msg Type 08946 Group Count 196   62688 39415 05300 38974 13419 45483 13823 65273
Link ID 41138 Msg Number 052 Msg Type 15337 Group Count 245   32768 11426 58111 12654 21686 03125 28400 09023

14880 kHz, 11-10, 0230 UTC, FSK 200/1000
Link ID 41018 Msg Number 125 Msg Type 07136 Group Count 245   32768 30727 50299 34328 21510 00150 46069 43406
Link ID 40328 Msg Number 224 Msg Type 19466 Group Count 193   12518 39510 41936 21339 34685 39284 29993 01304
Link ID 41018 Msg Number 125 Msg Type 07145 Group Count 245   32768 30935 50299 34328 21686 00438 46069 43918

Link ID 41018 Msg Number 125 Msg Type 07145 Group Count 245   32768 30935 54395 34328 21686 00438 46064 43918
Link ID 41018 Msg Number 125 Msg Type 07145 Group Count 224   34816 28887 50299 34328 21686 00438 46069 43918
Link ID 41530 Msg Number 253 Msg Type 07145 Group Count 245   32768 30935 50299 34328 21750 00950 47093 61326
Link ID 41018 Msg Number 125 Msg Type 07145 Group Count 245   32768 30935 49274 33808 00182 00438 13301 35726
Link ID 01845 Msg Number 049 Msg Type 00123 Group Count 224   00907 02264 14963 13410 42113 62508 05108 29264

16320 kHz, 14-10, 0150 UTC, FSK 200/1000
Link ID 13876 Msg Number 000 Msg Type 13940 Group Count 0   24576 00000 04096 08253 16321 36782 01024 08528
Link ID 57407 Msg Number 131 Msg Type 07081 Group Count 245   32768 00302 17409 02201 54526 36306 00505 55426
Link ID 47308 Msg Number 017 Msg Type 08084 Group Count 220   36080 50032 33241 32766 59893 00424 22582 63748

14880 kHz, 14-10, 0230 UTC, FSK 200/1000
Link ID 40976 Msg Number 128 Msg Type 06121 Group Count 245   32768 01798 54288 08320 00182 01090 00425 30850
Link ID 00030 Msg Number 128 Msg Type 08169 Group Count 245   32768 01830 49297 08241 21686 03394 00425 63618
Link ID 00062 Msg Number 130 Msg Type 07136 Group Count 245   32768 01794 53488 08433 23730 03392 00417 63490

16320 kHz, 17-10, 0150 UTC, FSK 200/1000
Link ID 13366 Msg Number 000 Msg Type 13366 Group Count 0   16640 00000 00000 01852 15391 03470 00256 14462
Link ID 41080 Msg Number 177 Msg Type 07145 Group Count 245   32768 58453 18172 01282 21686 01003 63889 47389
Link ID 61822 Msg Number 083 Msg Type 12905 Group Count 213   32768 50271 36092 02582 64695 08191 64411 64319
Link ID 41018 Msg Number 177 Msg Type 08041 Group Count 245   32768 58453 18172 01298 21695 02047 63888 47391
Link ID 41018 Msg Number 145 Msg Type 15337 Group Count 245   32768 58453 18172 01282 54452 06027 63745 47373
Link ID 00026 Msg Number 145 Msg Type 07145 Group Count 241   32768 58453 18172 01282 21684 02025 63889 47389

14880 kHz, 17-10, 0230 UTC, FSK 200/1000
Link ID 41018 Msg Number 145 Msg Type 03049 Group Count 117   32768 58453 18172 01280 00183 00751 63681 47135
Link ID 41016 Msg Number 144 Msg Type 04457 Group Count 240   32768 57361 18172 01282 21686 02027 63889 47389
Link ID 26593 Msg Number 008 Msg Type 24896 Group Count 3   28076 51209 09293 31493 00440 52691 55336 30774
Link ID 45070 Msg Number 048 Msg Type 05903 Group Count 239   26137 15760 53248 28481 00130 16437 00928 16136

16320 kHz, 18-10, 0150 UTC, FSK 200/1000
Link ID 13366 Msg Number 000 Msg Type 13366 Group Count 0   16384 00000 00000 01852 15391 03980 00001 14463
Link ID 13366 Msg Number 000 Msg Type 13366 Group Count 0   16384 00000 00000 01852 15647 03982 00257 30847
Link ID 41018 Msg Number 150 Msg Type 07145 Group Count 14   32768 04452 53704 10667 21686 06275 32510 37254
Link ID 26849 Msg Number 172 Msg Type 08906 Group Count 191   17599 45522 16606 33042 15971 42051 09418 58453
Link ID 18497 Msg Number 130 Msg Type 58125 Group Count 0   16438 17556 50694 16428 56135 56152 63660 37260
Link ID 41082 Msg Number 182 Msg Type 08185 Group Count 14   32768 04452 54232 27643 21680 06275 28286 37254
Link ID 41018 Msg Number 150 Msg Type 07145 Group Count 14   32768 04452 53704 10667 21686 06275 28414 37254

14880 kHz, 18-10, 0230 UTC, FSK 200/1000
Link ID 13366 Msg Number 000 Msg Type 13366 Group Count 0   16384 00000 00000 01852 15371 03468 00000 14382
Link ID 00058 Msg Number 150 Msg Type 04416 Group Count 2   32768 32800 53704 10667 21686 06275 28414 37254
Link ID 41018 Msg Number 150 Msg Type 07145 Group Count 14   32768 04452 53704 10667 20540 06151 26364 36877
Link ID 41147 Msg Number 215 Msg Type 07144 Group Count 14   32768 04452 62456 63995 21686 06275 28414 37254
Link ID 00048 Msg Number 020 Msg Type 02912 Group Count 14   32768 00000 33152 00002 00124 00279 19708 00781

16320 kHz, 21-10, 0150 UTC, FSK 200/1000
Link ID 41018 Msg Number 155 Msg Type 06889 Group Count 240   32768 10903 57801 28239 64758 03250 61582 64119
Link ID 03021 Msg Number 072 Msg Type 35095 Group Count 222   62526 00034 49200 14017 29339 38828 47146 49066

14880 kHz, 21-10, 0230 UTC, FSK 200/1000
Link ID 41018 Msg Number 155 Msg Type 04585 Group Count 245   32768 02711 41161 28235 21686 03250 28814 23159
Link ID 41018 Msg Number 155 Msg Type 07145 Group Count 245   32768 10903 41161 28235 23932 03189 28940 62959
Link ID 61498 Msg Number 155 Msg Type 07145 Group Count 245   32768 10911 41161 28235 21686 03120 28804 22631
Link ID 57402 Msg Number 155 Msg Type 07144 Group Count 245   32768 10895 61641 28235 21686 03250 28814 23159
Link ID 04152 Msg Number 048 Msg Type 19512 Group Count 88   17342 23843 60527 16976 13584 23858 05100 56012
Link ID 41018 Msg Number 155 Msg Type 07145 Group Count 245   32768 10903 41161 28235 21686 03250 28814 23159
Link ID 41008 Msg Number 145 Msg Type 07145 Group Count 245   32768 10903 41161 26187 21686 03250 28814 23159
Link ID 41018 Msg Number 155 Msg Type 06633 Group Count 245   32768 10903 41161 28235 21686 03250 28814 23159
Link ID 41018 Msg Number 155 Msg Type 07145 Group Count 245   32768 10903 41161 28235 21686 03250 28814 23159

Link ID 57402 Msg Number 155 Msg Type 08171 Group Count 255   36880 32703 41161 28235 21686 03250 28814 23159
Link ID 41018 Msg Number 155 Msg Type 07145 Group Count 245   32768 10903 41161 26187 21686 03250 28814 23159
Link ID 41018 Msg Number 155 Msg Type 07145 Group Count 245   32768 10903 41161 28235 21686 03250 28814 23159

16320 kHz, 22-10, 0150 UTC, FSK 200/1000

Link ID 08341 Msg Number 192 Msg Type 08168 Group Count 14   32768 02320 61185 28480 43971 34502 41447 10368
Link ID 41146 Msg Number 208 Msg Type 07145 Group Count 14   32768 02545 52162 20353 62646 14493 49374 20736
Link ID 41018 Msg Number 128 Msg Type 07145 Group Count 15   32768 02481 51970 19329 62710 06333 18142 21249
Link ID 61599 Msg Number 240 Msg Type 07144 Group Count 14   32768 02481 61409 28096 43671 33999 41455 08320
Link ID 41018 Msg Number 160 Msg Type 07145 Group Count 14   32768 02481 52098 19329 21687 06303 17118 20736
Link ID 13063 Msg Number 185 Msg Type 21423 Group Count 194   00792 25502 39861 00582 41243 21900 49403 18657
Link ID 61498 Msg Number 160 Msg Type 08168 Group Count 14   32768 06577 53122 20353 23735 06303 17150 28928
Link ID 41018 Msg Number 160 Msg Type 07144 Group Count 14   32768 02353 52098 19329 20662 04253 17118 04352

14880 kHz, 22-10, 0230 UTC, FSK 200/1000

Link ID 08228 Msg Number 000 Msg Type 12396 Group Count 0   00000 00000 00001 01576 26631 02568 00257 12381
Link ID 12037 Msg Number 181 Msg Type 03954 Group Count 115   59290 62150 42081 03395 12745 25769 61014 23808
Link ID 06016 Msg Number 090 Msg Type 20273 Group Count 121   65477 63843 54008 01577 39136 43612 30507 09856
Link ID 41018 Msg Number 160 Msg Type 05097 Group Count 14   32768 02481 52098 19329 23798 14493 49886 62208

16320 kHz, 23-10, 0150 UTC, FSK 200/1000

Link ID 05136 Msg Number 000 Msg Type 12311 Group Count 0   16512 00000 00000 01814 07179 01292 00007 04143
Link ID 57457 Msg Number 242 Msg Type 08185 Group Count 247   34824 47311 21248 52560 03198 33740 65268 65475
Link ID 61627 Msg Number 165 Msg Type 07145 Group Count 117   32768 12428 62222 19767 21686 00452 63058 64449

14880 kHz, 23-10, 0230 UTC, FSK 200/1000

Link ID 13366 Msg Number 000 Msg Type 13366 Group Count 0   16384 00000 00000 01852 15371 03468 00000 14382
Link ID 41018 Msg Number 133 Msg Type 07137 Group Count 240   32768 12420 54030 18742 21686 00452 63058 64449
Link ID 41018 Msg Number 165 Msg Type 07145 Group Count 245   32768 12420 54030 19766 20662 00196 63042 64449
Link ID 09019 Msg Number 103 Msg Type 21890 Group Count 142   26708 48304 33872 08063 47625 06909 04539 52321
Link ID 41018 Msg Number 165 Msg Type 07145 Group Count 245   32768 12420 54030 19766 20662 00448 63056 64448

16320 kHz, 24-10, 0150 UTC, FSK 200/1000

Link ID 61498 Msg Number 175 Msg Type 07149 Group Count 245   32768 14065 02787 11765 22006 03060 63411 61387
Link ID 61823 Msg Number 255 Msg Type 07145 Group Count 21   32768 14065 04087 28671 62647 06582 62419 58829
Link ID 32739 Msg Number 192 Msg Type 30975 Group Count 198   36345 65331 64308 06128 06139 53117 48403 12192
Link ID 41018 Msg Number 175 Msg Type 07145 Group Count 247   32768 16369 03587 11765 23998 06588 62355 58761

14880 kHz, 24-10, 0230 UTC, FSK 200/1000

Link ID 12310 Msg Number 000 Msg Type 04150 Group Count 0   00864 00000 00000 00083 15371 03851 00000 48887
Link ID 04288 Msg Number 075 Msg Type 48571 Group Count 8   57190 14231 02114 01616 27566 01804 53510 39208
Link ID 15329 Msg Number 064 Msg Type 28887 Group Count 194   35944 62737 23828 00752 01835 51053 48403 10912
Link ID 41018 Msg Number 175 Msg Type 06633 Group Count 117   32768 05873 02787 11765 21651 00242 61905 57548

16320 kHz, 29-10, 0150 UTC, FSK 200/1000

Link ID 13366 Msg Number 000 Msg Type 13366 Group Count 0   16384 00000 00000 01852 15371 03468 00000 14382
Link ID 13366 Msg Number 000 Msg Type 09270 Group Count 0   00000 00000 00000 01852 15375 36236 00000 14398
Link ID 13366 Msg Number 000 Msg Type 13366 Group Count 0   16384 00000 00004 01852 15371 03532 00128 14398
Link ID 13374 Msg Number 000 Msg Type 13366 Group Count 0   16384 00000 00000 01852 15375 36236 00000 14399
Link ID 41018 Msg Number 185 Msg Type 07161 Group Count 247   49153 61329 44906 18612 21686 00171 32873 58394
Link ID 41023 Msg Number 253 Msg Type 07145 Group Count 245   32769 51857 44926 18678 22198 00171 33897 58399

14880 kHz, 29-10, 0230 UTC, FSK 200/1000

Link ID 08242 Msg Number 000 Msg Type 13364 Group Count 0   16384 00000 00000 01812 07179 01164 00000 06191
Link ID 32826 Msg Number 185 Msg Type 02920 Group Count 112   32768 49665 02922 18612 21686 00171 33897 58394
Link ID 01875 Msg Number 240 Msg Type 24836 Group Count 149   15873 26596 44596 15585 30370 64635 13692 25597
Link ID 03084 Msg Number 010 Msg Type 09987 Group Count 168   02874 00000 04098 00304 00768 02272 03072 57344
Link ID 41018 Msg Number 185 Msg Type 07145 Group Count 245   32769 51857 43882 18612 21686 00171 33897 58395
Link ID 00117 Msg Number 099 Msg Type 00192 Group Count 113   00001 32785 02004 32888 43133 04167 06339 51493
Link ID 15381 Msg Number 037 Msg Type 08055 Group Count 198   02585 48532 44945 00684 46334 58616 24790 16624

Link ID 53277 Msg Number 212 Msg Type 06652 Group Count 247   32776 53208 23997 11344 00001 00192 00028 12293

16320 kHz, 30-10, 0150 UTC, FSK 200/1000
Link ID 13366 Msg Number 000 Msg Type 13366 Group Count 0   57344 00000 00000 01852 15371 03468 00000 14350
Link ID 09270 Msg Number 000 Msg Type 13366 Group Count 5   16640 00000 00000 01854 15371 03468 00000 12334
Link ID 57640 Msg Number 066 Msg Type 64535 Group Count 195   39615 36063 26617 34339 00635 65301 61774 61503
Link ID 41018 Msg Number 190 Msg Type 07145 Group Count 14   32769 11494 39790 19004 21686 04752 52320 22959
Link ID 41023 Msg Number 190 Msg Type 07144 Group Count 14   00000 11490 39278 16956 21686 04752 52324 22959
Link ID 44449 Msg Number 048 Msg Type 47925 Group Count 220   12428 46323 06625 12417 61288 63085 59710 30044
Link ID 41018 Msg Number 190 Msg Type 07145 Group Count 14   32769 11491 39790 18996 20662 04752 50276 20911
Link ID 41343 Msg Number 255 Msg Type 07145 Group Count 14   32769 11494 40943 20092 64766 06032 52580 23471

14880 kHz, 30-10, 0230 UTC, FSK 200/1000
Link ID 18773 Msg Number 245 Msg Type 32423 Group Count 38   34063 05507 47800 38311 37894 24768 40960 00140
Link ID 18773 Msg Number 181 Msg Type 32391 Group Count 38   34063 04227 47800 38311 38407 24578 45224 00222

16320 kHz, 31-10, 0150 UTC, FSK 200/1000
Link ID 41018   Msg Number 195 Msg Type 07145 Group Count 245   32769 04321 31455 21375 21686 04084 22459 43158
Link ID 33210   Msg Number 233 Msg Type 07113 Group Count 181   32769 00225 36092 21365 62566 25844 05563 04502

14880 kHz, 31-10, 0230 UTC, FSK 200/1000
Link ID 13366 Msg Number 000 Msg Type 13366 Group Count 0   16384 00000 00000 01844 15371 03468 00000 14382
Link ID 08250 Msg Number 195 Msg Type 06505 Group Count 240   32769 04321 31455 21375 20482 02032 22411 43142
Link ID 41018 Msg Number 195 Msg Type 07145 Group Count 245   32769 04321 31455 21375 21686 04084 22459 43158
Link ID 41018 Msg Number 195 Msg Type 07145 Group Count 245   32769 04321 31455 21375 21686 04084 22459 43158

16320 kHz, 24-10, 0150 UTC, FSK 200/1000 (complete message)
Rivet (Build 88) by Ian Wraith

Block No 0 : Total Message Size 34 blocks : This transmission contains 6 messages.
7d,12,b0,e6,00,13,34,00,43,80,36,00,60,00,30,00,40,01,70,05,60,07,30,0a,0f,0e,00,0f,bb,07,db,03,06,09,07,0f
----
Block No 0 : Total Message Size 3 blocks : This transmission contains 3 messages.
7d,12,b0,e6,00,10,00,00,00,00,40,00,30,00,00,00,00,0c,60,09,00,09,00,01,00,04,00,0c,e0,08,e0,0f,30,0a,f0,00
09:50:07 FSK200/1000 Sync Sequence Found

Block No 0 : Total Message Size 37 blocks : This transmission contains one message.
fd,12,b0,e6,00,00,00,00,40,00,80,00,10,00,00,00,00,06,30,07,80,01,00,06,f8,03,b0,0f,80,0f,90,08,b0,06,20,0c
Block No 1 : Link ID 61498 : Corrupt Date : Msg Number 175 : Msg Type 07149 : Group Count (?) 245
32768 14065 02787 11765 22006 03060 63411 61387
7d,12,b0,e6,00,33,18,f3,b0,56,e0,ff,d0,41,ff,02,0d,ad,3a,ef,af,35,50,fe,5b,7f,ff,bc,64,3b,d7,f4,9b,00,1b,f0
Block No 6
7d,12,b0,e6,00,cc,69,98,37,d6,7f,fe,bb,d7,e5,d6,70,56,5a,ec,07,ff,c3,fb,2a,28,a1,3b,fb,3e,ff,f8,f2,7b,d2,8f
Block No 10
7d,12,b0,e6,01,43,33,74,fa,7f,dc,0a,66,d1,ee,07,bf,ef,80,3a,54,49,8b,20,94,12,e8,6d,2f,46,48,9c,36,51,22,57
Block No 11
7d,02,b0,e6,01,70,94,10,48,3a,dc,6f,dd,e9,cb,72,62,9e,98,d8,ff,ff,cf,ff,ff,ff,ff,bd,fe,fe,79,7f,bf,1c,88,ed
Block No 12
7f,12,b0,e6,01,8f,b0,00,3c,43,8e,9e,f5,50,74,c8,36,e2,a2,3f,78,fd,ff,e3,73,fb,fe,f7,3f,3f,c0,de,dc,5c,07,d0
Block No 13
7d,12,b0,e6,01,bc,4b,08,17,91,7c,40,b9,b6,70,0e,3e,3e,9f,23,d2,4a,ff,1a,66,80,fb,a2,2c,de,05,34,8f,ba,6c,d6
Block No 15
7d,13,b0,e6,01,e9,8a,cc,d1,f9,e3,1f,7d,d3,15,a0,ef,c7,df,ae,bd,7e,eb,85,39,33,fd,2f,f0,f5,dc,57,ff,9f,fc,62
Block No 17
7f,12,b0,e6,02,3d,42,bf,a7,cf,ce,a4,07,2a,da,c5,3b,60,ab,40,34,f5,b7,42,2f,ef,ff,7b,9c,da,83,8c,ff,48,2c,1e
Block No 19
7d,12,b0,e6,02,78,25,c8,99,48,4b,c0,67,24,86,57,26,27,24,22,49,87,ff,e4,bd,9d,56,a5,d0,72,c1,06,18,3c,7e,f6
Block No 24
7d,12,b0,e6,03,08,63,cc,46,9f,e8,66,4f,11,f3,7c,ff,e7,87,1e,fc,93,44,d7,67,df,fb,67,fe,7d,ff,bb,fe,df,84,a1

Block No 26
7d,12,b0,e6,03,5d,74,5c,ac,b5,8f,b1,9a,69,cc,61,47,e1,6e,1f,f6,0f,f8,2f,e3,0f,07,3a,6e,b3,a5,cd,35,b4,e9,b6
Block No 11
7d,12,b0,e2,01,6e,74,67,87,d7,7c,2f,aa,41,b9,95,e2,9b,03,a9,e1,c7,cb,76,7e,04,80,94,2c,98,37,5d,d5,5d,74,3d
Block No 30
7d,12,b0,e7,03,c4,c2,91,9d,83,a6,03,ba,b9,bc,c3,d2,26,ff,fe,70,67,2e,bc,60,1b,a9,59,87,4c,8f,1f,da,93,45,99
Block No 63
7d,12,b0,e6,07,f7,b5,a1,f7,5b,fb,90,3e,43,ff,e6,f3,f3,ec,26,02,89,69,0d,a5,41,3d,2d,d8,5b,b9,89,59,3f,df,88
Block No 33
7d,12,b0,e6,04,2b,34,20,ba,53,10,ec,c1,a3,bc,d2,1d,3f,fe,ab,60,1a,42,8b,2c,99,a9,47,31,70,f9,6e,f6,a1,f9,ff
Block No 35
7d,12,b0,e6,04,7e,0a,b0,c7,81,b1,81,de,20,61,50,ce,ec,57,a9,c8,06,7f,87,0d,9f,af,6f,01,6e,87,f0,1f,d8,3a,03
Block No 1 : Link ID 61823 : Corrupt Date : Msg Number 255 : Msg Type 07145 : Group Count (?) 21
32768 14065 04087 28671 62647 06582 62419 58829
7d,12,b0,66,00,33,18,13,b0,56,e0,ef,90,41,ff,06,1f,ff,7f,ff,ff,7f,f1,fe,49,35,bb,dc,76,3d,fb,fe,df,99,ff,f0
Block No 3
7d,12,b0,e6,00,66,f9,b2,20,13,d8,1c,f3,a0,32,29,dc,33,75,e3,c7,cb,88,8f,f2,78,e0,3d,bf,1c,72,3c,38,df,b6,d9
Block No 4
7d,12,b0,e6,00,98,31,97,71,59,4d,bf,ef,8d,d9,b7,f8,ff,fe,6f,9f,d8,41,eb,39,3f,e1,ff,f9,9e,69,9d,0e,7d,f8,7b
Block No 9
7d,12,b0,e6,01,25,78,cf,8d,25,d6,f0,78,83,77,f1,bd,d2,e4,1f,10,40,9c,32,77,da,a6,1a,bd,30,43,c6,b2,d9,a7,7a
Block No 15
7d,12,b0,e6,01,f8,9c,10,48,38,4c,6f,dd,e9,cb,72,62,9e,98,d0,d5,aa,8d,af,7f,d5,57,29,fc,fe,ff,7f,bf,1d,fc,fd
Block No 12
7d,12,b0,e6,01,8f,b0,00,2c,47,9f,9c,e0,00,e0,80,6d,c5,44,2c,70,b9,d7,c2,63,d3,7c,a6,36,2d,80,94,98,ba,5f,b0
Block No 13
3d,12,b0,e6,01,bc,4b,0b,d7,91,7c,41,d8,b2,30,06,1f,3e,9f,23,f2,4a,f9,1a,66,80,ff,a2,2c,ff,07,3e,8f,ba,6d,d7
Block No 23
7d,12,b0,e6,02,f8,24,d8,b9,c8,0a,80,43,24,86,57,26,27,24,22,49,85,b0,44,bd,9d,56,a5,d0,72,c5,06,18,2c,7e,f4
Block No 20
7d,12,b0,e6,02,87,85,03,a3,89,bf,2b,5d,b5,70,f7,9b,00,fc,e3,bf,f6,60,1b,15,ac,51,f7,ff,92,22,5b,86,46,0b,cc
Block No 22
7d,12,b0,e6,02,d2,41,b9,6b,c2,80,8b,25,09,3b,d8,55,4f,69,e0,80,59,42,f9,dd,6f,c0,ae,16,fb,18,36,cc,03,8e,4a
Block No 23
7f,12,b0,e6,02,e1,f8,42,52,77,b2,3f,dc,60,c1,78,cf,ff,3f,99,62,b4,08,b3,7a,03,7b,bd,2c,f0,b3,ff,85,09,1b,99
Block No 24
fd,12,b0,e6,03,09,f3,cc,46,9f,e8,ee,9e,21,a2,48,f6,cf,0a,1c,b1,26,89,fe,cf,be,f0,07,fd,e9,ed,32,ff,d5,09,42
Block No 25
7d,12,b0,e6,03,3b,d3,81,38,9f,3f,39,f4,60,0c,2c,fb,b9,5e,03,46,0f,04,a5,f6,b3,8f,d9,80,24,60,98,b9,f0,d1,83
Block No 28
7d,12,b0,e6,03,91,3a,67,3f,3a,5d,4a,90,53,13,65,38,8b,dd,c3,32,4b,ab,a9,81,bf,7a,cb,65,20,c5,59,be,2b,03,f1
Block No 30
7d,12,90,e6,03,c4,d6,91,9d,83,a6,03,ba,b9,be,c3,d2,26,56,fc,60,4e,1d,7a,c4,b7,52,b3,06,99,1e,3f,d0,02,01,12
Block No 31
7d,13,b0,e6,03,f7,b5,a1,f7,59,db,92,3e,43,ff,f7,f9,f9,f6,33,00,00,21,0d,a5,41,3d,2d,d8,5b,fd,cd,fd,bf,cf,c4
Block No 32
7d,12,b0,e6,04,18,00,00,40,00,80,00,10,00,00,00,00,06,30,05,00,03,00,04,f0,07,f8,0f,80,07,d8,0c,f8,07,30,0e
Block No 33
7d,12,b0,e6,04,2b,34,20,ba,53,00,44,41,a3,bc,d2,1d,2f,3a,ab,60,18,42,df,2c,99,a9,47,31,f0,fb,ff,f6,a0,f0,97
Block No 35
7d,12,b0,e6,04,7e,0a,b0,c7,80,00,00,ca,20,61,50,ce,ec,57,a9,c8,06,33,06,09,17,af,6f,21,6e,03,b0,17,d8,7e,03
Block No 2
7d,12,b0,e6,00,57,a3,5f,77,c3,b1,b8,47,86,06,15,98,78,06,4b,f6,af,31,be,7c,1c,49,98,88,a7,d3,f1,0f,4f,2d,cc
Block No 3
fd,12,b0,e6,00,62,f9,b2,20,13,d8,0c,12,00,33,2d,dc,33,75,e1,d6,cb,88,8b,72,58,a0,1c,9d,0c,3a,3e,28,df,96,d9
Block No 9
7d,12,b0,e6,01,25,79,df,9f,6f,fe,f1,78,81,33,50,bd,f8,64,1f,10,40,9c,b2,ff,ff,ee,3f,ff,70,c7,c6,a0,91,87,7a
Block No 11
fd,12,b0,e6,01,70,94,10,c8,3a,dc,6f,dd,e9,cb,72,67,9f,b9,d0,ff,e2,8d,af,7f,d5,ff,bd,fe,ff,ff,7f,bf,0c,d4,76
Block No 12

7d,12,b0,e6,01,8f,a8,00,3c,43,8e,9e,f5,50,77,e8,36,e2,b2,16,38,5c,eb,e1,31,e9,be,53,1b,16,c0,4a,4c,5d,2f,d8
Block No 15
7d,12,b0,e6,01,e9,8a,cc,d1,d8,f7,9f,ff,f7,bf,e1,df,8e,bf,7f,ff,fd,d7,1a,72,ef,fe,ff,e3,fb,b8,a6,b7,1a,f8,44
Block No 48
7d,92,b0,e6,06,1e,00,00,40,00,80,00,10,00,00,00,00,04,20,05,00,03,00,0d,f0,0f,e0,0d,00,1f,90,08,b0,06,20,0c
Block No 51
7d,12,b0,e6,06,7f,c7,ff,e7,cf,df,ed,bf,ff,ff,e7,a9,b0,ff,e0,3e,ff,ff,e3,3f,f7,ff,fd,ce,6d,41,c2,3f,ac,3e,1f
Block No 20
7d,12,b0,e6,02,87,87,03,f3,89,bf,3b,ff,ff,f0,f7,9b,32,fc,d3,bf,f6,60,5b,15,fc,51,f7,ff,92,22,53,84,46,0f,cc
Block No 21
7d,12,b0,e6,02,b4,76,79,d2,e3,ee,bd,cf,22,7c,60,14,a7,0e,98,1f,e0,c4,64,f7,0f,f8,b7,e6,fb,f8,a9,a8,3f,fa,fa
Block No 22
7d,12,b0,e6,02,d2,41,b9,fb,62,80,9f,65,09,29,c8,55,4f,68,c0,80,59,03,f9,dd,6f,c0,ee,16,fb,1e,b6,cc,03,8e,4a
Block No 23
7d,12,b0,e2,02,e1,fe,d6,76,ff,b2,3f,dc,40,81,58,cf,df,17,99,60,97,fd,ff,ba,03,7b,bd,2c,f0,a3,bf,85,0d,1b,99
Block No 24
7d,12,b0,e6,03,08,63,cc,47,9f,e8,ee,9e,23,a2,e8,f7,df,0a,1c,b1,26,89,ae,47,96,72,46,fc,e9,ed,32,dc,97,cd,e3
Block No 27
7d,12,b0,e4,03,7f,fc,5c,ac,b5,9f,b1,9a,69,cc,61,41,e3,ea,0f,d6,06,e8,27,a1,05,07,3e,ee,b3,a5,cd,35,b4,e9,b6
Block No 27
7d,12,b0,e6,03,6e,74,62,87,d7,7c,2f,aa,43,ff,df,f3,df,81,fc,f0,e3,e5,bb,3b,02,40,4a,16,5c,3f,ae,ea,af,fe,3f
Block No 29
7d,12,b0,e6,03,a2,0f,4a,bf,dc,eb,f9,7c,38,c6,0e,67,e5,be,34,75,17,1a,eb,c0,25,2f,47,ff,6b,64,79,fc,78,fe,84
Block No 307
7d,12,b0,e6,26,6f,b7,ff,c0,3d,16,ba,98,81,f4,66,7b,cc,cb,98,01,cd,b7,fc,dd,0e,db,16,7f,c3,cf,b9,4a,1b,97,d5

Block No 5
7d,12,b0,e2,00,aa,bc,0b,df,87,bf,e9,f0,e7,12,44,47,86,c4,d5,0b,20,60,c9,b7,19,a1,8a,ec,68,06,1a,15,4d,59,5e
Block No 6
7d,12,b0,e6,00,dc,69,91,77,d6,7f,ea,bb,d7,e5,d6,70,52,7b,ee,0f,ff,e3,ff,9d,1c,70,9c,ec,8d,3a,dc,41,18,89,45
Block No 7
7d,12,b0,e6,00,ff,e2,84,8e,b8,2a,9b,2f,27,08,e8,7d,bc,09,25,10,17,c3,ab,1b,aa,ea,ab,e0,00,00,84,20,85,d0,d4
Block No 8
7d,12,b0,e6,01,17,6f,df,be,18,55,7c,7e,30,7d,a9,e9,c4,ad,ef,1c,74,f8,19,60,23,99,21,bf,b8,ff,dc,36,53,eb,65
Block No 1 : Link ID 32739 : Corrupt Date : Msg Number 192 : Msg Type 30975 : Group Count (?) 198
36345 65331 64308 06128 06139 53117 48403 12192
7d,12,b0,e6,00,25,78,cf,8d,6f,ff,f3,f9,83,77,f1,fb,b7,ec,3f,30,40,1c,b2,7f,df,f7,1a,bd,30,43,c6,b3,f9,f7,ff
Block No 19
7d,12,b0,e6,02,7f,c7,ff,e7,ef,df,ed,9f,b5,6d,62,9d,b0,5d,e0,1e,ff,db,a1,17,52,ee,bc,c6,2d,41,c2,3d,a4,16,0f
Block No 18
7d,12,b0,66,02,4b,6e,0e,84,8a,20,ef,fe,f8,3c,f8,0a,d9,81,5c,5d,ee,a6,0a,e7,e0,79,c3,ed,1e,f1,2e,1c,fd,e9,84
Block No 19
3d,12,b0,e6,02,78,25,c8,99,40,08,80,02,04,86,57,26,27,64,22,49,85,fa,e4,bd,8c,16,01,d0,32,c5,06,18,2c,7e,f4
Block No 20
7d,12,b0,e6,02,87,85,03,a3,89,bf,3f,ff,f5,70,f7,9b,32,fc,d3,bf,f6,60,5b,10,ac,51,f7,ff,90,22,5b,ce,ce,1f,dc
Block No 25
7d,12,b0,e6,03,3b,d3,81,38,9d,2e,39,f4,02,0d,28,d3,b9,5e,03,c6,1f,04,85,ff,b3,8d,79,a8,2f,f2,98,f3,f1,f3,83
Block No 24
7d,12,b0,e6,03,1d,7e,5c,fd,ff,9f,f3,be,fb,dc,40,01,c3,ea,0f,d2,04,40,27,a1,05,07,3e,ff,f7,ef,88,6b,69,d3,6c
Block No 28
7d,12,b0,ee,03,91,7e,ef,7f,3a,5d,4a,90,41,03,65,39,9b,4d,c1,32,4b,ab,a1,81,ff,ff,ef,f7,b0,e7,fd,fe,21,03,f0
Block No 29
7d,12,b0,e6,03,a2,0f,ca,ab,95,d7,f2,f8,71,88,18,87,cb,7c,68,ea,2e,35,d7,80,4a,5e,8d,7a,d6,c8,b2,b8,78,ff,8c
Block No 63
7d,12,b0,e6,07,f7,a1,21,f7,59,db,92,3f,63,f5,e7,f1,f1,a4,26,12,89,69,0f,a7,c1,3d,2d,d8,5b,b9,89,48,20,8f,88
Block No 97
7d,12,b0,e6,0c,38,00,00,c0,01,80,00,30,00,00,00,00,0c,60,0f,00,03,00,04,f0,07,e0,0d,00,0f,90,08,b0,06,20,0c
Block No 33
7d,12,b0,e6,04,3f,34,21,fe,f7,31,fd,c3,f7,fc,d2,1d,2d,3a,ab,60,1a,42,df,2c,99,ad,cf,73,f1,f0,4c,ed,41,e0,8f
Block No 35

7d,12,b0,e6,04,7e,0a,b0,c7,80,90,80,ca,20,61,50,ce,ec,57,fd,e8,06,33,06,09,17,af,6f,21,6e,87,f0,17,d8,3a,03

Block No 0 : Total Message Size 37 blocks : This transmission contains one message.
7d,12,b0,e6,00,00,00,00,40,00,80,00,10,00,00,00,00,04,20,01,00,03,00,05,d0,07,60,0d,00,06,80,0e,f8,03,10,06
Block No 1 : Link ID 41018 : Corrupt Date : Msg Number 175 : Msg Type 07145 : Group Count (?) 247
32768 16369 03587 11765 23998 06588 62355 58761
7d,12,b0,e6,00,33,18,f3,b0,7f,e0,6f,90,41,af,02,0f,ed,3a,0f,af,35,51,fe,d9,35,bb,98,ec,39,d3,d4,9b,10,5b,60
Block No 3
7d,12,b0,e6,00,7f,f3,ff,ff,e3,f9,fc,23,c3,07,0f,d8,78,06,4b,f6,af,31,be,0c,1e,7f,fc,cc,f7,fb,f9,8f,4d,2d,cc
Block No 7
7d,12,30,e6,00,ff,e3,8d,9e,a0,02,9b,3f,37,8c,fc,7f,be,0d,92,88,0f,e1,d5,8d,d5,75,55,f1,74,50,c2,10,42,e8,6e
Block No 14
7d,12,b0,e6,01,c3,33,74,fa,7f,dc,0a,66,d1,6e,06,9f,67,10,3a,54,49,8b,20,94,12,e8,6d,0f,42,08,9c,36,5f,b6,77
Block No 11
fd,12,b0,e6,01,70,94,10,48,28,dc,ff,bb,d3,96,e4,c5,3d,31,a1,ff,ff,3b,5e,fe,aa,ae,53,f9,fd,f4,ae,6c,33,51,da
Block No 13
7d,12,b0,ee,01,bc,4b,1f,d7,b3,7c,41,a8,00,30,06,16,3f,df,b3,fb,6f,ff,9f,73,40,7d,d1,16,6f,02,9a,47,dd,36,e9
Block No 14
3d,12,b0,e6,01,da,c0,19,d9,bf,e7,ed,04,49,bf,f3,f0,7e,84,cc,63,9c,62,23,bc,c4,bd,fd,36,03,7d,6a,8b,df,3c,a6
Block No 15
7f,12,b0,e6,01,e9,8a,cc,f3,d8,e1,0f,3d,d3,95,a0,cf,86,9d,5d,7a,ff,d7,1a,70,47,ba,5f,a0,eb,b8,a7,f7,1e,f8,44
Block No 21
7d,12,b0,e6,02,b4,76,79,d2,a3,c7,9f,cf,22,68,e0,94,b7,8f,dc,1f,80,e4,64,f7,0f,f8,b7,e2,7f,fc,a9,a8,3f,f8,7a
Block No 22
7d,12,b0,e6,02,d2,41,b9,6b,62,80,8b,25,09,29,c8,55,4f,68,c0,80,5d,e3,fd,ff,f7,e0,57,0b,7d,8f,5b,66,01,c7,25
Block No 23
7d,12,b0,e6,02,e1,fa,d6,56,ff,f6,7f,b8,c5,82,b1,9f,be,2b,33,c5,6a,b3,6e,f4,06,f3,7a,59,e1,c7,9f,8e,1e,37,32
Block No 27
7d,12,f0,e6,03,6e,74,67,c7,ff,fe,7f,ee,c3,fb,bf,e7,bf,03,a9,e3,cf,df,fe,fe,04,80,94,2c,98,7f,ff,ff,ff,fc,7f
Block No 29
7d,12,b0,e6,03,a2,0f,4a,ab,96,fa,40,7c,38,c4,1c,c7,ef,fe,7c,ff,3f,1b,fb,00,00,0f,46,0c,21,74,59,5c,28,70,84
Block No 30
7d,12,b0,e6,03,d4,fe,81,9d,83,a6,03,ba,b9,ff,c3,d2,26,d6,fc,60,4e,67,78,c0,37,52,b3,0e,99,1e,3f,b5,12,8b,22
Block No 32
7d,12,b0,e6,04,18,00,00,60,00,80,00,10,00,00,00,00,04,20,05,00,03,00,06,f8,07,e0,0d,00,0f,90,08,b0,06,20,0c
Block No 35
7f,12,b0,e6,04,7e,0a,b0,c7,80,00,00,6f,30,71,f8,ef,66,03,80,cc,07,3b,83,04,8b,d7,b7,90,bf,43,f8,0b,ec,1d,01
Block No 0 : Total Message Size 37 blocks : This transmission contains one message.
7d,12,b0,ee,00,00,00,00,40,00,80,00,10,00,00,00,00,04,20,05,00,03,00,06,f8,07,f0,06,80,07,c8,04,40,01,00,00
Block No 2
7d,12,b0,e6,00,55,a3,5f,77,c3,b1,fc,67,86,06,15,98,78,06,4b,f6,af,33,be,7c,1c,49,98,88,a7,d3,f1,0f,4d,2d,cc
Block No 6
fd,12,b0,e6,00,dd,f9,df,f9,ff,ef,d7,f7,c6,24,4d,a8,a8,0e,17,cf,ff,e4,f5,9c,8f,70,6e,f4,4f,3e,ce,87,3f,fc,3f
Block No 10
7d,12,b0,e6,01,43,73,74,fa,7f,dc,0a,66,d1,6c,06,9f,67,10,3a,fc,59,8b,00,94,12,e8,6d,2f,46,40,0c,12,09,93,3f
Block No 57
7d,12,b0,e6,07,3e,40,00,40,00,80,00,10,00,00,00,00,04,20,05,00,03,00,04,d0,07,e0,0d,00,0f,90,08,f0,06,20,0c
Block No 25
7d,12,b0,e6,03,2d,42,bf,a2,c7,4a,a4,9f,b5,6d,62,9d,b0,ff,a0,1a,7a,db,a1,17,52,ee,bc,c6,3d,c1,c2,3d,e4,1e,0f
Block No 22
7d,12,b0,e6,02,d2,41,b9,6b,62,00,8b,25,09,29,c8,55,4f,6e,c0,80,7d,e2,f9,dd,6f,c0,ae,16,fb,0e,96,cc,03,ce,40
Block No 23
7d,12,b0,e6,02,e1,fa,d6,52,7f,fb,3f,dc,62,c1,58,cf,df,15,99,62,b5,59,b7,7a,03,7b,bd,2c,f8,a3,bf,85,0d,1b,99
Block No 24
7d,12,b0,e6,03,08,63,cc,46,9f,e8,ee,9e,21,a2,68,f6,cf,0a,1c,b1,26,89,ae,47,96,72,46,fc,e9,fd,b2,dc,df,84,a1
Block No 25
7d,12,b0,e6,03,3b,d3,81,38,9d,2e,19,f4,62,0c,28,d3,b9,5e,03,46,1f,04,a5,f6,11,85,59,a8,2d,f2,98,b9,f0,d1,83
Block No 26
7d,12,b0,e6,03,5d,74,5c,ac,b5,9f,b1,92,69,cc,61,41,e3,ea,0f,d2,06,e8,67,e1,05,07,3a,6e,b3,a5,cd,35,b0,e9,b6
Block No 28

7d,12,b0,e6,03,91,3b,6d,25,3a,5f,ef,d8,53,3f,e5,39,9b,4d,c3,32,4b,ab,a9,81,bf,7f,cf,67,61,cf,fb,fe,7f,07,fb
Block No 33
7d,12,b0,e6,04,2b,3e,30,ff,73,10,fe,c1,a3,bc,d2,3f,3d,3a,ab,60,1a,40,4f,2c,99,a9,47,31,70,f9,ee,fa,60,f0,d7
Block No 35
7d,12,b0,e6,04,7e,0a,b0,c7,80,90,80,ca,20,61,50,cf,fc,ff,fb,c8,06,33,06,09,07,af,ef,21,6e,87,f0,17,d8,3a,00
Block No 0 : Total Message Size 55 blocks : This transmission contains one message.
7d,12,b0,e6,00,00,00,00,60,00,c0,00,18,00,00,00,00,04,20,05,00,03,00,04,d0,07,e0,05,00,0f,90,08,b0,06,20,0c
Block No 513
75,12,b0,e6,40,33,18,f3,f0,46,e0,ef,80,41,af,02,0d,ad,3a,ef,af,35,50,ff,69,bd,bf,dc,76,3d,f3,d4,9b,01,1b,60
Block No 3
7d,12,b0,e6,00,67,f9,f2,20,13,c0,1c,f3,a0,32,29,dc,33,75,e3,d6,cb,88,8b,72,58,a0,3c,9d,0c,3a,3e,28,df,ff,f9
Block No 6
7d,12,b0,66,00,cc,6b,b3,ff,fe,ff,ff,ff,f7,e5,d7,78,7f,2c,6c,0f,ff,c3,7b,bf,7d,e3,7b,d9,1e,7f,b8,f2,7b,d2,8b
Block No 7
7d,12,b0,e6,00,ff,e2,84,8e,b8,2a,9b,2f,2f,99,f8,ff,fc,1b,6f,10,17,c3,ab,1b,aa,ea,ab,e2,e8,a1,84,00,85,d0,d4
Block No 13
7f,12,b0,e6,01,bc,4b,0b,57,d9,fc,41,a8,92,30,06,36,3e,9f,27,f2,4a,ff,1a,66,80,fb,a2,2c,de,05,34,8f,ba,6d,d7
Block No 15
7d,13,b0,e6,01,e9,00,44,40,ec,71,8f,ff,f9,df,f0,ef,c6,4e,ae,bd,7e,eb,8d,39,13,fd,2f,80,f5,fc,53,5b,8d,7c,22
Block No 17
7d,12,b0,e6,02,2d,42,bf,80,c7,4e,a4,9f,b5,6d,62,bf,f0,55,a0,1a,7a,d9,80,17,52,ee,bc,c6,2d,c1,c2,3d,a4,16,0f
Block No 18
7d,12,b0,e6,02,4b,6c,0e,84,88,00,65,5a,68,14,58,01,d9,81,5c,5d,ee,ee,1f,ef,e0,79,c3,ff,1f,fb,3e,3d,ff,f3,ac
Block No 19
7d,12,b0,e6,02,78,25,c8,99,48,4a,80,67,24,86,7f,26,6f,6c,66,db,8b,f5,c9,7b,3a,ad,4b,a0,e5,8a,0c,30,58,fd,e8
Block No 20
7d,12,b0,e6,02,87,85,03,f3,89,ff,6b,5f,ff,f1,ff,bf,77,fd,f7,ff,fe,e0,7b,04,86,39,ff,ff,db,33,5f,86,46,0f,ee
Block No 21
7d,12,b0,e6,02,b4,76,7f,eb,f1,e7,df,ef,b1,3c,70,4a,53,87,4c,1f,e0,e2,32,7b,87,fc,db,f3,7d,fc,54,d4,1f,fd,7d
Block No 30
7d,12,b0,e6,03,d2,41,b9,6b,62,80,8b,25,09,29,c8,15,4f,68,c0,80,58,02,f9,dd,6f,c0,ae,16,fb,1e,b6,cc,03,8e,4e
Block No 16
fd,12,b0,e6,02,08,63,cc,46,8f,e9,ff,be,63,e6,f9,ff,df,0a,1c,b1,26,89,ae,47,96,73,4f,fc,e9,2d,32,dc,95,09,42
Block No 315
7d,12,b0,ee,27,7f,f7,83,78,bf,7e,3b,fc,e0,0c,28,d3,fb,fe,07,ce,3f,05,e5,f6,b3,8d,59,a8,2d,f2,98,b9,f0,d1,83
Block No 26
7d,12,b0,e6,03,5f,74,5c,ad,ff,3f,63,34,d3,98,c2,83,c7,d4,1f,a4,0d,d0,4f,42,0a,0e,7e,fd,67,4b,9a,6b,69,d3,7c
Block No 28
7c,12,b0,e6,03,91,3a,65,37,3e,dd,4a,90,53,03,65,29,9f,4d,c3,32,4b,ab,b9,81,bf,7a,df,65,20,c5,59,be,2b,01,f1
Block No 30
7d,12,b0,e6,03,c5,ff,f3,ff,83,a6,03,ff,f9,be,c3,d2,26,d6,fc,60,4e,5d,7a,c4,b7,52,b0,0e,99,1e,3f,b5,37,8b,32
Block No 31
7f,12,b0,e6,03,f7,b1,21,ff,59,db,92,3e,42,b5,e6,b1,f1,a4,26,12,89,69,0d,a5,41,3f,7f,f8,5b,b9,8b,59,3d,8f,88
Block No 32
7d,1a,b0,e6,04,18,00,00,c0,00,80,00,10,00,00,00,00,04,20,05,00,01,00,04,d0,0f,e0,0f,00,0f,90,08,b0,06,20,0c
Block No 33
7d,12,b8,e6,04,3f,3e,60,fe,f7,31,fd,c1,03,38,d2,1d,3f,7a,ae,c0,10,01,ff,7c,99,a8,47,31,70,fd,ff,ff,f0,f8,ff
Block No 2
7d,12,b0,e6,00,51,a3,7f,77,c3,31,b8,47,8e,0e,3f,b8,78,06,4b,f6,af,31,be,0c,1c,49,99,88,a7,fb,f9,83,ee,96,e7
Block No 8
7d,12,90,e6,01,16,cf,bb,3c,18,55,7c,7e,30,7f,f9,e9,c5,ed,ef,1c,74,f8,19,60,22,09,21,9a,ba,e3,14,36,53,eb,f5
Block No 10
7d,12,b0,e6,01,43,33,fd,fe,ff,fc,1e,ef,d3,7e,0f,bf,ef,10,3a,54,4b,9f,20,94,12,e8,6d,2f,46,48,9c,76,55,20,57
Block No 11
7d,12,b0,e6,01,70,94,10,48,3a,dc,6f,dd,e9,cb,72,42,9e,98,d0,d5,aa,8d,af,7f,d5,57,29,fc,ff,fa,17,36,19,b8,fd
Block No 13
7d,12,b0,e6,01,bc,4b,0b,d7,91,7c,41,a8,92,30,06,16,3e,9f,23,d2,6f,ff,8d,11,40,ff,f3,3e,6f,02,9a,47,ff,6d,d7
Block No 14
7d,12,b0,e6,01,da,c9,99,d8,9f,62,d4,82,05,bf,f3,f1,bf,c6,ee,73,de,73,33,fc,c4,bf,fd,3e,03,7d,6a,8b,df,3c,a7
Block No 15

fd,12,b0,e6,01,e9,8a,cc,f1,d8,e3,1f,7d,d3,95,80,47,c7,dd,5d,7a,fd,d7,1a,72,67,fa,7f,a1,eb,b8,a6,b7,1a,f8,44
Block No 16
7d,12,b0,e6,02,1e,00,00,40,00,80,00,10,00,00,00,00,04,20,05,00,03,00,04,d0,07,60,0f,00,0f,90,18,b0,06,20,0c
Block No 17
7c,12,b0,e6,02,38,21,c8,99,48,4a,80,67,24,86,57,26,2f,6c,66,db,8f,ff,ed,ff,bf,ff,ef,c0,60,80,00,10,0c,7e,f4
Block No 20
7f,12,b0,e6,02,87,85,03,a3,9b,ff,76,9d,b5,70,f7,9b,32,dc,d3,bf,f6,60,5b,10,ac,71,ff,ff,92,22,7b,86,46,0f,ce
Block No 19
7d,12,b0,e6,02,72,41,bd,6b,a0,00,8b,25,09,29,c8,55,4f,68,c0,80,59,42,f9,dd,6f,c0,ae,1f,ff,1f,ff,cc,03,8e,4e
Block No 25
7d,92,b0,e6,03,3f,ff,83,79,bf,7e,3b,fc,e6,0c,20,d3,b9,5e,03,46,1f,04,a5,f6,b3,8d,59,a8,2d,f2,98,b9,f0,d1,83
Block No 27
7d,12,b0,e6,03,7f,fc,fd,fd,ff,bf,f3,be,fb,dc,61,41,e3,fe,1f,f6,0f,f8,27,a1,05,07,3a,6e,b3,a5,cd,35,b4,69,be
Block No 32
7d,02,b0,e6,04,14,00,00,40,00,80,00,10,00,00,00,00,00,00,05,00,03,00,00,d0,03,20,0d,00,0f,90,08,b0,06,20,0c
Block No 33
7d,12,b0,e6,04,2b,34,20,ba,53,10,ec,c1,a3,bc,d2,1d,2d,3a,ab,60,1a,02,df,2c,99,a9,47,31,70,f9,6f,ff,a0,f0,d7
Block No 34
7d,12,b0,e6,04,4d,26,b7,d2,7d,3f,ff,b9,83,fc,e6,39,44,4b,98,a1,cd,b7,fc,dd,0e,db,16,7f,c2,8e,b9,4a,1b,93,c5
Block No 35
7d,12,b0,e6,04,7e,0a,b0,cf,80,90,81,da,60,61,50,ce,ec,57,fb,d8,0e,33,06,09,17,8f,6f,21,6e,87,f0,17,d8,3a,03

14880 kHz, 24-10, 0230 UTC, FSK 200/1000 (complete message)
Rivet (Build 88) by Ian Wraith

Block No 1 : Link ID 12310 : Corrupt Date : Msg Number 000 : Msg Type 04150 : Group Count (?) 0
00864 00000 00000 00083 15371 03851 00000 48887
7d,12,30,e6,00,33,10,00,03,00,36,00,60,00,30,00,00,00,10,05,60,03,30,0b,cf,0e,00,0f,bb,07,db,03,06,09,07,0f
09:58:05 FSK200/1000 Sync Sequence Found
Block No 0 : Total Message Size 92 blocks : This transmission contains 9 messages.
7d,12,b0,e2,00,11,18,f3,b0,52,60,ef,90,41,af,02,0d,ad,3a,ef,8f,35,50,fe,49,35,bb,88,64,39,d3,d4,9b,11,5b,60
Block No 0 : Total Message Size 30 blocks : This transmission contains 4 messages.
7d,12,b0,e6,00,00,01,0f,33,c3,b1,b8,47,c3,07,1a,cc,3c,02,01,f2,07,00,9e,3c,0c,48,98,88,a7,d3,f1,0f,4c,04,c4
Block No 1 : Link ID 04288 : Corrupt Date : Msg Number 075 : Msg Type 48571 : Group Count (?) 8
57190 14231 02114 01616 27566 01804 53510 39208
7d,10,b0,e6,00,2a,bd,03,df,87,b6,c9,b6,e7,12,00,03,86,c4,45,0b,20,60,d9,b7,19,a0,02,ec,68,06,1a,15,04,08,5e
Block No 2
3d,12,b0,e6,00,44,00,80,33,d6,7f,ea,bb,d7,e0,d6,70,56,5a,ec,0f,ff,c3,7b,0a,28,a1,39,d9,1a,71,98,70,3b,d2,8b
Block No 3
7d,12,b0,e6,00,77,e2,84,86,b8,2b,bf,2f,27,08,e8,7d,bc,09,20,10,17,c3,ab,1b,aa,ea,a3,e2,ec,01,84,20,85,c0,d4
Block No 8
7d,12,b0,e6,01,16,4b,89,1c,00,00,7c,3e,10,3c,81,e9,c4,ad,ef,1c,70,38,19,60,20,89,20,9a,ba,eb,54,32,03,eb,65
Block No 0 : Total Message Size 71 blocks : This transmission contains 3 messages.
7d,12,b0,e6,00,01,78,cf,8d,25,d6,f0,38,81,33,50,bd,d3,e4,0e,00,00,9c,20,37,da,a6,18,38,30,43,c6,b2,d9,af,7a
Block No 10
7d,12,b0,e6,01,43,30,30,78,7f,dc,00,26,d1,6e,06,9f,67,10,3a,54,49,81,00,10,00,60,25,2f,c6,48,9c,36,55,22,57
Block No 11
7d,12,b0,e6,01,70,94,10,00,01,04,37,e6,74,60,18,10,4f,4c,68,6a,d5,46,d7,bf,e0,01,84,7e,7f,7d,a9,88,04,40,3b
Block No 14
7d,12,b0,e6,01,da,c0,89,d8,9f,20,44,82,24,95,71,b0,bf,42,22,01,ce,31,11,de,62,5e,fe,99,01,be,b5,45,ef,9e,53
Block No 15
7d,12,b0,66,01,e0,80,44,40,c8,61,0f,7d,d3,95,a0,cf,86,9d,5d,7a,fd,d7,08,72,63,fa,5f,a1,c3,30,07,fe,10,f0,04
Block No 17
3d,12,b0,e6,02,2d,42,03,a2,c7,04,09,3f,fe,da,c5,3b,60,af,e0,34,f0,b7,42,2e,a5,dd,79,8c,0a,83,84,7b,48,2c,1e
Block No 18
7d,12,b0,e6,02,4b,ec,0e,00,8a,20,e5,5a,68,14,58,0e,d9,81,04,5d,ee,a6,00,c7,c0,fb,c3,c8,1c,f1,06,00,4c,e9,84
Block No 51
7d,12,30,e6,06,78,25,c8,08,08,42,80,67,24,86,57,20,07,24,00,49,85,fa,e4,bd,9c,16,a1,d0,72,c5,02,18,04,36,74
Block No 0 : Total Message Size 69 blocks : This transmission contains 15 messages.
7d,12,b0,e6,00,03,80,01,81,80,9f,bf,fe,da,b8,7b,cd,99,7e,69,df,fb,30,2d,8b,c2,18,7d,ff,c0,00,04,c1,23,05,e6

Block No 0 : Total Message Size 111 blocks : This transmission contains 12 messages.
7d,12,b0,e6,00,14,76,79,d2,a3,cf,bd,cf,22,68,e0,94,a7,0e,98,19,00,84,64,f7,0f,f8,b7,e6,fb,f8,a9,a8,3f,f8,78
Block No 22
3d,12,b0,e6,02,d2,41,b9,6b,62,80,8b,00,00,00,c0,00,07,20,40,00,0c,00,78,ee,b7,c0,06,12,79,0e,b6,cc,03,8e,4a
Block No 23
7d,12,b0,e6,02,e0,f8,40,00,33,90,3f,dc,20,40,08,47,cf,00,8c,73,ff,ed,db,be,00,9c,de,96,38,01,df,c2,86,8d,cc
Block No 8
7d,12,90,e6,01,08,63,cc,46,9f,e8,fe,9e,21,a2,68,f6,4f,0a,1c,b1,26,80,82,03,82,30,02,5c,60,e4,10,4c,1f,80,00
Block No 26
7d,12,b0,e6,03,4d,74,5c,ac,b5,9f,b1,9a,69,cc,61,41,e7,ea,0f,f0,03,70,13,d0,82,83,9d,37,59,d2,e6,9a,da,74,db
Block No 27
7d,12,b0,e6,03,6e,74,67,87,d7,7c,2f,aa,41,b9,95,e2,9b,03,a9,e1,c7,cb,36,76,04,80,94,2c,98,13,04,c1,5d,74,10
Block No 28
3d,12,b0,e6,03,91,3a,65,35,3a,5d,4a,90,53,10,20,18,89,04,80,10,01,83,a9,81,bf,1a,cb,65,20,c0,00,9e,01,03,f1
Block No 29
7d,02,b0,e6,03,a2,0f,1a,ab,95,c7,f2,f8,70,80,18,87,cb,7c,68,ea,0e,35,d7,80,4a,5e,8d,78,02,c8,80,1c,28,7e,84
Block No 32
7d,02,b0,e6,04,18,00,00,40,00,80,00,20,00,00,00,00,04,20,05,00,03,00,04,d0,03,00,05,00,0f,90,08,b0,06,00,08

Block No 0 : Total Message Size 113 blocks : This transmission contains 0 messages.
7c,12,b0,e6,00,01,22,1e,ef,80,03,70,07,04,04,01,00,70,0c,17,ed,5e,63,7c,f8,38,93,31,11,4f,a7,e2,1e,98,5b,98
Block No 2
7d,12,b0,e4,00,44,f1,20,00,03,b0,39,e7,40,20,01,00,02,eb,c7,ad,97,00,02,e0,31,40,79,38,18,74,7c,51,bd,7d,fa
Block No 0 : Total Message Size 76 blocks : This transmission contains 2 messages.
7d,12,b0,e4,00,00,14,03,9f,0f,6d,81,24,ce,24,88,8f,0d,89,80,02,00,c1,b3,6e,33,41,15,d8,40,04,34,2a,9a,b2,bc
Block No 6
7d,10,b0,e6,00,cc,69,80,33,40,07,e0,1b,d7,e4,c2,30,56,5a,ec,0f,ff,c3,79,02,28,a1,39,c0,0a,75,b8,70,39,c0,01
Block No 8
7d,12,b0,f6,01,1e,4b,9b,3c,10,55,7c,7e,30,7d,a9,e9,c4,ad,ef,1c,74,38,08,20,22,89,20,88,18,63,54,36,40,61,24
Block No 10
7d,12,b0,e6,01,40,04,00,24,1d,6e,37,ef,e9,c1,30,20,0e,08,50,d5,aa,8d,af,7f,d5,56,01,fc,fe,fa,53,12,19,a8,ed
Block No 12
7d,12,b0,e6,01,8f,b0,00,2c,01,86,0f,3a,a8,3a,60,1b,31,51,0b,0c,06,75,f0,98,f4,df,29,8d,8b,60,00,06,2e,03,e4
Block No 17
7d,12,b0,e6,02,2d,42,3f,a2,c7,4e,a4,9f,b5,6d,63,9e,d8,0a,c0,0d,3d,6d,d0,8b,a9,77,5e,63,16,a0,e1,1e,d2,0b,07
Block No 19
7d,12,b0,e6,02,78,25,c8,99,48,0a,80,67,24,82,17,26,27,24,22,48,85,fa,e4,bd,9d,56,a5,d0,72,c5,06,18,04,3e,70
Block No 20
7d,12,b0,e6,02,87,85,03,a3,80,9f,01,1d,b5,70,f7,9b,32,fc,d3,bf,f6,60,5b,01,84,00,f3,ff,80,00,59,82,46,0b,cc
Block No 22
7d,12,b0,e6,02,d2,41,b9,63,62,80,01,00,00,00,c0,00,07,20,40,00,19,42,f9,dd,6f,c0,06,02,79,0e,b6,cc,03,80,4a
Block No 23
7d,12,b0,e6,02,e1,fa,d6,52,77,b2,3f,dc,60,c1,58,cf,df,15,98,60,14,59,b7,7a,03,7b,bd,24,f0,a3,bf,80,04,09,88
Block No 24
3d,12,b0,e6,03,08,61,cc,46,9f,e8,ee,9e,21,a6,68,f6,cf,00,0c,10,02,00,86,03,96,72,46,fc,e9,ed,32,dc,95,09,42
Block No 26
7d,12,b0,e6,03,5d,74,58,0c,b5,9f,b1,9a,69,cc,61,41,e1,e0,07,c0,06,e8,27,a1,05,07,3a,6e,11,80,c4,00,94,e9,b6
Block No 29
7d,12,30,e6,03,a2,07,4a,ab,95,d7,e2,c8,71,88,08,87,cb,7c,68,ea,3e,35,d7,80,00,0e,04,a9,6b,64,79,fc,28,7e,84
Block No 62
7d,12,b0,e6,07,c4,d6,91,9d,83,a6,03,ba,b9,fe,c3,d2,26,d6,fc,60,4e,5d,7a,c4,b7,52,b3,00,01,0e,1f,90,12,01,10
Block No 0 : Total Message Size 37 blocks : This transmission contains one message.
7d,12,b0,e6,00,00,00,00,40,00,80,00,10,00,00,00,00,04,20,05,00,03,00,04,40,07,60,05,00,0f,90,08,b0,02,00,04
Block No 2
7d,12,f0,e6,00,5f,e7,ff,e7,83,21,30,07,04,0c,2b,30,f0,0c,97,e0,5e,63,7c,f8,38,93,31,11,4f,87,e2,1e,98,1b,98
Block No 3
7d,12,b0,66,00,66,f9,b2,20,13,d8,08,71,80,32,29,dc,33,75,e3,d6,cb,88,8a,72,58,a0,3c,9d,04,3a,3e,00,5f,a6,c8
Block No 4
3d,12,b0,e6,00,99,71,97,71,59,4d,af,e7,84,d9,b5,80,01,5e,26,8b,ec,00,e0,18,0e,60,4c,e0,1e,7d,9d,0e,7d,f8,3b
Block No 7

7d,12,b0,e6,00,ea,bd,43,9f,07,ed,90,24,c6,00,08,87,04,c8,80,02,00,01,11,6e,11,01,10,c8,40,0c,3c,2a,9a,b2,bc
Block No 6
7d,12,b0,e6,00,cc,6b,91,77,d6,3f,ea,bb,d7,e5,d6,70,56,5a,ec,0f,ff,c3,7b,2a,28,a1,38,c8,00,30,98,72,7b,d2,8b
Block No 11
3d,12,b0,e6,01,70,94,10,00,10,4c,6f,dd,e9,cb,32,62,8e,18,90,d5,aa,8d,af,7f,d5,57,29,f8,1f,78,03,12,09,a8,ed
Block No 13
7c,12,b0,e6,01,bc,4b,0b,f7,d0,7c,40,88,00,10,06,16,3e,9f,00,c0,00,7f,08,00,00,79,80,04,de,07,10,07,ba,6d,d7
Block No 2
7d,12,b0,e2,00,48,49,19,d8,9f,20,40,00,24,81,71,b0,bf,42,66,30,c6,10,01,de,62,5e,fe,0b,01,be,b5,45,ef,9e,53
Block No 0 : Total Message Size 65 blocks : This transmission contains 0 messages.
7f,12,b0,e6,00,0d,00,0f,80,40,02,10,0f,80,2c,60,0c,10,00,80,1a,78,49,81,17,52,ee,bc,c6,2c,00,c2,3d,a4,16,0f
Block No 21
3d,12,b0,e6,02,b0,36,79,d2,a3,c6,8c,cf,22,68,e0,94,a7,0c,10,1b,40,c4,60,77,0f,f8,13,f3,7d,fc,10,c4,1f,fd,7c
Block No 24
7d,12,b0,ee,03,08,63,cc,43,0f,f0,ee,9e,21,a2,68,f2,47,0a,1c,b1,26,89,ae,4f,96,72,02,7c,e9,ed,32,dc,95,00,02
Block No 25
7d,12,b0,e6,03,3b,d3,80,08,0c,3e,09,f0,62,0c,28,d3,b9,4e,03,02,1f,04,a5,f6,b3,8d,59,a8,04,f0,00,18,f0,d1,83
Block No 26
7d,12,b0,e6,03,5d,74,5c,ac,b5,9f,b1,9a,69,cc,61,40,e3,ea,0f,d2,06,e0,03,81,01,03,39,26,13,a5,cd,35,b4,e9,b2
Block No 27
3d,12,b0,e6,03,6e,74,63,83,c3,3c,07,80,01,b9,84,e0,0b,03,a8,e0,c7,cb,76,76,04,80,94,0c,08,13,0d,d4,0d,fc,15
Block No 28
7d,12,b0,e6,03,91,3a,65,34,38,08,00,00,53,13,65,39,9f,05,c3,32,4b,ab,a9,81,bf,7a,cb,20,00,40,08,9e,01,01,f0
Block No 31
7d,12,b0,e6,03,f3,95,80,a3,08,cb,92,3e,42,b5,ee,b3,f1,a4,26,00,00,28,05,a5,41,3d,2d,d8,5b,98,80,08,04,87,80

Block No 2
7d,12,b0,e6,00,55,a3,5f,77,c3,b1,b8,47,86,06,15,98,78,06,4b,f2,af,31,be,7c,1c,49,98,80,03,d3,f1,0f,4d,24,c4
Block No 1 : Link ID 15329 : Corrupt Date : Msg Number 064 : Msg Type 28887 : Group Count (?) 194
35944 62737 23828 00752 01835 51053 48403 10912
7d,12,b0,e6,00,21,78,cf,0c,25,d6,f1,78,81,33,50,bd,d2,e4,1f,10,40,0c,b2,77,da,26,1a,bd,30,43,c6,b2,d9,a7,7a
Block No 10
7d,12,b0,e6,01,43,33,74,38,3f,dc,0a,e6,d1,6e,02,9f,23,10,18,00,00,81,20,94,00,60,36,97,a3,24,4e,1b,2a,91,3f
Block No 11
7d,12,b0,e6,01,70,94,10,48,3a,dc,6f,dd,e9,cb,72,62,9e,98,d0,c5,aa,8d,af,7f,fd,57,29,f0,de,f8,13,36,19,a8,ed
Block No 12
3d,12,b0,e6,01,8f,b0,00,2c,43,8e,1e,f5,50,74,c8,36,e3,a2,06,38,1c,eb,e1,31,e9,be,53,1b,16,00,0a,4c,5d,2f,d8
Block No 13
7d,12,b0,e6,01,bc,4b,0b,d7,91,7c,43,a8,92,30,06,16,3f,9f,23,d2,4a,7f,1a,66,80,fb,a2,0c,4e,01,1c,c7,dd,34,13
Block No 14
7d,12,b0,e6,01,da,c1,99,d8,1f,60,d4,82,24,95,71,b0,bf,42,66,31,ce,31,11,de,62,1e,7e,09,00,9e,10,05,ef,9e,53
Block No 0 : Total Message Size 1 blocks : This transmission contains 0 messages.
3d,12,b0,e6,00,06,00,00,00,00,00,00,00,00,00,00,00,04,20,05,00,01,00,00,40,03,20,0d,00,07,90,08,b0,06,20,0c
Block No 0 : Total Message Size 66 blocks : This transmission contains 0 messages.
7c,12,b0,e6,00,01,24,06,84,8a,20,e5,08,68,14,58,0a,d9,81,5c,fd,ee,ae,1a,e7,e0,79,c3,ed,1e,f1,2e,1c,dd,e9,84
Block No 19
7d,12,b0,e6,02,78,25,c8,99,48,4a,80,67,24,86,57,26,07,20,00,09,85,fa,e4,fd,9d,56,05,d0,72,c5,06,08,04,3e,f4
Block No 20
7d,12,b0,e6,02,87,85,03,e3,89,bf,2b,5d,b5,70,73,83,32,fc,d3,bf,f6,60,49,00,84,00,f3,ff,92,22,5b,86,46,0b,cc
Block No 24
7d,12,b0,e6,03,08,63,cc,47,9f,e8,6e,9e,00,80,20,f6,cf,0a,18,10,26,89,ae,47,96,72,42,7c,61,ed,32,dc,95,09,42
Block No 26
7d,12,b0,e6,03,4c,30,5c,ac,b5,9f,b0,9a,69,cc,61,40,e3,e2,0f,d2,06,e8,03,80,00,03,3a,6e,b3,a5,cd,35,b4,e9,b6
Block No 27
7d,12,b0,e6,03,6e,74,67,87,c3,3c,07,d5,20,dc,ca,f1,44,81,d4,f0,e3,e0,99,3b,02,00,00,02,04,09,8e,ea,ae,ba,1a
Block No 28
7d,12,b0,e6,03,91,3a,61,15,3a,4c,4a,90,53,13,65,39,9b,4d,c3,32,43,a1,a9,81,bf,7a,cb,e0,00,45,59,be,29,03,e1
Block No 14
7d,12,b0,66,01,c0,9b,00,ce,c1,d3,01,dd,5c,df,61,e9,13,6b,7e,30,07,26,15,20,09,85,59,87,4c,07,1f,da,9b,45,99
Block No 35

7d,12,b0,ee,04,7e,0a,b0,c3,00,80,80,ca,20,60,00,40,24,03,80,c0,07,3b,06,01,17,af,6f,21,6e,87,f0,17,d8,3a,03

Block No 0 : Total Message Size 37 blocks : This transmission contains one message.
7d,12,b0,e6,00,00,00,00,40,00,80,00,10,00,00,00,00,04,20,05,00,03,00,04,d0,07,60,0d,00,0f,90,08,b0,06,20,0c
Block No 2
7d,12,b0,e6,00,51,82,1f,77,c3,b1,b8,47,82,02,15,98,78,06,01,f2,07,31,be,7c,0c,00,98,88,a3,c1,f0,07,5d,2c,4c
Block No 6
7d,12,b0,e6,00,cc,61,91,73,c2,7f,ea,bb,d7,e5,d6,70,56,5a,ec,0f,ff,c3,60,00,00,00,18,c9,9f,7a,dc,79,3d,e9,45
Block No 9
7d,12,b0,e6,01,25,38,07,8d,25,d7,f1,78,00,11,00,1c,c0,64,1f,10,40,9c,b2,f7,da,a6,1a,bd,30,43,c6,13,e9,06,74
Block No 10
7d,12,b0,e6,01,43,01,30,78,7f,dc,0a,63,68,b3,03,4f,b3,88,1d,2a,24,c1,00,00,00,60,24,07,23,6c,de,3b,2a,91,2b
Block No 3
7d,12,b0,e6,00,60,14,10,48,3a,dc,26,80,c1,82,60,03,bd,11,21,01,00,09,0e,ff,80,0e,53,f9,ec,f4,ae,6c,33,41,c8
Block No 14
7d,32,b0,e6,01,da,c9,99,d8,9f,62,d4,82,24,94,70,90,1f,42,66,31,ce,31,11,de,20,4e,7e,09,00,9e,10,00,ae,02,00
Block No 18
7d,12,b0,66,02,4b,6c,0c,04,8a,20,e0,1a,68,14,08,0a,48,80,0c,0c,47,03,04,21,e0,79,c1,e4,1e,f1,2e,1c,fd,e9,84
Block No 19
7d,12,b0,e6,02,78,25,c8,99,48,4a,80,63,24,86,57,26,27,24,22,49,87,fb,f6,ff,ce,ab,53,60,30,45,06,18,2c,7e,f4
Block No 20
7d,12,b0,e4,02,81,00,00,03,01,ff,3f,ff,f5,60,e7,bf,72,fc,d3,ff,f6,60,5b,15,ac,51,f7,ff,92,22,7f,86,46,0b,c0
Block No 22
fd,12,b0,e6,02,d2,41,98,61,62,80,88,00,09,29,c8,5f,cf,68,c0,80,59,40,f8,cd,6f,c0,ae,16,fb,1e,b6,cc,03,de,4a
Block No 23
7d,12,b0,e6,02,e0,f0,40,52,77,b2,3f,dc,62,c0,58,cf,df,15,98,62,b5,59,b7,7a,03,7a,3d,2c,70,23,bf,85,0d,1b,99
Block No 57
7d,12,b1,e6,07,3b,d3,80,08,8c,2e,08,f0,20,0c,28,db,98,4a,01,06,0f,00,a5,f2,11,04,08,80,04,f0,98,99,a0,00,83
Block No 24
7d,12,b0,e6,03,1d,70,3e,8c,10,8f,91,9a,29,cc,61,41,e3,ea,0f,d2,06,e8,25,01,05,07,3a,6e,b3,a5,cd,35,b4,e9,b6
Block No 11
7d,12,b0,ee,01,66,70,63,87,c3,3c,07,82,41,b8,81,e2,9b,03,a9,e1,c7,c0,24,76,04,80,94,2c,98,37,1d,d5,5c,30,35
Block No 32
7d,12,b0,e6,04,18,00,00,40,00,80,00,10,00,00,00,00,04,20,05,00,03,00,04,f8,07,60,0d,00,0f,90,08,b0,06,20,0c
Block No 33
7d,12,b0,e6,04,2b,34,20,ba,53,10,ec,c1,a3,bc,52,1d,6d,38,21,a0,08,00,4f,04,99,a8,07,31,70,f9,6f,fc,01,e1,af
Block No 34
fd,12,b0,e6,04,4d,26,b7,d2,7d,16,ff,b9,81,f0,66,39,44,4b,88,00,c4,9f,fc,4c,07,ff,92,3f,c0,06,98,00,0b,95,c4
Block No 1 : Link ID 41018 : Corrupt Date : Msg Number 175 : Msg Type 06633 : Group Count (?) 117
32768 05873 02787 11765 21651 00242 61905 57548
7f,12,b0,e6,00,33,18,71,90,56,e0,ef,90,41,af,02,0d,ad,3a,ef,af,35,50,fe,40,10,9f,dc,32,1c,e9,e8,4d,80,0d,b0
Block No 0 : Total Message Size 62 blocks : This transmission contains 4 messages.
7d,12,b0,e6,00,15,a3,5f,77,c3,b1,b8,47,86,06,00,88,78,06,4b,f6,af,31,be,7c,3c,09,98,08,a7,c1,f0,0f,5d,2d,cc
Block No 3
7d,12,b0,e6,00,6f,f9,b2,20,13,d8,1c,f3,a0,32,29,dc,33,77,e3,d6,cb,80,0b,72,58,80,1c,1d,04,38,3e,28,df,b6,d9
Block No 6
7d,12,b0,e6,00,cc,69,91,73,c0,28,a0,13,8f,cb,ac,e0,ac,b5,d8,0f,ff,82,f6,00,00,02,73,b2,30,60,30,e4,f7,a5,16
Block No 0 : Total Message Size 27 blocks : This transmission contains 3 messages.
7d,12,b0,e6,00,06,0b,9f,3c,00,55,74,3e,30,7d,a9,e9,c0,0d,ef,1c,74,78,19,60,20,00,00,9a,ba,eb,54,36,53,c1,20
Block No 12
7d,12,b0,e6,01,8f,b0,00,2c,43,8e,9e,f4,40,54,c8,36,e2,a2,16,38,5c,6b,e0,21,c1,3c,02,36,2d,80,94,98,ba,5e,30
Block No 13
7d,12,b0,e6,01,bc,43,0b,d7,91,7c,41,a8,12,30,06,16,3e,9f,23,c0,00,7f,08,22,00,79,80,04,4e,07,b8,47,dd,36,eb
Block No 22
3d,12,b0,e6,02,c0,00,b9,6b,62,00,83,25,09,00,00,00,07,20,40,00,3c,a0,7c,ee,b3,e0,57,0b,7f,8f,5b,66,01,c7,25
Block No 3
7d,12,b0,e2,00,60,f8,40,00,33,b2,03,dc,62,c1,58,cf,df,15,99,62,b5,59,ff,7a,03,7b,bc,08,e0,03,3f,00,08,33,32
Block No 25
7f,12,b0,e6,03,3b,d3,81,38,9d,2e,19,f4,62,0c,28,d3,b9,5e,03,46,0f,00,00,f2,11,8f,59,a8,2c,f2,98,b9,f0,40,81
Block No 28

7d,12,b0,e6,03,80,3a,65,35,3a,5c,02,00,51,03,35,39,9b,4f,c3,32,4b,ab,a9,81,bf,7a,c3,60,00,40,09,be,2b,01,f1
Block No 29
7d,12,b0,e6,03,a2,0f,40,ab,95,d7,f2,f8,71,88,08,86,83,7c,68,ea,04,14,c3,80,40,0e,8d,7a,d6,c8,b2,b8,50,fd,08
Block No 15
7d,12,b0,66,01,f3,95,a1,f3,09,db,92,3e,42,b5,e6,b1,f1,a4,22,00,8d,fd,04,80,00,1c,04,48,09,99,88,08,04,8f,cc
Block No 35
7c,12,b0,e6,04,7e,0a,b0,c7,80,90,80,ca,20,61,40,06,ec,03,a9,c8,06,33,06,09,17,af,23,23,6e,87,f0,17,d8,30,02
09:58:18 FSK200/1000 Sync Sequence Found
Block No 10
7d,32,b0,e6,01,43,33,74,fa,7f,dc,0a,22,40,66,06,9f,67,10,5a,54,49,8b,20,00,00,60,25,2f,42,08,9c,36,00,01,17
Block No 12
7d,12,b0,e6,01,8f,b0,00,0c,43,8e,9e,55,50,70,c8,36,e2,a2,16,38,5c,eb,e1,31,e9,be,53,1b,16,c0,4a,4c,1d,2f,d8
Block No 16
7d,12,b0,e6,02,1e,00,00,40,00,80,00,10,00,00,00,00,00,04,00,05,00,03,00,04,d0,07,60,04,00,07,90,00,b0,02,30,04
Block No 17
3d,12,b0,e6,02,2d,42,bf,a2,c7,4e,a4,9f,b5,6d,20,0c,90,00,80,08,38,5b,a1,17,52,ee,b8,02,24,00,c1,3d,a4,16,0f
Block No 18
7d,12,b0,e6,02,4b,6c,00,84,8a,20,e0,10,d0,28,b0,01,b3,02,b8,99,c4,04,04,c7,c0,73,87,da,3d,e0,1c,39,bb,d3,00
Block No 19
7d,12,b0,e6,02,78,25,c8,19,68,4a,80,67,24,86,57,22,07,24,20,00,80,f8,60,1c,8c,02,05,d0,72,c5,06,18,2c,7e,70
Block No 7
7d,12,b0,e6,00,e0,f8,46,52,77,b2,1b,cc,22,c1,c8,4f,df,05,99,62,b5,59,b7,7a,03,7b,bd,2c,70,23,bf,85,04,09,99
Block No 24
7d,12,b0,e6,03,08,63,cc,42,0f,a0,66,0e,21,a2,79,ff,cf,00,1c,b1,26,80,2c,07,9e,72,46,fc,e9,ff,37,d8,95,08,00
Block No 10
7d,12,b0,e6,01,5d,70,4c,2c,b5,9f,90,98,00,c4,20,01,e3,ea,0f,d2,06,e8,27,a1,05,07,3a,6e,b3,a5,cd,35,b4,f8,96
Block No 19
7d,12,b0,e6,02,6e,74,03,87,d7,7c,6f,a8,43,31,03,c0,12,03,01,c3,8f,96,ec,ec,09,01,00,19,30,6e,99,92,9a,e8,6a
Block No 28
7d,02,b0,e6,03,80,08,20,35,3a,5d,4a,90,01,01,25,39,9b,4d,c3,32,00,83,a9,81,bf,7a,cb,a0,00,45,59,be,2b,03,f1
Block No 29
7d,12,b0,e6,03,a2,0f,4a,8b,81,d7,f2,f8,71,88,18,03,c0,3c,68,f1,3f,10,c3,80,00,0e,04,38,42,40,10,18,00,7c,00
Block No 31
7d,12,b0,e6,03,ff,b5,a3,f7,59,db,92,32,42,b5,e6,b1,f1,a4,26,12,01,69,0d,a4,41,3f,7f,88,1b,39,89,59,2c,87,88
Block No 34
7d,12,b0,e6,04,4d,26,b7,d2,7d,16,ba,98,80,f0,20,18,02,25,cc,40,c4,93,f8,6c,06,db,16,7f,c7,8e,b9,4a,1b,87,d5
Block No 33
7d,10,b0,e6,04,3e,02,b0,c7,80,90,80,4a,20,60,00,ce,ec,57,a0,c0,06,33,02,00,03,af,6f,21,66,03,f8,13,ca,18,03

Block No 2
7d,12,b0,66,00,45,a3,5f,33,c1,98,fc,03,c2,06,15,98,78,06,4b,f6,af,31,be,7c,1c,49,a8,88,23,d3,e0,07,04,00,c4
Block No 7
7d,12,b0,e6,00,ff,e0,80,06,18,08,9b,0f,07,08,e8,7d,bc,09,01,00,17,c1,80,09,df,fa,81,e0,e8,00,80,00,00,c0,40
Block No 13
7c,12,b0,e6,01,bc,4b,0b,d7,91,5c,41,a8,92,30,06,00,3e,8f,01,c0,00,7f,12,02,00,79,80,2c,de,05,34,8f,98,24,57
Block No 16
7d,12,b0,e6,02,1e,00,00,00,00,80,00,10,00,00,00,00,04,20,05,00,06,00,04,d0,07,60,0d,00,0f,90,08,b0,06,20,0c
Block No 0 : Total Message Size 83 blocks : This transmission contains 8 messages.
7d,12,b0,e6,00,04,02,0f,a2,c7,4e,a4,8f,b4,6d,20,9d,b0,55,a0,1a,7a,c9,20,03,12,ee,bd,c6,00,00,c0,1d,a4,16,0f
Block No 16
7d,12,b0,e6,02,0b,2c,04,80,00,00,65,5a,68,10,08,0a,d9,81,1c,5d,ee,ae,00,03,e0,18,c3,ed,1f,f1,3f,1e,ff,fd,c6
Block No 0 : Total Message Size 5 blocks : This transmission contains 0 messages.
7d,12,b0,e6,00,02,00,00,03,80,9f,11,0c,90,71,f7,9b,32,fc,d0,1f,f6,60,09,15,ac,51,f7,ff,92,22,5b,86,46,0b,cc
Block No 21
7d,12,b0,e6,02,b4,76,79,d2,a1,c6,0c,c7,22,68,e1,b4,a7,0e,98,1b,40,c4,64,f7,0f,f8,b7,e6,fb,f8,a9,a8,3f,fa,fa
Block No 6
7d,12,b0,e6,00,c1,fa,c2,52,77,90,1f,dc,62,c1,18,cf,df,10,19,62,b0,bb,b7,7a,03,3b,bc,04,70,a1,9f,81,0d,1b,99
Block No 24
7d,12,b0,e6,03,08,63,cc,46,0f,e0,6e,9e,21,a2,68,f6,c7,0a,1c,b1,26,89,ae,47,96,72,46,7c,e0,ed,32,dc,95,09,42
Block No 27

30

7d,12,b0,e6,03,6e,74,23,87,d7,7c,2f,a2,81,b9,97,e2,9b,03,a9,e1,c7,cb,26,32,04,80,94,2c,98,37,5d,d5,5c,30,35
Block No 28
7d,12,b0,ee,03,91,3a,40,20,10,18,00,00,02,02,40,31,36,9b,86,60,03,57,53,03,3e,75,96,ca,00,80,11,7c,16,07,e2
Block No 30
7d,12,b0,e6,03,d4,d6,91,9d,83,a6,03,ba,b9,be,c3,d2,06,d6,fc,60,4e,5d,78,40,b7,f2,b3,0e,99,1e,3f,b7,52,81,32
Block No 32
7d,10,b0,e6,04,18,00,00,00,00,80,00,10,00,00,00,00,04,20,07,00,03,00,04,40,07,60,0d,00,07,80,00,b0,06,20,0c
Block No 33
7d,12,b0,e6,04,2b,34,20,9a,01,10,ec,41,a3,9c,d0,1c,2d,38,01,20,08,03,ff,96,01,80,02,00,10,78,66,f6,a0,f0,d7
Block No 34
7d,12,b0,e6,04,4d,26,b7,d2,7d,16,ba,98,81,f4,66,39,44,4b,98,a1,cd,b7,f8,18,0c,92,04,7f,85,1d,72,94,37,0f,8a

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North Korean diplomatic stations

14210 kHz, 12-09, 1402 UTC, DPRK-ARQ 600/600   North Korean embassy Moscow
16003 kHz, 29-10, 2300 UTC, DPRK-ARQ 600/600   MFA Pyongyang

Egyptian diplomatic stations

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

16340.0 kHz, 03-10, 1512 UTC, Codan 16   Egyptian embassy Alger msg to MFA Cairo
16341.7 kHz, 03-10, 1511 UTC, SITOR-A 100/170   Egyptian embassy Alger clg MFA Cairo
18045.0 kHz, 30-09, 1410 UTC, Codan 16   Egyptian embassy Muscat msg to MFA Cairo
18046.7 kHz, 30-09, 1423 UTC, SITOR-A 100/170   Egyptian embassy Muscat clg MFA Cairo
 9067.7 kHz, 08-10, 2150 UTC, SITOR-A 100/170   MFA Cairo clg RCVB (embassy Washington DC USA)
20036.7 kHz, 14-10, 1104 UTC, SITOR-A 100/170   Egyptian Embassy, Accra calls "SSTZ" then ATU-80 tfc to MFA Cairo
                                                headed "jg: kw--fk"
16222.0 kHz, 14-10, 1912 UTC, Codan 16 tone   99910: MFA Cairo traffic after chirp selcal to 11102 Paris
22965.7 kHz, 26-10, 0920 UTC, SITOR-A/Codan   MFA Cairo KKVA/99907 clg embassy Lagos: 33309

Sudanese diplomatic stations

8894.15 kHz, 15-10, 2037 UTC, Pactor-III   Sudanese diplo sends ASCII files to "6000" +stno+ +ftype+ .bag
8894.15 kHz, 03-10, 2019 UTC, Pactor-III   Sudanese diplo sends ASCII files to "1000" +stno+ +ftype+ .bag
8894.15 kHz, 03-10, 2047 UTC, Pactor-III   Sudanese diplo sends ASCII files to "1000" +stno+ +ftype+ .bag
8894.15 kHz, 03-10, 2025 UTC, Pactor-III   Sudanese diplo sends ASCII files to "1000" +stno+ +ftype+ .bag
8894.15 kHz, 03-10, 2040 UTC, Pactor-III   Sudanese diplo sends ASCII files to "1000" +stno+ +ftype+ .bag
21000.0 kHz, 11-10, 1200 UTC, USB   MFA Sudan, Khartoum wkg Sudanese embassy Yemen. Voice transmisson
21002.1 kHz, 11-10, 1202 UTC, Pactor-1   MFA Sudan, Khartoum wkg Sudanese embassy Yemen

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Pakistan

Eddy reports that he heard many messages in Pactor 2 fec being sent by a Pakistan agency on 19889.7 kHz, on 11 Oct. at 1200 UTC. An example of one message below. All messages are repeated.

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ZCZC
TGYCK YQIFK MABLJ YAYXE YNIFN OXTRX FXKNQ AURES KDRYF BKTRJ
VDMSH RSRGI KIPVQ NGFFS BIVWB BEVZY IOWUK LPPLJ GMXOG QTYJF
WLYFN RYJZQ XKKZY CZIQS MBIIF EETGN PLMPX SOWLX PPCLH CWBPT
LIGOB OOYIA GJVNK GJGTS WURGN ZCCNX CTINS VCBVP OUPJT NGTPP
NMZMJ TGCOQ YRMOX ZTULK MPYNA KTMSS NKJYA LZBHQ NUMVY HUTQD
OCBJC SMSDB DAEAN XNAJK LEPQT SLQDY PVYUT ELJTE TCHFX BESLG
XYVGJ UZAWR RPWBQ ZXVXB XHRGU ULODD NSTSQ DKILP HQRUZ WULZQ
NBPBC DEAEC LWILT JIPYO YJRQC QYLXO USOPH IDYYY RFWDI DJIWZ
TTBLY ZHWDO INTVF MNUBC AAUNR OMEMG WJLOG CRYOI JPNNB JJCCG
BEKLH JOEWW KOFPB WDLBK NSYTX JEFJV LUEWV IEAIT LDZBQ IQAAX
IOPAV CMLGV UNDQV XDYRE DLVIS NTEAA UUXMZ PUXSG UTSCO CASTI
AGSQE HCCVE BWJII OVNGB JYRI
NNNN
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UTILITY ROUND-UP

Pirates

6933 kHz, 31-10, 2325 UTC, logged by Vambo: Pirate CW station KPZL wishing a happy Halloween

Unid stations

4008 kHz, 05-10, 1734 UTC, CW. Copied by JPL: i.p. 113 131 135 … 141 142 144 145 146 147 148 150 151 AR (1735z - Silent)

5379 kHz, 01-10, 2242 UTC, CW. Copied by Les: 555 555 555 975 975 975 975 followed by 5Fgs ends 0000000 (cut zero)

Emergency Action Messages
& Skyking Messages

The EAMs and Skyking message were logged by Dave moonlight0551, Les G, Peter (PPA), Allan and Gary. Thanks gents !

4724	01-10	0923	L6U 43 CN	Mainsail SkyKing
4724	01-10	0924	CKN 16 VO	Mainsail SkyKing
4724	01-10	0925	12345 test	Mainsail
4724	01-10	1932	TGXHMS	Mainsail FOR CHIMIRA
11175	01-10	2011	CKN 16 VO	Mainsail SkyKing
4724	01-10	2017	TGXQQ2	Mainsail Standby
15016	01-10	2033	TGDOOS	Mainsail FOR SHRUB 40
11175	01-10	2145	SHFAFX	Mainsail 141 chrs message
6739	02-10	0718	VYZVZF	Mainsail
8992	07-10	1326	VYAKDY	Mainsail 30 chr EAM
8992	07-10	1431	VYQR6B	Mainsail 30 chr EAM
8992	07-10	1522	DH2 22 CT	Mainsail Skyking DNA
8992	07-10	1538	T5Q 38 CT	Mainsail Skyking DNA
8992	07-10	1553	VYD2BI	Mainsail 30 chr EAM
8992	07-10	1627	S44SLR	Mainsail for CHUG 35 30 chr EAM
8992	07-10	1658	VYQL5Q	Mainsail 30 chr EAM
8992	07-10	1700	S4ZHDW	Mainsail 30 chr EAM
8992	07-10	1714	S43CLW	Mainsail for ?? 41 30 chr EAM
8992	07-10	1819	HWE 19 RC	Mainsail Skyking DNA
8992	07-10	1904	VYRWCH	Mainsail 30 chr EAM
8992	07-10	1923	VYHQJD	Mainsail 30 chr EAM
8992	07-10	1845	VYNSHG	Mainsail 30 chr EAM
8992	07-10	2029	VY3OV6	Mainsail 30 chr EAM
8992	07-10	2034	VYWJPI	Mainsail 30 chr EAM
8992	07-10	2040	VY7FOF	Mainsail 30 chr EAM
8992	07-10	2044	VYTXE7	Mainsail 30 chr EAM
8992	07-10	2100	VYTXE7	Repeat
8992	07-10	2102	VY7FOF	Repeat
8992	07-10	2103	VYTXE7	Repeat
8992	07-10	2105	VY7FOF	Repeat
8992	07-10	2107	VYWJPI	Repeat
6712	08-10	1732	VYDFA6	Mainsail
6712	08-10	1732	VYUVDZ	Mainsail
6712	08-10	1732	VYRCGM	Mainsail
6738	09-10	0100	S4HUDP	39 char msg
8992	10-10	1405	GY4 05 KN	Mainsail Skyking DNA
8992	10-10	1410	KIV 10 ?Q	Mainsail Skyking DNA
8992	10-10	1420	VYEXJU	Mainsail 30 chr EAM
8992	10-10	1430	VYEXJU	repeat
8992	10-10	1442	VYXO7C	Mainsail 30 chr EAM
8992	10-10	1500	VY6NX3	Mainsail 30 chr EAM
8992	10-10	1502	VYXO7C	repeat
8992	10-10	1504	VYEXJU	repeat
8992	10-10	1510	VYGMMU	Mainsail 30 chr EAM
8992	10-10	1741	GY4 41 CD	Mainsail Skyking DNA
8992	10-10	1743	S4I47S	Mainsail 30 chr EAM

8992	10-10	1800	S4I47S	repeat
8992	10-10	1900	VYLKKZ	Mainsail 30 chr EAM
8992	10-10	1902	B4L 02 FR	Mainsail Skyking DNA
8992	10-10	1903	S4CBE3	Mainsail 34 chr EAM
8992	10-10	1905	S4I47S	repeat
8992	10-10	1919	VY7QIJ	Mainsail 30 chr EAM
8992	10-10	1930	VY7QIJ	repeat
8992	10-10	1932	VYLKKZ	repeat
8992	10-10	1934	S4CBE3	repeat
8992	10-10	2041	VY5JGV	Mainsail 30 chr EAM
8992	10-10	2044	VYZN44	Mainsail 30 chr EAM
8992	10-10	2053	VYIXMI	Mainsail 30 chr EAM
8992	10-10	2100	VYIXMI	repeat
8992	10-10	2102	VYZN44	repeat
8992	10-10	2108	CVC 08 FU	Mainsail Skyking DNA
8992	10-10	2108	RHO 08 FU	Mainsail Skyking DNA
8992	11-10	1415	VY5TJX	Mainsail 30 chr EAM
8992	11-10	1500	VY5TJX	Mainsail 30 chr EAM
11175	18-10	1438	G4PDAF	Mainsail 30 chr EAM
8992	18-10	1440	G4PDAF	Mainsail 30 chr EAM
11175	18-10	1527	G4HJCG	Mainsail 30 chr EAM
11175	18-10	1529	G4H2YC	Mainsail 30 chr EAM
11175	18-10	1535	S42EE4	Mainsail for ?? 30 chr EAM
11175	18-10	1537	G4PFUN	Mainsail 30 chr EAM
11175	18-10	1541	G437GN	Mainsail 30 chr EAM
11175	18-10	1606	G4N3RP	Mainsail 30 chr EAM
11175	18-10	1656	S425FI	Mainsail for ?? 30 chr EAM
11175	18-10	1822	G4SHXH	Mainsail 30 chr EAM
11175	18-10	1851	G47HJF	Mainsail 30 chr EAM
11175	18-10	2006	K2M 06 IW	Mainsail Skyking DNA
11175	18-10	2006	IGO 07 IW	Mainsail Skyking DNA
11175	20-10	1327	G4SUV4	Mainsail 30 chr EAM
11175	20-10	1343	G47F4L	Mainsail 30 chr EAM
11175	20-10	1347	G4IVNY	Mainsail 30 chr EAM
11175	20-10	1400	G4IVNY	Repeat
11175	20-10	1405	JO4 05 ZM	Mainsail Skyking DNA
11175	20-10	1405	S4AQ7K	Mainsail for PENNY?? 30 chr EAM
11175	20-10	1408	G4IVNY	Repeat
11175	20-10	1410	G47F4L	Repeat
11175	20-10	1412	G4SUV4	Repeat
11175	20-10	1506	XU5NUJ	Mainsail 148 chr EAM
11175	20-10	1516	4H7 16 KP	Mainsail Skyking DNA
11175	20-10	1516	EAA 16 KP	Mainsail Skyking DNA
11175	20-10	1516	S42V3A	Mainsail 30 chr EAM
11175	20-10	1518	S4NCJZ	Mainsail 30 chr EAM
11175	20-10	1520	S4IK5K	Mainsail 30 chr EAM
11175	20-10	1826	KYSMLQ	Mainsail for PATSY?? 30 chr EAM
11175	20-10	1948	KYKH72	Mainsail 34 chr EAM
11175	20-10	2004	VOC 04 ZM	Mainsail Skyking DNA
11175	20-10	2043	KYVBWF	Mainsail 34 chr EAM
11175	20-10	2102	G4AMQH	Mainsail 30 chr EAM
11175	20-10	2123	J6T 23 ?J	Mainsail Skyking DNA
11175	22-10	1202	6PZ 02 WI	Mainsail Skyking DNA
11175	22-10	1204	H3R 04 FY	Mainsail Skyking DNA

11175	22-10	1204	JGT 04 FY	Mainsail Skyking DNA
11175	22-10	1614	KYS5YF	Mainsail for WALKER 30 chr EAM
11175	22-10	1616	KYORZ7	Mainsail 30 chr EAM
11175	22-10	1700	WPI 00 TU	Mainsail Skyking DNA
11175	22-10	1703	KYO6SN	Mainsail 50 chr EAM
11175	22-10	1707	KYEMDB	Mainsail 30 chr EAM
11175	22-10	1726	G4ELLB	Mainsail 30 chr EAM
11175	22-10	1729	G4PHXS	Mainsail 30 chr EAM
11175	22-10	1731	G4ELLB	repeat
11175	22-10	1733	KYO6SN	repeat
11175	22-10	1800	G4PHXS	repeat
11175	22-10	1802	G4ELLB	repeat then disregard
11175	22-10	1805	G4DWBZ	Mainsail 30 chr EAM
11175	22-10	1807	G4PHXS	repeat
11175	22-10	1809	G4ELLB	repeat
11175	22-10	1933	G4YFUJ	Mainsail 30 chr EAM
11175	22-10	1940	G4XADP	Mainsail 30 chr EAM
11175	22-10	2000	G4XADP	repeat
11175	22-10	2006	G4Y2B7	Mainsail 30 chr EAM
11175	22-10	2010	G46JSZ	Mainsail 30 chr EAM
11175	22-10	2023	Y24 23 SL	Mainsail Skyking DNA
11175	22-10	2051	KYLWXC	Mainsail 30 chr EAM
11175	24-10	1330		Mainsail passes EAM
8992	25-10		G4VHB4	30 characters
8992	25-10		G4UEGG	30 characters
8992	27-10	1545	KYAPQV	30 characters
11175	27-10	1517	7KO 17 TP	Mainsail Skyking DNA
11175	27-10	1543	KYAPQV	Mainsail for PAINTBRUSH 30 chr
11175	27-10	1803	G4LCZW	Mainsail 30 chr EAM
11175	27-10	1911	KVY 11 ZD	Mainsail Skyking DNA
11175	27-10	1951	HGX 51 WR	Mainsail Skyking DNA
11175	27-10	2107	G4MTFB	Mainsail 30 chr EAM
11175	28-10	1054	GDJ 54 X?	Mainsail Skyking DNA
11175	28-10	1157	UIO 57 ON	Mainsail Skyking DNA
11175	28-10	1232	ZZV 32 TF	Mainsail Skyking DNA
11175	28-10	1232	7CM 32 TF	Mainsail Skyking DNA
11175	28-10	1402	ZVF 02 IQ	Mainsail Skyking DNA
11175	28-10	1502	A7O 02 GE	Mainsail Skyking DNA
11175	28-10	1543	KY53VF	Mainsail 30 chr EAM
11175	28-10	1556	G4VNUE	Mainsail 30 chr EAM
11175	28-10	1604	G4MWV4	Mainsail 30 chr EAM
11175	28-10	1623	G4ESG4	Mainsail 30 chr EAM
11175	28-10	1629	76A 29 DH	Mainsail Skyking DNA
11175	28-10	1630	G4XH2L	Mainsail 30 chr EAM
11175	28-10	1818	KYPUSA	Mainsail 30 chr EAM
11175	28-10	1822	KYY62G	Mainsail 30 chr EAM
11175	28-10	1825	G4MAQI	Mainsail 30 chr EAM
8992	30-10	1600	KYURSC	Mainsail
8992	30-10	1605	KYYGRY	
8992	30-10	1620	G4ACIQ	
11175	30-10	1201	EPX 01 AC	Mainsail Skyking DNA
11175	30-10	1201	QOJ 01 AC	Mainsail Skyking DNA disregard
11175	30-10	1203	EPX 03 FH	Mainsail Skyking DNA
11175	30-10	1203	QOJ 03 FH	Mainsail Skyking DNA

11175	30-10	1238	CLS 38 SN	Mainsail Skyking DNA
11175	30-10	1249	G44ELN	Mainsail 30 chr EAM
11175	30-10	1255	G4YB3H	Mainsail 30 chr EAM
11175	30-10	1300	G4YB3H	repeat
11175	30-10	1302	G44ELN	repeat
11175	30-10	1319	GJO 19 DL	Mainsail Skyking DNA
11175	30-10	1319	63H 19 DL	Mainsail Skyking DNA
11175	30-10	1325	TT6 25 VZ	Mainsail Skyking DNA
11175	30-10	1327	TT6 27 KM	Skyking DNA Diego out
11175	30-10	1558	KYURSC	Mainsail for REGION CHARLIE 30
11175	30-10	1605	KYYGYR	Mainsail for TANGO FORCE 30 chr
11175	30-10	1616	G4ACIQ	Mainsail 30 chr EAM
11175	30-10	1633	KYVK4Y	Mainsail for TANGO FORCE 30 chr
11175	30-10	1747	G4TBE6	Mainsail 30 chr EAM
11175	30-10	1800	G4KOPM	Mainsail 30 chr EAM
11175	30-10	2105	KYBBZT	Mainsail for ?? FORCE for ?? FO

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

RMv

3830 kHz, 16-10, 1550 UTC: Skuta-92 Pomite-17 sledite signal 53 825 MIZYuRA 34 36 94 97
Recording on the N&O website.

RAv
6685 kHz

01-10, 2139 UTC:	Korsar (Russian Air Force 6985th Aviation Base Pskov): 2139 USB w/76599 (IK-76M) reporting departure from (?Advia?) at 2145 MSK and landing at Mozdok at 2245 MSK w/cargo 29 tons. Also reporting departure from Mozdok at (time missed) and ETA landing at (?Dengij?) at 0320 MSK w/cargo 35 tons.
29-10, 2010 UTC:	Korsar (Russian Air Force 6985th Aviation Base Pskov): 2010 USB calling 82013 (Russian AF AN-124) w/no response.

11360 kHz

04-10, 1302 UTC:	Korsar (Russian Air Force 6985th Aviation Base Pskov) w/76743 (IL-76MD) reporting two hours into flt and passing point ABALI at 1700 MSK w/fuel 50 tons, at FL280, w/1 pax and 8 tons cargo.At 1638 76743 tries valling Korsar & Davlenie (Russian Air Force 6958th Aviation Base Taganrog)
04-10, 1639 UTC:	Korsar w/76713 IL-76MD-not heard) reporting departure from Chernyakhovsk at 1235 MSK at FL270, fuel 35 tons cargo 25 tons. ETA Chakhalovskij 2244 MSK. At 2044 76713 reports landing at Chakhalovskij at 2238 MSK
04-10, 1641 UTC:	Korsar w/76745 (IL-76MD-notheard) reporting landing at Borisoglebsk.
04-10, 1645 UTC:	Korsar w/76719 (IL-76MD-not heard) reporting departure from (missed) w/fuel 68 tons.At 1655 76719 (not heard) reports passing point (?LAMUR?) at FL290 at 2053 MSK.
07-10, 1123 UTC:	Korsar (Russian Air Force 6985th Aviation Base Pskov): 1123 USB w767453 (IL-76MD) reporting 2 hours into flt at FL280 w/fuel 40 tons At 1252 76743 (not heard) reports landing at Baltimor (Russian AB, Voronezh) at 1649 MSK.
07-10, 1207 UTC:	Korsar w/09329 (AN-22) reporting fuel 18 tons and ETA landing "according to plan" at 1645 MSK
07-10, 1235 UTC:	Korsar w/82039 (AN-124--not heard) reporting departure from Kedr (Russian AB, Bryansk) for local airfield activity w/fuel 97 tons. At 1738 82039 calling Korsar
07-10, 1255 UTC:	Korsar: w/85655 (TU-154M Open Skies). Also called Chkalovskij (Russian AB, Moscow).
08-10, 1245 UTC:	Korsar (Russian Air Force 6985th Aviation Base Pskov): 1245 USB calling 78844 (IL-76MD) w/no response.
08-10, 1328 UTC:	85420 (TU-154-B2): 1328 USB calling Chkalovskij (Russian AB. Moscow) w/no response
08-10, 1328 UTC:	Korsar w/76763 (IL-76MD-not heard) reporting next landing is Ulyanovsk
08-10, 1320 UTC:	Korsar w/65980 (TU-134-not heard) reporting ETA for (?Tomashovo?).

08-10, 1510 UTC:	Korsar w/76719 (IL-76MD-not heard) reporting 1 hr into flt at FL 290 w/fuel 40 tons
20-10, 1755 UTC:	Korsar (Russian Air Force 6985th Aviation Base Pskov) w/76779 (IL-76MD-not heard) id'd as flt TTF908 and next is Novosibirsk.
20-10, 1812 UTC:	Korsar w/89309 (unid-not heard) confirming landing at Orenburg.
29-10, 1212 UTC:	Proselok (Russian AF 566th Military Transport Aviation Regiment Bryansk) w/76764 (IL-76MD-not heard).
29-10, 1553 UTC:	Klarnetist (Russian Air Force 6955th Aviation Base Migalovo/Tver) w/78807 (IL-76MD) reporting 2 hours into flt and passing point (?OKETI?) w/fuel 42 tons. At 1655 78807 reports passing point (missed) w/fuel 34 tons
30-10, 1345 UTC:	Proselok (Russian AF 566th Military Transport Aviation Regiment Bryansk) w/78807 (IL-76MD) reporting landing at Buntar (Orenburg) at 1643 w/fuel 18 tons.
30-10, 1420 UTC:	Acft 78776 (IL-76MD) broadcasting in blind to Korsar (Russian Air Force 6985th Aviation Base Pskov), Klarnetist (Russian Air Force 6955th Aviation Base Migalovo/Tver) & Proselok that they are 3 hours into flt and passing point BARABINSK (spelled) at FL280 w/fuel 47 tons.
30-10, 1435 UTC:	Acft 76613 (IL-76MD) calling Korsar, Klarnetist and Davlenie (Russian Air Force 6958th Aviation Base Taganrog) w/no response. Finally gets Proselok (weak) reporting 1 hour into flt and fuel 30 tons.
30-10, 1445 UTC:	Korsar & Proselok w/76714 (IL-76MD) reporting departure from (missed) at 1837 MSK w/fuel 31 tons and next is Buntar (Orenburg).
31-10, 1447 UTC:	Korsar (Russian Air Force 6985th Aviation Base Pskov) w/76648 (IL-76MD-not heard) reporting departure from Pravdivnij (Kubinka AB) at 1820 MSK w/fuel 35 tons. Flt info relayed to Davlenie (Russian Air Force 6958th Aviation Base Taganrog)

RNAv

11354 kHz

08-10, 1207 UTC:	Priboj (Naval Air Transports Central Sector, Moscow) clg 09410 (Russian Navy AN-12/AN-26)
11-10, 1112 UTC:	Priboj (Naval Air Transports Central Sector, Moscow): 1112 USB w/30569 (Russian Navy AN-26) reporting passing point KANAL at alt 5100 mtrs w/fuel 4300 kgs. Priboj relays info to Novator (Naval Air Transports Northern Sector, Murmansk). At 1309 30569 reports landing at Ostafyevo at 1308Z w/fuel 2500 kgs.
11-10, 1218 UTC:	Priboj w/09410 (Russian Navy) reporting departure from (missed) at 1215Z and ETA landing at Ostafyevo 1300Z w/guel 5 tons. Priboj relays info to Kraket (Naval Air Transports Western Sector, Kaliningrad). At 1301 09410 reports landing at Anapa at 1300Z w/fuel 3 tons.(
11-10, 1255 UTC:	Novator w/75225 (Russian Navy) reporting departure from Kipelovo at 1250Z w/fuel 17000 kgs and ETA l anding at Levashovo at 1410Z. 75225 first tried comms w/Priboj but was unsuccessful so Novator stepped in. NOTE: Novator has weird whistle to xmitter making it difficult to read traffic
20-10, 1050 UTC:	Priboj (Naval Air Transports Central Sector, Moscow) & Kraket (Naval Air Transports Western Sector, Kaliningrad) w/30603 (Russian Navy AN-26) reporting passing Anapa at 1050 UTC at alt 5200 mtrs and fuel 4000 kgs. At 1143 30603 reports landing at Sochi at 1140 UTC. At 1333 30603 reports departure from Sochi at 1320 UTC w/fuel 3800 kgs and ETA Anapa at 1420 UTC. At 1427 30603 reports landing at Anapa at 1427 UTC.
20-10, 1336 UTC:	Priboj w/30658 (Russian Navy AN-26) reporting passing point (missed) at 1330 UTC at alt 5800 mtrs w/fuel 2800 kgs. At 1545 30568 reports deprture from Eisk at 1540 UTC w/fuel 4800 kgs and ETA landing at Ostafyevo at 1845 UTC.
20-10, 1522 UTC:	Novator (Naval Air Transports Northern Sector, Murmansk)w/30560 (Russian Navy AN-26) reporting depature from Kipelovo at 1510 UTC w/fuel 5000 kgs and ETA landing at Severeomorsk-3 at 1830 UTC. Novator relays flt info to Priboj.
20-10, 1530 UTC:	Novator w/09421 (Russian Navy AN-12) reporting departure from Kipelovo at 1520 UTC w/fuel 13,000 kgs and ETA Severomorsk-3 at 1800 UTC. Novator relays flt info to Priboj.
28-10, 1103 UTC:	Kraket (Naval Air Transports Western Sector, Kaliningrad) w/30605 (Russian Navy AN-26) reporting departure from Kacha w/fuel 4800 kgs and ETA landing at Anapa at 1350 UTC. Flt info relayed to Priboj (Naval Air Transports Central Sector, Moscow).
29-10, 1127 UTC:	Priboj (Naval Air Transports Central Sector, Moscow) & Kraket (Naval Air Transports Western Sector, Kaliningrad): 1127 USB w/30603 (Russian Navy AN-26) who reports alnding at Anapa at 1125

3289 kHz, 01-10-2013

1623   15417 39008 = 72251 15903 80009 =
        590. 4 15417 39008 72251 15903 80009 K

3174 kHz, 01-10-2013

1633   S99M DE 9FYT K
        S99M DE 9FYT K
        RPT K
        R K
        L7FC DE 9FYT K
        R K

9678 kHz, 21-10-2013. 1200 UTC

OWF6 DE 9YL4 K
OWF6 DE 9YL4 K
QSA2 QSA? K
R K
6EWE DE 9YL4 K
6EWE DE 9YL4 K
6EWE DE 9YL4 K
X2CN DE 9YL4 K
QSA2 QSA ? K
R K
VXKF DE 9YL4 K
QSA3 QSA? K
R K

3218 kHz, 03-10-2013

1915   …. DE GLFM K
        R K
        KKSK DE GLFM K
        R K
1916   6AZE DE GLFM K
        P25Y DE GLFM K
        R K
1917   9SVR DE GLFM K
        R K
1918   5EY5 DE GLFM K
        R K
        5ZY5 de GLFM K
        R K
1920   ZT.. DE GLFM K

2934 kHz, 03-10-2013

1922   VVV RFFR DE RFFN QSA? K
1923   VVV RFFO DE RFFN QSA? K
        QSA5 QAP K
        VVV RFFR DE RFFN QSA? K
1924   QSA3 QAP K VA

4130 kHz, 03-10-2013

1905   7QZX DE K2KK QSA 3 K
        QSA 2 R K
        BNNJ DE 7QZX QSA ? K
        BNNJ QSA 2 K
1907   QSA2 R K

Peter logged the following stations:

6821.5 kHz, 21-10, 0438 UTC: VVV PWZW PWZW =
6956 kHz, 21-10, 0418 UTC: RFH46 clg RMW46
6956 kHz, 21-10, 0415 UTC: RGR89 clg RMW46
6956 kHz, 21-10, 0416 UTC: RGR90 clg RMW46
6956 kHz, 21-10, 0417 UTC: RGR91 clg RMW46
6956 kHz, 21-10, 0420 UTC: RGR98 clg RMW46

Trond responds to Peter's logs and says:

I monitored your PWZW on the 1st of February this year, see UDXF archive:

6343.0   PWZW:Russian Operational Strategic Command Aerospace Defense, 0803, A1A end of ongoing plot
           w/ "0384382034103=pwzw=034175261961003=" transmitted as a continous string (01/FEB/2013)(TJ)

Several sources gave feedback that it could be related to a missile test launch and later on info has been received that the plotter (most likely) is associated to the Plesetsk Cosmodrome.

Your station on 6940, RRQ6, has previously been heard using a Moroz(2) system with 50/500 on 13985 kHz. I'm not sure if its correct to address the station as navy.

Your station RMW46 is part of the family of callsigns that is heard with callups to the LR43 (??43) recipient for technical checks

"TEHNIÖESKAÄ PROWERKA". I am pretty sure these are Russian military monitoring stations / centers. Seems like 6956 is a regular frequency for tests with the RGRxx stations. RMW46 seems also to use 6836 on a regular basis for telegrams. This frequency is often heavily QRM'ed here so not much properly heard of the comms. It's also very interesting to note that they consequently use Z codes for signal checks, telegrams and "I receive your signal" ZAA. Not sure if this is "navy" in its maritime form. :-)

The RMWxx series is contacting other players in the RMW net on these frequencies:

3700.0	RMD98, flash msgs, not using the LR43 collective addressee, but addressed as this; "XXX XXX RMD98 RMD98 TEHNITÖESKAÄ PROWERKA 795".
5830.0	RMW32, calling / wkg RMW36, LR43 adressed flash messages.
6491.0	RMW32 wkg unid in A1A at 0655utc
6836.0	RMW32, calling / wkg RMW56.
6860.0	RMD99, flash msgs, not using the LR43 collective addressee, but addressed like this; "XXX XXX RMD99 RMD99 TEHNITÖESKAÄ PROWERKA 795".
7060.0	RMW32 calling RMW48
7080.0	RMW32 calling / wkg RMW58
7149.0	RMW32 calling / wkg unid / (RKP56 ?)
7523.0	RMW32 calling / wkg RMW34, RMW36
7815.0	RMW32 calling / wkg RMW22 (weak in Europe), RMW36, RMW44 (strong in Europe), RMW46, LR43 addressed flash messages
8136.0	RMW32 wkg duplex with RMW36, LR43 addressed flash messages. ITU suggests location for RMW32 in area of 55 25N 35 12E.
10102.3	RMW32 calling / wkg RMW56. RMW32 very strong (S9+20dB) in central Europe, RMW56 not heard.

Thanks for the logs and comments, gentlemen.

M32a
Russian Navy
Voyenno-Morskoy Flot Rossii

8345 kHz, 01-10

0001   RIW DE RMC99 QSA? QTC

0002   RMC99 117 16 1 0400 117 = SML FOR RJH45 RJE73 = 01001 99354 10174 22223

0005   RMC99: Evgeny Khorov: riw de rmc99 117 16 1 0400 117 = sml for rjh45 rje73 = 01001 99354 10174 41/98 53205 10250 40020 52010 70200 8//// 22223 00200 01012 = + rmc99 k

0030   RMJA: Tender KIL-158?: rcv de rmja 766 17 1 0425 766 = sml for rjh45 rje73 = 01001 99407 10275 41/98 80000 10221 40000 57005 70222 88/// 22262 00221 2//// 01013 = + rmja k

0026   VVV RCV DE RMJA QSA? QTC

0027   RMJA 766 17 1 0425 766 = SML FOR RJH45 RJE73 = 01001 99407 10275 22262

0225   VVV RCV DE RMJA QSA? QTC

0226   RMJA 577 81 1 0625 577 =
60215 36919 60028 71136 69097 49555 03418 76562 15474 68740
67890 03441 18851 71599 09233 20229 01228 40402 83514 32684
01724 35689 65491 31395 99583 21713 62608 04833 73146 45764
53203 48195 33269 60424 30702 77318 31277 03766 54192 23349
80272 39593 12854 92560 90727 48941 02621 20696 77139 99804
45220 75293 39156 96041 31306 73780 62577 02168 62273 66256
35622 81654 05190 62022 08974 66225 42702 90082 61684 02763
93411 86209 61493 26121 72985 54742 72757 99503 77215 74007
01080 = + RMJA

0307   RMJA RPT K RMJA RPT
92560 90727 48961 02621 20696 77139 99804 45220 859 II II
99804 45220 85293 39156 96041 31306 73780 62577 02168
62273 66256 35622 81654 05190 62022 0897. 66254 2702
90082 61684 02769 93411 86209 ..493 26121 7..985 54742
72757 99503 77.15 74007 010.0 K
RMJA RPT 08974 K

RMJA 66225 K
RMJA OK QRU K

0332 RCV DE RFH70

0346 RCV DE RFH70 QYT4 QSX 8447/10984

0416 VVV RCV DE RMJA QSA? QTC

0417 RMJA 815 40 1 0815 815 = 10867 25277 ..... 30850 01039 = + RMJA

0508 RIT DE RJY96 QSA? (sets up QYT4)

0602 RMJA 257 19 1 1001 257 = SML FOR RJH45 RJE73 = 01061 99401 10264 22252

0605 RMJA: Tender KIL-158?: rcv de rmja 257 19 1 1002 257 = sml for rjh45 rje73 = 01061 99402 10264 41498 92505 10212
      49076 57011 70226 __3// 22252 00222 20101 88000 80000 01015 = + rmja k

0607 RBIZ: Amur PM-138: rcv de rbiz 313 17 1 1000 313 = for rje73 rjh45 = 01061 99351 10354 41598 40503 10250 40113
      58017 70300 84110 22200 10250 20000 88000 01014 = + rbiz k

1820 riw de rdnd qsa? k xxx xxx riw riw CHahtennyj 43786 32489 59615 02020 00111 45680 30853 15012 00615 12025 k

1812 RBIZ: Amur PM-138: rcv de rbiz 259 17 1 2200 259 = for rje73 jh45 = 01181 99350 10353 41598 02303 10235 40109
      57001 70100 80000 22200 10250 20000 88000 01014 = + rbiz k

1814 rcv de rhv42 qyt4 qmo k
      rit de rjy96 qyt4 qsa? k

1805 RMC99: Evgeny Khorov: riw de rmc99 381 16 1 2201 381 = sml for rjh45 rje73 = 01181 99348 10218 41/98 23008 10250
      40010 54000 70200 8//// 22223 00230 01012 = + rmc99 k

1810 RMJA: Tender KIL-158?: riw de rmja 763 17 1 2202 763 = sml for rjh45 rje73 = 01181 99387 10251 41/98 52104 10238
      49974 53005 70222 85/// 22252 00225 2//// 01013 = + rmja k

4576.5 kHz, 01-10

1838 Russian navy ship: RJD99 DE RMJZ QSA? QTC

11001 kHz, 01-10

1027 RMBB DE RIW K

1028 RIW QSV1 QWH 8794 QSX 8270 K

5776 kHz, 01-10

1948 DE RCV RCV QTC 259 21 1 2235 259 = SML = Into 5LG code message

4580.5 kHz, 01-10

0022 rjd89 de rji92 131 17 1 0405 131 = for rjh74 rjh45 = 01001 99710 10495 41498 60709 10020 40240 54010 70211 86411
      22223 00050 299// 399// 01014 = + rji92 k

4619.5 kHz, 01-10

1806 rjd56 de rag43 311 22 1 2204 311 = sml for rjh45 rjh74 = 01181 99.... 10382 .... 0//// 29908 309// 40507 5//// 6////
      01017 = + rag43 k

1815 rjd56 de rjp71 qsu1 qsx 4558.5 qwh 5906.5 k

1820 rjd56 de rhf40

9145 kHz, 01-10

0615 rfx56 de riw qyt4 qsx 16611 k

12464 kHz, 01-10

0617 RMC99: Evgeny Khorov: riw de rmc99 132 16 1 1001 132 = sml for rjh45 rjh74 = 01061 99351 10189 41/98 53110 10250
      40010 54000 70200 8//// 22223 00230 01012 = + rmc99 k

16611 kHz, 01-10

0703 RFX56 tfc to riw after coord. on 9145/12464 kHz

4195 kHz, 03-10

1810 RJH74 = 03181 99686 10377 41697 82705 10100 40140 52018 70222 88999
      22232 90030 20301 3//// 4//// 03015 = AR =
      RAL51 K (RAL51 position report for 1800Z 03 Oct 13)

1815 RAL51 RPT 246 19 3 2203 246 =
      RAL51 K
      RAL51 RPT 246 18 3 2203 246 =
      FOR RJH45 RJH74 =

RAL51 K
1817   RAL51 OK QRU K

4053 kHz, 03-10
1808   RAL2 K QSA2 QRU VA
       RLO2 DE RAL2 K
       RAL2 DE RLO2 QSA4?
1909   QSA 3 QRU VA VA

4197 kHz, 04-10
1821   In tfc 22273 00030 ./// 3//// 4//// 04..5 =
       RAL51 K
       RAL51 OK QRU K

7568 kHz, 05-10
1719   RMC99 DE RCV QSA? QTC K
1920   VVV RJI30 III
       RMC99 RMC99 RMC99 RJI30 RJI30 RJI30 DE RCV RCV QTC 744 34 5 2107 744 =
       SML = \UTUN222 56769 78883 34660 48308 44310 57510 55349 85104 30816 58452 83489 37722 33676 55947
       92153 39 (Cont'd)

8345 kHz, 07-10
1700   VVV RMP DE RMRV QSA?
1701   RMP DE RMRV QSA1 QSV
1707   VVV RIT DE RJY96 QSA?
1709   RIT DE RJY96 QYR5 QSL 975?
       RJY96 OK AS1
1712   RMP DE RMRV QYT4 QSA4
1713   VVV RMP DE RIR96 QSA?
1714   RMP DE RIR96 QYT4 QSX 3792
1719   RMP DE RIR96 QYT4 QSX 5764
1721   RMP DE RIR96 QYT4 QSX 4258
1725   RMP DE RIR96 OK QYT4 QWH 12370
1801   VVV RCV DE RMJA QSA? QTC
1802   RMJA 275 17 7 2201 275 = SML FOR RJH45 RJE73 = 07181 99389 10207 22200
1813   RCV DE RHV42 QSA?
1814   RHV42 OK QYT4 QWH 6310
1818   VVV RCV DE RBIZ QSA? QTC
1819   RBIZ 225 1? 7 2200 225 = FOR RJE73 RJH45 = 07181 99349 10358 22200
1821   VVV RMP DE RMRV QSA?
1822   RMP DE RMRV QSA3 QRV
1823   RMP DE RMRV QYT4 QRO
1826   RCV DE RFE70 QYT4 QSA?
1831   RMP DE RMRV QYT4 QSX 11016
1839   RMP DE RMRV QYT4 QSX 7787/7787
1845   RMP DE RMRV QYT4 QSX 10433/10433
1851   RFH70 OK QYT4 QWH 5322

7980 kHz, 11-10
1501   RJC38 DE RJF94 QSA? K
       RJF94 DE RJC38 QSA2 K
       RJF94 R K
       VVV RCB DE RJF94 QSA? K
       RJF94 R K
1503   VVV RJC48 DE RJF94 QSA III
       VVV RJC48 DE RJF94 QSA? K
       RJF94 DE RJC48 QSA ... K

8345 kHz, 12-10
1157   RIT DE RMRV QYT4 QMO

1202   RMRV AS2
1206   RIT DE RMRV QYT4 8440 OK?
1207   RIT DE RMRV QYT4 QSX 8440 OK?
1208   RMRV OK AS2
1212   RIT DE RMRV QYT4 QSX 6243 QWH 8440
1239   VVV RMP DE RHM81 QSA?
1244   RMP DE RHM81 OK QRR3 QDW 4967/4967
1314   VVV RMP DE RHM81 QSA?
1315   RMP DE RHM81 QRU?
1316   RMP DE RHM81 OK QRR3 SK
1330   RMP DE RHM81 QSU1 QSX 8195/8195 QWH 4146/4146 OK
1437   VVV RIT DE RMRV QSA? QTC
1439   RMRV 488 17 12 1830 488 = SML FOR RJH45 RJH74 = 12151 99679 10075 22262
1657   VVV RIW DE RFX56 QSA?
1731   RCV DE RFH70 QSA2
1732   RFH70 OK QYT4 QLS1
1734   VVV RCV DE RBIZ QSA?
1735   RCV DE RBIZ QYT4 QSX 7984/ 6841
1736   VVV RCV DE RCJG QSA? QTC
1737   RCJG 627 42 12 2130 627 = SML FOR RCV RIW RJT22 = 11111 (stepped on) ..... 07381 12036 = + RCJG
1742   RCV DE RFH70 QYT4 QSX 5736/6452
1747   VVV RIT DE RMRV QSA?
1748   RIT DE RMRV QSA4 QRU
1803   RCV DE RFH70 QYT4 QSA?
1805   RCV DE RFH70 QYT4 QSX 6452/7684
1808   RCV DE RBIZ QSA? QTC
1809   RBIZ 107 17 12 2200 107 = FOR RJE73 RJH45 = 12181 99349 10358 22200
1816   RCV DE RFH70 QYT4 QLS
1836   VVV RIW DE RIR96 QSA? QTC
1848   RIR96 407 4 13 2225 407 = FOR RMP = NDDXÄ WWWÄU ÄWPPW = + RIR96
1853   RIW DE RIR96 NR 408 QSL?
1855   RIW DE RIR96 COR COLP BL 407 4 12 2225 407
1903   VVV RMP DE RGV82 QSA?
1904   RMP DE RGV82 QYT9 QSA?
1906   VVV RIT DE RMRV QSA?
1907   RIT DE RMRV QYT4 QSA?
1931   RIT DE RMRV OK QYT4 QSX 6238
1941   RMP DE RGV82 QYT4 QLS
2011   RMC99 QRV
2022   RMC99 QSL 122
2046   VVV RIT DE RMRV QSA? QTC
2047   RMRV 932 17 13 0045 932 = SML FOR RJH45 RJH74 = 12211 99682 10065 22223

8345 kHz, 13-10
1701   VVV RCV DE RBIZ QSA?
1704   RCV DE RBIZ QYT4 QSX 8984/6841
1731   VVV RIW DE RGX56 QSA?
1812   VVV RCV DE RBIZ QSA? QTC
1813   RBIZ 944 17 13 2200 944 = SML FOR RJE73 RJH45 = 13181 99349 10358 22200
1818   RCV DE RFH70 QSA2
1842   VVV RMP DE RGV82 QSA?
1843   RMP DE RGV82 QYT4 QSA?
1847   RMP DE RGV82 OK QYT4 QWH 4158/4158
1947   VVV RCV DE RCJG QSA? QTC
2028   VVV RIT DE RMRV QSA? QTC
2229   RMRV 218 17 14 0025 218 = SML FOR RJH45 RJH74 = 13211 99690 10113 22222

8345 kHz, 14-10
1646   RMP DE RGX80 RPT. RMP DE RGX80 R
1648   RMP DE RGX80 QYT4 QLS OK?

1655   RMP DE RGX80 OK QYT4 QRO
1700   VVV RIT DE RMRV QSA?
1712   VVV RMP DE RGV82 QSA?
1713   RMP DE RGV82 OK QYT4 QLS
1725   VVV RCV DE RBIZ QSA?
1751   RMP DE RGV82 QYT4 QMO
1800   RMRV 516 17 14 2200 516 = (faded and QRM from RFX56 sidetone)
1808   VVV RCV DE RBIZ QSA? QTC
1809   RBIZ 311 17 14 2200 311 = FOR RJE73 RJH45 = 14181 99349 10358 22200
1814   RCV DE RFH70 QSA2
1909   RMP DE RGV82 QXX
1911   RMP DE RGV82 QYT4 QCM QLS
1912   RMP DE RGV82 QYT9 QSA?
1917   RGV82 OK QYT9 QWH 6308
2021   rmp de rmrv 161 17 15 0035 161 = sml for rjh45 rjh74 = 14211 99705 10193 41/97 /3111 10051 40026 58013 ... 8////
        22222 00085 20506 15013 = + rmrv k
2025   RIT DE RMRV QSA? QTC (too weak to copy preamble) 14221 99725 10??? 22222
2037   VVV RIW DE RMC99 QSA? QTC
2038   RMC99 182 4 15 0035 182 = FOR RCV = 37531 4235? 15002 = + RMC99

12464 kHz, 14-10
1455   RMJA: Tender KIL-158. rcv de rmja 279 19 14 1010 279 = sml for rjh45 rje73   = 14061 99380 10210 41498 60000 10231
        40159 540001 70222 863// 22213 0021 02000 88000 80000 14015 = + rmja k
1455   RIR96: LS Azov (151). riw de rir96 763 15 14 1845 763 = for rjh45 rjd38 = 14151 99425 10101 41598 71809 10190 41015
        51000 89470 22252 00170 20401 14012 = + rir96 k

3890.5 kHz, 18-10, 2130 UTC:
RJD99 NF Severodvinsk: rbhv de rjd99 qso rjp71 ? k - rjp50 de rjd99 qsa3 qrv k r 781 k - rjp71 de rjd99 qsa? qtc k - rhp86 de rjd99
qsa? k

4580.5 kHz, 18-10, 2120 UTC:
rjd99 de rbhv 564 19 19 0100 564 = for rjh74 rjd90 = 18211 99660 10350 41/95 80710 10104 .... 930 57003 72222 8865/ 22232
00050 2//04 3//09 ///// 88000 19016 = + rbhv k

4580 kHz, 20-10
2114   rjd99 de ras82 941 17 21 0101 941 = for rjd90 rjh74 = 20211 99666 10344 41/98 93605 10010 40040 52051 70222 89///
        22200 00026 20101 88000 20014 = + ras82 k
2107   rjd99 de rbhv 302 19 21 0100 302 = for rjh74 rjd90 = 20211 99666 10344 41/98 83010 11020 40034 52003 70202 886//
        22200 00050 2//01 3//30 ///// 88000 21016 = + rbhv k
2103   rjd99 de rbe99 997 17 21 0101 997 = for rjh74 rjd90 = 20211 99649 10356 41/97 93515 10040 40020 52060 70222 89///
        22252 00051 20303 88000 21014 = + rbe99 k

3890.5 kHz, 20-10, 2014 UTC:
RJD99: Russian Naval Vessel. RJD99 RPT 88301 06824 K. RJD99 RPT K. RJD99 RPT .2052 27978 65902 K. RJD99 QRU K.

5203 kHz, 20-10, 2105 UTC:
RIT: Severomorsk Naval Radio: RLO de RIT QTC 896 34 21 0057 896 = RADIOPROGNOZ 21103 03003 ... 00103 00612 40010 +

6940 kHz, 21-10, 1659 UTC: RNQ4 DE RRQ6 QSA4
6994 kHz, 21-10, 0429 UTC: RIT DE RHY73 QSA? QYT6
8014 kHz, 21-10, 1838 UTC: RHQ33 lengthy Cyrilic 5L message

4580.5 kHz, 22-10
2103   rjd99 de rbe99 382 17 23 0101 382 = for rjh74 rjd90 = 22211 99646 10355 41/98 92411 11010 40200 57020 70222 89///
        22272 00050 20202 88000 23014 = + rbe99 k
2103   rjd99 de ras82 312 17 23 0101 213 = for rjd90 rjh74 = 22211 99663 10336 41/98 92408 10000 40170 54000 70222 89///
        22200 00043 20101 88000 23014 = + ras82 k

8345 kHz, 22-10, 1930 UTC:
rcv de rji30 227 15 22 2320 227 = for rjt22 = 22222 46473 41050 83481 38511 15792 .... 22013 = + rji30 k

9145 kHz, 22-10, 1153 UTC:

RCJG de RIW QSA? QTC K. No apparent reply to two calls to tanker Ivan Bubnov.

8345 kHz, 30-10

1137 RMJA: Tender KIL-158. rmp de rmja 616 17 30 1530 616 = sml for rjh45 rjd38 = 30121 99575 10093 41598 12606 10103 40079 52013 70111 81200 22224 00088 299// 30013 = + rmrv k

1106 rmp de rmi93 333 15 30 1500 333 = sml for rjh45 rjd38 = 30121 99576 10072 41698 33605 10140 40070 54030 70200 83410 22222 30011 = + rmi93 k

12464 kHz, 30-10

1210 RMUW: tug Shakter. rcv de rmuw 102 17 30 1600 102 = sml for rje73 rjh45 = 30121 99368 10236 41697 10506 10230 40120 54000 70200 82040 22253 00180 20101 30013 = + rmuw

1213 RBIZ: Amur PM-138. rbit 41 17 30 1600 419 = for rje73 rjh45 = 30121 99349 10358 41598 03206 10288 40136 57003 70200 80000 22200 10214 20000 88000 30014 = + rbiz k

1031 RFH70: DG Smetlivyj. rfh70 33134 mevewqik 8322 8812 ii 99731 obihodnik 5695 7686

1030 RBIZ: Amur PM-138. rbiz 33134 mevewqik 8322 8812

1030 RMUW: tug Shakter. rmuw 33134 mevewqik 8322 8812

1030 RMJA: Tender KIL-158. rmja 33134 mevewqik 8322 8812

1030 RJT22: CG Moskva (121). rjt22 ? 33134 mevewqik 8322 8812

4635 kHz, 31-10, 1826 UTC:

RAG43: Russian Warship ends msg with ... _//// 4//// 310__ = + RAG43 K. RAG43 OK QRU K.

M32b
Russian Naval Aviation
Aviatsiya Voenno-morskogo Flota Rossii

8816 kHz, 03-10

0945 RJF94 RJC38 DE 09421 QTO 0936 QRD XLAA XLMV QRE 1045 QBD 13700 K QQM XLAA 1052 SK

1212 RJF94 RJC38 DE 09421 QTO 1155 QRD XLWF XLAA QRE 1330 QBD 11000 K QQL ULPE (?) 1243 QBG 4250 QRE XLWF 1315 K QQM XLWF 1313 SK

1248 RJF94 RJC38 DE 30561 QTO 1110 QRD XLLV XUMO QBD 3600 QRE 1320 K QTH 5809 3421 QTR 1220 QRE XLLV 1315 K QQM XLLV 1318 SK

8816 kHz, 07-10

0650 RJF94 RCB DE 44183 QAL EVRR 0645 QAH 5800 QBD 3500 K QAY EETT 0738 QAL XLLV 0825 QAH 5800 QBD 2900 K QQM XLLV 0824 SK

0940 RJF94 RCB DE 44183 QTO 0924 QRD XUMO XLLV QRE 1120 QAH 5800 QBD 5100 K QQL UUWR 1019 QAL XUMO 1110 QAH 5800 QBD 4500 K QQM XUMO 1105 SK

8816 kHz, 14-10

0925 RJF94 RCB DE 44183 QTH 5926 2241 QTR 0920 QAL XLLV 1030 QAH 5800 QBD 3000 K QQM XLLV 1030 SK

1425 RJF94 RCB DE 44183 QTO 1415 QRD XUMO XLLV QRE 1600 QAH 5800 QBD 5000 K QQL UUWR 1514 QAL XUMO 1600 QAH 5800 QBD 4400 K QQM XUMO 1557 SK

6989 kHz, 21-10

1715 RAL2 SIMPLEX RADIO CHECK WITH RGH2 RMW2 RHQ2 RBL66

1715 RGH2 RADIO CHECK WITH RAL2

1715 RHQ2 RADIO CHECK WITH RAL2

10263 kHz, 28-10

0312 RHQ2 DE RAL2 K. QSA NO QAP. RMW2 DE RAL2 QSA? K

0313 QSA NO ZNN VA

LOGS SECTION

code	date	UTC	day	freq	remarks	mode	ctrb
---	1-10-2013	2242	Tue	5379	555 555 555 975 975 975 975 followed by 5Fgs ends 0000000 (cut zero)	CW	(LG2)
---	5-10-2013	1734	Sat	4008	i.p. 113 131 135 ... 141 142 144 145 146 147 148 150 151 AR (1735z - Silent)	CW	(JPL-FNL)
DPRK	12-9-2013	1402		14210	North Korean embassy Moscow	DPRK-ARQ 600/600	(IARUMS)
DPRK	29-10-2013	2300	Tue	16003	MFA Pyongyang	DPRK-ARQ 600/600	(Dan)
E06	3-10-2013	2030	Thu	5186	762 762 etc	USB	(LG2)
E06	4-10-2013	0600	Fri	16320	186 953 101 = 71303	USB	(HFD)
E06	4-10-2013	0700	Fri	18210	186	USB	(HFD)
E06	9-10-2013	1920	Wed	4588	218 218 218 00000	USB	(MPJ)
E06	9-10-2013	2020	Wed	4060	218 218 218 00000	USB	(MPJ)
E06	30-10-2013	1940	Wed	7943	229 1 561 63 40509 81272 28675 55674 15835 ... 02321 17818 62444 55844 23118 000 000	AM	(MPJ)
E07	2-10-2013	1700	Wed	13376	317 0 prior to 1700Z a few sec of English bcing	USB	(HFD)
E07	2-10-2013	1900	Wed	10243	229 229 229 000	USB	(MPJ)
E07	3-10-2013	2030	Thu	5836	584 0	USB	(HFD)
E07	7-10-2013	1900	Mon	10243	229 0	USB	(HFD)
E07	7-10-2013	1900	Mon	10243	229 229 229 000	USB	(MPJ)
E07	7-10-2013	1920	Mon	9243	229 0	USB	(HFD)
E07	9-10-2013	1700	Wed	13376	317 1 2401 109 = 91598	USB	(HFD)
E07	9-10-2013	1720	Wed	12176	317 1	USB	(HFD)
E07	9-10-2013	1740	Wed	10776	317 1	USB	(HFD)
E07	9-10-2013	1900	Wed	10243	229 0	USB	(HFD)
E07	9-10-2013	1900	Wed	10243	229 229 229 000	USB	(MPJ)
E07	14-10-2013	1900	Mon	10243	229 1 819 80 71157 65303 32160 50186 40862 ... 62385 56093 86681 02105 17724 000 000	USB	(MPJ)
E07	21-10-2013	1940	Mon	7943	229 352 _2 73057 64180 98302 379_5 95914 ... 21465 86594 26443 56500 226__ 000	AM	(MPJ)
E07a	2-10-2013	2000	Wed	5864	815 1 39288 3631 92 = 61002	USB	(HFD)
E07a	2-10-2013	2020	Wed	5164	815 1 39288	USB	(HFD)
E07a	2-10-2013	2040	Wed	4564	815 1 39288	USB	(HFD)
E07a	4-10-2013	1510	Fri	11424	411 0	USB	(HFD)
E07a	5-10-2013	0800	Sat	11484	413 413 413 000	USB	(KI6USU)
E07a	10-10-2013	0430	Thu	5146	188 0	USB	(HFD)
E07a	10-10-2013	0450	Thu	5846	188 0	USB	(HFD)
E07a	11-10-2013	1510	Fri	11424	411 411 411 000	USB	(AB)
E07a	12-10-2013	0800	Sat	11484	413 0	USB	(HFD)
E07a	12-10-2013	0820	Sat	12184	413 0	USB	(HFD)
E11	2-10-2013	1045	Wed	7449	462/31 attention 12662 61624 72043 69399 25251 ... 88493 02105 54186 50053 37627	USB	(MPJ)
E11	2-10-2013	1155	Wed	15915	717/36 63128 31049 ..... 45268 ..503 (faded)	USB	(MPJ)
E11	2-10-2013	1445	Wed	4909	2??/00 Unreadably weak.	USB	(MPJ)
E11	7-10-2013	1540	Mon	15915	220/32 attention 27467 52176 46660 ...91833 4791825153 attention, msg rptd, out	USB	(GHn)
E11	7-10-2013	1540	Mon	15915	220/32 attention 27467 52176 46660 09388 10105 ... 70515 96489 91833 47918 25153	USB	(MPJ)
E11	9-10-2013	1045	Wed	7449	469/00	USB	(MPJ)
E11	10-10-2013	1155	Thu	15915	718/00	USB	(MPJ)
E11	14-10-2013	1540	Mon	15915	228/00	USB	(MPJ)
E11	17-10-2013	0900	Thu	4909	248/00	USB	(HFD)
E11	17-10-2013	1730	Thu	9371	i.p.	USB	(Steve-HOL)
E11	18-10-2013	0545	Fri	15915	348/00	USB	(HFD)
E11	18-10-2013	2000	Fri	7377	576/00	USB	(MPJ)
E11	24-10-2013	1730	Thu	9371	416/00	USB	(MPJ)

code	date	UTC	day	freq	remarks	mode	ctrb
E11	25-10-2013	2000	Fri	7377	576/00	USB	(MPJ)
E11	26-10-2013	1445	Sat	4909	287/00	USB	(MPJ)
E11	29-10-2013	1045	Tue	7449	469/00	USB	(MPJ)
E11	30-10-2013	1445	Wed	4909	287/00	USB	(MPJ)
E11	31-10-2013	1155	Thu	15915	718/00	USB	(MPJ)
E11	31-10-2013	1730	Thu	9371	416/00	USB	(MPJ)
E11a	1-10-2013	1400	Tue	13375	987/10 Attention 73318 34703 78142 89180 39290 02412 26829 48864 64612 38097	USB	(MPJ)
E11a	1-10-2013	1810	Tue	13455	985/10 Attention 66478 34905 31623 71900 47449 99866 55894 37543 59176 39502	USB	(MPJ/steve)
E11a	4-10-2013	1110	Fri	13375	954/33 Attention 92777 20047 06442 93755 19195 ... 97701 89660 53160 41979 95782	USB	(MPJ)
E11a	5-10-2013	1400	Sat	13375	986/10 attention 57722 42702 27978 63777 22438 78755 21508 21363 16529 71359	USB	(MPJ)
E11a	7-10-2013	1710	Mon	5194	953/?? attention 60671 04138 30485 70151 96725 ... 06047 95055 12594 19529 93911	USB	(MPJ)
E11a	8-10-2013	1400	Tue	13375	091/10 attention 58245 02799 89190 13875 96057 67684 14638 73315 54440 16889	USB	(MPJ)
E11a	10-10-2013	1730	Thu	9371	418/34 attention 97002 76113 47791 ... 93588 08267 03580 attention, rpt msg, out	USB	(AB)
E11a	11-10-2013	1110	Fri	13375	954/.. 98475 58720 41398 78210 32176 ... 98795 22791 46839 63921 86408	USB	(MPJ)
E11a	11-10-2013	1710	Fri	5194	955/24 attention 31427 07035 65459 09592 72514 ... 05225 77731 04071 92472 59311	USB	(MPJ)
E11a	11-10-2013	2000	Fri	7377	570/33 14893 33139 15554 00064 04426 ... 12079 36997 05831 77029 74242. Definitely English.	USB	(MPJ)
E11a	12-10-2013	1400	Sat	13375	987/10 attention 59544 09636 00443 00492 04800 88979 63881 87779 49296 11004	USB	(MPJ/AB)
E11a	12-10-2013	1400	Sat	13375	987/10 attention 59544 09636 00443 00492 04800 88979 63881 87779 49296 11004	USB	(SKX)
E11a	14-10-2013	1110	Mon	13375	951/20 attention 85297 21009 56317 59078 85580 ... 86804 44509 11110 30436 07523	USB	(MPJ)
E11a	15-10-2013	1400	Tue	13375	987/10 attention 45088 73964 02566 11529 21811 ... 70972 38963 14394 28570 81558	USB	(MPJ)
E11a	18-10-2013	1110	Fri	13375	952/31 attention 27589 55936 48259 53729 60852 ... 92450 48444 60446 64291 50704	USB	(MPJ)
E11a	18-10-2013	1710	Fri	5194	953/21 attention 76466 10825 90956 84142 27548 ... 77139 32068 89669 85548 98527	USB	(MPJ)
E11a	21-10-2013	1110	Mon	13375	953/21 Attention 67773 01210 20612 95474 85007 ... 40732 24990 33861 23275 15175	USB	(MPJ)
E11a	22-10-2013	1400	Tue	13375	981/10 attention 86517 10420 07645 93960 47039 30223 41023 33391 43381 79380	USB	(MPJ)
E11a	22-10-2013	1810	Tue	13455	982/10 attention 97412 13752 17508 90888 73627 21963 43976 63971 75852 30013	USB	(MPJ)
E11a	25-10-2013	2000	Fri	13375	952/31 attention 61065 56181 50280 98426 28817 ... 97250 39205 00900 12852 76054	USB	(MPJ)
E11a	26-10-2013	1400	Sat	13375	984/10 attention 14251 70966 82019 84726 02243 ... 96101 50384 34101 04634 89654	USB	(MPJ)
E11a	26-10-2013	1810	Sat	13455	985/10 attention 87883 78598 02149 44823 ... 28653 29888 93398 71392 03152	USB	(MPJ)
E11a	29-10-2013	1400	Tue	13375	982/10 attention 33304 64647 84363 51169 92308 20676 16293 46210 60457 05715	USB	(MPJ)
EGY	30-9-2013	1410		18045	Egyptian embassy Muscat msg to MFA Cairo	Codan 16	(BCI)
EGY	30-9-2013	1423		18046.7	Egyptian embassy Muscat clg MFA Cairo	SITOR-A 100/170	(BCI)
EGY	3-10-2013	1511	Thu	16341.7	Egyptian embassy Alger clg MFA Cairo	SITOR-A 100/170	(BCI)
EGY	3-10-2013	1512	Thu	16340	Egyptian embassy Alger msg to MFA Cairo	Codan 16	(BCI)
EGY	8-10-2013	2150	Tue	9067.7	MFA CairoSelcal to RCVB (Washington DC USA)	SITOR-A 100/170	(LG2)
EGY	11-10-2013	1949	Fri	11023	MFA Cairo EGY clg OOVF Pyongyang	SITOR-A 100/170	(PPA)
EGY	11-10-2013	2027	Fri	9066	MFA Cairo EGY clg RCVB Kinshasa	SITOR-A 100/170	(PPA)

code	date	UTC	day	freq	remarks	mode	ctrb
EGY	11-10-2013	2027	Fri	11033	MFA Cairo EGY clg XBVY Londen (11 Oct 2013)(PPA)	SITOR-A 100/170	(PPA)
EGY	12-10-2013	0805	Sat	16317	99909: MFA Cairo EGY clg 16	Codan	(PPA)
EGY	12-10-2013	0827	Sat	16340	MFA Cairo EGY traffic to KKXD (unid embassy)	SITOR-A 100/170	(PPA)
EGY	14-10-2013	1104	Mon	20036.7	Egyptian Embassy, Accra calls "SSTZ" then ATU-80 tfc to MFA Cairo headed "jg: kw--fk"	SITOR-A 100/170	(MCO)
EGY	14-10-2013	1912	Mon	16222	99910: MFA Cairo EGY traffic after chirp selcal to 11102 Paris	USB/Codan 16 tone	(PPA)
EGY	26-10-2013	0920	Sat	22965.7	MFA Cairo KKVA/99907 clg embassy Lagos: 33309	SITOR-A/Codan chirp	(DK8OK)
G06	7-10-2013	1800	Mon	5424	564 564 564 00000	USB	(MPJ)
G06	11-10-2013	1930	Fri	5442	947 352 15 03821 28754 86473 03711 10192 88932 53762 29583 04824 94730 93728 93627 83425 57634 58291 352 15 00000	USB	(MPJ)
G06	14-10-2013	1700	Mon	4569	564 564 564 00000	USB	(MPJ)
G06	14-10-2013	1800	Mon	5424	564 564 564 00000	USB	(MPJ)
G06	25-10-2013	1930	Fri	5442	947 352 15 03821 28754 86473 03711 10192 88932 53762 29583 04824 94730 93728 93627 83425 57634 58291 352 15 00000	USB	(MPJ)
G11	1-10-2013	1755	Tue	5815	261/35 Achtung 81109 59329 83301 12530 67958 ... Faulty robot digit prob 3.	USB	(MPJ/steve)
G11	8-10-2013	1755	Tue	5815	270/00	USB	(MPJ)
G11	11-10-2013	2000	Fri	6433	262/00	USB	(MPJ)
G11	13-10-2013	1855	Sun	5816	270/00	USB	(GHn)
G11	15-10-2013	1755	Tue	5815	270/11	USB	(GHn)
G11	15-10-2013	1755	Tue	5815	270/00	USB	(MPJ)
G11	18-10-2013	1325	Fri	5815	299/00	USB	(MPJ)
G11	18-10-2013	2000	Fri	6433	262/00	USB	(MPJ)
G11	19-10-2013	1325	Sat	5815	299/00	USB	(MPJ)
G11	20-10-2013	1755	Sun	5815	270/00	USB	(MPJ)
G11	20-10-2013	2000	Sun	6433	252/00	USB	(MPJ)
G11	22-10-2013	1755	Tue	5815	270/00	USB	(MPJ)
G11	25-10-2013	1325	Fri	5815	Active but too weak to copy	USB	(MPJ)
G11	25-10-2013	2000	Fri	6433	262/00	USB	(MPJ)
G11	29-10-2013	1755	Tue	5815	270/00	USB	(MPJ)
HM01	1-10-2013	0608	Tue	10345	56801 22564 15441 50182 084444 51835 56801	AM/RDFT	(LG2)
HM01	1-10-2013	0630	Tue	10345	15554 50182 08444 5183? 83381 32564 RDFT text received	AM/RDFT	(LG2)
HM01	1-10-2013	0828	Tue	9063	i.p.	AM/RDFT	(LG2)
HM01	1-10-2013	2100	Tue	16180	86063 22332 61631 14212 84083 70601	AM/RDFT	(Dan)
HM01	2-10-2013	0737	Wed	9330	i.p.	AM/RDFT	(LG2)
HM01	4-10-2013	0529	Fri	5855	86065 22334 61633 14214 84085 70603	AM/RDFT	(KC2TTK)
HM01	4-10-2013	2102	Fri	11635	Radio Havana SW Bcst program comes on briefly. Then announced number grps begin. 86066 22335 61634 14215 84086 70604	AM/RDFT	(DSch/Steve)
HM01	4-10-2013	2201	Fri	10715	86066 22335 61634 14215 84086 70604	AM/RDFT	(DSch)
HM01	5-10-2013	0504	Sat	5855	28231 22336 61635 14216 84087 70605	AM/RDFT	(KC2TTK)
HM01	6-10-2013	0500	Sun	5855	Carrier switched on at approximately 04:50z and vocal/data modulation commenced at 05:00.	AM/RDFT	(CFr)
HM01	6-10-2013	2100	Sun	11635	5FGs followed by RDFT data	AM/RDFT	(steve)
HM01	7-10-2013	1000	Mon	5855		AM/RDFT	(Rill)
HM01	8-10-2013	2100	Tue	16180	28234 16631 61638 52631 15603 38051	AM/RDFT	(Dan)
HM01	8-10-2013	2204	Tue	17480	i.p.	AM/RDFT	(Rill)
HM01	9-10-2013	0632	Wed	7320	ends at 0656	AM/RDFT	(Wade)
HM01	9-10-2013	0659	Wed	7320	ends at 0756	AM/RDFT	(Wade)
HM01	9-10-2013	0759	Wed	7320		AM/RDFT	(Wade)
HM01	9-10-2013	2200	Wed	10715	28235 16632 34121 52632 15604 38052	AM/RDFT	(Dan)
HM01	10-10-2013	2200	Thu	17480	5FGs followed by RDFT data	AM/RDFT	(Rill)
HM01	10-10-2013	2200	Thu	17480		AM/RDFT	(Rill)
HM01	10-10-2013	2337	Thu	11530		AM/RDFT	(CFr)

code	date	UTC	day	freq	remarks	mode	ctrb
HM01	11-10-2013	2314	Fri	11530		AM/RDFT	(Rill)
HM01	12-10-2013	2148	Sat	16180	i.p.	AM/RDFT	(Rill)
HM01	12-10-2013	2200	Sat	17480		AM/RDFT	(Rill)
HM01	12-10-2013	2259	Sat	17540		AM/RDFT	(Rill)
HM01	12-10-2013	2300	Sat	17540	28236 16633 34122 52633 15605 38053	AM/RDFT	(Dan)
HM01	13-10-2013	0500	Sun	5855		AM/RDFT	(CFr)
HM01	13-10-2013	1000	Sun	5855		AM/RDFT	(Rill)
HM01	13-10-2013	1000	Sun	9155		AM/RDFT	(Rill)
HM01	13-10-2013	2200	Sun	10715		AM/RDFT	(Rill)
HM01	13-10-2013	2304	Sun	11530	5FGs followed by RDFT data	AM/RDFT	(Steve)
HM01	17-10-2013	2200	Thu	17480	45455 60812 40266 00287 48755 07413	AM/RDFT	(Dan)
HM01	17-10-2013	2251	Thu	17480	i.p. ends at 2255	AM/RDFT	(steve)
HM01	18-10-2013	1619	Fri	11435	i.p.	AM/RDFT	(steve)
HM01	18-10-2013	1802	Fri	11635	Spanish 5FGs followed by RDFT data	AM/RDFT	(steve)
HM01	18-10-2013	2100	Fri	11635	Spanish 5FGs followed by RDFT data	AM/RDFT	(CFr)
HM01	18-10-2013	2200	Fri	10715	Spanish 5FGs followed by RDFT data	AM/RDFT	(CFr)
HM01	20-10-2013	2200	Sun	10715	56801 22574 15441 50182 08444 51835	AM/RDFT	(Dan)
HM01	23-10-2013	2200	Wed	10715	27562 21621 11602 60817 38065 06214	AM/RDFT	(Dan)
HM01	26-10-2013	2300	Sat	17540	84851 27565 21624 11605 85003 00483	AM/RDFT	(Dan)
HM01	27-10-2013	0022	Sun	10715	i.p.	AM/RDFT	(KE0QR)
HM01	27-10-2013	1639	Sun	11435	data transmission alternating with Spanish language synthe-sized voice with five digit numbers.	AM/RDFT	(steve)
HM01	27-10-2013	1718	Sun	11530	data transmission alternating with Spanish language synthe-sized voice with five digit numbers.	AM/RDFT	(steve)
HM01	27-10-2013	2200	Sun	10715	Female Spanish 5FGs and RDFT data	AM/RDFT	(MO)
HM01	28-10-2013	2200	Mon	10715	84853 27567 21626 75632 85005 00485	AM/RDFT	(Dan)
HM01	30-10-2013	2200	Wed	10715	84855 17622 50551 75634 85007 12832	AM/RDFT	(Dan)
HM01	31-10-2013	2200	Thu	17480	84856 17623 50552 75635 05041 12833	AM/RDFT	(Dan)
M01	1-10-2013	1800	Tue	5475	463 019 019 30 30 65773 69236 45643 69710 96705 … 56051 06638 04404 81901 12104 019 019 30 30 000 //5476	CW	(MPJ)
M01	5-10-2013	1500	Sat	6261	463 912 30 = = 90373 11857 19821 98921 23597 … 57467 86302 72452 71278 12314 = = 912 30 000	CW	(MPJ)
M01	6-10-2013	0710	Sun	6508	ip	CW	(HFD)
M01	8-10-2013	1800	Tue	5475	463 186 30 = = 73117 29551 58709 66605 36963 … 29647 52006 68007 98688 91408 186 30 000 //5474.	CW	(MPJ)
M01	12-10-2013	1500	Sat	6261	463 221 30 = 77173 68608 51791 87405 77661 … 43319 74347 34344 04520 03171 = 000. Many errors. //6260	CW	(MPJ)
M01	24-10-2013	1800	Thu	5475	463 158 30 36039 14799 48873 36762 95019 … 59491 73895 94_22 32_49 08720 158 30 000 //5476//5478.03	CW	(MPJ)
M01	26-10-2013	1500	Sat	6261	463 225 30 = = 95077 07826 54880 72375 36546 … 61323 37465 02622 87567 77454 = = 225 30 000	CW	(MPJ)
M01	31-10-2013	1820	Thu	5475	463 541 30 68432 09654 69431 60784 79476 … 35470 16284 00807 56488 13579 541 30 00	CW	(MPJ)
M01a	17-10-2013	1607	Thu	6957	333 80123 333 80123	CW	(FMB)
M01b	3-10-2013	1505	Thu	5938	159 194 30 = 42275	CW	(HFD)
M01b	3-10-2013	1837	Thu	4608	i.p. 22380 22380 28569 28569 42637 42637 13032 13023 etc	CW	(JPL-FNL)
M01b	7-10-2013	1810	Mon	3536.12	420 783 34 = = 94228 26156 87381 32641 63552 … 63276 58909 10563 00564 67879 = = 783 34 000. //3537.26//4592.25//4591.13	CW	(MPJ)
M01b	7-10-2013	1915	Mon	3646.13	771 783 34 = = 94228 26156 87381 32641 63552 … 63276 53909 10563 00564 67879 = = 783 34 000. //4457.26//4456.14//3647.26	CW	(MPJ)
M01b	10-10-2013	1832	Thu	3510	201 783 34 = = _4228 26156 87387 32__6 63552 … (rest un-readable)	CW	(MPJ)
M01b	11-10-2013	1515	Fri	5811.1	158 275 30 = = 24775 99552 69201 25774 97063 … 13522 27651 54771 24093 40029 = = 275 30 000	CW	(MPJ)
M01b	11-10-2013	1902	Fri	3626.11	153 783 34 = = 94228 262_6 87381 32641 63552 … _3276 58909 10563 00564 67879 = = 783 34 000	CW	(MPJ)

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M01b	14-10-2013	1810	Mon	4591.12	420 783 34 = = 94228 62615 67381 32641 63552 … 63276 58909 10563 00564 67879 = = 783 34 000 //4592.24	CW	(MPJ)
M01b	18-10-2013	1515	Fri	5810	158 275 30 = = 24775 99552 69201 25774 97063 … 13522 28651 54771 24093 40029 = = 275 30 000	MCW	(MPJ)
M01b	18-10-2013	1902	Fri	3625	153 783 34 = = 94228 26156 87381 32641 63552 … 63276 58909 10563 00564 67879 = = 783 34 000	MCW	(MPJ)
M01b	21-10-2013	1810	Mon	4590	420 783 34 = = 94228 26156 87381 32641 63552 … 63276 58909 10563 00564 67879 = = 783 34 //3535	MCW	(MPJ)
M01b	21-10-2013	1915	Mon	4455	771 783 34 = = 94228 26156 87381 32641 63552 … 63276 58909 10563 00564 67879 = = 783 34 000 //3645	MCW	(MPJ)
M01b	24-10-2013	1832	Thu	3510	201 783 34 94228 90_81 26156 87381 32741 … 63276 58909 10563 00564 67879 783 34 000	MCW	(MPJ)
M03	1-10-2013	1535	Tue	6977	798/00	CW	(MPJ)
M03	2-10-2013	1115	Wed	9150	650/00 = = 000	CW	(MPJ)
M03	5-10-2013	1535	Sat	6977	798/00	CW	(MPJ)
M03	8-10-2013	1535	Tue	6977	794/37 = = 52044 65741 22210 19530 69587 … 29339 62957 24326 11060 25360 = = 794/37 (rpts)	CW	(MPJ)
M03	9-10-2013	1115	Wed	9150	650/00 = = 000	CW	(MPJ)
M03	10-10-2013	1115	Thu	9150	650/00 = = 000	CW	(MPJ)
M03	10-10-2013	1320	Thu	9150	437/00 = = 000	CW	(MPJ)
M03	12-10-2013	1535	Sat	6977	794/37 = = 52044 65741 22210 19530 69587 … 29339 62957 24326 11060 25360 = =	CW	(MPJ)
M03	15-10-2013	1115	Tue	9150	272/00	CW	(MPJ)
M03	17-10-2013	1115	Thu	9150	650/00	CW	(HFD)
M03	20-10-2013	1320	Sun	9150	431/36 31373 55996 75299 72128 56181 … 62494 56855 27969 94099 53388 = = 431/36	CW	(MPJ)
M03	22-10-2013	1115	Tue	9150	275/30 = = 86878 96854 11236 72969 42051 … 40946 02333 38870 42331 18021 = = 275/30 000	CW	(MPJ)
M03	24-10-2013	1115	Thu	9150	658/30 = = 91503 65027 65516 37020 95966 … 51342 24506 77157 83999 14266 = = 658/30	CW	(MPJ)
M03	24-10-2013	1320	Thu	9150	437/00 = = 000	CW	(MPJ)
M03	26-10-2013	1535	Sat	6977	798/00	CW	(MPJ)
M03	29-10-2013	1115	Tue	9150	272/00	CW	(MPJ)
M08a	11-10-2013	2300	Fri	8135	68861 74881 57131. 57131 = = = 78783 06154 62442 46817 06622 … 45821 15585 52530 18458 38311 + + + (two further msgs followed by + + + SK)	CW	(MPJ)
M12	1-10-2013	1830	Tue	10343	124 1 2213 62 77840	CW	(FN)
M12	1-10-2013	1850	Tue	9264	124 1 2213 62 77840	CW	(FN)
M12	1-10-2013	1850	Tue	9264	124 1 2213 62 77840 74944 07826 47455 87684 … 22318 15056 25747 01348 24736 000 000	CW	(MPJ)
M12	1-10-2013	1910	Tue	8116	124 1 2213 62 77840	CW	(FN)
M12	2-10-2013	1500	Wed	9223	839 1 4075 143 71203	CW	(FN)
M12	2-10-2013	1500	Wed	9223	839 1	USB	(HFD)
M12	2-10-2013	1500	Wed	9223	839 1 4075 143 71203 61077 46665 67704 72383 … 63693 58144 63328 81047 85227 000 000	CW	(MPJ)
M12	2-10-2013	1520	Wed	8193	839 1 4075 143 71203	CW	(FN)
M12	2-10-2013	1520	Wed	8193	839 1	CW	(HFD)
M12	2-10-2013	1540	Wed	7463	839 1 4075 143 71203	CW	(FN)
M12	2-10-2013	1540	Wed	7463	839 1	CW	(HFD)
M12	2-10-2013	1700	Wed	8047	463 1 5813 97 52333	CW	(FN)
M12	2-10-2013	1700	Wed	8047	463 1	CW	(HFD)
M12	2-10-2013	1720	Wed	6802	463 1 5813 97 52333	CW	(FN)
M12	2-10-2013	1720	Wed	6802	463 1	CW	(HFD)
M12	2-10-2013	1740	Wed	5788	463 1 5813 97 52333	CW	(FN)
M12	2-10-2013	1740	Wed	5788	463 1	CW	(HFD)
M12	2-10-2013	1830	Wed	11435	938 1 3195 63 62406	CW	(FN)
M12	2-10-2013	1830	Wed	11435	938 1 3195 63 62406 99683 48489 74782 56200 … 57150 00100 18956 91167 65750 65750 000 000	CW	(MPJ)

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M12	2-10-2013	1850	Wed	10598	938 1 3195 63 62406	CW	(FN)
M12	2-10-2013	1910	Wed	9327	938 1 3195 63 62406	CW	(FN)
M12	2-10-2013	2100	Wed	5814	826 1 687 79 31617	CW	(FN)
M12	2-10-2013	2100	Wed	5814	826 1	CW	(HFD)
M12	2-10-2013	2110	Wed	10269	229 1 1306 107	CW	(FN)
M12	2-10-2013	2120	Wed	5214	826 1 687 79 31617	CW	(FN)
M12	2-10-2013	2120	Wed	5214	826 1	CW	(HFD)
M12	2-10-2013	2130	Wed	9269	229 1 1306 107	CW	(FN)
M12	2-10-2013	2140	Wed	4614	826 1 687 79 31617	CW	(FN)
M12	2-10-2013	2140	Wed	4614	826 1	CW	(HFD)
M12	3-10-2013	0630	Thu	6784	761 761 761 000	CW	(FN)
M12	3-10-2013	0650	Thu	7684	761 761 761 000	CW	(FN)
M12	3-10-2013	0651	Thu	7684	761 761 761 000	CW	(BCI)
M12	3-10-2013	1310	Thu	12214	282 282 282 000	CW	(FN)
M12	3-10-2013	1310	Thu	12214	282 0	CW	(HFD)
M12	3-10-2013	1330	Thu	10814	282 282 282 000	CW	(FN)
M12	3-10-2013	1600	Thu	13386	725 1 3876 117 94728	CW	(FN)
M12	3-10-2013	1620	Thu	12189	725 1 3876 117 94728	CW	(FN)
M12	3-10-2013	1640	Thu	11491	725 1 3876 117 94728	CW	(FN)
M12	3-10-2013	1700	Thu	9176	257 1 1679 95 66646	CW	(FN)
M12	3-10-2013	1700	Thu	9176	257 1	CW	(HFD)
M12	3-10-2013	1700	Thu	10343	124 1 8197 76 61907	CW	(FN)
M12	3-10-2013	1720	Thu	7931	257 1 1679 95 66646	CW	(FN)
M12	3-10-2013	1720	Thu	7931	257 1	CW	(HFD)
M12	3-10-2013	1720	Thu	9264	124 1 8197 76 61907	CW	(FN)
M12	3-10-2013	1740	Thu	6904	257 1 1679 95 66646	CW	(FN)
M12	3-10-2013	1740	Thu	6904	257 1	CW	(HFD)
M12	3-10-2013	1740	Thu	8116	124 1 8197 76 61907	CW	(FN)
M12	3-10-2013	1800	Thu	10343	124 1 7534 110 71485	CW	(FN)
M12	3-10-2013	1820	Thu	9264	124 1 7534 110 71485	CW	(FN)
M12	3-10-2013	1840	Thu	8116	124 1 7534 110 71485	CW	(FN)
M12	3-10-2013	1900	Thu	9176	257 1 3012 69 12058	CW	(FN)
M12	3-10-2013	1900	Thu	9176	257 1	CW	(HFD)
M12	3-10-2013	1920	Thu	7931	257 1 3012 69 12058	CW	(FN)
M12	3-10-2013	1920	Thu	7931	257 1	CW	(HFD)
M12	3-10-2013	1940	Thu	6904	257 1 3012 69 12058	CW	(FN)
M12	3-10-2013	1940	Thu	6904	257 1	CW	(HFD)
M12	4-10-2013	0630	Fri	6784	761 0	CW	(HFD)
M12	4-10-2013	0650	Fri	7684	761 0	CW	(HFD)
M12	4-10-2013	1330	Fri	10814	282 0	CW	(HFD)
M12	5-10-2013	1310	Sat	12214	282 282 282 000	CW	(FN)
M12	5-10-2013	1310	Sat	12214	282/00	CW	(MPJ)
M12	5-10-2013	1330	Sat	10814	282 282 282 000	CW	(FN)
M12	7-10-2013	1300	Mon	10804	839 1 1150 191 07580	CW	(FN)
M12	7-10-2013	1320	Mon	9324	839 1 1150 191 07580	CW	(FN)
M12	7-10-2013	1340	Mon	7964	839 1 1150 191 07580	CW	(FN)
M12	7-10-2013	1600	Mon	11435	938 1 2746 118 37373	CW	(FN)
M12	7-10-2013	1620	Mon	10598	938 1 2746 118 37373	CW	(FN)
M12	7-10-2013	1640	Mon	9327	938 1 2746 118 37373	CW	(FN)
M12	7-10-2013	1700	Mon	9176	257 1 8817 75 85363	CW	(FN)
M12	7-10-2013	1700	Mon	9176	257 1 8817 75 85363 23930 66063 60973 24355 ... 92540 56822 73480 59678 66746 000 000	CW	(MPJ)
M12	7-10-2013	1720	Mon	7931	257 1 8817 75 85363	CW	(FN)
M12	7-10-2013	1740	Mon	6904	257 1 8817 75 85363	CW	(FN)
M12	7-10-2013	1800	Mon	9176	257 1 1499 66 90515	CW	(FN)
M12	7-10-2013	1820	Mon	7931	257 1 1499 66 90515	CW	(FN)

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M12	7-10-2013	1840	Mon	6904	257 1 1499 66 90515	CW	(FN)
M12	7-10-2013	1900	Mon	9176	257 1 6257 116 57234	CW	(FN)
M12	7-10-2013	1900	Mon	9176	257 1 6257 116 57234 95313 80505 24431 61372 ... 60128 88561 20878 58837 21162 000 000	CW	(MPJ)
M12	7-10-2013	1920	Mon	7931	257 1 6257 116 57234	CW	(FN)
M12	7-10-2013	1940	Mon	6904	257 1 6257 116 57234	CW	(FN)
M12	8-10-2013	1830	Tue	10343	124 1 96802 18809 98123 12359 48451 ... 96987 14684 57316 69110 54516 000 000	CW	(MPJ)
M12	9-10-2013	1500	Wed	9223	839 1 1150 191 07580	CW	(FN)
M12	9-10-2013	1500	Wed	9223	839 191 07580 25309 76208 01099 44476 10906 ... 54640 96895 47359 10493 82049 000 000	CW	(MPJ)
M12	9-10-2013	1520	Wed	8193	839 1 1150 191 07580	CW	(FN)
M12	9-10-2013	1540	Wed	7463	839 1 1150 191 07580	CW	(FN)
M12	9-10-2013	1700	Wed	8047	463 1 1303 99 18680	CW	(FN)
M12	9-10-2013	1720	Wed	6802	463 1 1303 99 18680	CW	(FN)
M12	9-10-2013	1740	Wed	5788	463 1 1303 99 18680	CW	(FN)
M12	9-10-2013	1830	Wed	11435	938 1 5380 69 73943	CW	(FN)
M12	9-10-2013	1850	Wed	10598	938 1 5380 69 73943	CW	(FN)
M12	9-10-2013	1910	Wed	9327	938 1 5380 69 73943	CW	(FN)
M12	9-10-2013	2100	Wed	5814	826 826 826 000	CW	(FN)
M12	9-10-2013	2110	Wed	10269	229 229 229 000	CW	(FN)
M12	9-10-2013	2110	Wed	10269	229 0	CW	(HFD)
M12	9-10-2013	2120	Wed	5214	826 826 826 000	CW	(FN)
M12	9-10-2013	2130	Wed	9269	229 229 229 000	CW	(FN)
M12	9-10-2013	2130	Wed	9269	229 0	CW	(HFD)
M12	10-10-2013	0630	Thu	6784	761 761 761 000	CW	(FN)
M12	10-10-2013	0650	Thu	7684	761 761 761 000	CW	(FN)
M12	10-10-2013	1310	Thu	12214	282 1 4690 161 51529	CW	(FN)
M12	10-10-2013	1310	Thu	12214	282 1 4690 161 51529 18278 34619 40222 37723 ... 67852 27387 37759 41735 91896 000 000	CW	(MPJ)
M12	10-10-2013	1330	Thu	10814	282 1 4690 161 51529	CW	(FN)
M12	10-10-2013	1350	Thu	9214	282 1 4690 161 51529	CW	(FN)
M12	10-10-2013	1350	Thu	9214	i.p. ends ... 67852 27387 37759 41735 91896 000 000	CW	(MPJ)
M12	10-10-2013	1600	Thu	13386	725 1 4547 113 79236	CW	(FN)
M12	10-10-2013	1620	Thu	12189	725 1 4547 113 79236	CW	(FN)
M12	10-10-2013	1640	Thu	11491	725 1 4547 113 79236	CW	(FN)
M12	10-10-2013	1700	Thu	9176	257 1 2782 97 20158	CW	(FN)
M12	10-10-2013	1700	Thu	10343	124 1 2940 78 24348	CW	(FN)
M12	10-10-2013	1700	Thu	10343	124 24348 67611 99674 06461 98184 37887 ... 31661 85254 21946 09264 35377 000 000.	CW	(MPJ)
M12	10-10-2013	1720	Thu	7931	257 1 2782 97 20158	CW	(FN)
M12	10-10-2013	1720	Thu	9264	124 1 2940 78 24348	CW	(FN)
M12	10-10-2013	1740	Thu	6904	257 1 2782 97 20158	CW	(FN)
M12	10-10-2013	1740	Thu	8116	124 1 2940 78 24348	CW	(FN)
M12	10-10-2013	1800	Thu	10343	124 1 2450 118 52791	CW	(FN)
M12	10-10-2013	1820	Thu	9264	124 1 2450 118 52791	CW	(FN)
M12	10-10-2013	1840	Thu	8116	124 1 2450 118 52791	CW	(FN)
M12	10-10-2013	1900	Thu	9176	257 1 3855 68 93308	CW	(FN)
M12	10-10-2013	1920	Thu	7931	257 1 3855 68 93308	CW	(FN)
M12	10-10-2013	1940	Thu	6904	257 1 3855 68 93308	CW	(FN)
M12	12-10-2013	1310	Sat	12214	282 1 4690 161 51529	CW	(FN)
M12	12-10-2013	1330	Sat	10814	282 1 4690 161 51529	CW	(FN)
M12	12-10-2013	1350	Sat	9214	282 1 4690 161 51529	CW	(FN)
M12	12-10-2013	1350	Sat	9214	282 1 4690 161 51529 18278 34619 40222 37723 67941 ... 67852 27387 37759 41735 91896 000 000	CW	(MPJ)
M12	12-10-2013	2110	Sat	10269	229 229 229 000	CW	(FN)
M12	12-10-2013	2130	Sat	9269	229 229 229 000	CW	(FN)

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M12	14-10-2013	1300	Mon	10804	839 1 3027 165 50356	CW	(FN)
M12	14-10-2013	1300	Mon	10804	839 1 3027 165 50356 99746 10850 43990 30285 ... 08753 90552 34232 76016 36681 000	CW	(MPJ)
M12	14-10-2013	1302	Mon	10804	839 3027 165 3027 165 50356 99746 10850 43990 30285 73746 05861 33723 14370 18283 ... 000 000	CW	(JPL-Sib)
M12	14-10-2013	1320	Mon	9324	839 1 3027 165 50356	CW	(FN)
M12	14-10-2013	1325	Mon	4674	i.p. 66929 56996 46078 92085 73606 25118 65887 03753 69674 80000 82262 19033 26499 ... 000 000	CW	(JPL-Sib)
M12	14-10-2013	1340	Mon	7964	839 1 3027 165 50356	CW	(FN)
M12	14-10-2013	1345	Mon	7937	i.p. 99847 70.37 999.. 00.08 000 000	CW	(JPL-Sib)
M12	14-10-2013	1600	Mon	11435	938 1 8780 116 59281	CW	(FN)
M12	14-10-2013	1620	Mon	10598	938 1 8780 116 59281	CW	(FN)
M12	14-10-2013	1640	Mon	9327	938 1 8780 116 59281	CW	(FN)
M12	14-10-2013	1700	Mon	9176	257 1 4892 71 92657	CW	(FN)
M12	14-10-2013	1720	Mon	7931	257 1 4892 71 92657	CW	(FN)
M12	14-10-2013	1740	Mon	6904	257 1 4892 71 92657	CW	(FN)
M12	14-10-2013	1800	Mon	9176	257 1 3379 61 64167	CW	(FN)
M12	14-10-2013	1820	Mon	7931	257 1 3379 61 64167	CW	(FN)
M12	14-10-2013	1840	Mon	6904	257 1 3379 61 64167	CW	(FN)
M12	14-10-2013	1900	Mon	9176	257 1 7332 117 76605	CW	(FN)
M12	14-10-2013	1920	Mon	7931	257 1 7332 117 76605	CW	(FN)
M12	14-10-2013	1920	Mon	7931	257 1 7332 117 76605 14554 65711 73304 31869 ... 63186 84345 35838 88928 29578 000	CW	(MPJ)
M12	14-10-2013	1940	Mon	6904	257 1 7332 117 76605	CW	(FN)
M12	15-10-2013	1830	Tue	10343	124 1 1131 64 15377	CW	(FN)
M12	15-10-2013	1850	Tue	9264	124 1 1131 64 15377	CW	(FN)
M12	15-10-2013	1850	Tue	9264	124 1. 1131 64 15377 49489 96087 53649 06759 ... 63243 34803 14994 94336 44107 000 000	CW	(MPJ)
M12	15-10-2013	1910	Tue	8116	124 1 1131 64 15377	CW	(FN)
M12	16-10-2013	1500	Wed	9223	839 839 839 000	CW	(FN)
M12	16-10-2013	1520	Wed	8193	839 839 839 000	CW	(FN)
M12	16-10-2013	1700	Wed	8047	463 1 7967 93 02362	CW	(FN)
M12	16-10-2013	1720	Wed	6802	463 1 7967 93 02362	CW	(FN)
M12	16-10-2013	1740	Wed	5788	463 1 7967 93 02362	CW	(FN)
M12	16-10-2013	1830	Wed	11435	938 1 6907 63 28921	CW	(FN)
M12	16-10-2013	1850	Wed	10598	938 1 6907 63 28921	CW	(FN)
M12	16-10-2013	1910	Wed	9327	938 1 6907 63 28921	CW	(FN)
M12	16-10-2013	2100	Wed	5814	826 826 826 000	CW	(FN)
M12	16-10-2013	2110	Wed	10269	229 1 ...	CW	(FN)
M12	16-10-2013	2120	Wed	5214	826 826 826 000	CW	(FN)
M12	16-10-2013	2130	Wed	9269	229 1 ...	CW	(FN)
M12	17-10-2013	0630	Thu	6784	761 761 761 000	CW	(FN)
M12	17-10-2013	0650	Thu	7684	761 761 761 000	CW	(FN)
M12	17-10-2013	1310	Thu	12214	282 282 282 000	CW	(FN)
M12	17-10-2013	1330	Thu	10814	282 282 282 000	CW	(FN)
M12	17-10-2013	1600	Thu	13386	725 1 8629 114 79622	CW	(FN)
M12	17-10-2013	1620	Thu	12189	725 1 8629 114 79622	CW	(FN)
M12	17-10-2013	1640	Thu	11491	725 1 8629 114 79622	CW	(FN)
M12	17-10-2013	1700	Thu	9176	257 1 7661 95 08144	CW	(FN)
M12	17-10-2013	1700	Thu	10343	124 1 3552 74 11196	CW	(FN)
M12	17-10-2013	1720	Thu	7931	257 1 7661 95 08144	CW	(FN)
M12	17-10-2013	1720	Thu	9264	124 1 3552 74 11196	CW	(FN)
M12	17-10-2013	1740	Thu	6904	257 1 7661 95 08144	CW	(FN)
M12	17-10-2013	1740	Thu	8116	124 1 3552 74 11196	CW	(FN)
M12	17-10-2013	1800	Thu	10343	124 1 8457 118 33295	CW	(FN)
M12	17-10-2013	1820	Thu	9264	124 1 8457 118 33295	CW	(FN)
M12	17-10-2013	1840	Thu	8116	124 1 8457 118 33295	CW	(FN)

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M12	19-10-2013	1310	Sat	12214	282 282 282 000	CW	(MPJ)
M12	21-10-2013	1300	Mon	10804	839 1 1321 241 71295 08590 18846 39225 27801 ... 65511 16864 29378 27847 86249 000 000	CW	(MPJ)
M12	21-10-2013	1940	Mon	6904	257 1 6960 76 42585 90638 90423 16246 13996 ... 14964 70003 46207 39210 33902 000 000	CW	(MPJ)
M12	22-10-2013	1830	Tue	10243	8875 65 06872 47731 57210 99211 59756 99675 21421 87494 26661 48591 000 000	CW	(MPJ)
M12	23-10-2013	1500	Wed	9223	839 1 1321 241 71295	CW	(FN)
M12	23-10-2013	1520	Wed	8193	839 1 1321 241 71295	CW	(FN)
M12	23-10-2013	1540	Wed	7463	839 1 1321 241 71295	CW	(FN)
M12	23-10-2013	1700	Wed	8047	463 1 7561 92 03365	CW	(FN)
M12	23-10-2013	1720	Wed	6802	463 1 7561 92 03365	CW	(FN)
M12	23-10-2013	1740	Wed	5788	463 1 7561 92 03365	CW	(FN)
M12	23-10-2013	1830	Wed	11435	938 1 7135 67 31514	CW	(FN)
M12	23-10-2013	1850	Wed	10598	938 1 7135 67 31514	CW	(FN)
M12	23-10-2013	1910	Wed	9327	938 1 7135 67 31514	CW	(FN)
M12	23-10-2013	2100	Wed	5814	826 1 2462 89 39155	CW	(FN)
M12	23-10-2013	2110	Wed	10269	229 1 3455 89 03943	CW	(FN)
M12	23-10-2013	2120	Wed	5214	826 1 2462 89 39155	CW	(FN)
M12	23-10-2013	2130	Wed	9269	229 1 3455 89 03943	CW	(FN)
M12	23-10-2013	2140	Wed	4614	826 1 2462 89 39155	CW	(FN)
M12	23-10-2013	2150	Wed	7969	229 1 3455 89 03943	CW	(FN)
M12	23-10-2013	2157	Wed	7969	i.p. ends with 000 000	CW	(JPL-RUS)
M12	24-10-2013	0630	Thu	6784	761 761 761 000	CW	(FN)
M12	24-10-2013	0650	Thu	7684	761 761 761 000	CW	(FN)
M12	24-10-2013	1310	Thu	12214	282 282 282 000	CW	(FN)
M12	24-10-2013	1310	Thu	12214	282 282 282 000	CW	(MPJ)
M12	24-10-2013	1330	Thu	10814	282 282 282 000	CW	(FN)
M12	24-10-2013	1600	Thu	13386	725 1 8541 114 09674	CW	(FN)
M12	24-10-2013	1620	Thu	12189	725 1 8541 114 09674	CW	(FN)
M12	24-10-2013	1640	Thu	11491	725 1 8541 114 09674	CW	(FN)
M12	24-10-2013	1700	Thu	9176	257 1 4366 98 84894	CW	(FN)
M12	24-10-2013	1700	Thu	10343	124 1 7730 80 28242	CW	(FN)
M12	24-10-2013	1720	Thu	7931	257 1 4366 98 84894	CW	(FN)
M12	24-10-2013	1720	Thu	9264	124 1 7730 80 28242	CW	(FN)
M12	24-10-2013	1740	Thu	6904	257 1 4366 98 84894	CW	(FN)
M12	24-10-2013	1740	Thu	6904	257 1 4366 98 84894 03272 72417 12609 51878 ... 28635 04194 64432 65738 62794 000 000	CW	(MPJ)
M12	24-10-2013	1740	Thu	8116	124 1 7730 80 28242	CW	(FN)
M12	24-10-2013	1800	Thu	10343	124 1 3170 119 72953	CW	(FN)
M12	24-10-2013	1820	Thu	9264	124 1 3170 119 72953	CW	(FN)
M12	24-10-2013	1840	Thu	8116	124 1 3170 119 72953	CW	(FN)
M12	24-10-2013	1900	Thu	9176	257 1 6213 68 92379	CW	(FN)
M12	24-10-2013	1920	Thu	7931	257 1 6213 68 92379	CW	(FN)
M12	24-10-2013	1940	Thu	6904	257 1 6213 68 92379	CW	(FN)
M12	26-10-2013	1310	Sat	12214	282 282 282 000	CW	(FN)
M12	26-10-2013	1310	Sat	12214	282 282 282 000	CW	(MPJ)
M12	26-10-2013	1330	Sat	10814	282 282 282 000	CW	(FN)
M12	26-10-2013	2110	Sat	10269	229 1 3455 89 03943	CW	(FN)
M12	26-10-2013	2130	Sat	9269	229 1 3455 89 03943	CW	(FN)
M12	26-10-2013	2150	Sat	7969	229 1 3455 89 03943	CW	(FN)
M12	28-10-2013	1340	Mon	7964	839 1 7776 193 40795 74400 37892 52205 96875 ... 82224 44545 33063 58458 40013 000 000	CW	(MPJ)
M12	28-10-2013	1720	Mon	7931	257 1 1723 79 15929 11689 42431 20455 93361 ... 93456 22815 66063 52625 97166 000 000	CW	(MPJ)
M12	29-10-2013	1830	Tue	10343	124 1 2548 57 21684	CW	(FN)
M12	29-10-2013	1830	Tue	10343	124 1 2548 57 21684	CW	(FN)

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M12	29-10-2013	1850	Tue	9264	124 1 2548 57 21684	CW	(FN)
M12	29-10-2013	1850	Tue	9264	124 1 2548 57 21684	CW	(FN)
M12	29-10-2013	1850	Tue	9264	124 1 2548 57 21684 88594 09089 35784 70234 ...61761 95293 14401 19657 38286 000 000	CW	(MPJ)
M12	29-10-2013	1910	Tue	8116	124 1 2548 57 21684	CW	(FN)
M12	29-10-2013	1910	Tue	8116	124 1 2548 57 21684	CW	(FN)
M12	30-10-2013	1500	Wed	9223	839 1 7776 193 40795	CW	(FN)
M12	30-10-2013	1500	Wed	9223	839 1 7776 193 40795 74400 37892 52205 96975 ... 82224 44545 33063 58458 40013 000 000	CW	(MPJ)
M12	30-10-2013	1520	Wed	8193	839 1 7776 193 40795	CW	(FN)
M12	30-10-2013	1540	Wed	7463	839 1 7776 193 40795	CW	(FN)
M12	30-10-2013	1700	Wed	8047	463 1 4060 59 48378	CW	(FN)
M12	30-10-2013	1720	Wed	6802	463 1 4060 59 48378	CW	(FN)
M12	30-10-2013	1740	Wed	5788	463 1 4060 59 48378	CW	(FN)
M12	30-10-2013	1740	Wed	5788	463 1 4060 59 48378 79964 59932 19608 08665 ... 06210 58352 42630 40285 96220 000 000	CW	(MPJ)
M12	30-10-2013	1830	Wed	11435	938 1 2108 52 95792	CW	(FN)
M12	30-10-2013	1830	Wed	11435	938 1 2108 52 95792 50531 93753 41806 06930 42478 65621 ... 65621 65371 22642 61921 87520 000 000	CW	(MPJ)
M12	30-10-2013	1850	Wed	10598	938 1 2108 52 95792	CW	(FN)
M12	30-10-2013	1910	Wed	9327	938 1 2108 52 95792	CW	(FN)
M12	31-10-2013	1350	Thu	9214	282 1 9595 129 58821 06810 22997 85070 93064 ... 24179 49504 34366 14362 12398 000 000	CW	(MPJ)
M12	31-10-2013	1700	Thu	9176	257 1 3703 74 66951 99175 77676 45654 90258 ... 21938 42463 14299 69665 25090 000 000	CW	(MPJ)
M12	31-10-2013	1744	Thu	8116	i.p. 20024 78..1 48621 .6804 54121 218.6 15214 (Cont'd) 000 000	CW	(JPL-RUS)
M12	31-10-2013	1920	Thu	7931	257 1 4611 44 24857 23489 76058 21543 25013 ... 33235 75428 49971 90200 70503 000 000	CW	(MPJ)
M14	14-10-2013	1100	Mon	14721	262 etc. 480 480 137 137 = = 62616 90288 28671 99504 67462 97002 22609 10788 30563 39589 ... 82213 54038 87349 23104 64183 87799 55288 56418 88605 47895 = = 480 480 137 137 00000	CW	(JPL-Sib)
M14	14-10-2013	1116	Mon	14721	i.p. 44557 44557 18489 41046 07653 61616 20072 00586 94564 97604 84031 24768 58772 420.9 042 26832 95861 94845 26162 25784 69395 91437 29025 16072 83029 82213 54038 87349 23104 64183 87799 55288 56418 88605 57895 = = 480 480 137 137 00000	CW	(JPL-FNL)
M14	21-10-2013	0400	Mon	6884	834 834 834 920 920 16 16 = = (repeated 5L groups) = = 920 920 16 16 TTTTT	CW	(PPA)
M14	21-10-2013	1905	Mon	8115	i.p. 32594 = 258 97 00000	CW	(FMB)
M14	21-10-2013	1930	Mon	5380	i.p. 32594 = 258 97 00000	CW	(FMB)
M14	21-10-2013	1930	Mon	5414	975 413 92 = 60006 31163...58290 12792 = 413 97 00000	CW	(FMB)
M14	22-10-2013	0402	Tue	5380	441 258 97 = 95494...32594 = 258 97 00000	CW	(FMB)
M21	1-10-2013	2004	Tue	5202	=990005??0?????	CW	(JPL-FNL)
M21	1-10-2013	2007	Tue	4905	=991004??8?????	CW	(JPL-FNL)
M21	1-10-2013	2012	Tue	4628	=991009??8?????	CW	(JPL-FNL)
M21	7-10-2013	0915	Mon	6910	=11502181563614 =11507181571113 =11508181571514 =991315??8?????	CW	(Gwr)
M21	8-10-2013	1903	Tue	5201	Russian air defence =9923T3??T?????	CW	(PPA)
M21	20-10-2013	2008	Sun	4628	=990008??8?????	CW	(MPJ)
M21	20-10-2013	2036	Sun	5201	Russian Air Defence =990036??0?????	CW	(MPJ)
M21	21-10-2013	0359	Mon	6911.5	Russian air defence =99T759??8?????	CW	(PPA)
M21	26-10-2013	1918	Sat	5201	Russian air defence =992318??T?????	CW	(PPA)
M22	8-10-2013	2129	Tue	6607	VVV DE 4XZ 4XZ then into coded text	CW	(LG2)
M22	21-10-2013	1932	Mon	4331	4XZ: Navy Haifa ISR VVV DE 4XZ 4XZ //	CW	(PPA)
M23	2-10-2013	1000	Wed	11530	333	CW	(FMB)
M23	11-10-2013	1506	Fri	8030	i.p. 246 repeated. Stopped at 1515 with a dash	CW	(JPL-FNL)

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M23	11-10-2013	1609	Fri	12170	555	CW	(FMB)
M23	17-10-2013	1600	Thu	12170	222	CW	(FMB)
M24	21-10-2013	1940	Mon	5380	repeated 5F groups ending = = 413 413 92 92 TTTTT	CW	(PPA)
M24	21-10-2013	1940	Mon	5414	repeated 5F groups ending = = 258 258 97 97 TTTTT	CW	(PPA)
M32	1-10-2013	0744	Tue	7963	Z6OI Z6OI Z6TOI DE 6ELN 6ELN QTC	CW	(LG2)
M32	2-10-2013	0711	Wed	6822	DASI: Russian Mil	CW	(BCI)
M32	7-10-2013	1957	Mon	8132.5	Russian mil. IAAR DE P7PN QSA3	CW	(PPA)
M32	9-10-2013	1446	Wed	12011	RDL 62660 08740 62660 08740 ... K. 500 Hz unusual shift.	CW	(MPJ)
M32	11-10-2013	1448	Fri	22864	RDL: Russian Strategic Bcast. 28-group routine message ends with ... 46410 18035 22271 40363 11028 K. Another of 47 groups at 15:06.	CW	(MPJ)
M32	15-10-2013	1655	Tue	6779	2BCU: Russian mil clg 2V9K and E1WK	CW	(PPA)
M32	16-10-2013	0800	Wed	6945	XXX XXX WEGI WEGI 56745 BEABZhA 0800 9666 K	CW	(Gwr)
M32	20-10-2013	1952	Sun	7963	3CIL: Russian Mil NCS. Comms check with at least VP7M, SUPO and 5JZL who respond on QSX freq 6958 kHz	CW	(MPJ)
M32	21-10-2013	0402	Mon	6968	YTKS: Military outstation RUS 8OA7 DE YTKS QSA?	CW	(PPA)
M32	21-10-2013	0403	Mon	6956	RMW46: Netcontrol clg RGR49, RGR89, RGR90, RGR91, RFH46, RGR93, RGR94, RGR95, RGR96, RGR97, RGR98, RDQ91 for ZAA	CW	(PPA)
M32	21-10-2013	0405	Mon	6968	VIID: Military outstation RUS 8OA7 DE VIID QSA?	CW	(PPA)
M32	21-10-2013	0407	Mon	6963	AP9E: Russian mil. ZY8M DE AP9E QTC 887 26 21 0750 887 = 963 = (5L Msg)	CW	(PPA)
M32	21-10-2013	0410	Mon	6978.5	JFHD: Russian mil. BUKV DE JFHD	CW	(PPA)
M32	21-10-2013	0438	Mon	6821.5	PWZW: unid station 04:38 A1A/CW VVV PWZW PWZW =	CW	(PPA)
M32	21-10-2013	1703	Mon	6928	QO4U: Russian mil. MLET DE QO4U K	CW	(PPA)
M32	21-10-2013	1917	Mon	3807	4WCI: Russian mil. Duplex radio check with stations ZJGH, 1NNV and P6ZA	CW	(PPA)
M32	21-10-2013	1927	Mon	3866	LDBO: Russian military RUS 19:27 A1A/CW LDBO LDBO QTC 90 24 21 2123 290 = ZWL618 =	CW	(PPA)
M32	22-10-2013	1531	Tue	7963	Russian Mil NCS: SMP1 comms check with TOTK, LNC9, IIZZ, 1VLH and others. Only TOTK heard responding weakly on QSX 6958.	CW	(MPJ)
M32	22-10-2013	1603	Tue	6831	Russian Mil NCS: THZK de E76Z QYT6 K. THZK responds on QSX freq 7512 kHz: E76Z de THZK QRJ3 QYT6 K. E76Z: QRJ3 QJG QYT6 K	CW	(MPJ)
M32	23-10-2013	0440	Wed	5705	Russian mil: XGWE DE LVN4 ZKC ZOW	CW	(RHA)
M32	23-10-2013	1647	Wed	5454.5	Russian mil. OFHD DE GO2K QTC1 ZKM?	CW	(PPA)
M32	23-10-2013	1745	Wed	7841	Russian mil. QEVF clg FMFH QBE	CW	(PPA)
M32	23-10-2013	1810	Wed	7824	Russian mil. ZMFX DE AQYN AR	CW	(PPA)
M32	24-10-2013	0403	Thu	5426	Russian mil. 7SXO DE 4I4T	CW	(PPA)
M32	24-10-2013	0405	Thu	5426	Russian mil. 7SXO DE MGZO	CW	(PPA)
M32	24-10-2013	0409	Thu	5423	Russian mil. YCSK DE T1ZL QTC 496 27 24 0808 496 = 532 = 5L message	CW	(PPA)
M32	24-10-2013	1353	Thu	5744	2GWK R 097 K. HQLQ R 097 K. WUSX R 097 K. WUSX R 097 K. ZOLN DE CKYS RPT BN 10 20 K	CW	(JPL-FNL)
M32	24-10-2013	1358	Thu	5434	S8OA DE ZOLN K. S8OA DE ZOLN K. V8OA DE ZOLN K. DX5E DE ZOLN K. R K	CW	(JPL-FNL)
M32	25-10-2013	1349	Fri	8118	Russian Mil Bcast. Ends 30-group message ... ARWQQ Y▪m–R WQB–U CHPQW WTPEP 132 +	CW	(MPJ)
M32	26-10-2013	1832	Sat	7963	Russian mil. SMP1: Russian mil. net control clg CMAI EU2Q MU2Q and QNTQ	CW	(PPA)
M32	28-10-2013	1203	Mon	8646	FZME DE E4DY QTC K. CHJA DE E4DY QTC K	CW	(JPL-Sib)
M32	29-10-2013	1132	Tue	13034	9DW7 529 2. 29 1525 539 = 611 = 55555 32EEEEE = 55555 34909 75370 49596 56753 (ContÆd)	CW	(JPL-Sib)
M32	29-10-2013	1248	Tue	10535	XXX XXX RGT77 RGT77 70421 55527 WANDV 3641 9950 WANDEMXER 1885 8208 KAMÆOATSKIJ 4480 1003 K	CW	(JPL-FNL)
M32	29-10-2013	1250	Tue	10535	RDL 73834 55869 73834 55869 73834 55869 K	CW	(JPL-FNL)
M32	29-10-2013	1348	Tue	5282	AEIX DE V8IB K R K	CW	(JPL-FNL)
M32	29-10-2013	1349	Tue	6406	647 03242 61647 03242 61647 03242 K. (Into digital mode and back to morse) RDL 90818 05943 90818 05943 90818 05943 K	CW	(JPL-FNL)

code	date	UTC	day	freq	remarks	mode	ctrb
M32a	30-9-2013	0440		6769	Russian navy: RHL80 OK QYI RHL80 OK QSX 2428 QWH 3687 K	CW	(BCI)
M32a	1-10-2013	0734	Tue	10795	RJE56 RJE56 RJE56 DE RJD69 RJD69 QSA4 K	CW	(LG2)
M32a	1-10-2013	0829	Tue	17615	RCVmsg to RIP90 NAWIP 032 2041 KARTY 32206 GRECI–STRELXBY	CW	(LG2)
M32a	1-10-2013	1920	Tue	5224	RGZ59 Nikolei Flitchenkovwkg RHN85	CW	(LG2)
M32a	1-10-2013	2103	Tue	5224	RCV QRZ? K	CW	(LG2)
M32a	2-10-2013	0719	Wed	16240	Russian navy RJE56 wkg RJE67	CW	(BCI)
M32a	8-10-2013	1756	Tue	10543	RHV42 DE RCV QYT4	CW	(PPA)
M32a	10-10-2013	1653	Thu	8345	RMP DE RLA88 QSA1 QRV	CW	(PPA)
M32a	10-10-2013	1907	Thu	7664	RIR96 DE RIW QWH 12056 QYT4 QSA?	CW	(PPA)
M32a	12-10-2013	1739	Sat	11139	RDL: Navy Moscow 5F message in F1A into XXX XXX and F1B crypto messages	CW	(PPA)
M32a	15-10-2013	1925	Tue	7467	RIT: Severomorsk Naval Radio "RMRV de RIT QSA2 QRV K"	CW	(MPJ)
M32a	25-10-2013	0340	Fri	5224	Navy Sevastopol RIP90 DE RCV	CW	(PPA)
M32a	26-10-2013	1853	Sat	8014	RHQ33 lengthy Cyrillic 5L message to RCV	CW	(PPA)
M32b	23-10-2013	1800	Wed	7980	RJC38: Naval air force wkg RJF94	CW	(PPA)
M32b	23-10-2013	1800	Wed	7980	RJF94: Russian Naval Aviation Transport wkg RCB, RJC38 and RJC48	CW	(PPA)
M32b	23-10-2013	1801	Wed	7980	RJC48: Naval air force wkg RJF94	CW	(PPA)
M32b	26-10-2013	1700	Sat	7860	Russian Naval Air. RBL71 de RAL2 QSA? K. QSA4 ZNN SK	CW	(MPJ)
M32c	14-10-2013	1900	Mon	8162	Tu-95MS Bear H network. W-markers at 1900, 1920, 1940 UTC	CW	(Tom)
M32c	22-10-2013	1541	Tue	6978.5	Russian Strategic Air Bcast: REA4 REA4 = 22150 99900 21140 22212 87460 52805 11038 21056 70122 83530 = REA4 K.	CW	(MPJ)
M32c	24-10-2013	1233	Thu	9027	QZ6Y DE G7TY K @1233Z	CW	(Tom)
M32c	24-10-2013	1243	Thu	9027	4ASU DE G7TY K. 4ASU DE G7TY BLIND ?51 8??	CW	(Tom)
M32c	25-10-2013	0403	Fri	8162	Russian air force W-marker for two minutes	CW	(PPA)
M32c	26-10-2013	0600	Sat	8162	Russian Air Force. W-markers	CW	(Tom)
M32c	26-10-2013	0603	Sat	9027	Russian Air Force. 4ASU DE G7TY K. 4ASU DE G7TY K	CW	(Tom)
M32c	28-10-2013	1220	Mon	8162	W-marker at 1220 and 1240 UTC	CW	(Tom)
M42	1-10-2013	0150	Tue	16320	Russian Intel. Msgs on links 29750, 13366, 32826, 41018	FSK 200/1000	(Dan)
M42	1-10-2013	0230	Tue	14880	Russian Intel. Msgs on links 13362, 14429, 41018	FSK 200/1000	(Dan)
M42	1-10-2013	0425	Tue	3740	RDP4: Russian Gov. Kirov Kaluga	RUS-ARQ 100/500	(BCI)
M42	1-10-2013	0737	Tue	14955.5	Russian diplo	CROWD-36	(BCI)
M42	1-10-2013	1710	Tue	9174	Russian Intel	FSK 200/1000	(FMB)
M42	1-10-2013	1750	Tue	7850	Russian diplo	CROWD-36	(PPA)
M42	2-10-2013	0150	Wed	16320	Russian Intel. Msgs on links 13876, 57471, 41019, 41018, 29371, 53390	FSK 200/1000	(Dan)
M42	2-10-2013	0230	Wed	14880	Russian Intel. Msgs on links 13876, 04120, 41016, 41018	FSK 200/1000	(Dan)
M42	2-10-2013	0425	Wed	3300	RUU76: Russian Gov. St Peterburg	RUS-ARQ 100/500	(BCI)
M42	2-10-2013	0453	Wed	5185	RBW: Russian Gov. Tambov	RUS-ARQ 100/500	(BCI)
M42	2-10-2013	1015	Wed	11129	Russian Intel	FSK 200/1000	(FMB)
M42	2-10-2013	1025	Wed	9082	Russian Intel	FSK 200/1000	(FMB)
M42	3-10-2013	0150	Thu	16320	Russian Intel. Msgs on links 41018, 16708	FSK 200/1000	(Dan)
M42	3-10-2013	0230	Thu	14880	Russian Intel. Msgs on links 58947, 41018	FSK 200/1000	(Dan)
M42	3-10-2013	1501	Thu	19844.5	Russian diplo	CROWD-36	(BCI)
M42	3-10-2013	1900	Thu	8007	Russian Gov/Intel. 00000++++++++++162)5761	FSK 200/1000	(AB)
M42	3-10-2013	1900	Thu	8007	Russian Intel 6 40	FSK 200/500	(HFD)
M42	3-10-2013	1910	Thu	5844	Russian Gov/Intel. 00000++++++++++162)5761	FSK 200/1000	(AB)
M42	3-10-2013	1910	Thu	5844	Russian Intel 6 40	FSK 200/500	(HFD)
M42	3-10-2013	1920	Thu	4633	Russian Gov/Intel. 00000++++++++++162)5761	FSK 200/1000	(AB)
M42	3-10-2013	1920	Thu	4633	Russian Intel 6 40	FSK 200/500	(HFD)
M42	4-10-2013	0150	Fri	16320	Russian Intel. Msgs on links 41018, 16708	FSK 200/1000	(Dan)
M42	4-10-2013	0230	Fri	14880	Russian Intel.	FSK 200/1000	(Dan)
M42	7-10-2013	0150	Mon	16320	Russian Intel. Msgs on links 13360, 13366, 41145, 00383, 61597	FSK 200/1000	(Dan)
M42	7-10-2013	0230	Mon	14880	Russian Intel. Msgs on links 12326, 13330, 13366, 41018, 40986, 64068	FSK 200/1000	(Dan)

code	date	UTC	day	freq	remarks	mode	ctrb
M42	8-10-2013	0150	Tue	16320	Russian Intel. Msgs on links 49253, 28186, 26815, 17398, 41082	FSK 200/1000	(Dan)
M42	8-10-2013	0230	Tue	14880	Russian Intel. Msgs on links 49397, 41008	FSK 200/1000	(Dan)
M42	8-10-2013	1650	Tue	13426	Russian Intel	FSK 200/1000	(FMB)
M42	8-10-2013	1700	Tue	11116	Russian Intel	FSK 200/1000	(FMB)
M42	8-10-2013	2100	Tue	7727	Russian Intel	FSK 200/1000	(FMB)
M42	8-10-2013	2110	Tue	6926	Russian Intel	FSK 200/1000	(FMB)
M42	8-10-2013	2120	Tue	4631	Russian Intel	FSK 200/1000	(FMB)
M42	9-10-2013	0150	Wed	16320	Russian Intel. Msgs on links 32380, 41086, 41018, 00058, 21625	FSK 200/1000	(Dan)
M42	9-10-2013	0230	Wed	14880	Russian Intel. Msgs on links 49397, 41008	FSK 200/1000	(Dan)
M42	10-10-2013	0150	Thu	16320	Russian Intel. Msgs on links 13366, 17240, 10260	FSK 200/1000	(Dan)
M42	10-10-2013	0230	Thu	14880	Russian Intel. Msgs on links 05174, 41082, 41018, 37311, 17548, 00058, 23912	FSK 200/1000	(Dan)
M42	11-10-2013	0150	Fri	16320	Russian Intel. Msgs on links 05172, 26879, 41086, 22677, 57642, 25774, 41138	FSK 200/1000	(Dan)
M42	11-10-2013	0230	Fri	14880	Russian Intel. Msgs on links 41018, 40328, 41018, 41530, 01845	FSK 200/1000	(Dan)
M42	11-10-2013	1726	Fri	10688	Russian Intel	FSK 200/1000	(FMB)
M42	12-10-2013	1200	Sat	19526	Russian Intel 6 54	FSK 200/500	(HFD)
M42	12-10-2013	1210	Sat	17463	Russian Intel 6 54	FSK 200/500	(HFD)
M42	12-10-2013	1220	Sat	15824	Russian Intel 6 54	FSK 200/500	(HFD)
M42	13-10-2013	0816	Sun	14770	Russian Intel	FSK 200/1000	(FMB)
M42	13-10-2013	0820	Sun	12197	Russian Intel	FSK 200/1000	(FMB)
M42	13-10-2013	0910	Sun	16268	Russian Intel	FSK 200/1000	(FMB)
M42	13-10-2013	0920	Sun	14486	Russian Intel	FSK 200/1000	(FMB)
M42	14-10-2013	0150	Mon	16320	Russian Intel. Msgs on links 13876, 57407, 47308	FSK 200/1000	(Dan)
M42	14-10-2013	0230	Mon	14880	Russian Intel. Msgs on links 40976, 00030, 00062	FSK 200/1000	(Dan)
M42	17-10-2013	0150	Thu	16320	Russian Intel. Msgs on links 13366, 41080, 61822, 41018, 00026	FSK 200/1000	(Dan)
M42	17-10-2013	0230	Thu	14880	Russian Intel. Msgs on links 41018, 41016, 26593, 45070	FSK 200/1000	(Dan)
M42	18-10-2013	0150	Fri	16320	Russian Intel. Msgs on links 13366, 13366, 41018, 26849, 18497, 41082, 41018	FSK 200/1000	(Dan)
M42	18-10-2013	0230	Fri	14880	Russian Intel. Msgs on links 13366, 00058, 41018, 41147, 00048	FSK 200/1000	(Dan)
M42	18-10-2013	1710	Fri	7992	Russian Intel	FSK 200/1000	(FMB)
M42	18-10-2013	1720	Fri	10688	Russian Intel	FSK 200/1000	(FMB)
M42	20-10-2013	1538	Sun	16305	Russian Intel.	FSK 200/1000	(BCI)
M42	21-10-2013	0150	Mon	16320	Russian Intel. Msgs on links 41018, 03021	FSK 200/1000	(Dan)
M42	21-10-2013	0230	Mon	14880	Russian Intel. Msgs on links 41018, 61498, 57402, 04152	FSK 200/1000	(Dan)
M42	21-10-2013	1548	Mon	11438	Russian diplo	CROWD-36	(FMB)
M42	22-10-2013	0150	Tue	16320	Russian Intel. Msgs on links 08341, 41146, 41018, 61599, 13063, 61498	FSK 200/1000	(Dan)
M42	22-10-2013	0230	Tue	14880	Russian Intel. Msgs on links 08228, 12037, 06016, 41018	FSK 200/1000	(Dan)
M42	23-10-2013	0150	Wed	16320	Russian Intel. Msgs on links 05136, 57457, 61627	FSK 200/1000	(Dan)
M42	23-10-2013	0230	Wed	14880	Russian Intel. Msgs on links 13366, 41018, 09019	FSK 200/1000	(Dan)
M42	24-10-2013	0150	Thu	16320	Russian Intel. Msgs on links 61498, 61823, 32739, 41018	FSK 200/1000	(Dan)
M42	24-10-2013	0230	Thu	14880	Russian Intel. Msgs on links 12310, 04288, 15329, 41018	FSK 200/1000	(Dan)
M42	24-10-2013	0416	Thu	5440	RWD59: Russian PtP, Moscow	RUS-ARQ 100/500	(PPA)
M42	25-10-2013	0347	Fri	5225	RVR39: Russian PtP station wkg RTW54	RUS-ARQ 100/500	(PPA)
M42	25-10-2013	0646	Fri	7813	PRAT: Russian Gov. Crypto message to LKDW into short duplex opchat: "cfm qru? k ... zvp k" then "bk qrv k rpt k ... r 11t t652 k nil sk"	Baudot 50/500	(TJ)
M42	29-10-2013	0150	Tue	16320	Russian Intel. Msgs on links 13366, 13374, 41018, 41023	FSK 200/1000	(Dan)
M42	29-10-2013	0230	Tue	14880	Russian Intel. Msgs on links 08242, 32826, 01875, 03084, 41018, 00117, 15381, 53277	FSK 200/1000	(Dan)
M42	30-10-2013	0150	Wed	16320	Russian Intel. Msgs on links 13366, 09270, 57640, 41018, 41023, 44449, 41343	FSK 200/1000	(Dan)

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M42	30-10-2013	0230	Wed	14880	Russian Intel. Msgs on links 18773	FSK 200/1000	(Dan)
M42	31-10-2013	0150	Thu	16320	Russian Intel. Msgs on links 41018, 33210	FSK 200/1000	(Dan)
M42	31-10-2013	0230	Thu	14880	Russian Intel. Msgs on links 13366, 08250, 41018	FSK 200/1000	(Dan)
M42a	5-10-2013	1201	Sat	10814	GRU HFDF station: NW – Es 65637 – 65736 – 44379 K – – – K	CW	(MPJ)
M42a	11-10-2013	1735	Fri	11082	GRU hfdf net RUS VVVVVVV 3K	CW	(PPA)
M45	10-10-2013	1802	Thu	4555.5	555 892 33 = = 37481 21433 35031 75408 86765 ... 92659 42073 82939 21287 80526 = = 892 33. Errors. //4557.2//4558.4//4957.2	CW	(MPJ)
M45	15-10-2013	1802	Tue	4956.13	555 892 32 = = 37481 21423 35031 ... 92650 42073 82939 21287 80525 = = 892 33. Group count discrepancy. No final zeros. //4957.25//4556.12//4557.24	CW	(MPJ)
M45	24-10-2013	1817	Thu	4555	In progress ... (ends) 92650 42073 82939 21287 80526 = = 828_1 33 000	MCW	(MPJ)
M45	29-10-2013	1806	Tue	4955	892 33 = = 37481 21433 35031 75408 86765 ... 92650 42073 82939 21287 80526 892 33 000	MCW	(MPJ)
M51	1-10-2013	0927	Tue	6825	FAV228eme Regiment des Transmissions F	CW	(LG2)
M51	3-10-2013	2018	Thu	5053	5LGs= HVFSS PFNXO GIVJA BT NR TGA O 12:14:15 1985 =	CW	(LG2)
M51	7-10-2013	1529	Mon	10975	i.p.	CW	(FMB)
M51	8-10-2013	1812	Tue	5453	i.p.	CW	(FMB)
M51	8-10-2013	1916	Tue	5453	5L msg at 20 WPM after nr 71 O 08 21:15:41 1985 =	CW	(PPA)
M51	11-10-2013	1319	Fri	11617	i.p.	CW	(FMB)
M51	13-10-2013	1252	Sun	10609	i.p.	CW	(FMB)
M51	13-10-2013	1358	Sun	10609.1	French military intel Favieres 5L message	CW	(PPA)
M51	19-10-2013	1359	Sat	9213	Nr 44 O 15 15:58:08 1985 BT HPIWY MGGYE PWFTB LNPIU KNVWY ...	CW	(MPJ)
M51	19-10-2013	1507	Sat	9256	i.p.	CW	(FMB)
M51	21-10-2013	0708	Mon	6825	5 character groups in 10 WPM CW	CW	(PPA)
M51	21-10-2013	1722	Mon	9213	i.p.	CW	(FMB)
M51	30-10-2013	1455	Wed	9191	BT NR 57 O 3 DMDA ORRLA TOLIV GGGZX QRHVU TGBIO (preamble faulty) ... NR 60 O 30 16:18:17 1985 BT QHJBP DHIWR EIQRI PLEYR MDRAD ...	CW	(MPJ)
M89	1-10-2013	0242	Tue	8110	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	1-10-2013	0920	Tue	6840	VVV (x3) Q2M (x3) DE NY(x2) (R5) //10640	CW	(JPL)
M89	1-10-2013	0920	Tue	10640	VVV (x3) Q2M (x3) DE NY(x2) (R5) //6840	CW	(JPL)
M89	1-10-2013	0927	Tue	8750	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	1-10-2013	0929	Tue	7582	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	1-10-2013	0929	Tue	8110	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	1-10-2013	0930	Tue	8040	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	1-10-2013	0932	Tue	5588	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	1-10-2013	0943	Tue	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	1-10-2013	1215	Tue	5555	In tfc: VV = A463 75TD NUAD N534 T67A U453 6A7D TNU3 A45T 6ND7 (see N&O 193)	CW	(JPL)
M89	1-10-2013	1224	Tue	5588	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	1-10-2013	1230	Tue	7582	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	1-10-2013	1237	Tue	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	1-10-2013	1239	Tue	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	1-10-2013	1240	Tue	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	1-10-2013	1536	Tue	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	1-10-2013	1540	Tue	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	1-10-2013	1540	Tue	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	1-10-2013	1541	Tue	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	1-10-2013	1542	Tue	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	1-10-2013	1606	Tue	4039	In tfc: NTUA A473 47D. UN.A 563. 73TA 4U37 (see N&O 193)	CW	(JPL)
M89	1-10-2013	1900	Tue	7602	v DKG6 DKG6 DKG6 de 3A7D 3A7D	CW	(FN)
M89	1-10-2013	1935	Tue	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	1-10-2013	1936	Tue	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	1-10-2013	1936	Tue	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)

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M89	1-10-2013	1937	Tue	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	1-10-2013	1937	Tue	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	1-10-2013	1939	Tue	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	1-10-2013	1940	Tue	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	1-10-2013	1940	Tue	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	2-10-2013	1006	Wed	5230	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	2-10-2013	1006	Wed	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	2-10-2013	1006	Wed	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	2-10-2013	1007	Wed	6773	V H2FL (x3) DE DRV8 (x2) (Cont'd) //8040	CW	(JPL)
M89	2-10-2013	1007	Wed	8040	V H2FL (x3) DE DRV8 (x2) (Cont'd) //6773	CW	(JPL)
M89	2-10-2013	1010	Wed	7582	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	2-10-2013	1010	Wed	8110	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	2-10-2013	1012	Wed	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	2-10-2013	1012	Wed	10210	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	2-10-2013	1013	Wed	5588	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	2-10-2013	1020	Wed	6840	VVV (x3) Q2M (x3) DE NY(x2) (R5) //10640	CW	(JPL)
M89	2-10-2013	1020	Wed	10640	VVV (x3) Q2M (x3) DE NY(x2) (R5) //6840	CW	(JPL)
M89	2-10-2013	1437	Wed	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	2-10-2013	1438	Wed	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	2-10-2013	1438	Wed	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	2-10-2013	1440	Wed	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	2-10-2013	1440	Wed	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4512	CW	(JPL)
M89	2-10-2013	1858	Wed	5230	v DKG6 DKG6 DKG6 de 3A7D 3A7D	CW	(FN)
M89	2-10-2013	2015	Wed	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	2-10-2013	2016	Wed	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	2-10-2013	2016	Wed	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	2-10-2013	2017	Wed	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	2-10-2013	2017	Wed	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4512	CW	(JPL)
M89	2-10-2013	2018	Wed	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	2-10-2013	2019	Wed	5230	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	2-10-2013	2019	Wed	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	2-10-2013	2020	Wed	4860	VVV (x3) Q2M (x3) DE NY(x2) (R5) //6840	CW	(JPL)
M89	2-10-2013	2020	Wed	6840	VVV (x3) Q2M (x3) DE NY(x2) (R5) //4860	CW	(JPL)
M89	2-10-2013	2156	Wed	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	2-10-2013	2157	Wed	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	2-10-2013	2157	Wed	4512	DRV8 in tfc: UGT COMM BT 91./....89/1../..AR (see N&O 193) //3797	CW	(JPL)
M89	2-10-2013	2203	Wed	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	2-10-2013	2203	Wed	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4512	CW	(JPL)
M89	2-10-2013	2204	Wed	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	2-10-2013	2205	Wed	5230	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	3-10-2013	1103	Thu	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3-10-2013	1107	Thu	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	3-10-2013	1107	Thu	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	3-10-2013	1109	Thu	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	3-10-2013	1109	Thu	8750	V YUQW (x3) DE ASDF (x2) (Cont'd) //11210	CW	(JPL)
M89	3-10-2013	1109	Thu	10210	V YUQW (x3) DE ASDF (x2) (Cont'd) //8750	CW	(JPL)
M89	3-10-2013	1111	Thu	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3-10-2013	1111	Thu	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3-10-2013	1113	Thu	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	3-10-2013	1113	Thu	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	3-10-2013	1115	Thu	5555	In chat/tfc: QSA 2 .. 05 05 QT... (see N&O 193)	CW	(JPL)
M89	3-10-2013	1455	Thu	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	3-10-2013	1513	Thu	6666	In chat/tfc: 4AN3 UTA5 7476 TU5T (see N&O 193)	CW	(JPL)
M89	3-10-2013	1807	Thu	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	3-10-2013	1807	Thu	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)

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M89	3-10-2013	1819	Thu	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	3-10-2013	1820	Thu	4860	VVV (x3) Q2M (x3) DE NY(x2) (R5) //6840	CW	(JPL)
M89	3-10-2013	1820	Thu	6840	VVV (x3) Q2M (x3) DE NY(x2) (R5) //4860	CW	(JPL)
M89	3-10-2013	1826	Thu	7892	In chat/tfc: D3AN A5.. 305 HR NR 305 NIL SK NIL	CW	(JPL)
M89	3-10-2013	1850	Thu	4225	In tfc: A75U NA45 6A6D 7NA3 7A7D 6553 (see N&O 193)	CW	(JPL)
M89	3-10-2013	1857	Thu	4209	In tfc: 3343 TU4T 77T. N3.5 DUN7 6NDA 7U4D (see N&O 193)	CW	(JPL)
M89	3-10-2013	1945	Thu	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	3-10-2013	1945	Thu	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	3-10-2013	1948	Thu	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3-10-2013	1949	Thu	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3-10-2013	1949	Thu	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3-10-2013	1950	Thu	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	3-10-2013	1952	Thu	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	3-10-2013	1952	Thu	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3-10-2013	2137	Thu	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	3-10-2013	2138	Thu	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	3-10-2013	2138	Thu	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	3-10-2013	2139	Thu	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	3-10-2013	2139	Thu	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	3-10-2013	2140	Thu	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	3-10-2013	2140	Thu	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	3-10-2013	2142	Thu	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	3-10-2013	2202	Thu	6773	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	4-10-2013	0013	Fri	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	4-10-2013	0013	Fri	8110	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	4-10-2013	0016	Fri	6773	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	4-10-2013	0018	Fri	8750	V YUQW (x3) DE ASDF (x2) (Cont'd) //11210	CW	(JPL)
M89	4-10-2013	0018	Fri	10210	V YUQW (x3) DE ASDF (x2) (Cont'd) //8750	CW	(JPL)
M89	4-10-2013	0020	Fri	4860	VVV (x3) Q2M (x3) DE NY(x2) (R5) //6840	CW	(JPL)
M89	4-10-2013	0020	Fri	6840	VVV (x3) Q2M (x3) DE NY(x2) (R5) //4860	CW	(JPL)
M89	4-10-2013	0938	Fri	8750	V YUQW (x3) DE ASDF (x2) (Cont'd) //11210	CW	(JPL)
M89	4-10-2013	0938	Fri	10210	V YUQW (x3) DE ASDF (x2) (Cont'd) //8750	CW	(JPL)
M89	4-10-2013	0939	Fri	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	4-10-2013	0941	Fri	6773	V H2FL (x3) DE DRV8 (x2) (Cont'd) //8040	CW	(JPL)
M89	4-10-2013	0941	Fri	8040	V H2FL (x3) DE DRV8 (x2) (Cont'd) //6773	CW	(JPL)
M89	4-10-2013	0942	Fri	7582	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	4-10-2013	0942	Fri	8110	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	4-10-2013	0945	Fri	5588	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4-10-2013	1302	Fri	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4-10-2013	1304	Fri	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4-10-2013	1304	Fri	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	4-10-2013	1306	Fri	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	4-10-2013	1306	Fri	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	4-10-2013	1307	Fri	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	4-10-2013	1309	Fri	4225	QV5B into tfc: VV UGT COMM BT 2858/2140/G01/8398 (x2)	CW	(JPL)
M89	4-10-2013	1309	Fri	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4-10-2013	1320	Fri	4860	VVV (x3) Q2M (x3) DE NY(x2) (R5) //6840	CW	(JPL)
M89	4-10-2013	1320	Fri	6840	VVV (x3) Q2M (x3) DE NY(x2) (R5) //4860	CW	(JPL)
M89	4-10-2013	1340	Fri	6937	In tfc: NDU4 73ND U473 NT.. (ContÆd)	CW	(JPL)
M89	4-10-2013	1758	Fri	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	4-10-2013	1759	Fri	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	4-10-2013	1759	Fri	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	4-10-2013	1800	Fri	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	4-10-2013	1801	Fri	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	4-10-2013	1801	Fri	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	4-10-2013	1904	Fri	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)

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M89	4-10-2013	1904	Fri	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	5-10-2013	1435	Sat	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5-10-2013	1436	Sat	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	5-10-2013	1436	Sat	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	5-10-2013	1439	Sat	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	5-10-2013	1440	Sat	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5-10-2013	1440	Sat	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	5-10-2013	1442	Sat	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	5-10-2013	1442	Sat	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	5-10-2013	1626	Sat	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5-10-2013	1627	Sat	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	5-10-2013	1627	Sat	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	5-10-2013	1628	Sat	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	5-10-2013	1628	Sat	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	5-10-2013	1629	Sat	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5-10-2013	1629	Sat	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	5-10-2013	1630	Sat	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	5-10-2013	1630	Sat	5555	In tfc: 5T4N 5AT7 7A63 AUT7 A7A3 NU63 A3A5 (see N&O 193)	CW	(JPL)
M89	5-10-2013	2232	Sat	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	5-10-2013	2233	Sat	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	5-10-2013	2233	Sat	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	5-10-2013	2236	Sat	4474	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	5-10-2013	2238	Sat	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	5-10-2013	2238	Sat	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	5-10-2013	2239	Sat	6773	V H2FL (x3) DE DRV8 (x2) (Cont'd) //8040	CW	(JPL)
M89	5-10-2013	2239	Sat	8040	V H2FL (x3) DE DRV8 (x2) (Cont'd) //6773	CW	(JPL)
M89	5-10-2013	2242	Sat	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	6-10-2013	0117	Sun	7582	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	6-10-2013	0117	Sun	8110	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	6-10-2013	0118	Sun	10210	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	6-10-2013	0120	Sun	6840	VVV (x3) Q2M (x3) DE NY(x2) (R5) //10640	CW	(JPL)
M89	6-10-2013	0120	Sun	10640	VVV (x3) Q2M (x3) DE NY(x2) (R5) //6840	CW	(JPL)
M89	6-10-2013	0219	Sun	10210	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	6-10-2013	0220	Sun	6840	VVV (x3) Q2M (x3) DE NY(x2) (R5) //10640	CW	(JPL)
M89	6-10-2013	0220	Sun	10640	VVV (x3) Q2M (x3) DE NY(x2) (R5) //6840	CW	(JPL)
M89	6-10-2013	0226	Sun	7582	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	6-10-2013	0226	Sun	8110	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	6-10-2013	0239	Sun	7777	In tfc: U74T A6. UTN4 3T7A DN54 N77N (ContÆd) AR K. R 12W B753 K (see N&O 19	CW	(JPL)
M89	6-10-2013	0320	Sun	6840	VVV (x3) Q2M (x3) DE NY(x2) (R5) //10640	CW	(JPL)
M89	6-10-2013	0320	Sun	10640	VVV (x3) Q2M (x3) DE NY(x2) (R5) //6840	CW	(JPL)
M89	6-10-2013	0328	Sun	10210	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	6-10-2013	0329	Sun	7582	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	6-10-2013	0329	Sun	8110	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	6-10-2013	1157	Sun	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	6-10-2013	1208	Sun	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	6-10-2013	1210	Sun	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	6-10-2013	1210	Sun	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	6-10-2013	1212	Sun	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	6-10-2013	1212	Sun	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	6-10-2013	1213	Sun	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	6-10-2013	1216	Sun	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	6-10-2013	1220	Sun	4860	VVV (x3) Q2M (x3) DE NY(x2) (R5) //6840	CW	(JPL)
M89	6-10-2013	1220	Sun	6840	VVV (x3) Q2M (x3) DE NY(x2) (R5) //4860	CW	(JPL)
M89	6-10-2013	1733	Sun	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) // N/H	CW	(JPL)
M89	6-10-2013	1915	Sun	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)

code	date	UTC	day	freq	remarks	mode	ctrb
M89	6-10-2013	1916	Sun	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	6-10-2013	1916	Sun	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	6-10-2013	1917	Sun	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	6-10-2013	1917	Sun	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	6-10-2013	1918	Sun	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	6-10-2013	1918	Sun	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	6-10-2013	1919	Sun	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	6-10-2013	1920	Sun	4860	VVV (x3) Q2M (x3) DE NY(x2) (R5) //6840	CW	(JPL)
M89	6-10-2013	1920	Sun	6840	VVV (x3) Q2M (x3) DE NY(x2) (R5) //4860	CW	(JPL)
M89	6-10-2013	2205	Sun	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	6-10-2013	2206	Sun	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	6-10-2013	2206	Sun	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	6-10-2013	2207	Sun	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	6-10-2013	2207	Sun	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	6-10-2013	2210	Sun	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	6-10-2013	2210	Sun	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	6-10-2013	2211	Sun	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	6-10-2013	2212	Sun	4474	V RXP7 (x3) DE CZT2 (x2) (Cont'd) // N/H	CW	(JPL)
M89	6-10-2013	2220	Sun	4860	VVV (x3) Q2M (x3) DE NY(x2) (R5) //6840	CW	(JPL)
M89	6-10-2013	2220	Sun	6840	VVV (x3) Q2M (x3) DE NY(x2) (R5) //4860	CW	(JPL)
M89	8-10-2013	1818	Tue	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	8-10-2013	1819	Tue	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	8-10-2013	1820	Tue	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //6840	CW	(JPL)
M89	8-10-2013	1820	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //4860	CW	(JPL)
M89	8-10-2013	1826	Tue	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	8-10-2013	1826	Tue	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	8-10-2013	1828	Tue	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	8-10-2013	1828	Tue	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	8-10-2013	1829	Tue	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	8-10-2013	1829	Tue	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	8-10-2013	1830	Tue	6701	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	8-10-2013	1927	Tue	5801	V DKG6 DKG6 DKG6 DE 3A7D 3A7D	CW	(PPA)
M89	8-10-2013	2128	Tue	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	8-10-2013	2130	Tue	6701	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	8-10-2013	2131	Tue	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10-10-2013	0208	Thu	7582	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	10-10-2013	0208	Thu	8110	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	10-10-2013	0214	Thu	8888	NMAU DE ATUP (see N&O 193)	CW	(JPL)
M89	10-10-2013	0220	Thu	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5)	CW	(JPL)
M89	10-10-2013	1123	Thu	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10-10-2013	1751	Thu	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	10-10-2013	1753	Thu	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	10-10-2013	1753	Thu	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	10-10-2013	1755	Thu	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	10-10-2013	1755	Thu	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	10-10-2013	1757	Thu	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	10-10-2013	1757	Thu	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	10-10-2013	1758	Thu	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	10-10-2013	2204	Thu	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	10-10-2013	2205	Thu	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	10-10-2013	2206	Thu	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	10-10-2013	2206	Thu	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	10-10-2013	2207	Thu	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	10-10-2013	2208	Thu	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	10-10-2013	2215	Thu	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	10-10-2013	2215	Thu	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)

code	date	UTC	day	freq	remarks	mode	ctrb
M89	10-10-2013	2220	Thu	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //6840	CW	(JPL)
M89	10-10-2013	2220	Thu	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //4860	CW	(JPL)
M89	11-10-2013	0112	Fri	7582	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	11-10-2013	0112	Fri	8110	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	11-10-2013	0120	Fri	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //10640	CW	(JPL)
M89	11-10-2013	0120	Fri	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //6840	CW	(JPL)
M89	11-10-2013	0125	Fri	5555	In tfc: ADT6 7NDT A3U5 N64. (see N&O 193)	CW	(JPL)
M89	11-10-2013	0159	Fri	6666	In tfc: 2568 0789 23 (see N&O 193)	CW	(JPL)
M89	11-10-2013	1029	Fri	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	11-10-2013	1032	Fri	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	11-10-2013	1032	Fri	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	11-10-2013	1033	Fri	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	11-10-2013	1033	Fri	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	11-10-2013	1035	Fri	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	11-10-2013	1035	Fri	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	11-10-2013	1038	Fri	10210	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	11-10-2013	1040	Fri	5555	In tfc: 3456 DT7N UA34 756A DTUN 345D NT6A 37U4 (see N&O 193)	CW	(JPL)
M89	11-10-2013	1434	Fri	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	11-10-2013	1436	Fri	5230	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	11-10-2013	1436	Fri	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	11-10-2013	1438	Fri	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	11-10-2013	1438	Fri	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	11-10-2013	1440	Fri	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	11-10-2013	1440	Fri	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	11-10-2013	1441	Fri	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	14-10-2013	0020	Mon	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5)	CW	(JPL)
M89	14-10-2013	0026	Mon	10210	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	14-10-2013	0033	Mon	7582	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	14-10-2013	0037	Mon	4474	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	14-10-2013	0041	Mon	5230	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7698	CW	(JPL)
M89	14-10-2013	0041	Mon	7698	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	14-10-2013	0600	Mon	8110	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	14-10-2013	0602	Mon	7777	In tfc: VV FF32 FF32 ... RG 6..USL.... (see N&O 193)	CW	(JPL)
M89	14-10-2013	0624	Mon	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	14-10-2013	1018	Mon	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	14-10-2013	1018	Mon	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (//5801	CW	(JPL)
M89	14-10-2013	1019	Mon	6773	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	14-10-2013	1020	Mon	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5)	CW	(JPL)
M89	14-10-2013	1025	Mon	8750	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	14-10-2013	1250	Mon	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	14-10-2013	1251	Mon	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	14-10-2013	1251	Mon	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	14-10-2013	1253	Mon	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	14-10-2013	1254	Mon	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	14-10-2013	1255	Mon	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	14-10-2013	1255	Mon	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (//5801	CW	(JPL)
M89	14-10-2013	1339	Mon	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	14-10-2013	2026	Mon	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	14-10-2013	2028	Mon	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	14-10-2013	2028	Mon	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	14-10-2013	2030	Mon	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	14-10-2013	2030	Mon	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	14-10-2013	2032	Mon	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	15-10-2013	0058	Tue	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	15-10-2013	0058	Tue	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)

code	date	UTC	day	freq	remarks	mode	ctrb
M89	15-10-2013	0100	Tue	8750	V YUQW (x3) DE ASDF (x2) (Cont'd) //10210	CW	(JPL)
M89	15-10-2013	0100	Tue	10210	V YUQW (x3) DE ASDF (x2) (Cont'd) //8750	CW	(JPL)
M89	15-10-2013	0105	Tue	10659	In tfc: NR 1053/.0. = = H.../TT.F C NR 1053/../EX 5 NR 1053/EX 0.95 = (see N	CW	(JPL)
M89	15-10-2013	0120	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //10640	CW	(JPL)
M89	15-10-2013	0120	Tue	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //6840	CW	(JPL)
M89	15-10-2013	1119	Tue	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	15-10-2013	1120	Tue	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //6840	CW	(JPL)
M89	15-10-2013	1120	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //4860	CW	(JPL)
M89	15-10-2013	1125	Tue	10210	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	15-10-2013	1126	Tue	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	15-10-2013	1126	Tue	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	15-10-2013	1127	Tue	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	15-10-2013	1127	Tue	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	15-10-2013	1129	Tue	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	15-10-2013	1129	Tue	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	15-10-2013	1132	Tue	6666	In tfc: VV 0Q5 0OQX 0OQX K (see N&O 193)	CW	(JPL)
M89	15-10-2013	1457	Tue	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	15-10-2013	1458	Tue	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	15-10-2013	1458	Tue	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	15-10-2013	1459	Tue	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	15-10-2013	1459	Tue	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	15-10-2013	1505	Tue	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	15-10-2013	1507	Tue	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	15-10-2013	1808	Tue	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	15-10-2013	1808	Tue	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	15-10-2013	1809	Tue	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	15-10-2013	1814	Tue	4474	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	15-10-2013	1937	Tue	3300	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	15-10-2013	1938	Tue	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	15-10-2013	1938	Tue	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	15-10-2013	1940	Tue	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	15-10-2013	1940	Tue	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	15-10-2013	1941	Tue	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	15-10-2013	1947	Tue	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	16-10-2013	0220	Wed	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //10640	CW	(JPL)
M89	16-10-2013	0220	Wed	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //6840	CW	(JPL)
M89	16-10-2013	0227	Wed	7582	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	16-10-2013	0227	Wed	8110	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	16-10-2013	1020	Wed	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //10640	CW	(JPL)
M89	16-10-2013	1020	Wed	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //6840	CW	(JPL)
M89	16-10-2013	1030	Wed	5588	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	16-10-2013	1031	Wed	8750	V YUQW (x3) DE ASDF (x2) (Cont'd) //10210	CW	(JPL)
M89	16-10-2013	1031	Wed	10210	V YUQW (x3) DE ASDF (x2) (Cont'd) //8750	CW	(JPL)
M89	16-10-2013	1036	Wed	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	16-10-2013	1036	Wed	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	16-10-2013	1100	Wed	3330	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	16-10-2013	1238	Wed	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	16-10-2013	2031	Wed	3330	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	16-10-2013	2035	Wed	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	16-10-2013	2036	Wed	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	17-10-2013	1617	Thu	5566	In tfc: 3737 D3D FM 3 FM 3 FM 3 FM 3 N4N4 FM (see N&O 193)	CW	(JPL)
M89	17-10-2013	1934	Thu	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	17-10-2013	1934	Thu	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	17-10-2013	1936	Thu	3330	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)

code	date	UTC	day	freq	remarks	mode	ctrb
M89	17-10-2013	1940	Thu	5566	In tfc: CRT BT 477.HW? K. QSL QSL 23.. 10 = 5EEEE = 7R..RH. NR (see N&O 193)	CW	(JPL)
M89	17-10-2013	1951	Thu	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	18-10-2013	0200	Fri	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	18-10-2013	0200	Fri	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	18-10-2013	1118	Fri	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	18-10-2013	1118	Fri	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	18-10-2013	1119	Fri	8750	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	18-10-2013	1120	Fri	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5)	CW	(JPL)
M89	18-10-2013	1128	Fri	8119	In tfc: 3T6A T3D5 .A4N D4A6 U63. (see N&O 193)	CW	(JPL)
M89	18-10-2013	2148	Fri	6773	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	18-10-2013	2150	Fri	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	18-10-2013	2152	Fri	4474	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	20-10-2013	1148	Sun	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	20-10-2013	1210	Sun	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	20-10-2013	1210	Sun	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	20-10-2013	1212	Sun	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	20-10-2013	1628	Sun	3330	2SLC tfc: MSG NR 081 CK 301 34 1021 0030 = (see N&O 193)	CW	(JPL)
M89	20-10-2013	1700	Sun	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	20-10-2013	1701	Sun	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	20-10-2013	1701	Sun	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	20-10-2013	1702	Sun	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd)	CW	(JPL)
M89	20-10-2013	1703	Sun	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	20-10-2013	2013	Sun	3330	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	20-10-2013	2014	Sun	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	20-10-2013	2015	Sun	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	20-10-2013	2015	Sun	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	20-10-2013	2017	Sun	4225	V 7NPE (x3) DE QV5B (x2) (Cont'd) //5500	CW	(JPL)
M89	20-10-2013	2017	Sun	5500	V 7NPE (x3) DE QV5B (x2) (Cont'd) //4225	CW	(JPL)
M89	20-10-2013	2019	Sun	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	20-10-2013	2020	Sun	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //6840	CW	(JPL)
M89	20-10-2013	2020	Sun	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //4860	CW	(JPL)
M89	21-10-2013	0930	Mon	8750	V YUQW (x3) DE ASDF (x2) (Cont'd) //10210	CW	(JPL)
M89	21-10-2013	0930	Mon	10210	V YUQW (x3) DE ASDF (x2) (Cont'd) //8750	CW	(JPL)
M89	21-10-2013	0931	Mon	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	21-10-2013	0931	Mon	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	21-10-2013	1020	Mon	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //10640	CW	(JPL)
M89	21-10-2013	1020	Mon	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //6840	CW	(JPL)
M89	21-10-2013	1026	Mon	10210	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	21-10-2013	1027	Mon	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	21-10-2013	1028	Mon	7582	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	21-10-2013	1028	Mon	8110	V 7NPE (x3) DE QV5B (x2) (Cont'd) //7582	CW	(JPL)
M89	21-10-2013	1030	Mon	6773	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	21-10-2013	1032	Mon	5588	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	21-10-2013	1037	Mon	14862	In tfc: 45N7 ND.6 43.. (ContÆd) AR	CW	(JPL)
M89	22-10-2013	0033	Tue	7582	V 7NPE (x3) DE QV5B (x2) (Cont'd) //8110	CW	(JPL)
M89	22-10-2013	0033	Tue	8110	QV5B in tfc: 0900/G06/8398 AR. VV UGT COMM = 2417/0900/G06/8372 AR	CW	(JPL)
M89	22-10-2013	0045	Tue	10210	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	22-10-2013	0049	Tue	6666	In tfc: 4335 A45D 37N. N3. (ContÆd) AR K //A QSL 0851 K //B (see N&O 193)	CW	(JPL)
M89	22-10-2013	0107	Tue	8750	V YUQW (x3) DE ASDF (x2) (Cont'd) //10210	CW	(JPL)
M89	22-10-2013	0107	Tue	10210	V YUQW (x3) DE ASDF (x2) (Cont'd) //8750	CW	(JPL)
M89	22-10-2013	0109	Tue	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	22-10-2013	0109	Tue	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	22-10-2013	0115	Tue	7788	In tfc: R M HR MSG GA K. R GA K (see N&O 193)	CW	(JPL)

code	date	UTC	day	freq	remarks	mode	ctrb
M89	22-10-2013	0240	Tue	6666	In tfc: NR 097 NR 0	CW	(JPL)
M89	22-10-2013	0258	Tue	10180	3A7D in tfc: 2 = GN = CRRR 1139/ZD/..2/9EEEE = CR NR .120 EEEE 1130/ZD/9427	CW	(JPL)
M89	22-10-2013	0301	Tue	10210	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	22-10-2013	1004	Tue	8750	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	22-10-2013	1007	Tue	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	22-10-2013	1007	Tue	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) (//5801	CW	(JPL)
M89	22-10-2013	1020	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //10640	CW	(JPL)
M89	22-10-2013	1020	Tue	10640	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //6840	CW	(JPL)
M89	22-10-2013	1025	Tue	6753	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	22-10-2013	1235	Tue	10180	In tfc: QSA 2 QSA? HR 7G GA NR11/CCK CK 199 5. 7	CW	(JPL)
M89	22-10-2013	1244	Tue	7602	In tfc: AU74 3D5T T.AU 47D3 DN5T (ContÆd) AR QSL? HR WK NR 29	CW	(JPL)
M89	22-10-2013	1245	Tue	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	22-10-2013	1828	Tue	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	22-10-2013	1828	Tue	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	22-10-2013	1838	Tue	5581	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	22-10-2013	1920	Tue	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //6840	CW	(JPL)
M89	22-10-2013	1920	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //4860	CW	(JPL)
M89	22-10-2013	1933	Tue	5581	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	23-10-2013	0201	Wed	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	23-10-2013	0201	Wed	10180	3A7D i.p. HR WK NR 12 //10180	CW	(JPL)
M89	23-10-2013	0206	Wed	7740	V DP9J (x3) DE CQ (x2) HR NIL SK GB (ContÆd)	CW	(JPL)
M89	23-10-2013	1046	Wed	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	23-10-2013	1046	Wed	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	23-10-2013	1054	Wed	7889	In tfc: 54NT TNA. 63TN 6T4A TAD4 (ContÆd) AR K //A R R RPT //B	CW	(JPL)
M89	23-10-2013	1108	Wed	8040	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	23-10-2013	1903	Wed	5801	v DKG6 DKG6 DKG6 de 3A7D 3A7D	CW	(FN)
M89	23-10-2013	1905	Wed	7602	v DKG6 DKG6 DKG6 de 3A7D 3A7D	CW	(FN)
M89	23-10-2013	2112	Wed	3330	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	23-10-2013	2116	Wed	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	23-10-2013	2118	Wed	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	23-10-2013	2118	Wed	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	23-10-2013	2120	Wed	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //6840	CW	(JPL)
M89	23-10-2013	2120	Wed	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //4860	CW	(JPL)
M89	23-10-2013	2134	Wed	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	23-10-2013	2134	Wed	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	23-10-2013	2147	Wed	5581	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	23-10-2013	2151	Wed	6773	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	24-10-2013	1100	Thu	7739	In tfc	CW	(JPL)
M89	24-10-2013	1102	Thu	7741	In tfc	CW	(JPL)
M89	24-10-2013	1111	Thu	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	24-10-2013	1120	Thu	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	24-10-2013	1120	Thu	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5)	CW	(JPL)
M89	24-10-2013	1341	Thu	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	24-10-2013	1341	Thu	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	24-10-2013	1343	Thu	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	24-10-2013	1838	Thu	4474	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)
M89	24-10-2013	1841	Thu	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	24-10-2013	1841	Thu	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	24-10-2013	1842	Thu	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	24-10-2013	2200	Thu	3330	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	24-10-2013	2203	Thu	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	24-10-2013	2203	Thu	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	24-10-2013	2205	Thu	4474	V RXP7 (x3) DE CZT2 (x2) (Cont'd)	CW	(JPL)

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M89	24-10-2013	2208	Thu	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	24-10-2013	2211	Thu	6773	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	26-10-2013	1913	Sat	5230	V DKG6 DKG6 DKG6 DE 3A7D 3A7D	CW	(PPA)
M89	26-10-2013	2040	Sat	5485	V YUQW YUQW YUQW DE ASDF ASDF	CW	(PPA)
M89	27-10-2013	1920	Sun	6840	vvv Q2M Q2M Q2M de NY NYZ	CW	(FN)
M89	28-10-2013	2125	Mon	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	28-10-2013	2125	Mon	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	28-10-2013	2127	Mon	3330	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	28-10-2013	2129	Mon	5485	V YUQW (x3) DE ASDF (x2) (Cont'd) //8580	CW	(JPL)
M89	28-10-2013	2319	Mon	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	28-10-2013	2320	Mon	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5)	CW	(JPL)
M89	28-10-2013	2329	Mon	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	29-10-2013	1120	Tue	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5)	CW	(JPL)
M89	29-10-2013	1153	Tue	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd)	CW	(JPL)
M89	29-10-2013	1245	Tue	5485	V YUQW (x3) DE ASDF (x2) (Cont'd) //8580	CW	(JPL)
M89	29-10-2013	1245	Tue	8580	V YUQW (x3) DE ASDF (x2) (Cont'd) //5485	CW	(JPL)
M89	29-10-2013	1338	Tue	5230	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	29-10-2013	1338	Tue	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	29-10-2013	1340	Tue	5485	V YUQW (x3) DE ASDF (x2) (Cont'd) //8580	CW	(JPL)
M89	29-10-2013	1340	Tue	8580	V YUQW (x3) DE ASDF (x2) (Cont'd) //5485	CW	(JPL)
M89	29-10-2013	1751	Tue	5230	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	29-10-2013	1751	Tue	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5230	CW	(JPL)
M89	29-10-2013	1753	Tue	5485	V YUQW (x3) DE ASDF (x2) (Cont'd) //8580	CW	(JPL)
M89	29-10-2013	1753	Tue	8580	V YUQW (x3) DE ASDF (x2) (Cont'd) //5485	CW	(JPL)
M89	30-10-2013	0110	Wed	10210	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	30-10-2013	0929	Wed	5536	In tfc: UINR .799/EX TIMEEEE NR 7799/EX = A.B3/BAD AR. QSL? K (see N&O 193)	CW	(JPL)
M89	30-10-2013	0929	Wed	10210	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	30-10-2013	0937	Wed	5588	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	30-10-2013	0941	Wed	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	30-10-2013	0941	Wed	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	30-10-2013	1106	Wed	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	30-10-2013	1106	Wed	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	30-10-2013	1108	Wed	3330	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	30-10-2013	1110	Wed	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	30-10-2013	1110	Wed	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	30-10-2013	1948	Wed	3330	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)
M89	30-10-2013	1950	Wed	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	30-10-2013	1950	Wed	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
M89	30-10-2013	1952	Wed	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	30-10-2013	1952	Wed	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	30-10-2013	2007	Wed	5485	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	30-10-2013	2036	Wed	8040	V H2FL (x3) DE DRV8 (x2) (Cont'd)	CW	(JPL)
M89	31-10-2013	1144	Thu	5435	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	31-10-2013	1144	Thu	5435	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	31-10-2013	1147	Thu	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	31-10-2013	1147	Thu	10180	7602Z 757 6817 6707 9434 .46. (ContÆd) BT N4B5 U.3. D.U N37A U634 57DA NT3D	CW	(JPL)
M89	31-10-2013	1206	Thu	8073	(In tfc: 3573 D74T 3.3. 5.4 ? 47UD U3D7 (see N&O 193)	CW	(JPL)
M89	31-10-2013	1220	Thu	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //6840	CW	(JPL)
M89	31-10-2013	1220	Thu	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //4860	CW	(JPL)
M89	31-10-2013	1225	Thu	5801	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //10180	CW	(JPL)
M89	31-10-2013	1225	Thu	10180	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //5801	CW	(JPL)
M89	31-10-2013	1226	Thu	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	31-10-2013	1226	Thu	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	31-10-2013	1227	Thu	3330	V MW3D (x3) DE 2SLC (x2) (Cont'd)	CW	(JPL)

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M89	31-10-2013	1232	Thu	6666	(In tfc: 00 050 50 50 50 IIII III 7NA7. UA7U A73U 5 7T73 U4A7 T3AU (ContÆd)	CW	(JPL)
M89	31-10-2013	1500	Thu	3330	2SLC tfc: handsent 2330/237NR/0790 AR AR = 01651/7436/2230/237NR/0791 AR AR	CW	(JPL)
M89	31-10-2013	1504	Thu	3797	V H2FL (x3) DE DRV8 (x2) (Cont'd) //4512	CW	(JPL)
M89	31-10-2013	1504	Thu	4512	V H2FL (x3) DE DRV8 (x2) (Cont'd) //3797	CW	(JPL)
M89	31-10-2013	1520	Thu	4860	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //6840	CW	(JPL)
M89	31-10-2013	1520	Thu	6840	VVV (x3) Q2M (x3) DE NYZ (x2) (R5) //4860	CW	(JPL)
M89	31-10-2013	1810	Thu	5435	V YUQW (x3) DE ASDF (x2) (Cont'd)	CW	(JPL)
M89	31-10-2013	1811	Thu	3642	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //7602	CW	(JPL)
M89	31-10-2013	1811	Thu	7602	V DKG6 (x3) DE 3A7D (x2) (Cont'd) //3642	CW	(JPL)
MC03	14-10-2013	2052	Mon	5435	Chinese tracking station i.p. U4764A 7UN34UN TND 5A (see N&O 193)	CW	(JPL)
MX	1-10-2013	0816	Tue	7038.8	Beacon "P"	CW	(LG2)
MX	1-10-2013	1524	Tue	7039	Beacon "C"	CW	(LG2)
MX	1-10-2013	1555	Tue	6918	Marker "L"	CW	(MPJ)
MX	1-10-2013	1555	Tue	6928	Marker "V"	CW	(MPJ)
MX	3-10-2013	2101	Thu	5156.8	Beacon "L"	CW	(LG2)
MX	4-10-2013	1445	Fri	6917	Beacon "L"	CW	(JPL-FNL)
MX	4-10-2013	1824	Fri	4508	Beacon "V"	CW	(JPL-RUS)
MX	7-10-2013	0915	Mon	6717.4	Beacon "L"	CW	(Gwr)
MX	7-10-2013	1929	Mon	16331.9	Beacon "S"	CW	(PLdn)
MX	8-10-2013	1944	Tue	5153.8	Beacon "P"	CW	(AB)
MX	8-10-2013	1944	Tue	5153.9	Beacon "S"	CW	(AB)
MX	8-10-2013	1944	Tue	6917.5	Beacon "L"	CW	(AB)
MX	8-10-2013	1944	Tue	6928	Beacon "V"	CW	(AB)
MX	8-10-2013	1944	Tue	7038.7	Beacon "D"	CW	(AB)
MX	8-10-2013	1944	Tue	8497.8	Beacon "L"	CW	(AB)
MX	8-10-2013	1944	Tue	10871.9	Beacon "S"	CW	(AB)
MX	8-10-2013	1944	Tue	10872	Beacon "C"	CW	(AB)
MX	9-10-2013	1516	Wed	13527.8	Beacon "S" Severomorsk	CW	(MPJ)
MX	16-10-2013	1530	Wed	6917.5	Beacon "L" with trashy sounding transmitter	CW	(Gwr)
MX	18-10-2013	1319	Fri	6917.5	Beacon "L" Skt Peterburg, Russia	CW	(MPJ)
MX	20-10-2013	0610	Sun	6917.5	Beacon "L"	CW	(AB)
MX	20-10-2013	0610	Sun	7038.9	Beacon "S"	CW	(AB)
MX	20-10-2013	0610	Sun	8484.7	Beacon "D"	CW	(AB)
MX	20-10-2013	0610	Sun	8494.8	Beacon "P"	CW	(AB)
MX	20-10-2013	0610	Sun	8495	Beacon "C"	CW	(AB)
MX	20-10-2013	0610	Sun	8497.8	Beacon "L"	CW	(AB)
MX	20-10-2013	0610	Sun	10871.7	Beacon "D"	CW	(AB)
MX	20-10-2013	0610	Sun	10871.9	Beacon "S"	CW	(AB)
MX	20-10-2013	0610	Sun	13527.7	Beacon "D"	CW	(AB)
MX	20-10-2013	0610	Sun	13527.8	Beacon "P"	CW	(AB)
MX	20-10-2013	0610	Sun	13527.9	Beacon "S"	CW	(AB)
MX	20-10-2013	0610	Sun	13528	Beacon "C"	CW	(AB)
MX	20-10-2013	0610	Sun	16331.7	Beacon "D"	CW	(AB)
MX	20-10-2013	0610	Sun	16331.9	Beacon "S"	CW	(AB)
MX	20-10-2013	0610	Sun	16332	Beacon "C"	CW	(AB)
MX	20-10-2013	0610	Sun	20047.7	Beacon "D"	CW	(AB)
MX	20-10-2013	0610	Sun	20048	Beacon "C"	CW	(AB)
MX	21-10-2013	0430	Mon	6917.5	Beacon "L" St.Petersburg	CW	(PPA)
MX	21-10-2013	1850	Mon	8400.7	Beacon "P" Kaliningrad RUS	CW	(PPA)
MX	25-10-2013	1311	Fri	5154.4	Beacon "M"	CW	(AB-HK)
MX	25-10-2013	1311	Fri	7039.4	Beacon "M"	CW	(AB-HK)
MX	25-10-2013	1311	Fri	8495.4	Beacon "M"	CW	(AB-HK)
MX	25-10-2013	1311	Fri	10872.4	Beacon "M"	CW	(AB-HK)

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MX	25-10-2013	1415	Fri	8494.8	Beacon "P"	CW	(MPJ)
MX	26-10-2013	1033	Sat	16331.7	Beacon "D" Sevastopol/Odessa	CW	(MPJ)
MX	26-10-2013	1034	Sat	16331.9	Beacon "S" Severomorsk	CW	(MPJ)
MX	26-10-2013	1035	Sat	16332	Beacon "C" Moscow	CW	(MPJ)
PAK	11-10-2013	1200	Fri	19889.7	Unid Pakistan Agency sending 5LGs (see N&O 193)	Pactor II	(EW)
RAv	7-10-2013	1255	Mon	11360	Korsar w/85655. Also called Chkalovskij	USB	(RP-MD)
RMv	16-10-2013	1550	Wed	3820	Skuta-92 Pomite-17 sledite signal 53 825 MIZYuRA 34 36 94 97	USB	(Gwr)
RMv	24-10-2013	0355	Thu	5534	Russian mil. Russian test count 12	USB	(PPA)
S06	1-10-2013	1800	Tue	5890	286 0	USB	(HFD)
S06	2-10-2013	1930	Wed	5823	426 938 41 = 69447	USB	(HFD)
S06	3-10-2013	1900	Thu	5784	349 0	USB	(HFD)
S06	5-10-2013	1935	Sat	4772	426 0	USB	(HFD)
S06	5-10-2013	2000	Sat	4967	319 0	USB	(HFD)
S06	5-10-2013	2030	Sat	6874	857 0	USB	(HFD)
S06	5-10-2013	2100	Sat	4019	319 0	USB	(HFD)
S06	5-10-2013	2130	Sat	5902	857	USB	(HFD)
S06	7-10-2013	1905	Mon	5127	349 0	USB	(HFD)
S06	10-10-2013	1905	Thu	5127	349 349 349 0000	USB	(AB)
S06	10-10-2013	1905	Thu	5127	349 0	USB	(HFD)
S06	12-10-2013	1605	Sat	7472	764 0	USB	(HFD)
S06	12-10-2013	1935	Sat	4772	426 0	USB	(HFD)
S06	14-10-2013	1815	Mon	11125	451 451 451 00000	AM	(GHn)
S06	14-10-2013	1905	Mon	5127	349 0	USB	(HFD)
S06	14-10-2013	1915	Mon	9244	451 451 451 00000	AM	(GU)
S06	14-10-2013	1915	Mon	9245	451 0	USB	(HFD)
S06	19-10-2013	1605	Sat	7472	764 0	USB	(HFD)
S06	19-10-2013	1935	Sat	4772	426 0	USB	(HFD)
S06	19-10-2013	1945	Sat	4772	426 426 426 00000	USB	(GHn)
S06s	2-10-2013	0730	Wed	11854	745 912 6 = 88554	USB	(HFD)
S06s	2-10-2013	0740	Wed	12140	745	USB	(HFD)
S06s	2-10-2013	1000	Wed	13366	729	USB	(FMB)
S06s	2-10-2013	1230	Wed	7620	967 ??1 8 = ??0?8	USB	(HFD)
S06s	2-10-2013	1230	Wed	8105	967 ??1 8 = ??0?8	USB	(HFD)
S06s	2-10-2013	1240	Wed	8105	967	USB	(HFD)
S06s	4-10-2013	0700	Fri	7795	196-427/5=34140	USB	(HFD)
S06s	4-10-2013	0710	Fri	8695	196	USB	(HFD)
S06s	4-10-2013	0810	Fri	5805	278 439 5 = 48115	USB	(HFD)
S06s	11-10-2013	0600	Fri	9078	934 207 5 = 43657	USB	(HFD)
S06s	11-10-2013	0610	Fri	10148	934	USB	(HFD)
S06s	14-10-2013	0840	Mon	8270	371 286 5 21767 53672 11834 81022 36903 286 5 00000	USB	(ACE)
S06s	14-10-2013	0900	Mon	14580	872 934 5 46062 68672 97478 39685 30485 934 5 00000	USB	(ACE)
S06s	14-10-2013	1210	Mon	11460	831 960 5 88620 58069 61732 74537 57440 960 5 00000	USB	(ACE)
S06s	18-10-2013	0600	Fri	9078	934	USB	(HFD)
S06s	28-10-2013	1210	Mon	11460	831 562 7 46186 16945 80744 86200 84706 42227 61736 562 7 00000	USB	(AnEur)
S06s	29-10-2013	0610	Tue	12355	438 438 438 00000	USB	(AnEur)
S28	4-10-2013	1335	Fri	4625	MDZhB 50 980 BAZEDOVIZM 12 28 91 46 RAZDOLJE 06 86 58 06 RAZDEL 89 03 40 13 Pryom	USB	(DJP-RSRu)
S28	7-10-2013	1411	Mon	4625	MDZhB 59 716 RAZGLIAD 07 61 79 08 Priyom	USB	(AB-EST)
S28	7-10-2013	1544	Mon	4625	MDZhB 61 391 RAZBOLTKA 81 66 29 80 Priyom	USB	(AB-EST)
S28	9-10-2013	1414	Wed	4625	MDZhB 14 072 KAZASKER 25 41 15 50 Priyom	USB	(AB-EST)
S28	9-10-2013	1510	Wed	4625	MDZhB 12 497 FAZANOVYJ 82 82 48 96 Priyom	USB	(AB-EST)
S28	14-10-2013	0834	Mon	4625	MDZhB 46 208 NADShIVANIJE 73 85 93 99 Priyom	USB	(AB-EST)
S28	14-10-2013	0845	Mon	4625	MDZhB 15 180 RADUZhNICA 87 24 95 22 Priyom	USB	(AB-EST)
S28	14-10-2013	0851	Mon	4625	MDZhB ?? ??1 LADONNIK 88 92 42 79 Priyom	USB	(AB-EST)
S28	14-10-2013	1054	Mon	4625	MDZhB 60 205 TADIBEI 63 22 97 27 Priyom	USB	(AB-EST)

code	date	UTC	day	freq	remarks	mode	ctrb
S28	14-10-2013	1056	Mon	4625	MDZhB 40 777 BABEJNYJ 43 03 60 50 Priyom	USB	(AB-EST)
S28	17-10-2013	1843	Thu	4625	Buzzer	USB	(steve-HOL)
S28	23-10-2013	0759	Wed	4625	MDZhB 99 275 BESSChETNYJ 73 83 63 11 KIZAR 39 87 86 93 FESTUKA 73 28 08 77 Prijom	USB	(AB-EST)
S28	24-10-2013	1348	Thu	4625	MDZhB 94 158 IZAChYN sboj sboj sboj sboj MDZhB BDZhB 94 158 IZAChYeN 02 81 31 35	USB	(AB/FYM)
S30	8-10-2013	1944	Tue	3756	Pip	CW	(AB)
S30	16-10-2013	1450	Wed	3756	Msg, too weak to copy	USB	(Gwr)
S32	8-10-2013	1944	Tue	3829	Squeaky Wheel	USB	(AB)
S32	16-10-2013	1455	Wed	3828	Al'fa-45 Al'fa-45 72 719 SYeNIOLA 27 53 79 76	USB	(Gwr)
SDN	3-10-2013	2019	Thu	8894.15	Sudanese diplo sends ASCII files to "1000" +stno+ +ftype+ .bag	Pactor-III	(BCI)
SDN	3-10-2013	2025	Thu	8894.15	Sudanese diplo sends ASCII files to "1000" +stno+ +ftype+ .bag	Pactor-III	(BCI)
SDN	3-10-2013	2037	Thu	8894.15	Sudanese diplo sends ASCII files to "6000" +stno+ +ftype+ .bag	Pactor-III	(BCI)
SDN	3-10-2013	2040	Thu	8894.15	Sudanese diplo sends ASCII files to "1000" +stno+ +ftype+ .bag	Pactor-III	(BCI)
SDN	3-10-2013	2047	Thu	8894.15	Sudanese diplo sends ASCII files to "1000" +stno+ +ftype+ .bag	Pactor-III	(BCI)
SDN	11-10-2013	1200	Fri	21000	MFA Sudan, Khartoum wkg Sudanese embassy Yemen. Voice transmisson	USB	(ACE)
SDN	11-10-2013	1202	Fri	21002.1	MFA Sudan, Khartoum wkg Sudanese embassy Yemen	Pactor-1 100/170	(ACE)
V07	6-10-2013	0100	Sun	18074	883 883 883 000	USB	(Dan)
V07	6-10-2013	0120	Sun	15874	883 883 883 000	USB	(Dan)
V07	12-10-2013	0100	Sat	18074	883 883 883 1 ???	USB	(Dan)
V07	12-10-2013	0120	Sat	15874	883 883 883 1 ???	USB	(Dan)
V07	12-10-2013	0140	Sat	14374	883 883 883 1 ???	USB	(Dan)
V07	13-10-2013	0120	Sun	15874	883 014 85 = #51#4	USB	(HFD)
V07	20-10-2013	0100	Sun	18074	883 883 883 000	USB	(Dan)
V07	20-10-2013	0120	Sun	15874	883 883 883 000	USB	(Dan)
V07	27-10-2013	0100	Sun	18074	883 883 883 000	USB	(Dan)
V07	27-10-2013	0120	Sun	15874	883 883 883 000	USB	(Dan)
V13	5-10-2013	0600	Sat	13750	New Star #3. Tune followed by coded messages in Chinese	USB	(AB-HK)
V13	5-10-2013	0708	Sat	15388	New Star i.p.	USB	(AB-HK)
V13	9-10-2013	0603	Wed	13750	New Star i.p. Barely audible	USB	(AB-HK)
V13	20-10-2013	0607	Sun	13750	New Star i.p.	USB	(AB-HK)
V13	25-10-2013	1212	Fri	13750	New Star in progress	USB	(AB-HK)
V13	25-10-2013	1307	Fri	13750	New Star in progress	USB	(AB-HK)
V13	26-10-2013	0802	Sat	15388	New Star in progress	USB	(AB-HK)
V13	31-10-2013	0610	Thu	13750	New Star i.p.	USB	(AB-HK)
X06	11-10-2013	1404	Fri	12208	Mazielka	USB	(FMB)
X06	13-10-2013	1158	Sun	16060	Mazielka 6 tone selcal	AM	(MCO)
X06	21-10-2013	1537	Mon	11439	532614	USB	(FMB)
XPA	1-10-2013	1900	Tue	9362	0-msg	MFSK	(HFD)
XPA	1-10-2013	1900	Tue	9362	Polytone station	MFSK	(steve)
XPA	1-10-2013	1920	Tue	8062	0-msg	MFSK	(HFD)
XPA	1-10-2013	1920	Tue	8062	Polytone station	MFSK	(steve)
XPA	1-10-2013	1940	Tue	7462	0 msg	MFSK	(HFD)
XPA	2-10-2013	0600	Wed	10868	msg	MFSK	(HFD)
XPA	2-10-2013	0620	Wed	12168	msg	MFSK	(HFD)
XPA	2-10-2013	0640	Wed	13368	msg	MFSK	(HFD)
XPA	3-10-2013	1900	Thu	9362	msg	MFSK	(HFD)
XPA	3-10-2013	1920	Thu	8062	msg	MFSK	(HFD)
XPA	3-10-2013	1940	Thu	7462	msg	MFSK	(HFD)
XPA	15-10-2013	1900	Tue	9362	Short msg decoded 00000	MFSK-20/10Bd/USB	(MPJ)
XPA	24-10-2013	1900	Thu	9362	Message: 05624 00001 00000 10140	MFSK-20/10Bd/USB	(MPJ)
XPA2	11-10-2013	1500	Fri	16147	194, txt not decoded	MFSK	(FN)
XPA2	11-10-2013	1520	Fri	14947	194, txt not decoded	MFSK	(FN)
XPA2	11-10-2013	1540	Fri	14447	194, txt not decoded	MFSK	(FN)

CONTRIBUTORS

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AB-EST	Ary Boender via remote rx Estonia		JPL-HK	JPL via GlobalTuners Hong Kong
AB-HK	Ary Boender via remote rx Hong Kong		JPL-RUS	JPL via remote rx Russia
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