



**International Amateur Radio Union**



**Region 1**

# Monitoring System

- IARUMS Region 1 -

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The monthly newsletter for Region 1

## March 2008

The members of the IARUMS Region 1 monitoring team:



## Acknowledgements

++ ARSK: 5Z4NU - Ted ++ DARC: DJ9KR - Uli ++ MRASZ: HA7PL - Laci ++ OEVSV: OE3DMA – Alex ++  
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++ DJ7KG - Georg (beacons) ++ DF5SX - Wolfgang (BC) ++ DARC (server support) ++  
++ German PTT ++ British PTT ++ Spanish PTT ++ Finnish PTT ++ other European PTTs ++  
++ IARU Region 1 assistance ++

**Part 1: News and infos**

**Part 2: Detailed reports from the national co-ordinators**

Screenshots and measurements: DK2OM with Wavecom decoders

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## Part 1: News and Infos

### 1. Illegal traffic on 80 m

We observed much illegal phone traffic between 3500 and 3600 kHz in USB by fishery from Wales, Netherlands, France and Denmark. The pirates were using this range up and down in 5 or 10 kHz increments. The 80 m – band is assigned to amateur radio on primary base, but not exclusive. Pirates do not have any permission to abuse our 80m-band.

### 2. Military traffic on 80 m

Military traffic is allowed on 80 m, but not wanted of course. We found several digital systems like MIL-188-141A (= ALE), MIL-188-110A, MIL-188-110B, RFSM 2000, Stanag 4285, Thales Skymaster, Clansman, Link11, AT3004D. They all are using a large bandwidth from 850 – 2700 Hz. Some of these systems disappeared after the assistance of the British and German PTTs.

### 3. Voice of Russia on 14270 kHz

The harmonic BC transmission from Voice of Russia on 7135 kHz was still audible. An earlier complaint of the German PTT (BNetzA) could not help to solve this technical problem during March.

### 4. Chinese OTH radar now on 10 MHz

We found the Chinese OTH radar even on 10 MHz, not only on 7 MHz as before. Friends from Region 3 told me, that this OTH radar is often active on 3,5 – 7 – 10 and 14 MHz. It is easy to detect the radar, the pulse rate is always 43 pulses/second. Why do they use our bands for their radar? We do not know.

### 5. Fishery from Sri Lanka on 14000 kHz

The German PTT (BNetzA) helped me to find out the locations of the USB pirates on 14000 and 14001.5 kHz. Most of them seem to be fishery boats between South India and Sri Lanka. Sometimes you can hear the ship engines in the background.

### 6. Spanish pirate disaster as usual

3500, 3550, 7000, 14000, 14014.5, 14100, 14114.5, 14124, 14125, 14135, 14140, 14320, 14350, 21000, 21100, 21095, 21120 **USB** – Spanish fishery and family traffic, daily, various times! Most of them are moving up and down in 5 or 10 kHz increments, always transmitting in USB. Sometimes they use the **vocoder CRY2001**. **See below!**

### 7. French amateurs on 3550 kHz in AM

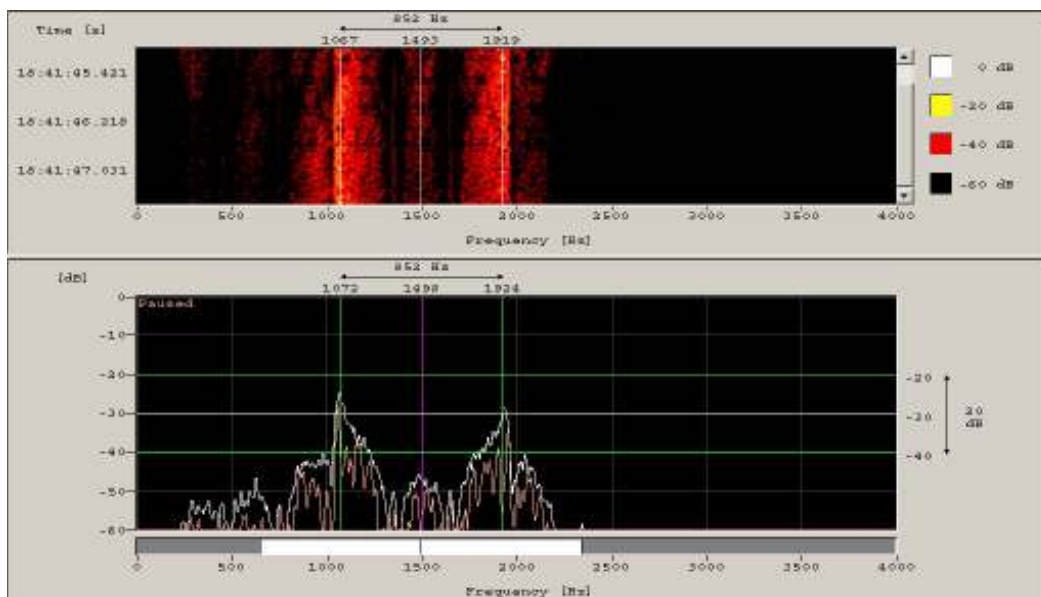
French amateurs are still transmitting on 3550 kHz in AM every morning, disregarding the bandplans of Region 1.

### 8. Homepage IARUMS Region 1 <http://www.iarums-r1.org>

Homepage IARUMS Region 2 <http://www.iaruregion2.org> – not available !

Homepage IARUMS Region 3 <http://www.jarl.or.jp/iaru-r3/ms/r3msnl.htm>

**MIL-system “Clansman”, F1B-burst, 300 Bd, 850 Hz shift, online encrypted, daily on 3555.400 and 3522.000 kHz - location: Northern part of the Netherlands and East of Brussels**



**Screenshot: DK2OM with a Wavecom W61 Decoder – sonagram and FFT**

## Part 2: Detailed reports from the national Co-ordinators

DD = day \*\*\* MM = month \*\*\* dly = daily \*\*\* vt = various times \*\*\* vd = various days \*\*\* pps = pulses per second (radar systems) \*\*\* BD = Baud \*\*\* SH = Shift \*\*\* Mode = mode of transmission \*\*\* A3E = AM \*\*\* A1A = CW \*\*\* J3E-U = USB \*\*\* J3E-L = LSB \*\*\* FSK (F1B) = frequency shift keying \*\*\* PSK = phase shift keying \*\*\* MPSK12 = 12 channel phase shift keying \*\*\* ALE (MIL-188-141A) = automatic link establishment \*\*\* MUX = multiplex \*\*\* Ui (uniden) = unidentified \*\*\* Illicit = illegal \*\*\* UiILL = unidentified illegal \*\*\* BC = broadcast \*\*\* MIL = military \*\*\* PTR = printer \*\*\* NGO = non governmental organization \*\*\* ITU = ITU country abbreviation \*\*\* PRC = People's Republic of China \*\*\* PLA = People's Liberation Army \*\*\* MFA = Ministry of Foreign Affairs \*\*\* MOPO = Ministry of Public Order

### ARSK MONITORING REPORT FOR MARCH, 2008

The main item of interest in March was a transmission in SSB heard once only on 14,260 KHz, a female voice (which may have been synthetic) repeating numbers, probably a cypher. Similar transmissions previously common on 14000 KHz have not been heard for some time. It was thought to originate from somewhere in the Middle East.

The two nets using 6,999 KHz were active daily, one in Amharic and presumably in Ethiopia, the other mainly in KiSwahili which may be military in East Africa. These transmissions spread into the 40 meter amateur band. Propagation conditions showed some improvement towards the end of the month and as usual many intruding Somalia, Ethiopian, Sudanese and Francophone African stations were heard.

My thanks to all contributors to this report.

E.H.M. Alleyne, 5Z4NU  
ARSK National IARUMS Co-ordinator

### ARSK – Kenya – 5Z4NU (Ted)

| H'd by | kHz    | UTC    | dd  | mm | ITU                  | Identity  | Mode        | Details   |
|--------|--------|--------|-----|----|----------------------|---|-------------|---|
| ARSK   | 6999.0 | vt     | dly | 3  | ETH?                 | UiPHONE   | J3Eu        | Amharic. Spreads into 40 m band.  |
| ARSK   | 6999.0 | vt     | dly | 3  | KEN?<br>UGA?<br>TZA? | 08, 15, 16, 20,<br>23, 24, 25, 26, 27,<br>43, 60, 66,   | J3Eu        | Spreads into 40 m band. Traffic appears to be details of air movements over East and Central Africa.  |
| ARSK   | 7000.0 | vt     | dly | 3  | SOM<br>DJI           | Bossasso,<br>Djibouti, Afmadu   | J3Eu        | Somalis. Phone patching.  |
| ARSK   | 7000.0 | vt     | dly | 3  | ZAI                  | UiPHONE   | J3Eu        | KiSwahili, DRC accent.  |
| ARSK   | 7006.0 | 7006.0 | 6   | 3  | ETH?                 | UiPHONE   | J3E         | Amharic.  |
| ARSK   | 7008.0 | vt     | dly | 3  | SDN                  | M7, M10, M18,<br>M21, M22, M125,<br>35, CM, others  | J3E<br>J3Eu | English, vernaculars, verbal Morse. Selcal. SPLA. Malakal mentioned. Both sidebands used. Also uses 6877 KHz. USB.  |
| ARSK   | 7009.0 | 0739   | 6   | 3  | SOM                  | UiPHONE   | J3Eu        | Somalis.  |
| ARSK   | 7012.0 | vt     | dly | 3  | SOM                  | Kismayu,<br>Afmadu, Dobleh,<br>Baidoa?  | J3Eu        | Somalis, SelCal. Some KiSwahili, prob. Bajuni.  |
| ARSK   | 7017.0 | vt     | *   | 3  | SOM                  | UiPHONE   | J3Eu        | Somalis.*6,7,   |
| ARSK   | 7022.0 | vt     | *   | 3  | SOM                  | UiPHONE   | J3Eu        | Somalis.*6,10,  |
| ARSK   | 7026.0 | vt     | dly | 3  | SDN?                 | K1, K2, JO,   | J3Eu        | English, NGO. Selcal.   |
| ARSK   | 7027.0 | 0736   | 6   | 3  | ZAI                  | UiPHONE   | J3Eu        | French, vernacular.   |
| ARSK   | 7030.0 | vt     | *   | 3  | SOM                  | UiPHONE   | J3Eu        | Somalis. *10,30,  |
| ARSK   | 7045.0 | vt     | dly | 3  | SDN                  | MM, NE, NU,<br>AA, AK, AJ, AL,<br>AT, AO, DU,<br>WL1, WL2,<br>WL4, WL5, WL6,<br>WL9, WL10, BR,<br>WM, NU, MAJ,<br>Ikola? Kabwe,<br>Kalulu | J3E<br>J3Eu | Vernacular, Dholuo? English, phonetics. SelCal. Sudan, NGO, SPLA or SNLA? Sends messages in phonetic five letter groups, probably a single-substitution cypher. |
| ARSK   | 7045.0 | vt     | dly | 3  | ZAI                  | Bukavu  | J3Eu        | KiSwahili, French.  |
| ARSK   | 7046.0 | vt     | *   | 3  | SOM                  | UiPHONE   | J3Eu        | Somalis.*11,13,18,24,   |
| ARSK   | 7048.0 | 0549   | 10  | 3  | SOM                  | UiPHONE   | J3Eu        | Somalis.  |

| H'd by | kHz     | UTC          | dd  | mm | ITU        | Identity  | Mode        | Details  |
|--------|---------|--------------|-----|----|------------|---|-------------|--|
| ARSK   | 7048.0  | vt           | dly | 3  | SDN        | WA, S, T, SM, AU, PK, PS, AC, BC, B15, CC, Malakal, Yambio,                           | J3E         | English, vernacular, verbal Morse. NGO or SPLA?  |
| ARSK   | 7050.0  | vt           | dly | 3  | SOM        | UiPHONE   | J3Eu        | Somalis.   |
| ARSK   | 7055.0  | 0734         | 6   | 3  | ZAI        | UiPHONE   | J3Eu        | French, vernacular.  |
| ARSK   | 7057.0  | vt           | dly | 3  | SOM        | UiPHONE   | J3Eu        | Somalis.   |
| ARSK   | 7065.0  | 0543         | 17  | 3  | SOM        | UiPHONE   | J3Eu        | Somalis.   |
| ARSK   | 7066.0  | vt           | dly | 3  | SDN        | B1, B2, AT, K1, KT, CT, TI, BT, B2, KR, JT, P1, LL, LA, A25, BJ, RK1, RK2, KA         | J3E         | S. Sudan. English, & Nilotic language. NGO? Also uses 5712 KHz.  |
| ARSK   | 7069.0  | 0548         | 17  | 3  | SOM        | UiPHONE   | J3Eu        | Somalis. Asmara mentioned.   |
| ARSK   | 7070.0  | vt           | dly | 3  | SOM<br>ERI | Asmara, Afmadu, Dobleh, Baidoa, Merere, Garoe, Burhane, Mogadishu, Kismayu, Beletwein | J3Eu        | Somalis. SelCal.   |
| ARSK   | 7075.0  | vt           | dly | 3  | SOM        | Galkayu, Kismayu, Baidoa  | J3E<br>J3Eu | Somalis. SelCal, phonepatching.  |
| ARSK   | 7087.0  | 0545         | 17  | 3  | SOM        | UiPHONE   | J3E         | Somalis.   |
| ARSK   | 7089.0  | 0853         | 13  | 3  | SOM        | Boccaro.  | J3Eu        | Somalis.   |
| ARSK   | 7090.0  | 0546         | 17  | 3  | SOM        | UiPHONE   | J3Eu        | Somalis.   |
| ARSK   | 7091.0  | 0733         | 6   | 3  | SOM        | UiPHONE   | J3Eu        | Somalis, SelCal.   |
| ARSK   | 7092.0  | 0541         | 10  | 3  | SOM        | UiPHONE   | J3Eu        | Somalis.   |
| ARSK   | 7093.0  | 0733         | 6   | 3  | SOM        | UiPHONE   | J3Eu        | Somalis.   |
| ARSK   | 7096.0  | 0730         | 6   | 3  | SOM        | UiPHONE   | J3Eu        | Somalis.   |
| ARSK   | 7100.0  | vt           | dly | 3  | ERI        | VOBM  | A3E         | Voice of the Broad Masses, Eritrea, broadcast.   |
| ARSK   | 14260.0 | 0745<br>0800 | 27  | 3  | M/E?       | UiPHONE   | J3E         | Non-amateur. Female voice repeating: "674", then "208" followed by a series of numbers, probably cypher. |

### DARC – Germany – Part 1 – DJ9KR (Ui) / DK2OM (Wolf)

| CLUB | kHz    | UTC  | DD | MM | MODE  | ITU | IDENT                     | REMARKS   |
|------|--------|------|----|----|-------|-----|---------------------------|---|
| DARC | 3500,0 | 0937 | 12 | 03 | J3E-U | F   | UiILL                     | French persons, ident "VRX"   |
| DARC | 3500,0 | 2135 | 16 | 03 | J3E-U |     | UiILL                     | unid Arabic male persons  |
| DARC | 3500,0 | vt   | vd | 03 | J3E-U | E   | UiILL                     | Spanish fishery, also using Vocoder CRY-2001 to scramble traffic, heard 10 20 at 1920, 1858, 2100 |
| DARC | 3510,0 | 1054 | 06 | 03 | J3E-U | HOL | UiILL                     | Dutch pirates, possibly fishery   |
| DARC | 3510,0 | 1938 | 21 | 03 | J3E-U | F   | UiILL                     | French pirates  |
| DARC | 3525,0 | 0626 | 06 | 03 | J3E-U | F   | UiILL                     | French fishery, engine noise  |
| DARC | 3525,0 | 1744 | 30 | 03 | J3E-U | F   | UiILL                     | French fishery, engine noise  |
| DARC | 3545,0 | 0955 | 07 | 03 | J3E-U | E   | UiILL                     | Spanish fishery, also using Vocoder CRY-2001 to scramble traffic                                  |
| DARC | 3550,0 | vt   | vd | 03 | A3E   | F   | French<br>Lis<br>Amateurs | daily heard 0600 - 0730 - is in contradiction to IARU BANDPLAN - only CW in this range            |
| DARC | 3560,0 | 1836 | 11 | 03 | J3E-U | I   | UiILL                     | Italian pirates   |
| DARC | 3560,0 | 1756 | 14 | 03 | J3E-U | E   | UiILL                     | Spanish fishery   |
| DARC | 3560,0 | vt   | vd | 03 | J3E-U | G   | UiILL                     | traffic from sw England, daily 2038, 1720   |
| DARC | 3566,0 | 1939 | 05 | 03 | J3E-U | RUS | UiILL                     | female in Russian voice   |
| DARC | 3566,0 | vt   | vd | 03 | J3E   | RUS | UiILL                     | net in Russian language, USB and LSB used, male and female persons, heard 11 16 at 2003, 1859     |
| DARC | 3575,0 | 2017 | 18 | 03 | A3E   | F   | French<br>Lis             | is in contradiction to IARU BANDPLAN, only CW in this range!                                      |

| CLUB | kHz     | UTC  | DD | MM | MODE  | ITU  | IDENT    | REMARKS   |  |  |
|------|---------|------|----|----|-------|------|----------|---|--|--|
|      |         |      |    |    |       |      | Amateurs |   |  |  |
| DARC | 3575,4  | 1818 | 14 | 03 | J3E-U | G    | UiILL    | male person, English dialect, obscene!                                  |  |  |
| DARC | 3585,0  | 0920 | 17 | 03 | J3E-U | G    | UiILL    | UK pirates, located Wales   |  |  |
| DARC | 3590,0  | 1743 | 12 | 03 | J3E-U | F    | UiILL    | persons in French voice, no call sign available                         |  |  |
| DARC | 3590,0  | 2057 | 18 | 03 | J3E-U | E    | UiILL    | Spanish fishery   |  |  |
| DARC | 6999,0  | 1633 | 12 | 03 | J3E-U | RUS  | UiILL    | Russian MIL, USB into ham band  |  |  |
| DARC | 7000,0  | 1643 | 03 | 03 | J3E-U | F.Ea | UiILL    | Far East pirates  |  |  |
| DARC | 7000,0  | 1640 | 18 | 03 | J3E-U |      | UiILL    | pirates in Arabic voice   |  |  |
| DARC | 7000,0  | 0924 | 21 | 03 | J3E-U | RUS  | UiILL    | pirates in Russian voice  |  |  |
| DARC | 7040,0  | 2252 | 28 | 03 | J3E-U | E    | UiILL    | Spanish fishery   |  |  |
| DARC | 10101,0 | 1844 | 20 | 03 | J3E-U | E    | UiILL    | Spanish male to female  |  |  |
| DARC | 10104,0 | 2039 | 04 | 03 | J3E-U | MRC  | UiILL    | Moroccan pirates  |  |  |
| DARC | 10120,0 | 2043 | 04 | 03 | J3E-U | KOR  | UiILL    | Korean ships  |  |  |
| DARC | 10120,0 | 1526 | 13 | 03 | J3E-U | F.Ea | UiILL    | pirates from Far East, Hindi language?                                  |  |  |
| DARC | 10120,0 | 1620 | 17 | 03 | J3E-U | F.Ea | UiILL    | unid pirates  |  |  |
| DARC | 10120,0 | 1602 | 30 | 03 | J3E-U | CLN  | UiILL    | fishery from Sri Lanka  |  |  |
| DARC | 10123,0 | 1928 | 06 | 03 | J3E-U | KOR  | UiILL    | Korean ships  |  |  |
| DARC | 10123,4 | 1433 | 01 | 03 | J3E-L | F.Ea | UiILL    | Far East pirates. LSB used  |  |  |
| DARC | 10127,5 | 0730 | 18 | 03 | J3E-U | I    | UiILL    | Italian pirates   |  |  |
| DARC | 10130,0 | 1614 | 17 | 03 | J3E-U | F.Ea | UiILL    | unid pirates  |  |  |
| DARC | 10135,1 | 1720 | 10 | 03 | J3E-U |      | UiILL    | Arabic male traffic   |  |  |
| DARC | 10147,0 | vt   | vd | 03 | J3E-L | INS  | UiILL    | pirates from Indonesia, very active net all month 1420 - 1630           |  |  |
| DARC | 13998,7 | 1649 | 03 | 03 | J3E-U | MRC  | UiILL    | Moroccan pirates splattering into ham band                              |  |  |
| DARC | 14000,0 | 0913 | 12 | 03 | J3E-U | MRC  | UiILL    | Moroccan pirates  |  |  |
| DARC | 14000,0 | vt   | vd | 03 | J3E-U | SRL  | UiILL    | Sri Lanka fishery, heard 04 09 10 11 24 25 30 at 0922, 1155, 1542, 1558 |  |  |
| DARC | 14001,5 | 1500 | 21 | 03 | J3E-U | CLN  | UiILL    | pirates from Sri Lanka, fishery   |  |  |
| DARC | 14001,5 | 1452 | 28 | 03 | J3E-U | CLN  | UiILL    | fishery from Sri Lanka  |  |  |
| DARC | 14002,0 | 1821 | 13 | 03 | J3E-U | KOR  | UiILL    | Korean ships in South Atlantic Ocean                                    |  |  |
| DARC | 14005,5 | 1436 | 03 | 03 | J3E-U | F.Ea | UiILL    | Far East pirates  |  |  |
| DARC | 14014,6 | 1543 | 12 | 03 | J3E-U | MRC  | UiILL    | Moroccan pirates  |  |  |
| DARC | 14015,9 | 1822 | 20 | 03 | J3E-U | E    | UiILL    | Spanish male to female  |  |  |
| DARC | 14020,0 | 1119 | 13 | 03 | J3E-U | F.Ea | UiILL    | pirates from Far East   |  |  |
| DARC | 14040,0 | 1213 | 28 | 03 | J3E-U | CLN  | UiILL    | fishery from Sri Lanka  |  |  |
| DARC | 14060,7 | 1555 | 30 | 03 | J3E-U | CLN  | UiILL    | fishery from Sri Lanka  |  |  |
| DARC | 14100,0 | 1729 | 06 | 03 | J3E-U | POR  | UiILL    | Portuguese pirates, no call sign  |  |  |
| DARC | 14100,0 | 1435 | 16 | 03 | J3E-U | MRC  | UiILL    | Moroccan pirates  |  |  |
| DARC | 14100,0 | vt   | vd | 03 | J3E-U | E    | UiILL    | Spanish pirates, heard 10 12 at 1804, 1748                              |  |  |
| DARC | 14101,0 | 1446 | 16 | 03 | J3E-U | F.Ea | UiILL    | Far East pirates, possibly Sri Lanka                                    |  |  |
| DARC | 14310,0 | 1843 | 14 | 03 | J3E-U | E    | UiILL    | male to female in Spanish, no amateur radio calls - to 14320            |  |  |
| DARC | 14320,0 | 1844 | 14 | 03 | J3E-U | E    | UiILL    | male to female in Spanish, no amateur radio calls - to 14330            |  |  |
| DARC | 14330,0 | 1845 | 14 | 03 | J3E-U | E    | UiILL    | male to female in Spanish, no amateur radio calls - from 14320          |  |  |
| DARC | 21009,8 | 1002 | 14 | 03 | J3E-U | MRC  | UiILL    | Moroccan pirates  |  |  |

### DARC – Germany – Part 2 – DJ9KR (Ui) / DK2OM (Wolf)

| CLUB | kHz    | UTC  | DD | MM | MODE | ITU | IDENT                | BD  | SH   | REMARKS AND OBSERVATIONS                                 |
|------|--------|------|----|----|------|-----|----------------------|-----|------|--|
| DARC | 1916,7 | 1949 | 05 | 03 | F1B  | D   | TQFR                 | 100 | 170  | SITOR-A, selcall TQFR, is German Coast Guard - is legal! |
| DARC | 3500,0 | 2124 | 01 | 03 | G7B  |     | UiMUX                |     |      | frequency hopper, daily, various times                   |
| DARC | 3500,0 | 2008 | 11 | 03 | G7B  |     | UiMUX                |     |      | frequency hopper   |
| DARC | 3500,0 | 2200 | 26 | 03 | FSK8 | TUR | Turkish Red Crescent | 125 | 1750 | ALE, selcalls 2024, 4015, is Turkish Red Crescent        |
| DARC | 3501,0 | 2057 | 26 | 03 | FSK  |     | UiMUX                |     |      | Thales Skymaster,  |

| CLUB | kHz    | UTC  | DD  | MM | MODE | ITU       | IDENT                  | BD       | SH   | REMARKS AND OBSERVATIONS   |
|------|--------|------|-----|----|------|-----------|------------------------|----------|------|--|
|      |        |      |     |    |      |           |                        |          |      | FSK8, 8 x 125 Bd, unid   |
| DARC | 3501,5 | 1937 | 04  | 03 | G7B  |           | UiMUX                  |          |      | LINK-11, SLEW, unid  |
| DARC | 3503,5 | 1810 | 14  | 03 | FSK8 | G         | UiMUX                  |          |      | ALEL, selcalls XKK, XSS - is UK-MIL "DHFCS", daily                       |
| DARC | 3503,5 | 2320 | 24  | 03 | FSK8 | G         | UiMUX                  |          |      | ALE, selcall XSS   |
| DARC | 3506,0 | 1808 | 14  | 03 | J7D  | RUS       | UiMUX                  | 12 x 120 |      | MPSK-12, AT-3004-D, BPSK, location south of St. Petersburg               |
| DARC | 3508,0 | vt   | vd  | 03 | G7B  |           | UiMUX                  | 2400     |      | MIL-188-110A, 8PSK, 2k4  |
| DARC | 3510,0 | 1918 | 16  | 03 | J7D  | ISR       | UiMUX                  | 2400     |      | MIL-188-110A, hybrid modem, 24 x 75 Bd, QPSK                             |
| DARC | 3515,0 | 2021 | 13  | 03 | FSK8 | F         | UiMUX                  | 125      | 1750 | Thales Skymaster, French MIL, ident "2k"                                 |
| DARC | 3515,0 | 1928 | 20  | 03 | G7B  |           | UiMUX                  |          |      | frequency hopper   |
| DARC | 3517,8 | vt   | vd  | 03 | G7D  | G         | UiMUX                  | 2400     |      | STANAG-4285, 2k4 Bd, 2,5 Hz, 8PSK, UK-Scotland heard 02 05 at 1948, 1740 |
| DARC | 3530,2 | 2250 | 12  | 03 | J7D  |           | UiMUX                  |          |      | Link-11, unid  |
| DARC | 3530,2 | 1854 | 13  | 03 | J7D  |           | UiMUX                  |          |      | Link-11, unid  |
| DARC | 3532,0 | vt   | vd  | 03 | J7D  | RUS       | UiMUX                  |          |      | MPSK-12, AT-3004-D, heard 21 22 at 2052, 2044                            |
| DARC | 3533,8 | 0840 | 17  | 03 | J7D  | BEL / POR | UiMUX                  |          |      | Link-11, unid  |
| DARC | 3533,8 | 1957 | 17  | 03 | J7D  | BEL       | UiMUX                  |          |      | Link-11, location Belgium, with north Portugal, 2 systems                |
| DARC | 3533,8 | 1957 | 17  | 03 | J7D  | POR       | UiMUX                  |          |      | Link-11, location north Portugal, with Belgium, 2 systems                |
| DARC | 3536,0 | 1750 | 29  | 03 | J7D  | RUS       | UiMUX                  |          |      | MPSK-12, AT-3004-D, location St. Petersburg                              |
| DARC | 3536,8 | 2300 | 19  | 03 | G7D  | G         | UiMUX                  | 2400     |      | Stanag-4285, 8PSK, 2k4 - location east of Baldock                        |
| DARC | 3544,0 | 2033 | 26  | 03 | F1B  | RUS       | UiPTR                  | 75       | 250  | unid printer, sw Russia  |
| DARC | 3544,3 | 2120 | 22  | 03 | F1B  | ISR       | UiPTR                  | 75       | 50   | ISR Navy?  |
| DARC | 3552,0 | 1718 | 04  | 03 | F1B  | FNL       | UiPTR                  | 50       | 250  | unid printer   |
| DARC | 3553,7 | vt   | vd  | 03 | G7D  | TUR       | UiMUX                  | 2400     |      | STANAG-4285, 2k4, 8PSK, is Turkish MIL, permanent                        |
| DARC | 3555,0 | 2239 | 06  | 03 | G7B  |           | UiMUX                  |          |      | frequency hopper   |
| DARC | 3555,4 | vt   | vd  | 03 | F1B  | HOL       | UiPTR                  | 300      | 850  | system CLANSMAN, heard 06 - 11 at 0922, 1832                             |
| DARC | 3555,8 | 2300 | 09  | 03 | F1B  | KAZ       | UiPTR                  | 50       | 150  | unid printer, location Kazakhstan  |
| DARC | 3555,8 | 2006 | 18  | 03 | F1B  | KGZ       | UiPTR                  | 150      | 150  | unid printer, location Kirghizia, daily                                  |
| DARC | 3560,0 | 2032 | dly | 03 | A3E  | KRE       | Voice of Korea (North) |          |      | daily active, // 7100  |
| DARC | 3560,0 | 2130 | 16  | 03 | A3E  | KRE       | Voice of Korea (North) |          |      | is active, // 7100   |
| DARC | 3564,0 | 1929 | 05  | 03 | G7B  |           | UiMUX                  |          |      | LINK-11, SLEW, unid  |
| DARC | 3565,0 | 2300 | 12  | 03 | FSK8 | GEO       | UiMUX                  |          |      | ALE, selcalls KBT,   |

| CLUB | kHz    | UTC  | DD | MM | MODE | ITU   | IDENT               | BD | SH  | REMARKS AND OBSERVATIONS   |
|------|--------|------|----|----|------|-------|---------------------|----|-----|--|
|      |        |      |    |    |      |       |                     |    |     | ARAT, 8GS - is Georgian MIL  |
| DARC | 3566,0 | 2037 | 02 | 03 | J7D  | UKR   | UiMUX               |    |     | MPSK-12, AT-3004-D, QPSK   |
| DARC | 3566,0 | 2005 | 11 | 03 | G7B  |       | UiMUX               |    |     | frequency hopper   |
| DARC | 3570,0 | vt   | vd | 03 | J7D  | RUS   | UiMUX               |    |     | MPSK-12, AT-3004-D, west of Moscow, heard 05 14 21 at 1750, 1817, 2230       |
| DARC | 3582,0 | 2010 | 11 | 03 | G7B  |       | UiMUX               |    |     | frequency hopper   |
| DARC | 3588,0 | 1944 | 14 | 03 | J7D  | BLR   | UiMUX               |    |     | MPSK-12, AT-3004-D, location Minsk   |
| DARC | 3588,5 | vt   | vd | 03 | G7D  | F     | UiMUX               | 2k | 2k4 | RFSM-2000, 8PSK, French MIL; daily - hear 1800 - 1930 - 25 reports all month |
| DARC | 3588,8 | 1957 | 17 | 03 | J7D  | POR   | UiMUX               |    |     | Link-11, location nr Brussels, with north Portugal, 2 sytems                 |
| DARC | 3590,0 | 2205 | 13 | 03 | J7D  | RUS   | UiMUX               |    |     | MPSK-12, AT-3004-D - location nw Russia                                      |
| DARC | 3598,4 | 1633 | 02 | 03 | FSK8 | POL   | UiMUX               |    |     | ALE, selcalls P20 - is Polish MIL, daily                                     |
| DARC | 3598,4 | 0950 | 08 | 03 | FSK8 |       | UiMUX               |    |     | ALE, selcalls M10, C30   |
| DARC | 3612,0 | 2240 | 06 | 03 | J7D  | Ea.Eu | UiMUX               |    |     | LINK-11, Eastern Med. Sea, East of Cyprus                                    |
| DARC | 3681,0 | 2048 | 22 | 03 | A1A  |       | UiCW                |    |     | encrypted CW, location?  |
| DARC | 3738,0 | 2113 | 22 | 03 | F1B  | RUS   | UiPTR               | 50 | 250 | unid printer   |
| DARC | 3756,0 | 1536 | 01 | 03 | A3E  | UKR   | "The Pip"           |    |     | channel marker (?), 5 x 2 tones  |
| DARC | 3782,0 | 2040 | 02 | 03 | F1B  | POR   | CTP                 | 75 | 850 | POR Navy HQ Lisbon, legal  |
| DARC | 7000,0 | 2139 | 01 | 03 | A1A  | UKR   | beacon D            |    |     | spurious of beacon-D on 7038,7 (Sevastopol)                                  |
| DARC | 7000,0 | 2145 | 01 | 03 | G7B  |       | UiMUX               |    |     | frequency hopper, daily  |
| DARC | 7000,0 | 2053 | 07 | 03 | A3E  | RUS   | Voice of Russia     |    |     | spurious of 7105   |
| DARC | 7000,0 | 2056 | 09 | 03 | A1A  | UKR   | beacon D            |    |     | spurious of 7038,7   |
| DARC | 7000,0 | 0315 | 12 | 03 | A1A  | UKR   | beacon D            |    |     | IM from 7038,7   |
| DARC | 7000,0 | 0728 | 18 | 03 | P0N  | F     | Ocean Surface Radar |    |     | French Ocean Surface Radar   |
| DARC | 7000,0 | 1646 | 18 | 03 | FSK8 | ALG   | UiMUX               |    |     | ALE, selcalls CY52, RM50 - is Algerian MIL, daily                            |
| DARC | 7000,0 | 2200 | 18 | 03 | A1A  | UKR   | beacon D            |    |     | beacon Sevastopol, SP 7038,7   |
| DARC | 7000,0 | 1802 | 27 | 03 | P0N  | CHN   | Chinese OTH Radar   |    |     | 43 pps   |
| DARC | 7001,0 | 0816 | 26 | 03 | MFSK | RUS   | UiMUX               | 40 |     | MFSK-36, 36 tones, CIS-36  |
| DARC | 7001,0 | vt   | vd | 03 | J7D  | RUS   | UiMUX               |    |     | MPSK-12, AT-3004-D, QPSK, heard 12 13 at 1633, 1709 - location is Moscow     |
| DARC | 7005,0 | 1330 | 08 | 03 | G7B  |       | UiMUX               |    |     | frequency hopper   |
| DARC | 7010,0 | 0753 | 03 | 03 | FSK8 | MAK   | UiMUX               |    |     | ALE, selcalls RS0, CS002 - is Makedonian MIL,                                |

| CLUB | kHz    | UTC  | DD | MM | MODE | ITU | IDENT                  | BD | SH  | REMARKS AND OBSERVATIONS   |
|------|--------|------|----|----|------|-----|------------------------|----|-----|--|
|      |        |      |    |    |      |     |                        |    |     | daily  |
| DARC | 7010,0 | 1102 | 03 | 03 | G7B  |     | UiMUX                  |    |     | frequency hopper   |
| DARC | 7011,7 | 1500 | 17 | 03 | G7B  | ALB | UiMUX                  |    |     | MIL-188-110A, 2,4, 8QPSK   |
| DARC | 7020,0 | 1726 | 09 | 03 | F1B  | RUS | UiPTR                  | 50 | 250 | unid printer, location east of Moscow  |
| DARC | 7020,0 | 1604 | 19 | 03 | P0N  | CHN | Chinese OTH Radar      |    |     | 43 pps   |
| DARC | 7030,0 | 1334 | 30 | 03 | F1B  | RUS | UiPTR                  | 75 | 250 | unid printer   |
| DARC | 7033,0 | 0949 | 20 | 03 | F1B  | RUS | UiPTR                  | 75 | 250 | unid printer, location Moscow  |
| DARC | 7033,5 | 0731 | 13 | 03 | J7D  | RUS | UiMUX                  |    |     | MPSK-12, AT-3004-D   |
| DARC | 7038,7 | vt   | vd | 03 | A1A  | UKR | beacon D               |    |     | beacon Sevastopol heard all month 0320 - 0949 - 1623 - 2200                    |
| DARC | 7038,8 | 0920 | 01 | 03 | A1A  | RUS | beacon P               |    |     | (RMP) beacon of Russian Baltic Sea HQ, Kaliningrad - heard 01 21 at 0920, 1623 |
| DARC | 7039,0 | 1815 | 02 | 03 | A1A  | RUS | beacon C               |    |     | beacon Moscow heard all month, 01, 12 13, 21 at 0320, 0821, 1623, 2223         |
| DARC | 7039,0 | 2223 | 23 | 03 | A1A  | RUS | beacon "HF"            |    |     | "HFB" repeated, location Moscow  |
| DARC | 7039,6 | 0710 | 01 | 03 | A1A  | I   | IZ3DVW / BEACON        |    |     | by IARU not wanted beacon  |
| DARC | 7039,6 | 0920 | 12 | 03 | A1A  | I   | IZ3DVW / BEACON        |    |     | unwanted bcos uncoordinated beacon   |
| DARC | 7039,9 | 1425 | 16 | 03 | A1A  | RUS | beacon S               |    |     | (RIT) Russian Navy Northern HQ Severomorsk (Murmansk)                          |
| DARC | 7040,0 | 1958 | 07 | 03 | A3E  | RUS | Voice of Russia        |    |     | BC-IM, mix of 7105 and 7170, strong!   |
| DARC | 7040,0 | 1935 | 25 | 03 | P0N  | CHN | Chinese OTH Radar      |    |     | 43 pps   |
| DARC | 7040,0 | vt   | vd | 03 | A3E  | RUS | Voice of Russia        |    |     | IM of VOR, heard daily 1514 - 2136   |
| DARC | 7043,4 | 2103 | 19 | 03 | A3E  | HRV | UiBC                   |    |     | distorted Croatian px  |
| DARC | 7044,0 | 1942 | 13 | 03 | A1A  | RUS | REA4 OMSK              |    |     | endless dots all day all month, heard 1542 - 2132 - is Russian Airforce Omsk   |
| DARC | 7044,5 | 1206 | 11 | 03 | J7D  | RUS | UiMUX                  |    |     | MPSK, AT-3004-D  |
| DARC | 7044,7 | 2139 | 01 | 03 | A1A  | RUS | beacon D Sevasto- pol  |    |     | spurious of beacon-D on 7038,7   |
| DARC | 7078,0 | 1211 | 09 | 03 | J7D  | RUS | UiMUX                  |    |     | MPSK-12, AT-3004-D   |
| DARC | 7080,0 | 1737 | 05 | 03 | P0N  | CHN | Chinese OTH Radar      |    |     | system 43 pps  |
| DARC | 7090,0 | 1644 | 01 | 03 | A3E  | RUS | Voice of Russia        |    |     | splatters from 7105  |
| DARC | 7095,0 | vt   | vd | 03 | A3E  |     | UiBC                   |    |     | unid BC  |
| DARC | 7100,0 | vt   | vd | 03 | A3E  | KRE | Voice of Korea (North) |    |     | French px 1800 - 1900, acative 1800 - 2230                                     |
| DARC | 7100,0 | vt   | vd | 03 | A3E  | ERI | Voice of Broad Masses  |    |     | daily active 1700 - 1800   |
| DARC | 7162,0 | 0733 | 13 | 03 | F1B  | RUS | UiPTR                  | 75 | 250 | unid printer   |
| DARC | 7162,0 | 1335 | 30 | 03 | F1B  | RUS | UiPTR                  | 75 | 250 | unid printer   |



| CLUB | kHz     | UTC  | DD | MM | MODE    | ITU     | IDENT             | BD  | SH   | REMARKS AND OBSERVATIONS                          |
|------|---------|------|----|----|---------|---------|-------------------|-----|------|---|
| DARC | 7165,0  | 1132 | 01 | 03 | G7B     |         | UiMUX             |     |      | frequency hopper, heard 01 02                     |
| DARC | 7178,0  | 1152 | 12 | 03 | J7D     | RUS     | UiMUX             |     |      | MPSK-12, AT-3004-D                                |
| DARC | 7188,0  | vt   | vd | 03 | F1B     | RUS     | UiPTR             | 75  | 250  | unid printer heard 12 14 at 0924, 0912            |
| DARC | 7188,0  | vt   | vd | 03 | F1B     | RUS     | UiPTR             | 81  | 250  | unid printer system 81, heard 17 26 at 0836, 0814 |
| DARC | 10100,0 | 2001 | 11 | 03 | G7B     |         | UiMUX             |     |      | frequency hopper                                  |
| DARC | 10101,0 | 1704 | 20 | 03 | G7B     |         | UiMUX             |     |      | frequency hopper                                  |
| DARC | 10104,0 | 1506 | 06 | 03 | G7B     |         | UiMUX             |     |      | frequency hopper                                  |
| DARC | 10105,0 | 1709 | 03 | 03 | FSK8    |         | UiMUX             |     |      | ALE, selcalls 911911, 911913 - unid net           |
| DARC | 10105,0 | 0926 | 21 | 03 | J7D     | RUS     | UiMUX             |     |      | MPSK-12, AT-3004-D, west of Moscow                |
| DARC | 10112,0 | 0951 | 01 | 03 | G7D     | TUR     | UiMUX             |     |      | STANAG-4285, 2,4, 8PSK, is Turkish MIL, permanent |
| DARC | 10114,7 | 0736 | 03 | 03 | F1B     | RUS     | UiPTR             | 96  | 1000 | system CIS-14, daily                              |
| DARC | 10117,0 | 1634 | 18 | 03 | J7D     | RUS     | UiMUX             |     |      | MPSK-12, AT-3004-D, location Samara               |
| DARC | 10120,0 | 1528 | 13 | 03 | FSK8    |         | UiMUX             |     |      | ALE, selcalls 5001, 7001                          |
| DARC | 10120,5 | 0952 | 01 | 03 | F1B     | RUS     | UiPTR             | 50  | 250  | unid printer                                      |
| DARC | 10124,0 | 1544 | 07 | 03 | FSK36   | RUS     | UiMUX             | 40  |      | CIS-36, 36 tones                                  |
| DARC | 10125,0 | 1055 | 04 | 03 | P0N     | G / CYP | British OTH Radar |     |      | 50 Hz-system                                      |
| DARC | 10125,0 | 1212 | 09 | 03 | P0N     | G / CYP | British OTH Radar |     |      | 50 pps  |
| DARC | 10130,0 | 1108 | 03 | 03 | F1B     | RUS     | UiPTR             | 50  | 500  | unid printer, Baudot encrypted                    |
| DARC | 10130,0 | 1828 | 15 | 03 | G7B     |         | UiMUX             |     |      | frequency hopper                                  |
| DARC | 10130,0 | 1829 | 15 | 03 | FSK8    |         | UiMUX             |     |      | Thales Skymaster, FSK8, 8 x 125 Bd, unid          |
| DARC | 10130,0 | 0950 | 28 | 03 | P0N     | G / CYP | British OTH Radar |     |      | 50 pps  |
| DARC | 10131,7 | 1615 | 17 | 03 | FSK8    | ISR     | UiMUX             |     |      | ALE, selcall BA4, is Israel Air Force, daily      |
| DARC | 10135,0 | 1640 | 11 | 03 | P0N     | CHN     | Chinese OTH Radar |     |      | system 43 pps, bandwidth 50 kHz                   |
| DARC | 10145,0 | 1652 | 30 | 03 | FSK8    |         | UiMUX             |     |      | ALE, selcall EB6                                  |
| DARC | 10150,0 | 1450 | 12 | 03 | MFSK 36 | RUS     | UiMUX             | 40  |      | CIS-36, 36 tones                                  |
| DARC | 14000,0 | 1126 | 01 | 03 | G7B     |         | UiMUX             |     |      | frequency hopper, daily                           |
| DARC | 14003,0 | 0856 | 24 | 03 | F1B     | RUS     | UiPTR             | 75  | 250  | unid printer                                      |
| DARC | 14008,0 | vt   | vd | 03 | F1B     | RUS     | UiPTR             | 50  | 250  | location Velikiye Luki, heard 05 13 at 0815, 1020 |
| DARC | 14016,0 | 0912 | 26 | 03 | J7D     | RUS     | UiMUX             |     |      | MPSK-12, AT-3004-D                                |
| DARC | 14021,0 | 1040 | 08 | 03 | XXX     |         | UiMUX             |     |      | multiplex   |
| DARC | 14026,0 | 0956 | 14 | 03 | J7D     | RUS     | UiMUX             |     |      | MPSK-12, AT-3004-D                                |
| DARC | 14028,0 | vt   | vd | 03 | F1B     | RUS     | UiPTR             | 75  | 250  | unid printer heard 03 24 at 0752, 0914            |
| DARC | 14028,0 | vt   | vd | 03 | F1B     | RUS     | UiPTR             | 75  | 250  | unid printer, heard 13 17 at 0754, 1030           |
| DARC | 14048,5 | vt   | vd | 03 | F1B     | LBY     | UiPTR             | 600 | 600  | DPRK-FSK 600/600, daily 1655 - 1700               |
| DARC | 14050,0 | 1057 | 06 | 03 | F1B     | RUS     | UiPTR             | 50  | 250  | unid printer                                      |
| DARC | 14065,0 | 1544 | 28 | 03 | G7B     |         | UiMUX             |     |      | frequency hopper                                  |

| CLUB | kHz     | UTC  | DD | MM | MODE | ITU     | IDENT             | BD  | SH   | REMARKS AND OBSERVATIONS   |
|------|---------|------|----|----|------|---------|-------------------|-----|------|--|
| DARC | 14070,0 | 1800 |    | 03 | G7B  |         | UiMUX             |     |      | frequency hopper   |
| DARC | 14102,0 | 0959 | 20 | 03 | G7B  |         | UiMUX             |     |      | frequency hopper   |
| DARC | 14120,0 | 1106 | 03 | 03 | F1B  | RUS     | UiPTR             | 75  | 250  | unid printer, idling   |
| DARC | 14120,0 | vt   | vd | 03 | F1B  | RUS     | UiPTR             | 81  | 250  | heard 08 23 at 0932, 0755, 0927 - location near Moscow           |
| DARC | 14122,0 | vt   | vd | 03 | J7D  | RUS     | UiMUX             |     |      | MPSK-12, AT-3004-D, heard 04 14 20 21 22 at 0900 - 1052          |
| DARC | 14135,0 | 0917 | 24 | 03 | F1B  | RUS     | UiPTR             | 75  | 250  | unid printer   |
| DARC | 14160,0 | 1058 | 06 | 03 | F1B  | RUS     | UiPTR             | 50  | 250  | unid printer   |
| DARC | 14169,0 | 0914 | 26 | 03 | F1B  | RUS     | UiPTR             | 41  | 200  | system FROST-1   |
| DARC | 14171,0 | 0811 | 26 | 03 | J7D  | RUS     | UiMUX             |     |      | MPSK-12, AT-3004-D   |
| DARC | 14216,0 | 1059 | 06 | 03 | F1B  | RUS     | UiPTR             | 100 | 1000 | CIS-14   |
| DARC | 14226,0 | 1442 | 10 | 03 | F1B  | RUS     | UiPTR             | 75  | 250  | unid printer   |
| DARC | 14240,0 | 1001 | 20 | 03 | F1B  | RUS     | UiPTR             | 75  | 250  | unid printer, location west of Omsk                              |
| DARC | 14242,0 | 1057 | 08 | 03 | XXX  |         | UiMUX             |     |      | multiplex  |
| DARC | 14270,0 | 1400 | 25 | 03 | A3E  | RUS     | Voice of Russia   |     |      | harmonic of 7135   |
| DARC | 14350,0 | 0933 | 25 | 03 | P0N  | G       | British OTH Radar |     |      | 50 pps   |
| DARC | 18007,0 | 1107 | 08 | 03 | P0N  | ?       | OTH-Radar         |     |      | chirping and rattling pulses                                     |
| DARC | 18130,0 | 1420 | 14 | 03 | A3E  |         | UiBC              |     |      | unid BC  |
| DARC | 21000,0 | 0928 | 24 | 03 | P0N  | G / CYP | British OTH Radar |     |      | 50 pps (50-Hz-system)  |
| DARC | 21085,0 | 1106 | 04 | 03 | P0N  | G / CYP | British OTH Radar |     |      | 50 pps (50-Hz-system)  |
| DARC | 21120,0 | 1540 | 09 | 03 | P0N  | G / CYP | British OTH Radar |     |      | 50 pps (50-Hz-system)  |
| DARC | 21135,0 | 1410 | 01 | 03 | FSK8 | IRQ     | MOD Iraq          |     |      | ALE, selcalls MOD, 1DV, 9DV - is Iraq Ministry of Defense, daily |
| DARC | 21135,2 | 1312 | 04 | 03 | FSK8 | IRQ     | Iraq MIL Mossul   |     |      | ALE, selcalls 1030, 1642   |
| DARC | 21310,0 | 1356 | 12 | 03 | FSK8 |         | UiMUX             |     |      | ALE, selcall 8803  |
| DARC | 21420,0 | 1123 | 01 | 03 | P0N  | G / CYP | British OTH Radar |     |      | 50 Hz-system   |

### MRASZ – Hungary - HA7PL (Laci)

| CLUB  | kHz    | UTC  | DD  | MM | MODE | ITU  | IDENT | BD  | SH   | REMARKS   |
|-------|--------|------|-----|----|------|------|-------|-----|------|---|
| MRASZ | 7000.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | NEW INTRUDER  |
| MRASZ | 7000.0 | 0-24 | DLY | 3  | FSK8 | ALG  | ALE   | 125 | 1750 | ALGERIAN MILITARY: LNM-DKJ, ASD-DKJ, ASD-EKK, ASD-POW LINK WAS ESTABLISHED THIS MONTH.  |
| MRASZ | 7000.0 | 0-24 | DLY | 3  | FSK8 | ALG  | ALE   | 125 | 1750 | ANOTHER ALGERIAN MILITARY NETWORK WAS ACTIVE. CY52 THE NET CONTROL STATION CONTACTED WITH CY40, CY42, CY49, CY51. HQ3 CALLEDMOBILE 23, MOBILE24 WERE OUT. |
| MRASZ | 7000.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | THE INTRUDER USED TILL NOW ONLY 7092 TARTED TO APPEAR HERE TOO. CALLSIGNS WERE: 2214, 2215,   |

| CLUB  | kHz    | UTC  | DD  | MM | MODE | ITU  | IDENT | BD  | SH   | REMARKS  |
|-------|--------|------|-----|----|------|------|-------|-----|------|--|
|       |        |      |     |    |      |      |       |     |      | 2216, 2412, 2427.  |
| MRASZ | 7000.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | ZWARA-GHADAMES   |
| MRASZ | 7003.0 | 0-24 | DLY | 3  | FSK8 | USA  | ALE   | 125 | 1750 | USAF NETWORK WAS BUSY AS USUAL (MORE THAN 400 TRANSMISSIONS). T01185 THE NET CONTROL STATION. NEW HELICOPTERS: R 23839, R23941, R24509, R23715, R24509. SOME OTHERS WERE ALSO ACTIVE HERE. |
| MRASZ | 7005.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | 123461, 123471 sounded   |
| MRASZ | 7005.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | 8001 sounded   |
| MRASZ | 7007.0 | 0-24 | DLY | 3  | FSK8 | ISR  | ALE   | 125 | 1750 | AAA sounded. ISRAELI AIR FORCE HEADQUARTER. NEW INTRUDER NOT WELCOME.  |
| MRASZ | 7010.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | RS-CS NETWORK PRODUCED A GREAT TRAFFIC MORE THAN 500 TRANSMISSIONS.  |
| MRASZ | 7014.0 | 0-24 | DLY | 3  | FSK8 | NIG  | ALE   | 125 | 1750 | NIGERIEN POLICE 411411, 4111,4113,4115,411413,411414,411415, 4112-4111   |
| MRASZ | 7017.0 | 0-24 | DLY | 3  | FSK8 | ISR  | ALE   | 125 | 1750 | AAA sounded. ISRAELI AIR FORCE HEADQUARTER. NEW INTRUDER NOT WELCOME.  |
| MRASZ | 7020.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | RS-CS NETWORK PRODUCED A GREAT TRAFFIC MORE THAN 200 TRANSMISSIONS.  |
| MRASZ | 7027.0 | 0-24 | DLY | 3  | FSK8 | USA  | ALE   | 125 | 1750 | ICZSPR SOUNDED   |
| MRASZ | 7034.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | LAST MONTH NEW INTRUDER : 527 CALLED 390.  |
| MRASZ | 7041.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | T01185 SOUNDED THIS FREQUENCY MAY BE A RESERVE   |
| MRASZ | 7045.0 | 0-24 | DLY | 3  | FSK8 | GEO  | ALE   | 125 | 1750 | GEORGIAN MILITARY NETWORK WAS VERY ACTIVE: MORE THAN 1000 TRANSMISSION!!!  |
| MRASZ | 7051.0 | 0-24 | DLY | 3  | FSK8 | GEO  | ALE   | 125 | 1750 | GEORGIAN MILITARY NETWORK NEW FREQUENCY!!! WE ARE NOT HAPPY.   |
| MRASZ | 7060.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | ICZSPR SOUNDED   |
| MRASZ | 7061.0 | 0-24 | DLY | 3  | FSK8 | NIG  | ALE   | 125 | 1750 | NIGERIAN POLICE 211-511  |
| MRASZ | 7062.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | 100 - 105  |
| MRASZ | 7068.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | 401 SOUNDED NEW INTRUDER   |
| MRASZ | 7069.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | NEW INTRUDER: 322 CALLED 304.  |
| MRASZ | 7069.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | 322-304 NEW INTRUDER   |
| MRASZ | 7070.0 | 0-24 | DLY | 3  | FSK8 | CHN  | ALE   | 125 | 1750 | 288NET VERY ACTIVE.CALLSIGNS:288,00,73 8,686,587,571,494,204,334,514,68 6,510  |
| MRASZ | 7080.0 | 0-24 | DLY | 3  | FSK8 | CHN  | ALE   | 125 | 1750 | 288NET VERY ACTIVE.CALLSIGNS:288,00,73 8,686,587,571,494,204,334,514,68 6,510  |
| MRASZ | 7081.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | 5810 sounded.  |
| MRASZ | 7083.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | NEW INTRUDER: 126 CALLED 246   |
| MRASZ | 7090.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | 4001, 4033, 6056, SOUNDED  |
| MRASZ | 7092.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | CALL SIGNS: 1020 IS THE NCS. IT CONTACTED 2013,2011,2012,4017,2010,2014,2015,2016,4015,4016,3012,2017,40   |

| CLUB  | kHz    | UTC  | DD  | MM | MODE | ITU  | IDENT | BD  | SH   | REMARKS   |
|-------|--------|------|-----|----|------|------|-------|-----|------|---|
|       |        |      |     |    |      |      |       |     |      | 01,4011,4012,4013 BUSY UNID<br>NET 4 FIGURES CALLSIGNS                      |
| MRASZ | 7097.0 | 0-24 | DLY | 3  | FSK8 | ISR  | ALE   | 125 | 1750 | AAA sounded. ISRAELI AIR<br>FORCE HEADQUARTER. NEW<br>INTRUDER NOT WELCOME. |
| MRASZ | 7100.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | 0711 CONTACTED 0807, 1505.<br>SOUNDED: 1000                                 |
| MRASZ | 7100.0 | 0-24 | DLY | 3  | FSK8 | ALG  | ALE   | 125 | 1750 | ASD CONTACTED EKK   |
| MRASZ | 7100.0 | 0-24 | DLY | 3  | FSK8 | UNID | ALE   | 125 | 1750 | MOB2MSS CONTACTED<br>OKROKANMSS   |

### OEVSV – Austria – OE3DMA (Alex)

### RSGB - Great Britain – G4BOH (Chris)

### SRAL – Finland – OH2BLU (Pekka)

| Society | kHz    | UTC           | DD        | MM | ITU | IDENT             | MODE | SH  | REMARKS                          |
|---------|--------|---------------|-----------|----|-----|-------------------|------|-----|----------------------------------|
| SRAL    | 7030,0 | 1300-<br>1530 | 24        | 3  |     | UiPTR             | F1B  | 250 |                                  |
| SRAL    | 7030,0 | 1300-<br>1530 | 30        | 3  |     | UiPTR             | F1B  | 250 |                                  |
| SRAL    | 7038,7 | h24           | 1-2       | 3  | UKR | D                 | A1A  |     | Sevastopol                       |
| SRAL    | 7038,7 | h24           | 28-<br>31 | 3  | UKR | D                 | A1A  |     | Sevastopol                       |
| SRAL    | 7038,9 | 0400-<br>1830 | 25-<br>31 | 3  | RUS | S                 | A1A  |     | Severomorsk/Murmansk             |
| SRAL    | 7039,0 | h24           | dly       | 3  | RUS | C                 | A1A  |     | Moscow                           |
| SRAL    | 7041,0 | 1440-<br>1450 | 3         | 3  |     | UiCW              | A1A  |     | MR 5BL                           |
| SRAL    | 7048,0 | 0850          | 2         | 3  | RUS | RZTK              | A1A  |     |                                  |
| SRAL    | 7056,0 | 1110          | 2         | 3  |     | ZBPN              | A1A  |     | Calls VZPR etc.                  |
| SRAL    | 7100,0 | 1755-<br>2100 | dly       | 3  | KRE | Voice of<br>Korea | A3E  |     |                                  |
| SRAL    | 7100,0 | 0400-<br>0530 | dly       | 3  | ERI | VoBME             | A3E  |     |                                  |
| SRAL    | 7100,0 | 1530-<br>1803 | dly       | 3  | ERI | VoBME             | A3E  |     |                                  |
| SRAL    | 7122,0 | 0430-<br>1830 | 3         | 3  |     | UiPTR             | F1B  | 200 | 25 Hz dotter                     |
| SRAL    | 7122,0 | 0430-<br>1830 | 12        | 3  |     | UiPTR             | F1B  | 200 | 25 Hz dotter                     |
| SRAL    | 7122,0 | 0430-<br>1830 | 24-<br>31 | 3  |     | UiPTR             | F1B  | 200 | 25 Hz dotter                     |
| SRAL    | 7124,0 | 1130-<br>1300 | 12        | 3  |     | UiMUX             | F7   |     |                                  |
| SRAL    | 7162,0 | 1300-<br>1600 | *         | 3  |     | UiPTR             | F1B  | 250 | Days 5, 22, 24 & 30              |
| SRAL    | 7178,0 | 1145-<br>1300 | 12        | 3  |     | UiMUX             | F7   |     |                                  |
| SRAL    | 7188,0 | 0700-<br>1230 | *         | 3  |     | UiPTR             | F1B  | 225 | 37,5 Hz dotter, days 12, 14 & 24 |
| SRAL    | 7190,0 | 1130-<br>1200 | 21        | 3  |     | UiMUX             | F7   |     |                                  |

## USKA – Switzerland – HB9CET (Peter)

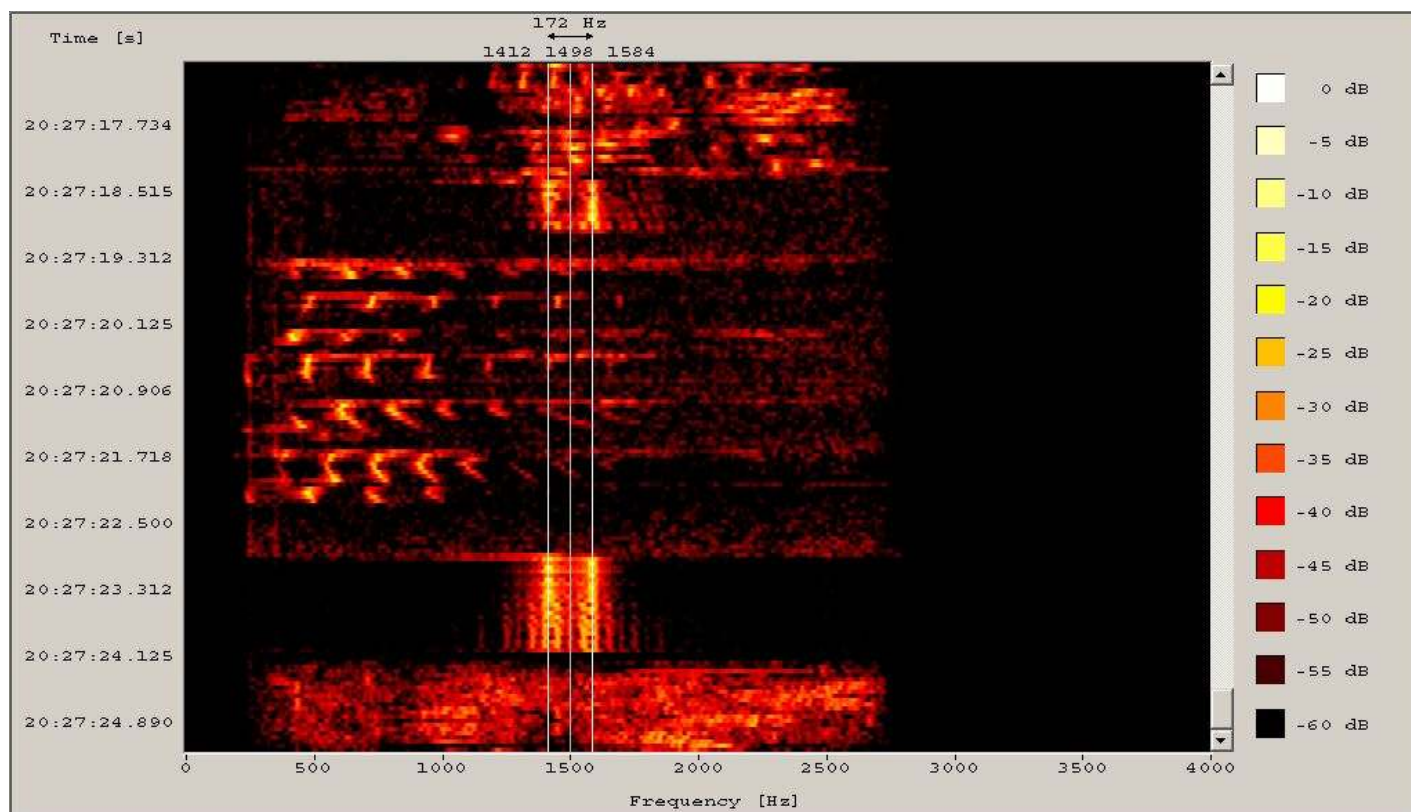
| SOC  | kHz     | UTC        | DD | MM | ITU | IDENT | MODE  | BD     | SH    | DETAILS  |
|------|---------|------------|----|----|-----|-------|-------|--------|-------|--|
| USKA | 3667.5  | 0901       | 08 | 03 |     |       |       |        |       | Jammer; almost daily interfering ham's (melody, noise) daily |
| USKA | 7039.0  | 1639       | 10 | 03 | RUS | C     | A1A   |        |       | Beacon C Moscow  |
| USKA | 7045.0  | 1805       | 17 | 03 | GEO | EDE   | J7D   | 125    | 1750  | ALE MIL188-141A to KB1 this is EDE daily                     |
| USKA | 7045.0  | 1820       | 17 | 03 |     | DSD   | J7D   | 125    | 1750  | ALE MIL188-141A to KBT this is DSD daily                     |
| USKA | 7045.0  | 1823       | 17 | 03 |     | KBT   | J7D   | 125    | 1750  | ALE MIL188-141A to 2BR this is KBT daily                     |
| USKA | 10123.0 | 1435       | 26 | 03 |     |       | J3e u |        |       | english conversation, no ham's                               |
| USKA | 14008.0 | 1119       | 03 | 03 | RUS |       | F1B   | 2x50   | 2x500 | MFSK-4; unident Printer                                      |
| USKA | 14008.0 | 1205       | 12 | 03 |     |       | F1B   | 50     | 250   | unident Printer  |
| USKA | 14008.0 | 0845       | 20 | 03 |     |       | F1B   | 75     | 250   | unident Printer  |
| USKA | 14014.0 | 1145       | 26 | 03 |     |       | F1B   | 75     | 250   | unident Printer  |
| USKA | 14028.0 | 1221       | 13 | 03 |     |       | F1B   | 75     | 250   | unident Printer  |
| USKA | 14050.0 | 0811       | 31 | 03 |     |       | F1B   | 50     | 250   | unident Printer  |
| USKA | 14104.0 | 0908       | 03 | 03 |     |       | F1B   | 81     | 250   | CIS 81 daily   |
| USKA | 14120.0 | 1341       | 11 | 03 | RUS |       | F1B   | 81     | 250   | CIS 81 daily   |
| USKA | 14122.0 | 0853       | 20 | 03 |     |       | J7D   | 12x120 |       | MPSK-12: CIS 12 = AT3004D                                    |
| USKA | 14240.5 | 0925       | 20 | 03 |     |       | F1B   | 75     | 250   | unident printer  |
| USKA | 14242.0 | 0944       | 31 | 03 | RUS |       | J7D   | 12x120 |       | MPSK-12: CIS 12 = AT3004D Testemissions, often idling        |
| USKA | 14242.0 | 0944       | 31 | 03 |     |       | A1A   |        |       | together with the AT3004D Test                               |
| USKA | 14248.5 | 1231       | 20 | 03 |     |       | F1B   | 600    | 600   | unident Burst ARQ daily                                      |
| USKA | 14258.0 | 0941       | 07 | 03 |     |       | J7D   | 12x120 |       | MPSK-12: CIS 12 = AT3004D                                    |
| USKA | 14262.0 | 1141       | 03 | 03 |     |       | A1A   |        |       | random letters only; 1057 QRT                                |
| USKA | 14265.0 | 0914       | 03 | 03 |     |       | J7D   | 12x120 |       | MPSK-12: CIS 12 = AT3004D                                    |
| USKA | 14283.0 | 0914<br>vt | 20 | 03 |     |       | A1A   |        |       | letters and figures daily                                    |
| USKA | 14302.0 | 1051       | 20 | 03 |     |       | J7D   | 12x120 |       | MPSK-12: CIS 12 = AT3004D                                    |
| USKA | 14350.0 | 1136       | 12 | 03 | E   |       | J3e u |        |       | Spanish fishery, long. convers.                              |
| USKA | 14350.0 | 0920       | 25 | 03 |     |       | P0N   |        |       | unident OTHR 50pps 20ms                                      |
| USKA | 21095.0 | 1430       | 31 | 03 |     |       | P0N   |        |       | unident OTH Radar, 43ms (21095 to 21120 kHz)                 |

## Veron – Netherlands – PA0GRU (Dick)

| SOC   | kHz     | UTC   | DD | MM | ITU | IDENT  | MODE  | DETAILS  |         |                                   |
|-------|---------|-------|----|----|-----|--------|-------|----------|---------|-----------------------------------|
| VERON | 7002,0  | 18.56 | 3  | 3  | RUS | RGT77  | A1A   | rgt77    | 113=    | (5BL) K                           |
| VERON | 7002,0  | 17.35 | 5  | 3  | RUS | RGT77  | A1A   | 5BL      |         |                                   |
| VERON | 7002,0  | 20.04 | 7  | 3  | RUS | RGT77  | A1A   | rgt77    | 011=    | (5BL) = K                         |
| VERON | 7002,0  | 19.35 | 24 | 3  | 5T5 | 5T5DC  | A1A   | unknown  | qrm-er: | "qrm cq dx bad dx etc"            |
| VERON | 7005,0  | 09.10 | 2  | 3  | CIS | UiILL  | J3E-1 | Russian, |         | male voices                       |
| VERON | 7010,0  | 17.00 | 2  | 3  | RUS | UiILL  | J3E-1 | Russian, |         | male voices                       |
| VERON | 7038,7  | 06.09 | ** | 3  | UKR | D      | A1A   | 21.57    | utc,    | beacon D, 5 days                  |
| VERON | 7038,9  | 06.07 | ** | 3  | RUS | C      | A1A   | 21.45    | utc,    | beacon C, 22 days                 |
| VERON | 7038,9  | 06.07 | ** | 3  | RUS | S      | A1A   | 18.28    | utc,    | beacon S, 4 days                  |
| VERON | 7041,0  | 18.32 | 5  | 3  | CIS | UiCW   | A1A   | 5BL:     |         | 218 AR                            |
| VERON | 7041,0  | 16.18 | 24 | 3  | CIS | BC6B   | A1A   | Proc     |         |                                   |
| VERON | 7046,0  | 16.41 | 3  | 3  | ?   | UiCW   | A1A   | figure   |         | groups of different length        |
| VERON | 7046,0  | 17.56 | 5  | 3  | ?   | UiCW   | A1A   | figure   |         | groups                            |
| VERON | 7046,0  | 18.07 | 5  | 3  | ?   | PABA   | A1A   | XXX      | PABA    | 61653 OKTAWA 9653                 |
| VERON | 7046,0  | 18.43 | 13 | 3  | CIS | PABA   | A1A   | XXX      | PABA    | 77790 FALXCHYWYJ<br>1812 K        |
| VERON | 7094,5  | 21.52 | 25 | 3  | RUS | V.O.R. | A3E   | Splatter |         | V.O.R. 7105 KHz                   |
| VERON | 7095,0  | 21.45 | 21 | 3  | RUS | V.O.R. | A3E   | Splatter |         | V.O.R. 7105 KHz                   |
| VERON | 10109,0 | 15.37 | 20 | 3  | CIS | UiMUX  |       | heavy    |         | noise, 5.6 KHz wide, also 23/25/3 |
| VERON | 14008,0 | 10.44 | 31 | 3  | CIS | UiPtr  | F1B   | Revs/Ptr |         |                                   |
| VERON | 14028,0 | 10.55 | 17 | 3  |     | UiPtr  | F1B   | Ptr      |         |                                   |
| VERON | 14050,0 | 08.18 | 31 | 3  | RUS | RGT77  | A1A   | XXX      | RGT77   | KFDP 93728 (parallel<br>14284)    |

| SOC   | kHz     | UTC   | DD | MM | ITU  | IDENT | MODE  | DETAILS                               |
|-------|---------|-------|----|----|------|-------|-------|---------------------------------------|
| VERON | 14092,0 | 08.35 | 3  | 3  | RUS  | RGT77 | A1A   | 5BL                                   |
| VERON | 14092,0 | 08.09 | 7  | 3  | RUS  | RGT77 | A1A   | rgt77 308=(5BL)= K                    |
| VERON | 14092,0 | 08.26 | 10 | 3  | RUS  | RGT77 | A1A   | rgt77 882=(5BL) = K                   |
| VERON | 14092,0 | 08.51 | 13 | 3  | RUS  | WEGI  | A1A   | XXX WEGI 35137 HLOORCD 3486<br>2230 k |
| VERON | 14092,0 | 09.25 | 13 | 3  | RUS  | RGT77 | A1A   | rgt77 194=(5BL) = K                   |
| VERON | 14100,0 | 09.40 | 8  | 3  | Asia | UiILL | J3E-1 | Asian language, male voices           |
| VERON | 14104,0 | 09.30 | ** | 3  |      | UiPtr | F1B   | 11.30 utc, Ptr, 2 days                |
| VERON | 14120,0 | 09.30 | 19 | 3  |      | UiPtr | F1B   | Ptr                                   |
| VERON | 14135,0 | 09.30 | 19 | 3  |      | UiPtr | F1B   | Ptr                                   |
| VERON | 14160,0 | 08.15 | 31 | 3  |      | UiPtr | F1B   | Ptr                                   |
| VERON | 14226,0 | 15.18 | 10 | 3  |      | UiPtr | F1B   | Ptr                                   |
| VERON | 14243,0 | 11.18 | 18 | 3  | E    | UiILL | J3E-1 | Spanish male voices, info PD2HE       |
| VERON | 14263,0 | 13.40 | 16 | 3  | CIS  | UiCW  | A1A   | Strings of Cyrillic Morse             |
| VERON | 18080,0 | 12.52 | 2  | 3  |      | OTHR  | PON   | OTH radar wide 18100 KHz              |
| VERON | 21092,0 | 13.38 | 25 | 3  |      | OTHR  | PON   | OTH radar                             |
| VERON | 21248,0 | 14.42 | 26 | 3  |      | OTHR  | PON   | OTH radar                             |
| VERON | 21280,0 | 14.45 | 26 | 3  |      | OTHR  | PON   | OTH radar                             |

**Vocoder “CRY 2001” (encrypted voice traffic) on 3500 kHz in USB. The key exchange with 100 Bd and 170 Hz shift (FEC) is visible in the center of the screenshot (white cursor lines). The system is used by Spanish fishermen.**



# IARUMS Region 1

Manual2006, Monitoring Template, WAV-files, Fishery Buoys on 10m, Latest Intruder News, Co-ordinator's Corner, Monthly Overview, Newsletter Collection, Important Links, Contacts, Gallery, History of IARUMS Region 1, ITU Informations, the Story of Ron Roden's Life, Successful Actions, Bandplans, Frequency Allocation Tables and Soundfiles are available on: <http://www.iarums-r1.org>

**Many thanks for your interest!**

## **The monitoring team of IARU Region 1**

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