# 2019 World Wide Digi DX Contest

## 31 August – 1 September



ZW5B team which achieved the overall top score (back) Oms PY5EG, Pav PY5EJ, Peter PY5CC, Neto PU2TIB (front) Luc PY5KD, Erika PU5SIX

With the solar flux index at 66, the A index at 38 and the K index at 5, the very first World Wide Digi DX Contest experienced extremely poor conditions in the lowest part of sunspot cycle 24. Yet both FT4 and FT8 showed their value as contest modes under adverse conditions. A total of 168,685 QSOs were reported in 1,329 logs received. With very little 10 or 15-meter activity (only 5% of all QSOs), most contacts were made on 20 meters (49%). 40, 80 and 160 meters accounted for the other 46%.

Prior to the contest, there had been very little FT-mode contesting. One thing we did know was that when contest organizers recommended contest frequencies away from the standard FT frequencies, contesters still showed up on standard frequencies anyway. This caused a lot of confusion in other FT-mode contests because of the different exchanges used.

For the WW Digi DX contest, the organizers decided to make the contest exchange the same as the standard exchange so contest QSOs could be made on everyday FT frequencies without

disrupting casual QSOs. It's seems to have been a good idea. Being able to use standard FT8 frequencies in addition to contest frequencies seemed to work well, especially late the contest.

One huge advantage FT-mode contesting has over its legacy counterparts is the ease at which the operation can be done remotely. Several operators reported operating remotely including Hisami, 7L4IOU, who wrote "Thanks to WWORF and SCC for organizing a wonderful contest. I worked most (80%) QSO by remote operation from JARTS booth of Tokyo HAM Faire."

## **SOAB High Power**

Starting off in the Single Op All Band High Power category, Helmut, DF7EE, piloted the LX7I super station to 1373 contacts and 400,640 points for the win. He edged Matt, KA1R, by less than 4,000 points. Matt, located on the US East Coast in Massachusetts, finished with 356,720 points despite having 430 less contacts than Helmut. Matt also had 22 more multipliers (182 vs. 160) and averaged nearly 2.1 points per QSO compared to Helmut's 1.8. Lew, W7EW, located on the US West Coast in Oregon, was not far behind in 3<sup>rd</sup> with 329,522 points and 146 multipliers from 920 contacts. Lew had a better point-per-QSO average than both Helmut and Matt at 2.5. Well-known contesters Bud, AA3B, and Alex, YO9HP, rounded out the top five. In all, the SOAB High Power category had 224 or 17% of all entries.



Helmut LX7I (DF7EE) won SOAB HP

Lew W7EW is 3<sup>rd</sup> SOAB HP

## **SOAB Low Power**

Half of all entries (660) entered the Single Operator All Band Low Power category, making it the most popular by far. As with SOAB HP, there was an equally close finish between the first and second place finishers. David, VK3BDX, (342 QSOs/83 multipliers/133,049 points) eked out the win over Levi, K6JO, operating as KR1DX (718 QSOs/96 multipliers/130,272 points) from California. Levi had more than twice as many QSOs but David prevailed with a monstrous 4.7 point-per-QSO average compared to 1.9 for Levi. John, W7CD, finished third (115,632 points)

from Washington state. Fourth and fifth place finishers John, IK4LZH, and Filipe, CT1ILT, battled to a near dead heat. Their scores were separated by only 428 points.



David VK3BDX won SOAB LP

### Leo CX3AL won 20 Meter LP

## SOAB QRP

In the Single Op All Band QRP category, Karel, OK2FD (26,250 points), outdistanced Pat, ON3CQ (14,850), for first place. Places three through five were separated by only 202 points with Mark, K6UFO, operating remotely as NN7SS taking third with 10,471 points. Anthony, K8ZT, was fourth (10,368 points) and Helio, S92HP (10,336 points), was fifth. There were 40 entries in the SOAB QRP category.

## 2019 WORLD WIDE DIGI DX CONTEST PLAQUE SPONSORS AND WINNERS

#### **Single-Operator High Power**

World All Band: Sponsored by Araucaria DX Group. Winner: LX7I (op. Helmut Mueller, DF7EE) Europe All Band: Sponsored by MSHV Development Team – OZ1PIF Memorial. Winner: Alex Panoiu, YO9HP USA All Band: Sponsored by MSHV Development Team – OZ1PIF Memorial. Winner: Matthew Power, KA1R World 1.8 MHz: Sponsored by Richard Palio, WU6W. Winner: DM7C (op. Olaf Brunner, DL7CX) World 21 MHz: Sponsored by Luciano Scandelari, PY5KD. Winner: Luciano Scandelari, PY5KD World 28 MHz: Sponsored by Thomas Carney, K6EU. Winner: Kristjan Kodermac, S50XX

### **Single-Operator Low Power**

World All Band: Sponsored by Joe Taylor, K1JT. Winner: David Burden, VK3BDX Europe All Band: Sponsored by DX-WORLD NET. Winner: Gianluca Mazzini IK4LZH North Americal All Band: Sponsored by Ivo Jereb S57AL. Winner: KR1DX (op. Levi Jefferies, K6JO) Asia All Band: Sponsored by MSHV Development Team – OZ1PIF Memorial. Winner: Tex Izumo 9M2TO Oceania All Band: Sponsored by MSHV Development Team – OZ1PIF Memorial.

Winner: Turjiman Kendhagawessi YF0TUR

USA All Band: Sponsored by Dennis Motschenbacker, K7BV. Winner: John Zantek, W7CD World 7 MHz: Sponsored by Patrick Moyer W3RGA. Winner: Tine Brajnik, S50A USA 7 MHz: Sponsored by Cedrick Johnson, WT2P. Winner: Robert Beaudoin, WA1FCN World 14 MHz. Sponsored by The NN6NN Digital Team. Winner: Leonardo Correa Gordiola, CX3AL World 21 MHz: Sponsored by Dick Dievendorff, K6KR. Winner: Jose Maria Benitez Granada ZP6ARO

### Single-Operator QRP

World All Band: Sponsored by Fred Gaisser KK4HEG. Winner: Karel Karmasin, OK2FD North America All Band: Sponsored by Ed Muns, W0YK. Winner: NN7SS op. Mark Aaker K6UFO

### Multi-Operator Single Transmitter High Power

World: Sponsored by Ronald Lodewyck, N6EE. Winner: Clubstation DLOCS

### **Multi-Operator Single Transmitter Low Power**

World: Sponsored by Tine Brajnik, S50A. Winner: Resava Valley Contest Club YU5R

### **Multi-Operator Two Transmitter**

World: Sponsored by Araucaria. Winner: Radioklub Triglav S51A

### Multi-Operator Multi-Operator

World: Sponsored by Iztok Saje, S52D. Winner: Araucaria DX Group ZW5B Europe: Sponsored by MSHV Development Team – QZ1PIF Memorial. Winner: Croatian DX Club 9A1A Asia: Sponsored by MSHV Development Team – OZ1PIF Memorial. Winner: Andrey Sachkov and Team P33W

### **Club Competition**

World: Sponsored by Slovenia contest Club. Winner: Northern California Contest Club USA: Sponsored by Northern California Contest Club. Winner: YANKEE CLIPPER CONTEST CLUB

All Band     Villend     Villend     Ultend     Uilsend     Uilsend     Uilsend       ANIR     366,700     WRIDS     133,049     OCCU     24,230     UICS     47,712       ANIR     356,700     WRIDS     130,272     OCSCO     14,450     11,3281     6,554       ANIR     235,125     UIVAL     100,770     KGC     110,366     WILTS     5,564       YOMP     177,556     CTITT     100,254     COELY     10,366     WILTS     6,502     MILTS     6,902     JUILEN     4,422       KGGK     119,559     WGYK     664,855     004FE     7,662     30,461     7,712     7,302     4,224       VILL     VILL     TPOTUR     664,855     004FE     5,760     7,912     3,660     1,944     4,224     7,302     3,620     1,240     7,221     7,221     7,221     7,221     7,221     7,221     7,221     7,221     7,221     1,221     1,221     1,221     1,221     1,221     1,221     1,221	Single Op High Power		Single Op Low Power		Single Op QRP			Multi-Single	
RA1R 356,720 RRIDK (R5.00) 130,272 ON3CQ 14,850 (T.32HU) 6,534   AA3R 228,522 WTCD 133,632 NTSS (R5UP) 10,336 MIL1-Single   AA3R 228,121 TRALEM 109,242 SOLUTIALX 3,050 MIL1-Single   REGER (NHCY) 135,122 AA3R 2040 / 100,224 COBLY 10,336 MIL1-Single   REGER (NHCY) 135,122 AA3R 100,224 COBLY 10,338 MIL1-Single   REGER (NHCY) 135,122 AA3R 00000 6,900 USA COBLY 0.00000   REGER (NHCY) 135,122 KAGELM 65,100 USA COBLY 0.0400 4,985   NSDR 92,223 KAGELM 65,000 NA1R 5,000 4,3825 1,2800 2,000   UITER 28 MBE 28 MBE 1230VR 500 KAGELM 2,000 KAGELM 2,000   UITER 28 MBE 100000 14,800 13,000 14,800 13,000 14,100   UITER 28 MBE 28 MBE 1230VR 500 10,011 700 12,010   UITER 28 MBE 10,012 14,000 14 10,014 10,014 10,014 <	All Band	d	All Band	L		All Band		High P	ower
WTEW     329,522     WTCD     115,622     MATSS     (KGUPC)     10,474     UTXAL     3,050       YOMP     17,556     CTLIT     109,670     K8CT     10,366     Miti-Single     Miti-Single <td< th=""><th></th><td></td><th></th><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
AA3B     238,128     ITKLEH     10.98,20     K82T     10,368     Multi-Single       KM6KK     (M16Y)     135,142     AASAU     100,224     S02EP     0,336     Lule     C62,280       KM6KK     122,437     MOYK     63,300     EA3EPF     6,402     JJ12EJ     14,130       MACDU     L00,222     ZPOTUR     64,855     ON42E     5,760     74382     4,422       NOR     22,021     YEDTUR     64,855     ON42E     5,760     74382     4,223       NOR     2,221     YEDTUR     64,855     ON42E     28     MIX     3,634       USER     2,220     SDUX     140     123NVR     7606     54231/150     3       USER     2,220     SDUX     140     760     140     3     4274,626       VTIL     VTIL     VTIM     12     MIX     4350     474,626       VTIL     VVIL     1,400     1,400     14,402     3     4274,626       VESER     DLOMAGU									6,594
V094P     17,733     CU11LT     109,242     S2PAP     10,336     MULE-SLAQLE       K66K     124,437     YL12F     75,810     822KWQ     7,602     YUSLK     62,230       K66K     124,437     YUTUTR     75,810     822KWQ     7,602     YUSLK     4,120       R467U     24,232     KA62LM     65,100     UNTEC     6,230     4738C     4,224       28 MHz     28 MHz     28 MHz     28 MHz     1,420     4738C     4,224       101LREM     2,500X     5,760     123NVR     510     MULE-TWO     7,602       101LREM     2,500X     550X     1,881     1,823     4,422       11 MHz     V77N     760     123NVR     510X     1,620       11 MHz     1059KU     1,426     1,221N/150     3     51,427,100       V75N     2,820     1,14 MHz     104,225     1,221N/150     3       12 MHz     10,934     14 MHz     104,247,100     104     104       V161V     2,240						(K6UFO)			3,050
KHGKK     List, J.142     AAS.U     1.00, 254     CORIV     1.0, 1.66     CUPSMC       MGCAT     1.13, 3.13     WUXK     69, 300     EAJ FIFF     6, 902     JJJZZ     1.4, 120       NSQE     92, 2.33     WTOTNR     64, 855     ONAPP     5, 760     YMAXK     4, 224       NSQE     92, 2.33     WTOTNR     64, 855     ONAPP     5, 760     YMAXK     2, 760       NSQE     28 MHz     28 MHz     28 MHz     20 MHz     4, 224       ULINEW     21 MHz     NSEEV     18     SSEXCO     91       YTTAN     78     22 FGARO     3, 760     112 MHz     MSEV     160       VERLY     1, 984     22 FGARO     3, 760     14 MHz     10, 917     14 MHz     10, 917     14 MHZ     1474, 626     114 MHZ     10, 917     14, 147.00     14 MHZ     10, 917     14, 920     14 MHZ     10, 917     14, 920     14 MHZ     10, 914     14, 930     13, 53, 917     14, 930     14, 930     14, 930     14, 930     14, 932     <									
Kaoar     121, 437     VIL1ZF     75, 810     SP2EPRO     7, 602     UUR, 8, 62, 280       KH6TU (ADEE)     108, 252     KA65IM     65, 108     UNYER     6, 230     H33C     4, 224       N3QS     92, 233     SUDXX     664, 855     ON4FB     5, 760     H33C     4, 224       USING     92, 233     SUDXX     560     I 3, 760     I 3, 760     H33C     4, 224       USING     92, 230     SUDXX     560     I 3, 760     I 3, 760     I 3, 760     M11K     M33C     4, 224       VILX     U21NW     10     I 4     M1E     I 4, 204, 23, 2, 700       VILX     U21NW     10     N64     I 4, 204, 23, 2, 700       VILX     U21NW     10     N64     I 4, 204, 23, 2, 700       VILX     U21NW     10     N64     I 4, 204, 700     N64       VILX     U21NW     10     N64     N64     N64     N74     N74       VESEN     23, 610     D14 M52     U14 M52     U14 M52     N74									
WOART     115     114     110     UTRE     6,900     UTLE     14,100       NAQE     192,232     YETUR     64,855     ONAPB     5,760     HTRAC     4,422       NAQE     92,323     YETUR     64,855     CAMPB     5,760     HTRAC     4,422       NAME     28 MHz     28 MHz     CAMPB     5,760     HTRAC     4,224       NAME     2,770     CAMPB     5,760     HTRAC     2,760       NUME     2,770     TAM     7,60     21 MHz     CAMPS     5,870       PTSAD     1,984     21 MHz     USEFU     580     MALE     942,870       YUTLY     1,430     URANCW     470     14 MHZ     MALE     942,870       YERLP     36,660     DLIAPR     264     CTAIX     767     CTSRN     57,057       YERLP     36,660     DLIAPR     264     CTAIX     767     CTSRN     57,057       YERLP     36,060     DLIAPR     264     CTAIX     761     MAR									
KHETU (ADDE)     108,723     KAGEIM     65,108     UNYEG     6,230     KHAGE (A,224       N3QE     92,232     YFOTUR     64,855     ONAPB     5,760     YH3RC (A,224     TARC (A,224     TA									
NAQE     92,232     YEPTUR     64,855     ONAPR     5,760     YERC 4,224       28 MHz     28 MHz     28 MHz     3,664       021 MHZ     550X     560     12.000     12.000     12.000     12.000     12.000     921.000 </th <th></th> <td></td> <th></th> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
28 Miz     28 Miz     28 Miz     28 Miz     28 Miz     27 AA     3,654       MSPR     2,220     S50X     560     IZ3N7R     500     HA22MAX     2,100       C1 MIZ     T7AN     78     USEFU     500     HA3CB     1,281       PYSRD     1,984     Z1 MHZ     USEFU     18     SIA     2721WL/150     3       14 MHZ     DAPROV     1,425     HDSEV     14     Miz     NASN 147,100       VESEU     30,566     DLIFFN     248     CTIAX     767     CTIAX     77.057       VESEU     30,566     DLIFFN     248     CTIAX     767     CTIAX     77.057       VERM     26,080     PUTASP     248     DUADT     611     WARV     33,600       VERM     24,040     14     Miz     001A     238     622,945       VERM     13,000     SESME     10,044     7     MIZ     91A     344,621       UTRAV     21,050     STESCR     7,710     TTESCR <th></th> <td></td> <th></th> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
28 Miz SPR28 Miz S50X28 Miz S70X28 Miz S70X27 Miz S70X28 Miz S70X28 Miz S70X28 Miz S70X27 Miz S70X27 Miz S70X	ирбе	92,232	IFUIUR	04,000	ONALD		5,700		
NSPR     2,220     SOXX     SOU     L21NR     SOC     EARCB     1,281       DLIREM     34     V21WW     140     V77AW     78     USSRT     50     Multi-100     3       YSRD     1,994     21 MHz     USSRT     USSRT     90     Multi-100     3       YUR (YUR)     51,3     272.5     DLIRES     286     011N     8550     V22.07.5     NSIN     147,100     NSSN     147,100       YUR (YUR)     30,566     DLIRES     286     011N     8550     V22.07.57,057     V20.07.57,057     V20.07.57,057 <th>28 MH7</th> <td></td> <th>28 MH 7</th> <td></td> <td></td> <td>28 MH-</td> <td></td> <td></td> <td></td>	28 MH7		28 MH 7			28 MH-			
D.L.I.REM     384     UZ IWI     140     PZ IMIZ     PZ IMIZ     PZ IMIZ     PZ IMIZ     PZ IMIZ     SIZ IMIZ     PZ IMIZ     SIZ IMIZ     PZ IMIZ     SIZ IMIZ     PZ IMIZ     SIZ IMIZ	-				TZ3NVR				
VTXM     P1     C12 MHz     USE P2     P12 ML/150     3       PYSR0     1,984     21 MHz     USE P2     91     Multi-W24,626       14 MHZ     296AR0     1,425     VUTRR     14.000     NN820     77,490       VERV (VILKN)     51,303     UESMCU     1,425     NN820     77,490       VERV VILKY     51,303     UESMCU     1,426     NN820     67,490       VERV VILKY     53,666     DLLEPR     2,640     CTAIN     670     CT380     57,624       VERV VILKY     53,066     DLLEPR     2,640     CTAIN     670     CT380     57,624       VERW VILKY     53,06     DLEPR     2,640     CTAIN     670     CT380     57,624       VIRM VILKY     53,06     DLEPR     2,640     CT480     580     CT380     57,624       VIRM VILKY     53,06     DLEPR     2,646     CT401     10     10,616     10,670     N100     CT380     76,700     N100     76,700     10,700     10,700     N10					1001111		000		
21 Mitz     USSEPU     580     Multi-Two       PYSK0     1,994     221 Mitz     HB9ESC     91     Multi-Two       PYSK0     1,3 03     URSW0     1,4 25     NASN     14 Mitz     NMSS     67,4 90       VPULK (VVLKN)     31,303     URSW0     470     14 Mitz     NMSS     67,4 90       VERDE     30,566     DLIPRE     264     CTTAIX     767     CT3N     57,0 57       VERDE     26,603     PUTASE     264     CUTAIX     767     CT3N     57,0 57       VERDE     25,640     PUTASE     244     CUTAIX     767     CT3N     57,0 57       VCERNT     26,603     SPETHE     18     UNDATX     611     M9AP     35,260       NARE     23,940     CXAR     13,900,072     HSHIE     200     HSHE     200     10,934     477,630       URSWZ     20,435     DFJRSN     16,213     PDGRE     80     201     10,103     437,630       UNSSMZ     10,5505     JFIRTV <th>5511011</th> <td>001</td> <th></th> <td></td> <td></td> <td>21 MHz</td> <td></td> <td></td> <td></td>	5511011	001				21 MHz			
PYRD     1,988     22 MHz     PPR2C     91     Multi-Work       14 MHz     2P6ABC     1,425     S51A - 724,626     NASNN     147,100       24 MHZ     1,2725     00.HHS     266     HUNN     850     NASNN     147,100       28 APU     37,565     DLILPR     266     CTATN     767     C733N     57,024       071A     28,080     PUTASP     248     SV1AZL     630     W92CC     57,057       071A     26,010     S261HE     18     0040KT     611     W92CC     57,057       071A     26,010     S261HE     18     0040KT     611     W92CC     77,024       071A     7,610     S261HE     18     0140KT     110     433       0780K     22,043     ESPS0     16,621     30,072     N6H     210     NWW     4,320       0780K     11,268     Y905C     9,042     ON3DI     700     NWIN     4,320       0780K     11,268     Y905C     7,710	21 MHz								-
U2 PEAR0     3,760     PUSTKE     18     851A     274,623       VMLK (V1UKN)     51,303     URSK0W     470     14 MHz     NASMN     147,100       VMLK (V1UKN)     51,303     URSK0W     470     14 MHz     NASMN     147,100       VERLP     30,566     DLIHER     264     CTTAIX     767     CT3NN     57,057       VERLP     26,603     SP6THE     18     SUTAZ     630     11,477     53,660       VCRUP     26,610     CX3AL     30,072     NGHT     216     11,4 MHz     101DA     228     N3YA     4,320       URSKT     21,200     CX3AL     16,646     42400     140     MSYA     4,320       URSKT     21,200     CX3HT     13,906     0000     7072     NGHT     13,906     0040     700T     NASM     477,630       URSKT     11,268     V928CM     9,042     0NSDT     700     NASMAL     226,163       UNSMAZ     10,5503     JF1790CP     9,042     0NSDT <th></th> <td></td> <th>21 MHz</th> <td></td> <td></td> <td></td> <td></td> <td>Multi</td> <td>-Two</td>			21 MHz					Multi	-Two
14 MHz     DL9MEU     1,425     MASNN     147,100       EA6V0     32,725     DD1HFS     286     OHIMN     850     VR2CC     57,657       VPBLE     32,765     DD1HFS     286     OHIMN     850     VR2CC     57,057       OTIA     28,060     PU7ASP     248     SVIAZI,     630     LU4FM     51,659       VERL     28,060     PU7ASP     248     SVIAZI,     630     LU4FM     51,669       VERL     24,010     14     MB2     21,010     MASP     23,940     14 MB2     01DA     238     W3A     4,320       UT4QX     20,435     CE7VPQ     16,213     PD0GP     02     M3A     4,324,621       UN4QX     20,435     CE7VPQ     16,213     PD0GP     03     MSES     52,245       UN4QX     20,455     CPTPQ     16,213     PD0GP     04     MUE     MUE     543       UN4QX     11,266     CPSPVPQ     10,214     TMSE     K15FA     338,621		,		3,760					
YNTK (YULKK)     51,303     UKBNCW     470     14 MHz     NNBS     67,490       CASOQ     33,766     DLIAPR     264     CT7AIX     760     CT3KN     57,057       VPBLP     30,566     DUIAPR     264     CT7AIX     760     CT3KN     57,057       VPBLP     30,566     DUIAPR     264     CT7AIX     760     CT3KN     57,057       VPBLP     23,046     PUTASP     248     SVLAN     516     NUW     35,264       NABP     23,016     CX3AL     30,072     N6H     210     NUW     35,264       UR40X     20,436     CTXAL     30,072     N6H     210     NUW     37,432       UR40X     20,436     CTVAQ     16,913     PD0GP     80     2795     622,945       UR40X     20,436     CT9LVU     10,044     7 MEz     9A1A     394,622       UR50X     11,268     YOPSCM     9,042     ONSDI     870     880,755       UNSNMZ     10,265     SFGR									
EA6VQ 32,725 D01HFS 288 0H1MN 850 VR2C 57,057 VF8LP 30,556 D1LFF 248 SV1A2L 630 VR2C 57,057 0T1A 28,080 PUTASP 248 SV1A2L 630 L04FM 51,652 VC6KMT 26,410 UL4FM 51,652 VC6KMT 26,410 UL4FM 51,652 VC6KMT 26,410 UL4 MHz ULA 238 W3YA 4,320 HB9C2F 23,016 CX3AL 30,072 N6HT 210 UT8NT 21,200 ES5MG 16,646 424U0 144 M12 UT8NT 21,200 ES5MG 16,646 424U0 144 P33W 477,630 UT8NT 21,200 ES5MG 16,646 424U0 144 P33W 477,630 UT8NT 21,200 ES5MG 16,646 424U0 144 P33W 477,630 UM4QY 20,436 C27VPQ 16,618 C300 54 WAQX 10,914 7 MHz K15FA 388,735 UK4KR 6,160 S56A 7,710 D72FW (D070K) 492 KARU 338,74621 K408R 6,160 S56A 7,710 D72FW (D070K) 492 KARU 35,434 SP9UNX 5,175 VU2E0J 6,930 K15X 344 NTOK 75,114 D1CT 5,152 VU2E0J 6,930 K15X 344 NTOK 75,116 NG4KF 4,200 7 MHz K15K 344 NTOK 75,11,667 AB45F 4,200 7 MHz K15K 344 NTOK 75,11,667 AB45F 4,200 7 MHz K15K 344 NTOK 75,11,675 J1.66 S56A 29,889 B04LB 1 OH5BM 320 SN2K (S22FWC) 22,725 HB9CA 1,360 NO3JW 11,458 C02JD 451 UT3N (K) 600 UT3UA 7,221 K15X 128 VC6NVJ 2,826 S50A 29,889 B04LB 1 NANCK 75,116 VU2E0J 6,520 UNIL 12 1.8 MHz S1CK (S22FWC) 22,725 HB9CA 1,360 NO3JW 11,458 C02JD 451 UT3N (K) 600 UT3UA 7,221 UNIL 12 1.8 MHz 134 NO5 51,667 V12VW 285 S50L 4,290 J1.8 MHz 14,58 CX5VM 225 S552 UNIL 18 UT3N (K) 600 UT3UA 7,221 UNIL 12 1.8 MHz 14,58 CX5VM 225 S550L 4,290 J122VC 28 S50 44,290 J122VC 28 S50 4455 S55VIH 340 UA4DB 576 E333CB 4955 S55VIH 340 UA4DB 576 E333CB 4955 S55VIH 340 UA4DB 576 E333CB 4955 S55VIH 340 D4440 UN1UT (UT3UA) 360 S75WIH 340 S75WIH 1,020 J142 444 UN1UT (UT3UA) 360 S75WIH 340 S75WIH						14 MHz		NW8S	
VPELP     30,566     DLIRPR     264     CTAIX     76     CT3KN     57,024       WIRM     26,609     SP6THE     18     DU4DXT     611     WDAV     35,264       WIRM     26,610     SP6THE     18     DU4DXT     611     WDAV     35,264       NSEP     23,940     14     MHE     DU1DA     238     WDAV     4,320       HB9C2F     23,016     CX3AL     30,072     NGH     210     SSEMG     16,646     42400     144     WDAV     4,320       UTRNT     13,908     C080 H     54     578     622,945       UMSEXD     11,265     YOBCM     9,042     ON3DI     870     800A     225,150       UMSEXD     11,265     YOBCM     9,042     ON3DI     870     800A     25,150       UMSEXD     11,265     YOBCM     9,042     ON3DI     870     800A     25,150       UMSEXD     11,264     YOBCM     9,042     ON3DI     870     800A     3,15,45,4					OH1MN				·
OTIA     28,080     EUTASE     248     SVIAZL     630     Utatw     51,652       YC6RWT     26,410     I     JUDANT     111     W3AV     35,264       N4BP     23,940     I     JUDANT     218     DUIDA     238     W3YA     4,320       UTSNT     21,200     ESSMG     16,646     42400     144     MELI-MULI     MSE     622,943       URAVX     20,436     CETVPQ     16,646     42400     144     MELI-MULI     MSE     622,943     F33W     477,630       URAVX     20,436     CETVPQ     16,646     42400     144     MELI-MULI     KISFA     388,755       UWSEKD     11,266     YOBSCM     9,042     ONSIT     8700     RNOA     252,150       UWSEKD     11,266     YOBSCM     9,042     ONSIT     8700     RNOA     252,150       UWSEKD     11,555     JTGVS     7.95     DATEW     1874     8408     9461     9414     9462     9414     9464     942									57,024
WIRM     26,609     SPETHE     18     DU4DXT     611     WBAV     35,264       VCSENWT     23,940     14     MHz     DU1DA     238     W3YA     4,320       HB9CZF     23,940     CX3AL     30,072     N6HI     210     MU1DA     238     W3YA     4,320       UTRVT     21,200     ESSMG     16,646     42400     144     Multi-Multi     Multi-Multi       UR4QX     20,436     CE7VPQ     16,213     PDUGP     80     ZM58     622,945       NGMA     15,50     JFIRYU     10,044     7     MHz     SN1A     394,621       NGMA     15,50     JFIRYU     10,044     7     MHz     SN1A     394,621       UR5NMZ     11,261     Y09BCM     9,042     ON3DI     870     RN0A     252,150       UR5NMZ     11,512     Y09BCM     9,042     ON3DI     K15A     N04C     7,114       JH1CTV     5,125     TMIZ     K15A     M14     NTOK     7,114 <th></th> <td></td> <th></th> <td></td> <td></td> <td></td> <td>630</td> <td></td> <td></td>							630		
YC6RNT     26,410     IA MHZ     JR1NK1     518     NUWW     33,600       HB9C2F     23,016     CX3AL     30,072     N6HI     210     M3YA     4,320       UT8NT     21,200     ESSMG     16,646     42400     144     Malti-Malti       UR4QX     20,436     CEVVPQ     16,213     PD0cP     80     ZW5B     622,945       NMA     15,505     JFIRYU     10,044     7 MHZ     KISX     388,755       UWSEKD     11,266     Y059CM     9,042     ON3DI     870     RW0A     252,150       UWSEKD     11,266     Y059CM     9,042     ON3DI     870     RW0A     252,150       UWSEKD     10,533     IT965F     6,930     KISX     344     NTOK     75,114       SP30NX     5,175     VU2E0J     6,930     KISX     344     NTOK     75,114       M45F     4,200     7     MET     4,768     82,514     NTOK     75,114       M50C     S32,KK     12,758 <th></th> <td></td> <th></th> <td></td> <td></td> <td></td> <td></td> <td></td> <td>35,264</td>									35,264
NABP     23,940     14 MHiz     DUIDA     238     W3XA     4,320       HB9CZF     23,016     CK3L     30,072     N6HT     210     Multi-Multi     100       UT8NT     21,020     ESSMG     16,646     42400     144     Multi-Multi     2W5B     622,945       T MHz     NK0KA     13,908     CO80H     54     933     477,630       NGMA     11,268     Y09BCM     9,042     ON3DI     870     RW0A     225,150       UMSNMZ     10,531     T90GSF     8,995     BD4HV     660     RW0A     252,150       KD4RH     6,160     S56A     7,710     DX7EVM (DU70K)     492     KA4RRU     85,434       SPUINK     5,175     VU2EJO     6,805     RUBEN     138     N0KP     73,467       VCCBUY     2,26     S50A     29,889     BD4HPV     660     W3EK     33,475       VCSUV     2,26     S50A     21,758     3.5     MHz     W8CA     1,366       DK3ZZ<									
UTENT 21,200 ESSMG 16,646 42400 144 Multi-Multi UR4QX 20,436 CE7PQ 16,213 PD0CP 80 7 MHz N00R 10,914 SC C080H 54 NC4RY 13,908 C080H 54 WOSR 10,914 T MHz K1SFM 3848,755 UMSEKD 11,268 Y09BCM 9,042 ON3DI 870 NN0A 2252,150 UNSEKD 11,268 Y09BCM 9,042 ON3DI 870 NN0A 252,150 UNSMZ 10,593 TF9GF 8,995 BD4RHV 660 NN3EKL 138,972 K04RH 6,160 S55A 7,710 DX75VM (DU70K) 492 KA4RRU 85,434 SP9UNX 5,175 VU2E0J 6,930 K1SX 344 NT0K 75,114 HS2AH 138 BD4LFU 10 VC2UVJ 2,262 SOA 29,889 BD4LFU 10 OHSBM 320 SN2K (SP2FWC) 22,725 HS9CAT 144 S51CK 21,758 J- UNSQZ 1,530 WAIFCN 8,450 UT3N (K) 600 UT3DA 7,221 1,386 R21N 3,600 Y03JW 11,458 C02JD 451 UV5QQ 1,530 WAIFCN 8,450 UT3N (K) 600 UT3DA 7,221 1.8 MHz DM7C 387 W1UE 6,400 UT3VA 7,221 UR5U 4,290 L22ZG 198 D04DXA 3,128 JH2FXK 12 SP5DL 4,290 JH2FXK 14 JH2 JH2FXK 14 JH2 JH					DU1DA		238	W3YA	
UK4QX     20,436     CL/VPQ     16,413     PUOP     00     ZM35     622,949       T     NK0R     10,914     PX0SR     10,914     PX18     PX38     477,630       UMSEKD     11,268     Y09BCM     9,042     ON3DI     8700     RM0A     252,150       UMSEKD     11,268     Y09BCM     9,042     ON3DI     870     RM0A     252,150       UMSEKD     11,268     Y09BCM     9,042     ON3DI     870     RM0A     252,150       UNSINZ     10,593     IT96SF     8,995     BD4RHV     660     WA3EKL     138,975       SP3UNX     5,175     VU2DOJ     6,930     KISX     344     NTOK     75,116       AB4SF     4,200     7     MHz     KISX     344     NW0K     75,167       USBUT     1,8     S51CK     21,725     3.5     MB2     1.67       MSE     S51CK     21,725     3.5     MB2     1.380     MSC     33,475       USA2Q     1,300<	HB9CZF	23,016	CX3AL	30,072	N6HI		210		
UK4QX     20,436     CL/VPQ     16,413     PUOP     00     ZM35     622,949       T     NK0R     10,914     PX0SR     10,914     PX18     PX38     477,630       UMSEKD     11,268     Y09BCM     9,042     ON3DI     8700     RM0A     252,150       UMSEKD     11,268     Y09BCM     9,042     ON3DI     870     RM0A     252,150       UMSEKD     11,268     Y09BCM     9,042     ON3DI     870     RM0A     252,150       UNSINZ     10,593     IT96SF     8,995     BD4RHV     660     WA3EKL     138,975       SP3UNX     5,175     VU2DOJ     6,930     KISX     344     NTOK     75,116       AB4SF     4,200     7     MHz     KISX     344     NW0K     75,167       USBUT     1,8     S51CK     21,725     3.5     MB2     1.67       MSE     S51CK     21,725     3.5     MB2     1.380     MSC     33,475       USA2Q     1,300<	UT8NT		ES5MG	16,646	4Z4UO		144	Multi-N	Multi
7 Miz     RNOSR     10, 914     9A1A     394, 621       N6MA     15, 505     JTRVU     10,094     7 Miz     KISFA     388, 755       UWSEKD     11,268     YO9BCM     9,042     ON3DI     870     RW0A     252,150       URSNMZ     10,593     ITPGSF     8,995     BD4RHV     660     W32BKL     138,972       KD4RH     6,160     S56A     7,710     DX7EW (DU7OK)     492     KA4RU     85,434       JHICTV     5,155     VU2EOJ     6,930     KISX     344     NTOK     75,114       JHICTV     5,155     VU2EOJ     6,930     KISX     344     NTOK     75,114       JHICTV     5,156     SSA     29,889     BD4LB     1     0     0     550     3.5 MHz     NW8DC     33,475       OK5D     SSICK     21,758     3.5 MHz     1,386     1     0     0     0     0     0     0     0     0     0     0     0     0     0     0	UR4QX	20,436	CE7VPQ	16,213	PDUGP		80	ZW5B	622,945
7 Miz     RNOSR     10, 914     9A1A     394, 621       N6MA     15, 505     JTRVU     10,094     7 Miz     KISFA     388, 755       UWSEKD     11,268     YO9BCM     9,042     ON3DI     870     RW0A     252,150       URSNMZ     10,593     ITPGSF     8,995     BD4RHV     660     W32BKL     138,972       KD4RH     6,160     S56A     7,710     DX7EW (DU7OK)     492     KA4RU     85,434       JHICTV     5,155     VU2EOJ     6,930     KISX     344     NTOK     75,114       JHICTV     5,155     VU2EOJ     6,930     KISX     344     NTOK     75,114       JHICTV     5,156     SSA     29,889     BD4LB     1     0     0     550     3.5 MHz     NW8DC     33,475       OK5D     SSICK     21,758     3.5 MHz     1,386     1     0     0     0     0     0     0     0     0     0     0     0     0     0     0			NC4RY	13,908	CO8OH		54	P33W	477,630
UMSEKD 11,268 YO9BCM 9,042 ON3DI 870 RWOA 252,150 URSNMZ 10,593 IT9GSF 8,995 B04R4V 660 WA2EXL 138,972 SPSUNX 5,175 VU2EOJ 6,930 K1SX 344 NTOK 75,114 JH1CTV 5,152 AB4SF 4,200 <b>7 MHz</b> K12H3H 138 NM6P 51,667 AB4SF 4,200 <b>7 MHz</b> 4G7RAZ 5 HB9CAT 184 S51CK 21,758 UK02K (3P2PWC) 22,725 HB9CAT 1,8 MHz UK04 K424 H056 UV5QQ 1,530 WA1FCN 8,450 UT3N (K) 600 UT3UA 7,221 <b>1.8 MHz</b> DM7C 387 W1UE 6,400 VK3KJ 592 320X 6,552 UN1L 12 DM7C 387 W1UE 6,400 UT3VA 7,221 <b>1.8 MHz</b> DM7C 387 W1UE 6,400 UT3VA 7,221 UN1L 12 <b>1.8 MHz</b> DM7C 387 W1UE 6,400 UT3VA 3,128 JH2FXK 12 SQ1EVG 1,526 UV5QU 1,530 UA50U 4,728 SF5L 4,290 LZ2ZG 198 D04DXA 3,128 JH2FXK 12 SQ1EVG 1,526 CH2OT (OG55W) 826 IZ5MOQ 780 UA3AJK 444 UW1U (UT7UA) 360 AJ6T 65	7 MHz		RWOSR	10,914				9A1A	394,621
URSNMZ 10,593 IT9GSF 8,995 S64 7,710 DX7EVM (DU70K) 492 KA4RRU 138,972 S564 7,710 DX7EVM (DU70K) 492 KA4RRU 85,434 X5,434 KA4RRU 85,434 KA4RRU 85,434 KA4RRU 85,434 KA4RRU 85,434 KA4RRU 25,434 KA4RRU 24,738 KA44A KU114 12 KA4RRU 24,748 KA4RU 24,748 KA4R	N6MA		JF1RYU	10,044		7 MHz		K1SFA	388,755
KD4RH   6,160   S56A   7,710   DX7EVM (DU70K)   492   KA4RNU   85,434     JH1CTV   5,175   VU2EOJ   6,930   K1SX   344   NT0K   75,114     JH1CTV   5,152   7   Hz   344   NT0K   75,114     JH2CTV   5,826   S50A   29,889   B4LB   138   NW6P   51,667     VC8UYJ   2,826   S50A   29,889   BD4LB   1   NW8DC   33,475     VC8UYJ   2,826   S51CK   21,758   BD4LB   1   NW8DC   33,475     VK7NET   14,796   YT5YTT   1,386   YT5YTT   1,386     DK8ZZ   6,812   822K   11,640   IK4UXA   768     R21N   3,600   Y03JW   11,458   C02JD   451     UVSQQ   1,530   WA1FCN   8,450   UN1L   12     DM7C   387   W1UE   6,400   UR5QU   4,728   UN1L   12     L2Z2G   198   D04DXA   3,128   SQ1BVG   1,526   YU1XX   1,020 <			YO9BCM	9,042					
KD4RH   6,160   S56A   7,710   DX7EVM (DU70K)   492   KA4RNU   85,434     JH1CTV   5,175   VU2EOJ   6,930   K1SX   344   NT0K   75,114     JH1CTV   5,152   7   Hz   344   NT0K   75,114     JH2CTV   5,826   S50A   29,889   B4LB   138   NW6P   51,667     VC8UYJ   2,826   S50A   29,889   BD4LB   1   NW8DC   33,475     VC8UYJ   2,826   S51CK   21,758   BD4LB   1   NW8DC   33,475     VK7NET   14,796   YT5YTT   1,386   YT5YTT   1,386     DK8ZZ   6,812   822K   11,640   IK4UXA   768     R21N   3,600   Y03JW   11,458   C02JD   451     UVSQQ   1,530   WA1FCN   8,450   UN1L   12     DM7C   387   W1UE   6,400   UR5QU   4,728   UN1L   12     L2Z2G   198   D04DXA   3,128   SQ1BVG   1,526   YU1XX   1,020 <	UR5NMZ		IT9GSF	8,995	BD4RHV			WA3EKL	
JH1CTV 5,152 T MHz 138 NW6P 51,667   AB4SF 4,200 T MHz 4GTRAZ 5 WBDC 33,475   YC8UYJ 2,826 S50A 29,889 BD4LB 1 33,475   OH5BM 320 SN2K (SP2FWC) 22,725 BD4LB 1 3,5 MHz   S1CK 21,758 S1CK 1,386 WBDC 33,475   DK8ZZ 6,812 872K 1,786 WBQZA 1,056   DK8ZZ 6,812 872K 11,640 IK4UXA 768   UTSN (K) 600 UT3UA 7,221 1.8 MHz 12   UTSN (K) 600 UT3UA 7,221 1.8 MHz 12   DM7C 387 WUE 6,400 UN5QU 4,728   YL2VW 286 UR5QU 4,290 UN1L 12   DM7C 387 WUE 6,400 UT1WIX 1,020   JH2FXK 128 SQ1BVG 1,526 YU1XX 1,020   JH2FXK 128 SQ1BVG 1,526 YU1XX 1,020   JH2FXK 1.8 MHz OH20X SP5VIH 340   UA4HDB 576 EA3EGB 495			S56A	7 <b>,</b> 710		(DU7OK)			
AB4SF 4,200 7 MHz 4G7RAZ 5 W8DC 33,475   YC8UYJ 2,826 SOA 29,889 BD4LB 1   BDCAT 184 SS1CK 21,758 BD4LB 1   WK7NET 14,796 YT5 YTT 1,386   VK7NET 14,796 YT5 YTT 1,386   DK8zz 6,812 8P2K 11,640 IK4UXA 768   R2IN 3,600 Y03JW 11,458 CO2JD 451   UVSQQ 1,530 WAIPCN 8,450 UT3UA 7,221   UT3N (K) 600 UT3UA 7,221 <b>1.8 MHz 1</b> DM7C 387 W1UE 6,400 UNIL <b>12</b> YL2VW 286 URSQU 4,728 URSQU 4,728   CX6VM 225 SP5DL 4,290 J1 J1   JH2FXK 12 SQ1BVG 1,526 YU1XX 1,020   JH1MUT 780 UA4HDB 576 EA3EGB 495   SP5VIH 340 J44HDB 576 EA3EGB 495   SP5VIH 340 J44HDB J44HDB J44HDB J44HD   UA4HDB 576 EA3EGB <th></th> <td>-</td> <th>VU2EOJ</th> <td>6,930</td> <td></td> <td></td> <td></td> <td></td> <td></td>		-	VU2EOJ	6,930					
YC8UYJ   2,826   S50A   29,889   BD4LB   1     OH5BM   320   SN2K (SP2FWC) 22,725   3.5 MHz   YT5YTT   1,386     NC802X   6,812   S51CK   21,758   YT5YTT   1,386     DK82Z   6,812   BP2K   11,640   YT5YTT   1,386     R21N   3,600   Y03JW   11,458   CO2JD   451     UV5QQ   1,530   WA1FCN   8,450   UN1L   12     DM7C   387   W1UE   6,452   UN1L   12     DM7C   387   W1UE   6,400   UR5QU   4,728     YL2VW   286   SP5DL   4,290   1,8   1     JH2FXK   12   SQ1BVG   1,526   1,526     YU1XX   1,020   J11MUT   780   1,4290   1     JH2FXK   12   SQ1BVG   1,526   1,526   1,526     YU1XX   1,020   J1MUT   780   1,499   1,414     UA4HDB   576   EA3EGB   495   575VIH   340     UA50   OH2OT									
OH5BM   320   SN2K (SP2FWC)   22,725     HB9CAT   184   SS1CK   21,758   3.5 MHz     SJ.5 MHz   VK7NET   14,796   YT5YTT   1,386     DK8ZZ   6,812   8P2K   11,640   IK4UXA   768     R2IN   3,600   Y03JW   11,458   CO2JD   451     UV5QQ   1,530   WAIFCN   8,450   UNIL   12     UT3N (K)   600   UT3UA   7,221   1.8 MHz   12     DM7C   387   WUE   6,400   UNSQU   4,728     CX6VM   225   SP5DL   4,290   1,526     JH2FXK   12   D04DXA   3,128   SQIBVG   1,526     VULXX   1,020   J1MUT   780   N4HDB   576     EASEGB   495   SP5VIH   340   340     DH2FXK   1.8 MHz   0H2CT (OG5SW)   826   125MQ   780     UA4HDB   576   EASEGB   495   54   14     DH2CT (OG5SW)   826   IZ5MOQ   780   14		-						W8DC	33,475
HB9CAT   184   S51CK   21,758   3.5 MHz     VK7NET   14,796   YT5YTT   1,386     0.5 MHz   ESSRY   13,804   W802A   1,056     DK82Z   6,812   8P2K   11,640   IK4UXA   768     R2IN   3,600   Y03JW   11,458   C02JD   451     UV5QQ   1,600   UT3UA   7,221   1.8 MHz     VK3KJ   592   320X   6,552   UN1L   12     DM7C   387   W1UE   6,400   URSQU   4,728     CX6VM   225   SP5DL   4,290   1,8 MHz     JH2FYK   12   SQ1BVG   1,526   1,11/1X   1,02     JH2FYK   12   SQ1BVG   1,526   4,95   5     JH2FYK   12   SQ1BVG   1,526   4,95   5     JH2FYK   12   O4DXA   3,128   5   5   5     JH2FYK   12   O4DXA   3,408   5   5   5     JH2FYK   12   OH2OT (COS55W)   826   125/102   1					BD4LB		1		
3.5 MHz     VK7NET     14,796 ESSRY     YT5YTT     1,386 W8QZA     1,056 IK8ZZ     6,812 SSRY     SSRY     13,804 W8QZA     N8QZA     1,056 IK4UXA     768 768       DV5QQ     1,530     WA1FCN     8,450     IK4UXA     768       UT3N (K)     600     UT3UA     7,221     1.8 MHz       VK3KJ     592     3Z0X     6,522     UN1L     12       1.8 MHz     3.5 MHz     0.400     UT3UA     7,221     1.8 MHz       DM7C     387     W10E     6,400     UR5QU     4,728       CX6VM     225     SP5DL     4,290     0.402AA     3,128       JH2FXK     12     SQ1BVG     1,526     YU1XX     1,020       JH1MUT     780     UA4HDB     576     EA32EGB     495       SP5VIH     340     125     1.8 MHz     14,290       UA4HDB     576     EA32EGB     495     1.8 ME2       UA400     IC655W)     826     125MOQ     780       UA9AJXK     444     1001/10/1									
3.5 MHz   ESSRY   13,804   W8QZA   1,056     DK8ZZ   6,812   8P2K   11,640   IK4UXA   768     R2IN   3,600   Y03JW   11,458   COZJD   451     UV5QQ   1,530   WAIFCN   8,450   1.8 MHz     UT3N (K)   600   UT3UA   7,221   1.8 MHz     DM7C   387   W1UE   6,400   UR5QU   4,728     CX6VM   225   SP5DL   4,290   200   1,526     L222G   198   D040XA   3,128   1,020   311     JH2FXK   12   SQIBVG   1,526   YU1XX   1,020     JH2FXK   12   SQIBVG   1,526   YU1XX   1,020     JH2FXK   12   OH2OT (OG55W)   826   EA3EGB   495     SP5VIH   340   JAAJAK   444   UM10 (UT7UA)   360     UA9AJK   444   UM10 (UT7UA)   65   444   444	HB9CAT	184							
DK8ZZ 6,812 8P2K 11,640 IK4UXA 768   R2IN 3,600 Y03JW 11,458 C02JD 451   UV5QQ 1,530 WAIFCN 8,450 UT3UA 7,221 1.8 MHz   UT3N (K) 600 UT3UA 7,221 1.8 MHz 12   DM7C 387 WIUE 6,400 UR5QU 4,728   YL2VW 286 UR5QU 4,728 595   CX6VM 225 SP5DL 4,290 1,526   JH2FXK 12 SQ1BVG 1,526 YU1XX 1,020   JH2FXK 12 SQ55WI 826 125M0Q 780   UA4HDB 576 FA3EGB 495 SP5VIH 340   UA9AJK 444 UW1U (UT7UA) 360 AJ6T 65	0.5.000								
R2IN   3,600   Y03JW   11,458   C02JD   451     UV5QQ   1,530   WAIFCN   8,450   1.8 MHz     UT3N (K)   600   UT3UA   7,221   1.8 MHz     DW7C   387   W1UE   6,400   UNSQU   4,728     YL2VW   286   US5DL   4,290   4,290     LZ2ZG   198   D04DXA   3,128   SQ1BVG   1,526     YU1XX   1,020   JIIMUT   780   V10XA   1,020     JH2FXK   12   SQ1BVG   1,526   SP5VIH   340     HUE   0H2OT (OG55W)   826   EA3EGE   495     SP5VIH   340   UAAHDB   576   EA3EGE   495     UA4HDB   576   EA3EGE   495   SP5VIH   340     UA2AT   0120T (OG55W)   826   125MOQ   780   1049AJK   444     UNAU   UT7UA)   360   AJ6T   65   65   65									
UVSQQ   1,530   WAIFCN   8,450     UT3N (K)   600   UT3UA   7,221   1.8 MHz     VK3KJ   592   320X   6,552   UN1L   12     1.8 MHz   3.5 MHz   12     DM7C   387   W1UE   6,400     YL2VW   286   UK5QU   4,728     CX6VM   225   SP5DL   4,290     LZ2ZG   198   D04DXA   3,128     JH2FXK   12   SQ1EVG   1,526     YU1XX   1,020   J11MUT   780     UA4HDB   576   EA3EGB   495     SP5VIH   340   0H20T (OG55W)   826     UA9AJK   444   UMIU (UT7UA)   360     AJ6T   65   65   65									
UT3N   (K)   600   UT3UA   7,221   1.8 MHz     VK3KJ   592   320X   6,552   UN1L   12     1.8 MHz   3.5 MHz   UN1L   12     DM7C   387   W1UE   6,400   UN1L   12     J12VW   286   UR5QU   4,728   USQU   4,728     J12Z2G   198   D04DXA   3,128   D04DXA   3,128     J11MUT   780   UA4HDB   576   EA3EGB   495   SP5VIH   340     H2E   0H2OT (OG55W)   826   225   SP5VI + 340   244   2444   2444     UN1U (UT7UA)   360   Aj6T   65   444   444   444   444 <th></th> <td></td> <th></th> <td></td> <td>COZUD</td> <td></td> <td>451</td> <td></td> <td></td>					COZUD		451		
VK3KJ     592     3Z0X     6,552     UN1L     12       1.8 MHz     3.5 MHz     3.5 MHz     12       DM7C     387     W1UE     6,400       YL2VW     286     UR5QU     4,728       CX6VM     225     SF5DL     4,290       LZ2ZG     198     D04DXA     3,128       JH2FXK     12     SQ1BVG     1,526       YU1XX     1,020     J11MUT     780       UA4HDB     576     EA3EGB     495       SP5VIH     340     340     12       0H2OT (OG55W)     826     125M0Q     780       UA3AJK     444     UMIU (UT7UA)     360       AJ6T     65     65     65						1 0 107			
1.8 MHz   3.5 MHz     DM7C   387   W1UE   6,400     YL2VW   286   UR5QU   4,728     CX6VM   225   SP5DL   4,290     L2Z2G   198   D04DXA   3,128     JH2FXK   12   SQ1BVG   1,526     YU1XX   1,020   J11MUT   780     UA4HDB   576   EA3EGB   495     SP5VIH   340   SP5VIH   340     I.8 MHz     ML2OT (OG55W)   826     IZ5MOQ   780   MAJK     UM30JK   444   UM1U (UT7UA)   360     AJ6T   65   65   65						1.8 MHZ	10		
DM7C   387   W1UE   6,400     YL2VW   286   UR5QU   4,728     CX6VM   225   SP5DL   4,290     L22ZG   198   D04DXA   3,128     JH2FXK   12   SQ1BVG   1,526     YU1XX   1,020   J11MUT   780     J11MUT   780   UA4HDB   576     EA3EGB   495   SP5VIH   340     I.8 MHz     OH2OT (OG55W)   826     I25M0Q   780     UA9AJX   444     UW1U (UT7UA)   360     AJ6T   65	0/10/10	592	540A	0,552	ONTL		12		
DM7C   387   W1UE   6,400     YL2VW   286   UR5QU   4,728     CX6VM   225   SP5DL   4,290     L22ZG   198   D04DXA   3,128     JH2FXK   12   SQ1BVG   1,526     YU1XX   1,020   J11MUT   780     J11MUT   780   UA4HDB   576     EA3EGB   495   SP5VIH   340     I.8 MHz     OH2OT (OG55W)   826     I25M0Q   780     UA9AJX   444     UW1U (UT7UA)   360     AJ6T   65	18 MH-		35 MH-7						
YL2VW   286   UR5QU   4,728     CX6VM   225   SP5DL   4,290     L22ZG   198   D04DXA   3,128     JH2FXK   12   SQ1BVG   1,526     YU1XX   1,020   J11MUT   780     UA4HDB   576   EA3EGB   495     SP5VIH   340   340     I.8 MHz     OH2OT (OG55W)   826     IZ5MOQ   780     UA9AJK   444     UW1U (UT7UA)   360     AJ6T   65									
CX6VM   225   SP5DL   4,290     L22ZG   198   D04DXA   3,128     JH2FXK   12   SQ1BVG   1,526     YU1XX   1,020   JI1MUT   780     JH2FXK   12   SQ1BVG   1,526     YU1XX   1,020   JI1MUT   780     UA4HDB   576   EA3EGB   495     SP5VIH   340   340     OH2OT (OG55W)   826     IZ5MOQ   780   UA9AJK   444     UW1U (UT7UA)   360   AJ6T   65									
LZ2ZG 198 D04DXA 3,128 JH2FXK 12 SQ1BVG 1,526 YU1XX 1,020 J11MUT 780 UA4HDB 576 EA3EGB 495 SP5VIH 340 1.8 MHz OH2OT (OG55W) 826 IZ5MOQ 780 UA9AJK 444 UW1U (UT7UA) 360 AJ6T 65									
JH2FXK 12 SQ1BVG 1,526 YU1XX 1,020 J11MUT 780 UA4HDB 576 EA3EGB 495 SP5VIH 340 <b>1.8 MHz</b> OH2OT (OG55W) 826 IZ5MOQ 780 UA9AJK 444 UW1U (UT7UA) 360 AJ6T 65									
YU1XX 1,020 JI1MUT 780 UA4HDB 576 EA3EGB 495 SP5VIH 340 1.8 MHz OH2OT (OG55W) 826 IZ5MOQ 780 UA9AJK 444 UW1U (UT7UA) 360 AJ6T 65									
JI1MUT 780 UA4HDB 576 EA3EGB 495 SP5VIH 340 <b>1.8 MHz</b> OH2OT (OG55W) 826 IZ5MOQ 780 UA9AJK 444 UW1U (UT7UA) 360 AJ6T 65		10							
UA4HDB 576 EA3EGB 495 SP5VIH 340 <b>1.8 MHz</b> OH2OT (OG55W) 826 IZ5MOQ 780 UA9AJK 444 UW1U (UT7UA) 360 AJ6T 65									
EA3EGB 495 SP5VIH 340 <b>1.8 MHz</b> OH2OT (OG55W) 826 IZ5MOQ 780 UA9AJK 444 UW1U (UT7UA) 360 AJ6T 65									
SP5VIH   340     1.8 MHz      OH2OT (OG55W)   826     IZ5MOQ   780     UA9AJK   444     UW1U (UT7UA)   360     AJ6T   65									
1.8 MHz     OH2OT (OG55W)   826     IZ5MOQ   780     UA9AJK   444     UW1U (UT7UA)   360     AJ6T   65									
OH2OT (OG55W) 826   IZ5MOQ 780   UA9AJK 444   UW1U (UT7UA) 360   AJ6T 65									
OH2OT (OG55W) 826   IZ5MOQ 780   UA9AJK 444   UW1U (UT7UA) 360   AJ6T 65			1.8 MHz						
IZ5MOQ 780 UA9AJK 444 UW1U (UT7UA) 360 AJ6T 65									
UA9AJK 444 UW1U (UT7UA) 360 AJ6T 65									
UW1U (UT7UA) 360 AJ6T 65									
AJ6T 65									
				65					
BGIREN 32			BG1REN	32					

## World Top Scores

Single	On High	Power	Sing	le On Low	Power	c i	ngle Op (	)RP	N	Multi-Two
Single Op High Power All Band		Single Op Low Power All Band		51	All Band	e	NA5NN	147,100		
KA1R		356,720	KR1DX	(K6JO)			(K6UFO)		NW8S	67,490
W7EW		329,522	W7CD		115,632	K8ZT		10,368	W9AV	35,264
AA3B		238,128	AA5AU		100,254	K2XR		1,575	N1WW	33,600
K60K		121,437	WOYK		69,300	KM4CQG,	/ P	1,280	W3YA	4,320
W6OAT		119,519	KA6BIM		65,108	KC9NBV		924		-,
N3OE		92,232	K1JT		61,337	N7UVH		550	Mu	ulti-Multi
KW6S		82,302	WBOTEV		59,541	N8URE		528	K1SFA	388,755
NG7M		75,255	K1HTV		52,398	W5UHQ		340	WA3EKL	138,972
W6SX		55,451	WT8V		50,639	KC1DVT		136	KA4RRU	85,434
N4IQ		49 <b>,</b> 572	W3LL		50,084	WBOSIO		126	NTOK	75 <b>,</b> 114
									NW6P	51 <b>,</b> 667
	28 MHz			14 MHz			14 MHz		W8DC	33,475
W5PR		2,220			13,908	NGHI		210		
			WA7BNM		5,175					
	14 MHz			(W6XK)	4,706		7 MHz			
W1RM		26,609	NA1KW	(N1SPX)	4,444	K1SX		344		
N4BP		23,940	W9ILY		3,250	KB2HSH		138		
N7EPD		7 <b>,</b> 776	N6QQ		2,210					
WX4G		2,047	K7XC		2,160		3.5 MHz			
KE7SW		1,781	K7RE		1,995	W8QZA		1,056		
AA4VV		1,560	ND4G		1,280					
K9DR		936	NF7E		1,120					
N2YBB		732								
WA5NOM		720		7 MHz						
W6SR		671	WA1FCN		8,450					
			N5WRX		5,126					
	7 MHz		KC1BB		4,560					
N6MA		15,505			2,356					
KD4RH		6,160		WB9SBD)	2,176					
AB4SF		4,200	N9OU		1,598 972					
			KM4HI N2OPW		972 308					
			-							
			KA2YRA		273					
			W1RH		270					
				3.5 MHz						
			W1UE	5.5 MHZ	6,400					
			K6ST		133					
			W8WTS		104					
			MOMTO		104					
			1	.8 MHz Ba	and					
			AJ6T		65					
					00					

United States Top Scores

Single On High Power	Single On Low Po	WOT	Single On ORP	Multi-Single High Power DLOCS 47,712 UT7AXA 3,050
All Band	All Band	Wer	All Band	High Power
LX7I (DF7EE) 400,64	IK4LZH 109	9,670 OK21	D 26,250	DLOCS 47,712
YO9HP     177,53       S53X     83,19       YO6BHN     76,72	CT1ILT 109	9,242 ON30	Q 14,850	UT7AXA 3,050
S53X 83,19	YL1ZF 75	5,810 SP2E	WQ 7,602	
109HP     177,33       S53x     83,19       YO6BHN     76,72       UA6CE     62,56       HB9DDO     59,01       OM7JG     58,28       IX1CLD     56,24	US0YA 50	0,568 EA3E	'HP 6,902	Multi-Single Low Power YU5R 62,280 EA3RCB 1,281
UA6CE 62,56	RW7M 44	4,538 ON4H	B 5,760	Low Power
HB9DDO 59,01	9A2JK 43	3,862 DL5F	K 5,544	YU5R 62,280
OM7JG 58,28	S57AM 41	1,810 SM0I	PO 5,440	EA3RCB 1,281
IX1CLD 56,24	S57AW 38	8,220 PC1E	MR 3,848	
OK2EA 51,56	SO3MZM 3	7,920 PE2F	3,213	Multi-Two
OK2EA     51,56       ER4DX (UT5UDX)     50,69	UX7QV 35	5,949 YL3E	W 3,052	Multi-Two S51A 274,626
<b>28 MHz</b> DL1REM 38	28 MHz		28 MHz	<b>Multi-Multi</b> 9A1A 394,621
DL1REM 38	s50xx	560 IZ31	VR 506	9A1A 394,621
	UZ1WW	140		
14 MHz	YT7AW	78	Op 21 MHz	
14 MHz       EA6VQ     32,72       OT1A     28,08       HB9C7E     23,01		US5E	FU 580	
OT1A 28,08	21 MHz	HB9E	ZC 91	
HB9CZF 23,01	DL9MEU	1,425		
UT8NT 21,20	UR5WCW	470	14 MHz	
UR4QX 20,43	DO1HFS	288 OH1N	IN 850	
OZ1ADL 17,17	DL1RPR	264 CT72	IX 767	
HA6NN 5,85	5 SP6IHE	18 SV17	ZL 630	
14 MHz       EA6VQ     32,72       OT1A     28,08       HB9CZF     23,01       UT8NT     21,20       UR4QX     20,43       OZ1ADL     17,17       HA6NN     5,85       DK3RA     4,98		PDOC	P 80	
103KHJ 4,23	14 MHz	CTIF	ND 36	
IK3ASM 4,10	ES5MG 10	6,646		
	Y09BCM 9	9,042	7 MHz	
IK3ASM 4,10 <b>7 MHz</b>	IT9GSF 8	8,995 ON31	I 870	
7 MHz UW5EKD 11,26 UR5NMZ 10,59 SP9UNX 5,17 OH5BM 32 HB9CAT 18 3 5 MHz	S56A 7	7,710		
UR5NMZ 10,59	DF1SD 4	4,750	3.5 MHz	
SP9UNX 5,17	OE3DXA 4	4,536 YT5Y	TT 1,386	
OH5BM 32	Z39A 4	4,142 IK4U	XA 768	
HB9CAT 18	EI5KO 4	4,026		
	UR7QM 3	3,652		
		3,500		
DK8ZZ 6,81				
R2IN 3,60 UV5QQ 1,53	<b>7 MHz</b> S50A 29			
UV5QQ 1,53	S50A 29	9,889		
UT3N (K) 60	SN2K (SP2FWC) 22	2,725		
	S51CK 21	1,758		
<b>1.8 MHz</b> DM7C 38	ES5RY 13 YO3JW 11	3,804		
DM7C 38	YO3JW 11	1,458		
YL2VW 28	5 UT3UA 7	7,221		
LZ2ZG 19	3Z0X 6	6 <b>,</b> 552		
	UT3UA 3Z0X US7KC S50B	5,808		
	EW6DM 3	3,287		
	3.5 MHz	4 700		
		4,728		
		4,290		
		3,128		
		1,526		
		1,020		
	UA4HDB	576		
	EA3EGB	495		
	SP5VIH	340		
	DO2HEY	200		
	1.8 MHz	0.0.5		
	OH2OT (OG55W)	826		
	IZ5MOQ	780		
	UW1U (UT7UA)	360		

Europe Top Scores

## Single Op, Single Band

Of the single band entries, the winners of 80 meter high and low power classes were near even in score with high power winner Zik, DK8ZZ, scoring 6,812 points and low power winner Dennis, W1UE, finishing with 6,400 points. On 40 meters, the top three low power entries (S50A Tine, SP2FWC Jan operating as SN2K, and S51CK Ivan) all scored higher than HP winner Paul, N6MA.



*Club station SN2K antenna farm used by Jan SP2FWC for 2<sup>nd</sup> place 40 Meter Low Power* 

The high and low power winners on 20 meters were both from South America and both won by wide margins. In HP, the winner was Julio, YV1KK, operating as YW1K. The 20 meter LP winner was Leonardo, CX3AL.





Olaf DM7C (DL7CX) won 160 Meter HP

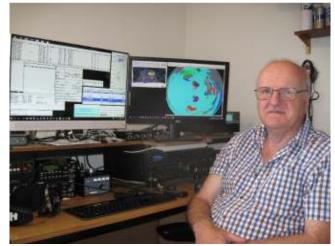
Alex UR5NMZ was 3<sup>rd</sup> 40 Meter HP



Alex YT5YTT won 80 Meter QRP



Gabriel EA6VQ 2<sup>nd</sup> 20 Meter HP



Bob VP8LP, 3<sup>rd</sup> 20 Meter HP



Pete W1RM, 5<sup>th</sup> 20 Meter HP



Javier CE7VPQ, 3<sup>rd</sup> 20 Meter LP



Robert NC4RY, 4<sup>th</sup> 20 Meter LP



Markus OH1MN won 20 Meter QRP



Jose ZP6ARO won 15 Meter LP

It was no surprise there were very few entries in the 10 and 15 meter single band categories because of poor high band conditions and the lack of E-skip. There weren't many entries for single band 160 meters either. Digital contesting on top band is fairly new plus 160 meters is not thought to be great at the end of August in the northern hemisphere. However, FT modes work extremely well on top band during the summer months. With FT-modes being fairly new, a lot of people may not know this. Expect this category to become more popular in the future as the next few years could still be low on sunspots.

W	ORLD S	SINGLE	OPERATOR	ASSISTE	D ALL	BAND
LX7I	46/0/16	270/0/3	0 397/0/45	536/0/50	108/0/13	16/0/6
KA1R	87/0/26	219/0/3		306/0/53	29/0/15	2/0/1
W7EW	8/0/6	184/0/3		359/0/51	27/0/11	0/0/0
AA3B	49/0/16	185/0/3		265/0/34	27/0/9	0/0/0
YO9HP	31/0/14	96/0/2		288/0/42	117/0/28	10/0/6
KH6KR	2/0/2	36/0/1		294/0/45	11/0/6	2/0/2
*VK3BDX	0/0/0	12/0/	6 228/0/47	102/0/30	0/0/0	0/0/0
*KR1DX	0/0/0	101/0/1	8 313/0/32	289/0/38	15/0/8	0/0/0
КбОК	0/0/0	74/0/1	7 180/0/39	232/0/41	10/0/6	0/0/0
W6OAT	16/0/9	86/0/1	9 171/0/36	238/0/38	8/0/4	1/0/1
W	ORLD M	MIT.T.T.	PERATOR	SINGLE-T	RANSMI	TTTER
*YU5R	4/0/2	77/0/1		233/0/27	59/0/16	4/0/3
DLOCS	0/0/0	29/0/1		206/0/36	22/0/8	0/0/0
*JJ1ZEJ	0/0/0	8/0/		34/0/23	7/0/5	1/0/1
JL3ZHU *4F3BZ	0/0/0 0/0/0	0/0/ 0/0/		44/0/23 32/0/10	0/0/0 12/0/6	0/0/0 0/0/0
*YM3KC	0/0/0	0/0/		136/0/22	0/0/0	0/0/0
*ET3AA	0/0/0	0/0/		80/0/18	0/0/0	0/0/0
UT7AXA	0/0/0	7/0/		90/0/15	0/0/0	0/0/0
*4A2MAX	0/0/0	0/0/		103/0/20	0/0/0	0/0/0
*EA3RCB	0/0/0	0/0/		37/0/15	2/0/2	3/0/2
21101102	0, 0, 0	0, 0,		0,,0,10	2, 0, 2	0, 0, 2
	WORLD	MULTI	-OPERATO	R TWO-TRA	ANSMIT	TER
S51A	44/0/14	133/0/2	8 355/0/42	384/0/50	138/0/26	15/0/11
NA5NN	39/0/10	187/0/1	9 374/0/32	395/0/32	15/0/7	0/0/0
NW8S	18/0/5	100/0/1	8 177/0/29	202/0/28	9/0/5	0/0/0
VR2CC	0/0/0	0/0/	0 126/0/32	243/0/38	10/0/7	0/0/0
CT3KN	0/0/0	26/0/1		279/0/27	47/0/12	0/0/0
LU4FM	3/0/2	14/0/1		67/0/23	44/0/17	0/0/0
W9AV	43/0/8	115/0/1		129/0/19	1/0/1	0/0/0
N1WW	0/0/0	90/0/1		131/0/22	0/0/0	0/0/0
W3YA	0/0/0	6/0/	3 61/0/8	63/0/14	2/0/2	0/0/0
V	WORLD	MULTI-(	OPERATOR	MULTI-TI	RANSMI	TTER
ZW5B	11/0/9	126/0/2	3 348/0/47	423/0/48	134/0/23	10/0/5
P33W	104/0/24	170/0/3		557/0/46	192/0/29	71/0/8
9A1A	102/0/19	201/0/2		528/0/45	225/0/28	58/0/13
K1SFA	160/0/24	280/0/3		382/0/43	63/0/14	27/0/4
RWOA	56/0/20	78/0/2		428/0/52	15/0/11	4/0/3
WA3EKL	72/0/14	172/0/2		219/0/34	5/0/4	0/0/0
KA4RRU	81/0/10	157/0/1	8 225/0/27	158/0/26	22/0/6	0/0/0
NTOK	65/0/5	137/0/1		221/0/27	2/0/2	4/0/3
NW6P	0/0/0	81/0/1		239/0/21	16/0/5	0/0/0
W8DC	45/0/9	135/0/1	3 110/0/13	130/0/26	4/0/4	0/0/0
	F.7		Scores Ba			

World Top Scores Band Breakdowns

US	SA SING	LE OPER	ATOR AS	SISTED	ALL BAN	1D
KA1R	87/0/26	219/0/37	300/0/50	306/0/53	29/0/15	2/0/1
W7EW	8/0/6	184/0/31	342/0/47	359/0/51	27/0/11	0/0/0
AA3B	49/0/16	185/0/30	382/0/43	265/0/34	27/0/9	0/0/0
*KR1DX	0/0/0	101/0/18	313/0/32	289/0/38	15/0/8	0/0/0
K60K	0/0/0	74/0/17	180/0/39	232/0/41	10/0/6	0/0/0
W6OAT	16/0/9	86/0/19	171/0/36	238/0/38	8/0/4	1/0/1
*W7CD	0/0/0	77/0/14	190/0/40	280/0/41	5/0/3	1/0/1
*AA5AU	34/0/7	180/0/21	239/0/29	298/0/32	40/0/9	0/0/0
N3QE	23/0/9	154/0/19	230/0/30	246/0/26	0/0/0	0/0/0
KW6S	8/0/4	22/0/10	114/0/24	306/0/39	16/0/9	1/0/1
No entries NA5NN NW8S W9AV N1WW W3YA		LTI-OPEI 187/0/19 100/0/18 115/0/16 90/0/15 6/0/3	<b>XATOR TV</b> 374/0/32 177/0/29 189/0/20 139/0/19 61/0/8	<b>IO – TRANS</b> 395/0/32 202/0/28 129/0/19 131/0/22 63/0/14	SMITTER 15/0/7 9/0/5 1/0/1 0/0/0 2/0/2	0/0/0 0/0/0 0/0/0 0/0/0 0/0/0
_		-		LTI – TRAN 382/0/43	<b>ISMITTE</b> 63/0/14	<b>R</b> 27/0/4
K1SFA	160/0/24	280/0/38	408/0/40	, -, -	/ - /	, ,
WA3EKL	72/0/14	172/0/26	282/0/33	219/0/34	5/0/4	0/0/0
WA3EKL KA4RRU	72/0/14 81/0/10	172/0/26 157/0/18	282/0/33 225/0/27	219/0/34 158/0/26	5/0/4 22/0/6	0/0/0 0/0/0
WA3EKL KA4RRU NTOK	72/0/14 81/0/10 65/0/5	172/0/26 157/0/18 137/0/14	282/0/33 225/0/27 353/0/27	219/0/34 158/0/26 221/0/27	5/0/4 22/0/6 2/0/2	0/0/0 0/0/0 4/0/3
WA3EKL KA4RRU	72/0/14 81/0/10	172/0/26 157/0/18	282/0/33 225/0/27	219/0/34 158/0/26	5/0/4 22/0/6	0/0/0 0/0/0

USA TOP Scores Bana Breakdowns

EURC	OPE SIN	IGLE OPP	ERATOR	ASSISTED	ALL	BAND
LX7I	46/0/16	270/0/30	397/0/45	536/0/50	108/0/13	16/0/6
YO9HP	31/0/14	96/0/20	249/0/42	288/0/42	117/0/28	10/0/6
*IK4LZH	1/0/1	105/0/20	189/0/24	341/0/42	60/0/15	15/0/8
*CT1ILT	23/0/10	52/0/14	104/0/22	321/0/43	41/0/10	5/0/3
S53X	0/0/0	51/0/14	234/0/26	252/0/34	68/0/14	12/0/6
YO6BHN	21/0/9	51/0/13	139/0/29	339/0/32	60/0/12	2/0/2
*YL1ZF	33/0/11	124/0/22	232/0/20	237/0/26	43/0/10	19/0/6
UA6CE	10/0/6	40/0/10	182/0/32	258/0/30	27/0/10	1/0/1
HB9DDO	0/0/0	0/0/0	70/0/26	249/0/46	34/0/11	0/0/0
OM7JG	12/0/7	40/0/11	131/0/23	210/0/31	81/0/18	5/0/4
EURO	OPE MUI	LTI-OPEI	RATOR S	SINGLE-TRA	ANSMI	TTER
*YU5R	4/0/2	77/0/17	151/0/25	233/0/27	59/0/16	4/0/3
DLOCS	0/0/0	29/0/10	155/0/30	206/0/36	22/0/8	0/0/0
UT7AXA	0/0/0	7/0/3	15/0/7	90/0/15	0/0/0	0/0/0
*EA3RCB	0/0/0	0/0/0	4/0/2	37/0/15	2/0/2	3/0/2
EU	ROPE M	ULTI-OP	ERATOR	TWO-TRAN	SMITT	ER
S51A	44/0/14	133/0/28	355/0/42	384/0/50	138/0/26	15/0/11
EUR	OPE MU	LTI-OPE	RATOR	MULTI-TRA	NSMIJ	TER
9A1A	102/0/19	201/0/22	391/0/40	528/0/45	225/0/28	58/0/13

# Europe Top Scores Band Breakdowns

## **Multi-Single**

In Multi-Single, the top low power entry YU5R (IV3FSG, YT3PL & YT7AW) had a higher score (62,280 points) than the high power winner DL0CS (DL1VH & DK2OY with 47,712 points).

## Multi-2

In the Multi-2 category, the S51A team of S51TC, S51ZJ, S52D, S55KZ, S56B, S57PM and S59MZ blew away the competition with 274,626 points. In second was NA5NN (K2FF & W5UE) in Mississippi with 147,100 points. Third went to another US station, NW8S (KB8O & AB8M) in Ohio with 67,490 points.



S51A won Multi-Two (sitting, front to back) Sergej S51ZJ and Iztok S52D (standing left to right) Ziga S55KZ, Matjaz S59MZ, Andreja S56B, Tone S51TC



Glenn K2FF pushing hard Randy W5UE 2<sup>nd</sup> Place Multi-Two team at NA5NN



Doug AB8M & Jay KB8O operated NW8S for 3<sup>rd</sup> Place Multi-Two



Pansy VR2XYL & Charlie VR2XMT operated VR2CC for 4<sup>th</sup> Place Multi-Two

## Multi-Multi

The biggest surprise in multi-op has to be the competition in Multi-Multi. There were several perennial powerhouse Multi-op stations taking part this year. ZW5B (PP5NS, PU2TIB, PU5SIX, PY5CC, PY5EG, PY5EJ and PY5KD) took the win by outdistancing P33W (LZ2HM & Andy Jr.). 9A1A (9A9A, 9A7R, 9A7ROR, 9A4BP and 9A3GZI) was third. K1SFA (K1MK, K1NZ, K1SFA, K1TTT and K2IW) operating from K1TTT in Massachusetts came in fourth. RW0A (RA0AM, RW0AR, RV0AR, R0ACG and RA0AAC) completed the top five.

## **Club Competition**

As with the CQ WW contests, club competition is separated into US clubs and DX clubs (all non-US clubs). 17 US clubs had the minimum 3 logs while 19 DX clubs met the criteria. The Northern California Contest Club (NCCC) mounted a focused effort to do well in the first WW-Digi contest, and it obviously paid off as they were the only club to break a million points with the highest number of logs, 51. The Yankee Clipper Contest Club (YCCC) took second with only 15 logs. Third overall was the Araucaria DX Group (ADXG) who led the DX Club scores. Potomac Valley Radio Club (PVRC) was fourth, Rhein Ruhr DX Association was fifth and Slovenia Contest Club (SCC) was sixth overall. Congratulations to all the club participation which is summarized in the <u>Clubs web page</u> on the 2019 <u>Results web page</u>.



SCC awards team: Iztok S52D, Lili and Tine S50A

### Awards

Certificates are available for all entrants who submitted their log by the deadline of 2350 UTC on 6 September 2019. For each entry in the Scores Database (<u>https://ww-digi.com/scores.htm</u>) there is a certificate link at the right-hand end of the line. The certificate design was done by Lili of the SCC (see photo above).

Lili also created the plaque design for the many plaques sponsored by the gracious supporters of the first WW Digi contest (<u>https://ww-digi.com/plaques.htm</u>). Thanks so much to the sponsors and congratulations to the winners! Big thanks to Tine S50A for organizing the certificate and plaque programs and to Iztok S52D for his invaluable contributions to the contest committee.

## Nil QSO Penalty removed for 2019

The WW Digi rules state that NIL QSOs are penalized 2 times the equivalent point value. Each good QSO is awarded 1-7 points based upon distance between the Grid Squares of the two QSO partners. If a log has a QSO that is not in the log of the QSO partner, that QSO is deemed a NIL (Not in Log) and 2 times the point value is subtracted from the score of that log. Note that this affects the score by 3 times the point value because instead of getting N points, the log gets -2N points.

This NIL penalty is the same in all CQ WW contests (note the World Wide Digi DX Contest is not sponsored by CQ but is still in the family of WW contests along with CW, SSB and RTTY) in order to encourage participants to try hard to make good QSOs rather than simply logging a questionable contact, e.g., not copying a clear acknowledgement or QSL.

### - Problem

WW Digi log checking resulted in large score reductions from the Raw Scores posted on the web site to the final log-checked scores. A number of the final scores were actually negative! The primary cause of these reductions was an abnormally high number of NIL QSOs across most logs.

In CW, SSB and RTTY WW contests, the average NIL rate across all logs is about 1%, but in WW Digi it was 5%, which indicates something is particularly different about FT mode contesting compared to the legacy modes. For reasons not fully understood, FT QSO partners more often disagree about whether a QSO was completed and should be logged, compared to the legacy modes. One side logs the QSO but the other side does not, which results in a NIL penalty for the QSO partner who logged the QSO. This can be due to an operator decision or how the FT software determines whether a QSO is complete.

In the legacy modes, the "fault" for a NIL is most always on the side that logged the QSO. For the FT mode it is not yet clear where the fault is, but in any case, the amount of NILs is abnormally high.

## - Solution

During WW Digi log checking the contest committee faced a dilemma. On the one hand, it seemed that we had to apply the rules and just let the scores fall where they may. On the other hand, it is assumed that the vast majority of participants entered in good faith and to enjoy the event. Presenting them with greatly reduced final scores, even negative scores, just didn't seem appropriate. Ultimately, the contest committee decided to waive the NIL penalty. NIL QSOs still receive zero points, but they are not further reduced with the 2x penalty. So, there is still incentive for participants and software developers to learn how to reduce NIL rates in contesting.

Here is a summary of how a QSO is scored:

## 2019 WW DX Digi

Good QSO: N points Dupe QSO: zero points Incorrect exchange: zero points NIL QSO: zero points (-2N points in the CQ WW CW/SSB/RTTY contests) Incorrect ("busted") call: -2N points

Interestingly, busted call signs average about 1% in the legacy modes, but are virtually zero in FT mode contests so far. The primary way a call sign can be busted in an FT contest is manual entry, which seldom occurs. The FT software is renowned for perfect copy, or no copy at all.

## Future

Going forward, FT contesting needs to better define how QSO partners can reliably communicate whether a QSO is complete and should be logged. The responsibility resides both with contest participants and FT contest software developers.

A big thank you to everyone who participated to make the first World Wide Digi DX Contest a success. The contest will continue in 2020 and take place on the last full weekend in August. Bjorn, SEOX, may have captured the excitement when he wrote "Wow! This is something completely new in contesting! I see a lot of potential for the World Wide Digi DX Contest to lead development of the future of contesting. With the fast pace of development in digital modes and the rise of live scoring, radiosport has the potential to be attractive as an e-sport to young hams. This can certainly help revitalize ham radio!". We hope you're right, Bjorn. See you in 2020, on 29-30 August.