The end of a solar cycle...?

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Sixteen year old Michael McCarty,

KE5RJJ, of Abilene, Texas jumped into the 10 Meter contest just three weeks after getting licensed. He managed 177 QSOs and 10,034 points.



Rhy, ZS6DXB, and Daniel, ZS6JR, make final

adjustments to their beam for their portable 10 Meter Contest operation in South Africa, 40 km from the border with Botswana.

It was with great delight to amateur radio operators world wide that scientists announced the appearance of a sunspot on January 4, 2008 that fit the criteria for the first sunspot of Solar Cycle 24. Amateur radio operators yearning for higher levels of solar flux, eager for better propagation on the higher frequency HF bands, could look to this news with hope. Just a few weeks earlier, on December 8-9, 2007, over 1,500 amateur radio operators around the globe took part in the ARRL 10 Meter Contest, knowing full well that the solar cycle must be near its bottom, hoping to catch some luck on the bands just the same.

For more information on the first sunspot of Solar Cycle 24, click here.

No HF band is more sensitive to the ups and downs of the solar cycle than 10 meters. At the peak of the cycle, when the number of sunspots is high, and the solar flux is creating high levels of ionization in the F layer, life is good. With five watts and a dipole, you can work the world. A few years later, when the cycle bottoms out, when there are no sunspots at all for days at a time, operating on 10 meters takes real dedication. Even stations with stacked Yagis and high power amplifiers struggle to make contacts. Successful competitors stay in the chair, alert for marginal openings, making the most of every opportunity. Every year is different, and with the right attitude, every year can be rewarding. As Brad Mikimen N5LUL noted, "The band was not in the best of shape this year, but the contacts I made were worth every minute of waiting and listening."

Fortuitously, the 2007 ARRL 10 Meter Contest caught the leading edge of a two-week long bump in the solar flux. Just a few days before the contest, solar flux numbers hovered around 70. By December 8, the solar flux was up to 84.4, and by December 9 it was up to 86.2. Flux would actually peak out at 91.1 on December 12 before returning to 70 a few days later. Remarkably, this is the fifth year in a row where the solar flux on the days of the contest has been between 84 and 91. The trend began in 2003, when the weekend of the contest had very unusually low flux numbers, followed by unusually low flux numbers on that particular weekend in 2004. You never can tell what the sun will do!

A total of 1,586 logs were entered in the 2007 ARRL 10 Meter Contest, down 277 logs, or 15%, from 2006. There were 159 fewer logs submitted by Europeans, but only 96 fewer logs submitted by stations in North America. With many fewer Japanese stations participating, only 60 logs total were submitted by stations from Asia this year, representing 15.6% of the DX logs and just 3.8% of the total number of logs for the contest as a whole. Relatively speaking, this the lowest level of activity from Asia in the ARRL 10 Meter Contest since 1977, and the percentage of DX logs coming from Asia has never been lower. Despite the decreases in log submissions from some parts of the world, this is still likely to be the first solar cycle in which the overall number of logs submitted in the contest stays above the 1,000 mark even in the years at the very bottom of the cycle.

The three Single-Operator Low Power categories remain the most popular, accounting for 53% of all log submissions. The most popular of all the categories for DX stations is the Single Operator CW-Only Low Power category, in which 18.7% of all DX stations operated. For W/VE stations, the Single Operator Mixed-Mode Low Power category was the most popular, accounting for 22.8% of all W/VE stations. Mixed-mode categories provide the opportunity to work stations on both phone and CW. In lean years at the bottom of the solar cycle, more opportunities to make contacts can be very appealing!

Records

At the bottom of the solar cycle, nobody expects a lot of records to be set. That didn't stop a 12-year-old in Queensland, Australia from setting a new continental record. Raj Deyoung VK4FRAJ set a new Oceania record for the Single Operator, Mixed-Mode QRP category. Raj beat the previous record score, set by YC2OK in 1998, by over 40%. Both of Raj's parents are amateur radio operators, and he earned his Foundation class license in the summer of 2007. More and more Foundation class licensees can be heard on the air from Australia, many of them younger operators just learning the radio arts. To identify these new operators, listen for four character suffixes that begin with the letter F.

For a complete listing of ARRL 10 Meter Contest records, see: http://www.arrl.org/contests/results/10-meter-contest-records-wve.html

In other DX competitions, 14 new DXCC entity records were set in 2007, scattered around the world. Three new records were set in Africa, three in Asia, one in Europe, three in North America, two in Oceania, and one in South America. More DXCC entity records were set in the single operator low power categories than the others. Two of the new DXCC entity records were set in China, both by stations in central Guangdong Province in the southeastern part of the country. Huang Jinquan BD7JLR claimed a new record in the Single Operator CW-Only Low Power category, and Yang Weiwen BD7IXG claimed a new record in the multi-operator single-transmitter category (using the DX cluster). While the number of entries from Japan was down this year, Chinese operations in the contest were up 150% in 2007.

There were no new W/VE Division records set in 2007. There were, however, four new W/VE section records set. Three of the W/VE section records were set in the Single Operator Mixed-Mode QRP category: Manuel Fonseca W2MF in Northern New Jersey (24,860 points), Christopher Gay KU4A in Kentucky (2,890 points), and Toni Radebaugh N0NI in Iowa (48,690 points). Toni now has four of the ten possible Iowa section records in three of the single operator categories and the Multi-Operator Single-Transmitter category. Al KC5R in Louisiana set a new record in the Single Operator CW-Only QRP category (33,792 points). 29 section records remain unclaimed, primarily in the QRP categories. 14 of those unclaimed records are for Canadian sections. The Yukon/Northwest Territories still has four unclaimed section records, while Newfoundland/Labrador and Manitoba each have three unclaimed records.

DX Categories

Participation in the contest amongst DX stations was broadly down, especially in Europe, where the number of submitted logs fell from 318 logs in 2006 to just 159 logs in 2007. One area of the world where participation actually increased was in South America. While 85 logs were received from South American stations in 2006, 102 logs were received in 2007, the third highest log total ever from South America. Why the difference? South America can be a very good location from which to operate the contest during the bottom of the solar cycle.

At the bottom of the solar cycle, the best paths for F layer propagation on ten meters will be north-south paths that cross equatorial regions. If any portion of the F layer of the ionosphere can achieve the ionization levels necessary to refract 10 meter signals, it will be near the magnetic equator. The openings may be marginal, and the signals may be weak, but they may be all that is available at this point in the solar cycle. South America is uniquely positioned to take advantage of north-south trans-equatorial paths. From Buenos Aires, Europe lies at beam headings between 30 and 45 degrees (NNE through NE), while North America lies at beam headings between 315 and 360 degrees (NW through N). While many stations in South America reported no openings to Europe, those that did were able to pick up new multipliers even if the overall number of stations worked was small. The top scores from South America came from northern Argentina, southern Brazil, and Uruguay. Stations in South Africa have great north-south paths to Europe, but Japan and North America too far to the east and the west, respectively. Similarly, stations in Australia and New Zealand have excellent north-south paths to Japan, but the paths to Europe and North America are more to the west and east. Even stations located in the Caribbean, thousands of kilometers closer to the United States and Canada, have difficulty challenging the South Americans in years at the bottom of the solar cycle.

Single Operator Mixed Mode

In addition to setting a new Oceania record for the Single Operator Mixed-Mode QRP category, Raj Deyoung VK4FRAJ also took the overall DX victory in the category. Raj was one of only two DX entrants in the category to make more than 100 contacts. Second place went to Vitor La Santos PY2NY, operating from the town of Jaboticabal about 350 km northwest of Sao Paulo, Brazil. Ymanol Yoseva YV5YMA took third place, operating with his contest call sign 4M2L from Venezuela. Ymanol also made over 100 contacts, but was only able to work 16 unique multipliers.

In the Single Operator Mixed-Mode Low Power category, there was a very margin of victory. Alex Cozzi LU5WW took the victory from Argentina with 395 contacts and 103 multipliers. His total score of 130,192 points was higher than any other DX single operator in any category, including the High Power categories, and is his third consecutive victory in the category. Second place went to Marco Soto XE2S, operating from the Sonoran Desert in northern Mexico. Alfredo Ramos WP3C, using the Atlantic Contest Club call sign WP4I, took third place for his effort from the island of Puerto Rico. The only top ten entry in this category not from North or South America was the ninth place for Mike Manafo K3UOC, operating at the St. John's School Amateur Radio Club station WH2D on the island of Guam. "That was tough! I think we all learned a lesson in patience/humility from this year's 10 Meter Contest," John notes.

Pulling off a rare category victory for a South African, Vidi LaGrange ZS1EL won the Single Operator Mixed-Mode High Power category from his station east of Cape Town. Vidi made over 200 contacts from a location quite distant from the major amateur radio populations of Europe, North America, and Japan. Second place went to Vaso Nastasic YT1XX using his contest call sign YT5T from Serbia. Vaso made 187

contacts for just under 35,000 points, using a Kenwood TS-940S he received as a wedding present from his good friend Dusko Dumanovic ZL3WW. Third place came from Andre Sampaio PY0FF, operating from the island DXCC entity of Fernando de Noronha off the coast of Brazil.

Single Operator Phone Only

Operators in the Single Operator Phone-Only QRP category are members of a dedicated group. In 2007, the winner made just 87 QSOs. Sebastian Potenzo LW3DC took the victory, operating with the Grupo DX Noroeste call sign LV6D from Argentina. Just ten contacts behind was Carlos Alfaro TI2KAC, operating with the contest call sign TE2M from Costa Rica. Although Carlos nearly matched Sebastian in contacts, Sebastian worked nearly twice as many multipliers, for a comfortable margin of victory. Third place went to last year's victor, Ted Jiminez HI3TEJ, who was operating with his contest call sign HI3T from the Dominican Republic. The top European score came from Franco Bernardini I5KAP of Italy, who worked 33 contacts in 12 multipliers for a fifth place finish overall.

Nine of top ten scores in the Single-Operator Phone-Only Low Power category came from just two countries: Argentina and Brazil. Winning the category this year was twenty-six year old Alan Laure Santamaria PU2LSM operating from the station of Mamiro Yoshizawa PY2DM in Sao Paulo, Brazil. Alan made just over 200 contacts, and says "They were poor conditions, but it was a good opportunity to learn." In second place was Mauricio Pitorri PY2CX, also from Sao Paulo, Brazil. Alan worked 26 more contacts and 3 more multipliers than Mauricio to take the victory. Victor Fabian Olmos LU3HS, using his contest call sign LQ5H, came in third place from Cordoba, Argentina. The only top ten finish in the category not from Argentina or Brazil was the ninth-place effort of Constantino Carlo HI3CCP using his contest call sign HI3C operating from the Dominican Republic.

In the Single Operator Phone-Only High Power category, overall QSO totals were well down from the top totals in 2006. This year, the victory went to Juan Manuel Morandi LU1HF from Cordoba, Argentina. Juan made 440 contacts, about 1600 fewer than last year's category winner. Second place went to another great effort by a South African station. Twenty-four year old Rhynhardt Louw ZS6DXB made just shy of 40,000 points. Rhynhardt earned his license in 2006 and has been an active contester ever since. Third place went to Miguel Carlos Peres Marcal PY5HOT, operating from Parana state in southern Brazil.

Single Operator CW Only

Some of the best results for Asian competitors in 2007 came in the Single Operator CW-Only QRP category, where half of the top ten scores were made by Asian stations. Overall DX victory in the category, however, went to Bob Novak K0OK, operating from the Turks and Caicos Islands with his contest call sign VP5E. Bob won the category with just 34 QSOs and 15 multipliers. Second place went to Manohar Arasu VU2UR, operating from Bangalore, India. Manohar is the IARU Region 3 Monitoring System Coordinator, and has been active in DXpeditions to South Asian islands. Third place went to Masaaki Saito JD1AHC, who set a new record from the island DXCC entity of Ogasawara, located 1000 kilometers south of Tokyo in the Pacific Ocean.

Only three DX stations in the Single Operator CW-Only Low Power category made over 10,000 points. First place went to Geoffrey Howard W0CG, who operated at the Caribbean Contesting Consortium's contest station PJ2T on the island of Curacao in the Netherlands Antilles. Operating from Uruguay, Andrea Panati IK1PMR, using the contest call sign CW2C, took second place with 140 contacts. Third place went to last year's second place finisher, Hugo Jorge Salmoyraghi LU1EWL, operating with his contest call sign LW1E from Buenos Aires, Argentina.

In the Single Operator CW-Only High Power category, Waldir Soares PY2WC took a commanding victory from his station in Sao Paulo, Brazil. Waldir earned 45,540 points from 170 QSOs and 69 multipliers. Waldir reported two openings to Europe, one of which was frustratingly interrupted by heavy storms. In the best result for a European station in 2007, Slavko Celarc S57DX took second place in the category from Slovenia, making exactly 100 contacts. Also doing well from Europe, Vojtech Novotny OK1GI, operating with the contest call sign OL5M, took third place overall from the Czech Republic. The top score from Oceania was from Ken McCormack ZL1AIH, operating with the ZM1K call sign and taking eighth place overall. Ken commented that the "weird conditions turned the contest into a lottery."

Multioperator Single Transmitter

In the DX Multi-operator category, all of the top ten scores came from stations in South America. Winning the contest in 2007 was the two-man team at LR2F in Rosario, Santa Fe, Argentina. Roberto Marinesco LU2FA and Javi Pons Estel, LU5FF together made 305,920 points from their location 475 km northwest of Buenos Aires. Improving on their second-place finish in 2006, LR2F was the only team to break the 300,000 point barrier in 2007. Last year's winning team took second place this year. Six operators at the station of Pedro Alberto Cana Pereira CX5BW combined to make 264,300 points from their contest station in Uruguay. A multi-national team of seven operators used the Auracaria DX Group's call sign, ZW5B, from the QTH of Atilano Oms PY5EG in Parana, Brazil. ZW5B's third place result included operators from Brazil, Finland, and the United States.

W/VE Categories

Conditions for W/VE operators in 2007 were not very different from 2006 in some ways, and yet were quite different in other ways. No matter where you were located in the United States and Canada, working DX was difficult. At the bottom of the solar cycle, F layer propagation can be quite marginal, favoring north-south paths that cross the equator. The further south you are located, the closer you are to the magnetic equator, the more likely you will be to catch the marginal F layer openings. If you operated the contest in 2005 or 2006, you were likely prepared for this. If the band sounds dead, try focusing your antennas to the south and you might find something.

While the DXing experience at the bottom of the solar cycle can be predictable, what does change from year to year is the effects of sporadic E propagation. Sporadic E occurs when clouds of dense ionization form in the E layer of the ionosphere and reflect radio signals back to earth. A single sporadic E cloud can support communications out to about 2400 km (1500 miles) on 28 MHz. Multiple sporadic E clouds can combine to extend that distance across entire continents. December is a good time of year for sporadic E to occur in North America, and some sporadic E propagation is available somewhere on the continent for at least some portion of the contest every year. What changes from year to year, however, is who gets it and who doesn't. There's nothing you can do to predict when, where, and for how long an opening will last with sporadic E. Staying in the chair and on the air is the only sure-fire way to catch it when it happens.

For more information on Sporadic E, see "Sporadic E - A Mystery Solved?" by David Whitehead, one of many articles available to ARRL members in the Technical Information Services section of the ARRL web site: http://www.arrl.org/members-only/tis/info/pdf/9710039.pdf
http://www.arrl.org/members-only/tis/info/pdf/9711038.pdf

In 2006, the primary beneficiaries of sporadic E were stations in the southwest United States, especially Arizona and southern California. This year, the propagation favored the south central United States, especially east Texas and Louisiana, and to a lesser extent the Midwest. Very few west coast stations made it into the Top Ten score boxes. How bad was it for the west coast in 2007? The average score for the 19 logs submitted for the Central Texas DX and Contest Club in the club competition exceeded the combined scores from 38 logs submitted for the Northern California Contest Club. Jerome Olive KD6WKY, operating in the East Bay section, summed it up for many west coast operators: "I never got east of the Sierra Nevadas or south of San Diego. Talk about difficult conditions! Most of my QSOs came from within a 100 mile radius with my beam pointed directly at them." The best result for a west coast station came from Larry Tucker W7YA of the Orange section in southern California, who came in third place in the Single Operator, Phone-Only QRP category.

The northwest United States and Canada also had it tough, with little to no Sporadic E propagation, and more limited F layer opportunities than stations located further south. The top results for stations from the northeast United States came in the three Single Operator Mixed-Mode categories. Manuel Fonseca W2MF took second place in the QRP category from Northern New Jersey (setting a new section record in the process), Pete Stafford K2PS took third place in Low Power from Southern New Jersey, and John Rodgers WE3C took fourth place in High Power from Eastern Pennsylvania. Pete and John both have multiple Top

Ten finishes in their categories in recent years and relied upon years of experience to maximize their results.

No Canadian stations made it into any of the Top Ten W/VE score boxes this year. The northern latitude really makes F layer propagation very difficult if not impossible at the bottom of the solar cycle, and there was no significant Sporadic E propagation in Canada this year. The top score from Canada was made by Gilles Renucci VE2TZT of Ile-Bizard, Quebec, who scored 31,376 points in the Single Operator Mixed-Mode High Power category. Gilles worked 53 multipliers, the only Canadian to work more than 40.

Single Operator Mixed Mode

The top two W/VE scores in the Single Operator Mixed Mode QRP category set section records. Toni Radebaugh N0NI set a new Iowa section record and took first place with a score almost twice that of Manuel Fonseca W2MF in Northern New Jersey. Manuel also set a section record with 196 QSOs. Last year's second place finisher, Chris Merchant KA1LMR in New Hampshire, took third place this year. This is the third year in a row for Chris to finish in the top three in the category.

In the Single Operator Mixed Mode Low Power category, a pair of Texans took the first two places in the W/VE competition. Tom Johnson WD5K made just shy of 1200 QSOs and 100 multipliers from North Texas to win the category. Remarkably, Tom's score was good enough to have beaten all the W/VE entries in the Single Operator Mixed Mode High Power category! Dave Cockrum N5DO, in West Texas, took second place. Third place went to Pete Stafford K2PS of Southern New Jersey. Pete has finished in the top three in this category for three years in a row.

With 1028 QSOs in the log, Scott Jasper NE9U, operating the well-known W0AIH contest station in Wisconsin, just edged out the competition in the Single Operator, Mixed-Mode High Power category. Paul Newberry, Jr. N4PN in Georgia took second place. Paul had seven more multipliers in his log, but Scott made more QSOs - 132 more - to take the victory. Jerry Rosalius WB9Z in Illinois came in a close third place. Jerry noted that, "As per one of my favorite sayings - 'Never give up, never surrender' - in the last 10 minutes of the contest, I picked up new multipliers, VE1SKY in Nova Scotia and VO1KVT in Newfoundland." Last year's third place finisher, John Rodgers WE3C, was the only other station to break 200,000 points, and finished in fourth place this year.

Single Operator Phone Only

Only 18 W/VE logs were received in the Single Operator, Phone-Only QRP category this year, the fewest of any category. Winning the category was Kevin Matheny W1KLM from Arkansas. Kevin was the only entrant in the category to make over 100 contacts. Michael Statom KB0OLA of Alabama came in second place with 79 contacts. last year's category winner, Larry Tucker W7YA of the Orange section in southern California, came in third place in 2007.

In 2007, the top three spots in the Single Operator, Phone-Only Low Power category all went to stations in the fifth call district. Taking advantage of a location in the south center of the United States, Charles Frost K5LBU won the category from South Texas with over 600 contacts in the log. Terry Wright WW5TT from Oklahoma took second place with over 500 QSOs. In third, Jeff Guidry AC5O of Louisiana was just short of 500 contacts. The remainder of the stations in the Top Ten were all located in the W5 and W0 call districts except for Charles Cone W4GKF, who took eighth place from Georgia.

In the Single Operator Phone-Only High Power category, Chuck Dietz W5PR returned to first place after several years of top five finishes. Chuck made 1848 contacts from South Texas, the most of any W/VE single operator in 2007, and 200 more than the high QSO total among single operators world-wide in 2006. The 2005 winner of the category, Ken Harker WM5R, operating at the K5TR station in South Texas, took second place for the second year in a row. Ed Gray W0SD of South Dakota, who won the category (and took first place world wide) in 2006, came in third place this year.

Single Operator CW Only

Winning the Single Operator CW-Only QRP category for the fourth year in a row, Dale Martin KG5U of South Texas made over 100 more QSOs in 2007 than he did for his winning effort of 2006. Dale made

most of his contacts with his Force 12 C3 pointed ENE thanks to a broken rotor. Second place went to Jerome Fiore N4JF of Alabama, the only other entrant in the category to make more than 250 QSOs. In third place, Al Sinopoli KC5R of Louisiana set a new Louisiana section record with a score of 33,792 points.

In the Single Operator CW-Only Low Power category, first place went to Bob Beaudoin WA1FCN of Alabama. Bob was just shy of 500 contacts this year. Todd Dewberry N5CHA of North Texas took second place with 67,404 points. In a close third place finish, Merril Brown WK2G of West Central Florida worked four more multipliers than Todd, but had fewer contacts, and finished with 65,700 points, a difference of just 2.5%.

What was perhaps the closest finish ever in the ARRL 10 Meter contest took place in the W/VE Single Operator CW-Only High Power category in 2006. Last year, Dan Street K1TO edged out Richard King K5NA by a remarkably tight score difference of just 0.1%. This year, Richard come out on top. Operating from his farm in South Texas, K5NA was the only W/VE single operator in any category to exceed 300,000 points, despite working no Europeans or Asians. Dan Street K1TO, operating from West Central Florida, came in second place this year. While Dan was competitive with Richard in multipliers again this year, Dan finished over 300 contact behind. Third place went to Karl Bretz K9BGL of Illinois.

Multioperator Single Transmitter

It was a one-two-three sweep for South Texas stations in the W/VE Multioperator category in 2007. The five-operator team at NX5M earned its third consecutive victory in the category. This is the 11th consecutive year that Bob Pack NX5M and team have entered the category, and their fourth victory overall.

The team had three hours in a row on Sunday at over 150 QSOs/hour, and finished with 2,221 contacts, more than any other station in the contest. Earning the second place spot was a two person team at NR5M. This was the first multi-operator effort for George DeMontrond III NR5M (who was joined by Eric Silverthorn NM5M this year) in the ARRL 10 Meter Contest since 1993. George is building a new, large contest station near Houston, and should continue to figure in multi-operator contests in the future. Third place went to the husband-and-wife team of W5YAA. Sharon Mowers W5YAA was joined by Dennis Mowers K5YA and together they made over 1100 contacts from their hilltop location north of San Antonio.

The top effort from outside South Texas was the fourth place finish by the Dixie Radio Pirates, N4ARR. The seven-man crew in North Carolina worked 738 contacts and 90 multipliers.

ARRL Affiliated Clubs Competition

The ARRL affiliated Club Competition continues to be popular, and a reason many cited for getting on a challenging 10 meter band at the bottom of the solar cycle. 47 clubs qualified for the competition this year, one more than qualified in 2006 or 2005. Affiliated clubs are organized into three categories: Local Clubs, Medium Clubs, and Unlimited Clubs. Which category your club will be ranked in depends on the number of logs submitted for the club, and how large the territory is from which the club members operate. For a club to be listed in the results, the Contest Branch must receive at least three entries from club members. This year, there were only 13 clubs in the Local Club category, ten fewer than in 2006. Some clubs that entered in the Local Club category last year qualified for the Medium Club category this year, either by including stations over a broader geographic area or by having more than ten club members submitting scores. The top score in the Local Club category this year went to the Midland Amateur Radio Club of Midland, Texas. Three club members combined for a score of 162,544 points. Second place went to the Lincoln Amateur Radio Club of Lincoln, NE with a combined score of 58,982 points from three logs. Third place went to the Metro DX Club of Oak Lawn, Illinois with a combined score of 53,494 from four logs. The most competitive club competition category in 2007 was the Medium Club category. 33 clubs qualified for this category, and three broke 1,000,000 points. Winning the club competition for the first time was the Central Texas DX and Contest Club. The 19 logs from CTDXCC members combined for 2,021,354 points, over 106,000 points per log on average. The CTDXCC's club score even exceeded the only club score in the Unlimited category this year. The Florida Contest Group came in second place, with exactly 50 logs (the limit for the Medium category) and 1,509,834 points. The Society of Midwest Contesters came in third place with 1,103,248 points from 31 logs.

The only club to motivate over 50 members to send in entries on its behalf this year was the Potomac Valley Radio Club. 76 logs from PVRC members combined for 1,725,518 points and a solid victory. To be eligible to compete, a club must be a current ARRL affiliate and must have submitted an annual report to the ARRL within the past two years. (Of course, Affiliated Clubs should update their records with the ARRL every year!) To become an Affiliated Club, more than half of the voting club membership must be ARRL members, more than half of the voting membership of the club must be licensed radio amateurs, the club must have a constitution, and the goals of the club must not conflict in any way with the goals of the ARRL. Non-W/VE clubs can qualify for the Affiliated Club Competition, but they must meet all of the ARRL Affiliated Club requirements.

For your score to count for your club, you must be a member of the club, the station from which you operate must be located within the club's geographic territory, and you must include the club name in the Cabrillo log file headers when you submit your log. Do not use abbreviations, even if you think your club's abbreviation is well known. Many clubs have similar abbreviations. You can find the official list of contest club names on the ARRL Contest Branch web site. If your club is not listed, contact contests@arrl.org, and the team at the Contest Branch will help make sure that your club meets the Affiliated Club requirements and is updated on the list.

Are You Ready for Next Year?

The ARRL 10 Meter Contest has long been one of the easiest and most approachable contests. If you are new to HF, there's no easier HF band on which to get a station operating. Antennas for 10 meters can be reasonably compact, cost less to build, and can have excellent performance at lower heights above ground. A dipole antenna for 28 MHz requires just five meters (16.5') of wire, and the antenna is a full wavelength above ground at just 10 meters (33') up in the air. Even with the high price of copper these days, there's no better value on HF than a 10 meter antenna.

If you've never operated the 10 Meter Contest before, find some stations in your Section or DXCC entity that have participated in the recent past, be brave, and ask for advice. At the bottom of the cycle, the pace of contest can be slower and less intimidating to newcomers. Marcel Livesay N5VU entered the contest for the first time in 2007. "In spite of it all, I had a blast! This is the first time that I ever submitted a log to a contest. I can't remember ever seeing the S-Meter move off of zero, but stations were there." An event like the 10 Meter Contest is one of the best ways to get your feet wet in HF contesting.

For the most recent NOAA solar predictions, see: http://www.swpc.noaa.gov/ftpdir/weekly/Predict.txt

By December, 2008, we will almost certainly be at the leading edge of Solar Cycle 24. The NOAA Space Environment Center predictions are for conditions very similar to December, 2007, with solar flux numbers in the low seventies. Even if the solar numbers don't look spectacular, you can be sure that the anticipation will be high. On December 13-14, 2008, thousands of amateur radio operators around the world will bring the 10 meter band to life once again and behold the first year of a new solar cycle... "CQ Contest"! DE WM5R

Affiliated Club Competition

Affiliated Club Competition		
H-15-34-1 C-4	Score	Entries
Unlimited Category Potomac Valley Radio Club	1,725,518	76
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Medium Category		
Central Texas DX and Contest Club	2,021,354	19
Florida Contest Group	1,509,834	50
Society of Midwest Contesters	1,103,248	31
Minnesota Wireless Assn	806,516	42
Tennessee Contest Group	727,430	37
Frankford Radio Club	677,456	11
South East Contest Club	622,150	12
Alabama Contest Group	603,504	13
Yankee Clipper Contest Club	568,702	32
North Texas Contest Club	461,796	4
Texas DX Society	426,378	6
Grand Mesa Contesters of Colorado	394,774	12
Central Arizona DX Assn	268,188	10
Central Virginia Contest Club	240,002	11
Mad River Radio Club	202,230	12
Oklahoma DX Assn	161,196	12
Low Country Contest Club Contest Club Ontario	145,270	19
	140,334 104.926	16
Southern California Contest Club Western New York DX Assn		3
Northern California Contest Club	102,072	38
Utah DX Assn	101,600 90,200	5
		12
Hudson Valley Contesters and DXers Western Washington DX Club	74,542 65,364	6
West Park Radiops	21,526	
Carolina DX Assn	13,554	7
Six Meter Club of Chicago	12,898	7
Kentucky Contest Group	10,114	3
Motor City Radio Club	9.150	4
Willamette Valley DX Club	8,398	3
Order of Boiled Owls of New York	7,230	3
East Coast Canada Contest Club	5,276	4 7 7 3 4 3 3
Contest Club Du Quebec	1,332	4
Local Category	1,002	8
Midland ARC	162,544	3
Lincoln ARC	58,982	3
Metro DX Club	53,494	4
Sussex County ARC	43,362	5
West Allis RAC	30,122	7
Hampden County Radio Assn	19,544	9
Granite State ARA	12,276	5
Athens County ARA	12,090	9 5 4 3 3 3 3
Redmond Top Key Contest Club	8,634	3
CTRI Contest Group	3,760	3
Heartland DX Association	3,190	3
Mother Lode DX/Contest Club	2,372	3
Portage County Amateur Radio Service	1,078	3

Mixed Mode

Atlantic	W2MF	24,860	A	2007
Central	KO9A	3,136	A	2007
Dakota	NOUR	1,254	A	2007
Delta	KN4Q	96	A	2007
Great Lakes	KU4A	2,890	Α	2007
Hudson	N2TM	4,228	A	2007
Midwest	NONI	48,690	A	2007
New England	KA1LMR	18,700	A	2007
Pacific	N6WG	928	A	2007
Roanoke	K4CIA	7,050	A	2007
Rocky Mountain		648	A	2007
	K1EQA			
Southeastern	NA4BW	3,808	A	2007
Southwestern	WA6FGV	3,210	A	2007
West Gulf	WA8ZBT	18,348	A	2007
Canada	VA3DF	2,640	A	2007
Atlantic	K2PS	98,356	В	2007
Central	N9LYE	20,672	В	2007
Dakota	AC0W	74,694	В	2007
Delta	WQ5L	72,900	В	2007
Great Lakes	WD8S	18,300	В	2007
Hudson	W2MYA	13,098	В	2007
Midwest	KT0K	43,898	В	2007
New England	W3EP	72,704	В	2007
Northwestern	W7QN	4,256	В	2007
Pacific	N6NF	6,324	В	2007
Roanoke	W4YE	22,596	В	2007
Rocky Mountain	W0ETT	37,842	В	2007
Southeastern	N4IG	91,542	В	2007
Southwestern	K6AM	45,496	В	2007
West Gulf	WD5K	348,480	В	2007
Canada	VE3XD	10,764	В	2007
a00.110.00 00.00	D. OTT. DECORPTION	7-11-7	1	
A.II . I'	WEGG	000 000	0	0007
Atlantic	WE3C	230,690	C	2007
Central	W0AIH (NE9U, op)	304,774	C	2007
Dakota	WA0MHJ	55,664	C	2007
Delta	W4NZ	160,064	C	2007
Great Lakes	K8AJS	45,264	C	2007
Hudson	K2TTT	42,018	C	2007
Midwest	W0BH	154,650	C	2007
New England	N2TTA	119,016	C	2007
Northwestern	W7IJ	15,996	C	2007
Pacific	K6XX	12,840	C	2007
Roanoke	N8II	176,610	C	2007
Rocky Mountain	NOKE	130,832	C	2007
Southeastern	N4PN	281,008	C	2007
Codinousion		201,000		2001

Southwestern	K9WZB	42,900	С	2007
West Gulf	K5NZ	143,752	C	2007
Canada	VE2TZT	31,376	C	2007

Phone Only

Atlantic Central Dakota Delta Great Lakes Hudson Midwest Roanoke Rocky Mountain Southeastern Southwestern West Gulf	KB3KOC N9FRY K0HW W1KLM N8MWK AB2IW N0JK KD4OFG WW0WB KB0OLA W7YA WD5FGZ	32 1,078 1,204 5,750 1,110 190 112 210 900 2,844 1,248 240	A A A A A A A A A A	2007 2007 2007 2007 2007 2007 2007 2007
Atlantic Central Dakota Delta Great Lakes Hudson Midwest New England Northwestern Pacific Roanoke Rocky Mountain Southeastern Southwestern West Gulf Canada	KE3WM WB9PUB KE0L AC5O W8GG KS2G KA0FSP KB1LKB K7VIT KB6NAN KI4AOQ WA5ZUP W4GKF W7UPF K5LBU VO1KVT	6,394 13,080 9,030 29,760 11,840 846 23,160 12,240 180 440 10,824 4,240 18,496 3,000 45,448 1,680	B B B B B B B B B B B B B B B B B B B	2007 2007 2007 2007 2007 2007 2007 2007
Atlantic Central Dakota Delta Great Lakes Hudson Midwest New England Northwestern Pacific Roanoke Rocky Mountain Southeastern Southwestern West Gulf Canada	W3LL W9JA W0SD KN5O K8CC (N8NX, op) N2EOC K0RH N8RA W7LEA W7LEA W7EB K4KZZ WØRIC W04DX WR5G W5PR VA3KA	44,772 3,026 103,456 6,804 64,032 41,082 40,128 40,700 1,692 6,672 7,080 3,162 36,540 1,344 213,440 1,634	0000000000000000	2007 2007 2007 2007 2007 2007 2007 2007

CW Only

Atlantic	K2SM	992	A	2007
Central	N9SF	6,552	A	2007
Dakota	K0TCP	4,144	Α	2007
Delta	KC5R	33,792	A	2007
Great Lakes	N8AP	12,096	A	2007
Hudson	KR2Q	5,100	A	2007
Midwest	Co. Co. Co. Co. Co.		A	2007
3. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	W7JI	11,252		
New England	AA1CA	7,728	A	2007
Pacific	K9JM	64	Α	2007
Roanoke	K4ORD	4,248	Α	2007
Rocky Mountain	K5OI	3,536	Α	2007
Southeastern	N4JF	45,900	A	2007
Southwestern	WA6L	144	A	2007
West Gulf	KG5U	63,672	A	2007
Canada	VE3MGY	192	A	2007
		50.700		
Atlantic	W2RR	50,760	В	2007
Central	W9PN	20,648	В	2007
Dakota	KN0V	11,016	В	2007
Delta	K5AYO	19,812	В	2007
Great Lakes	WB8JUI	10,400	В	2007
Hudson	K2UF	9,108	В	2007
Midwest	KC0M	34,100	В	2007
New England	N1BAA	45,232	В	2007
Northwestern	N7LOX	7,904	В	2007
Pacific	N7YK	20,160	В	2007
Roanoke	K4XD	19,000	В	2007
Rocky Mountain	N5UL	21,576	В	2007
Southeastern	WA1FCN		В	2007
		93,400	В	
Southwestern	K7HP	31,960		2007
West Gulf	N5CHA	67,404	В	2007
Canada	VE7XF	16,988	В	2007
Atlantic	NY3A	91,160	C	2007
Central	K9BGL	132,632	C	2007
Dakota	NOAT	17,888	C	2007
Delta	W9WI	71,148	C	2007
Great Lakes	W8AV	63,168	C	2007
Hudson	W2LE	7,268	C	2007
Midwest	KOKT	18,368	C	2007
New England	W1UE	41,760	C	2007
Northwestern	K7RL	33,600	C	2007
Pacific	W0YK	14,280	C	2007
Roanoke	N4AF	53,000	C	2007
Rocky Mountain	K0RI	39,480	C	2007
Southeastern	K1TO	217,744	C	2007

Southwestern	KN5H	45,236	C	2007
West Gulf	K5NA	309,760	C	2007
Canada	VE3MM	12.880	С	2007

Multioperator

Atlantic	K3DI	106,926	2007
Central	W9IU	124,024	2007
Dakota	KD0S	126,344	2007
Delta	N5KDV	21,402	2007
Great Lakes	W8MJ	22,140	2007
Hudson	K2DFC	29,256	2007
Midwest	KE0WO	20,706	2007
New England	AA1JD	147,264	2007
Northwestern	W7PU	5,678	2007
Pacific	W6YX	34,504	2007
Roanoke	N4ARR	188,640	2007
Rocky Mountain	K0GAS	58,292	2007
Southeastern	KR4F	71,680	2007
Southwestern	WA7XX	123,000	2007
West Gulf	NX5M	671,830	2007
Canada	VE3UTT	23,680	2007

Region Leaders

Boxes list call sign, score, class (A = Mixed Mode, B = Phone only, C = CW only, D = Multioperator), and power (A = QRP, B = Low Power, C = High Power).

Northeast Region

(New England, Hudson and Atlantic Divisions; Maritime and Quebec Sections)

W2MF KA1LMR K3TW N2TM N3HU	24,860 18,700 5,632 4,228 1,680	AAAAA	A A A
K2PS W3EP W3KB KK1W W2MYA	98,356 72,704 18,164 13,888 13,098	AAAA	B B B B
WE3C N2TTA N3II K2TTT W6AAN	230,690 119,016 45,064 42,018 34,578	AAAAA	00000
AB2IW KB3KOC	190 32	B B	A
KB1LKB KE3WM W1KT KT3RR N3ALN	12,240 6,394 2,600 2,196 2,132	B B B B	B B B B
W3LL N2EOC N8RA AC2AA K3JD	44,772 41,082 40,700 17,990 13,002	B B B B B	00000
AA1CA KR2Q WO2N K2SM W2JEK	7,728 5,100 4,148 992 704	00000	A A A
W2RR N1BAA W2UP KC2TA WA3IIA	50,760 45,232 30,100 17,472 9,480	CCCCC	B B B B
NY3A AA3B N3UM	91,160 51,356 48,160	CCC	CCC

N3ST W1UE	44,252 41,760		C
AA1JD K3DI K1TTT K3WW W3MF Southeast Region	147,264 106,926 82,236 67,732 67,648	D	
(Delta, Roanoke and Southeastern Division	ons)		
K4CIA NA4BW WA8WV WA4A K4UK	7,050 3,808 666 392 280	AAAAA	A A A A
N4IG WQ5L N4DL NV4B W4NBS	91,542 72,900 59,170 42,864 36,920	A	B B B B
N4PN N4UU K4ZGB N8II N4WW	281,008 179,850 179,252 176,610 170,694	A	CCCCC
W1KLM KB0OLA KD40FG	5,750 2,844 210	B B	A A A
AC50 K5KDX (KE5QKA, op) W4GKF N5KGY KI4AOQ	29,760 24,168 18,496 15,488 10,824	B B B B	B B B B
WO4DX W4SVO KC4TVZ K4JPC K1YQ	36,540 30,960 13,160 11,752 11,178	B B B B	CCCCC
N4JF KC5R N4AU K4ORD W5JBV/M	45,900 33,792 7,476 4,248 2,296	00000	A A A A
WA1FCN WK2G WB4TDH WF4W	93,400 65,700 45,600 42,000	CCCC	B B B

WD4AHZ	40,672 C	В
K1TO WJ9B W4FDA W9WI N4BP	217,744 C 103,040 C 72,420 C 71,148 C 68,224 C	CCCCC
N4ARR K4SO N4RV K4FJ W1ZA	188,640 D 148,918 D 131,740 D 126,828 D 103,638 D	
Central Region	one: Ontario Section)	
(Central and Great Lakes Divisi KO9A	3,136 A	Α
KU4A VA3DF AF9J KB9ZUV	2,890 A 2,640 A 1,342 A 1,008 A	A
N9LYE WD8S N9AX WE9V W9OP	20,672 A 18,300 A 16,800 A 15,930 A 11,840 A	B B B B
W0AIH (NE9U, op) WB9Z K8LEE W9XT K8AJS	304,774 A 265,000 A 196,992 A 104,188 A 45,264 A	00000
N8MWK N9FRY WD9FTZ N8QE KE4TZJ	1,110 B 1,078 B 740 B 240 B 42 B	A A A A
WB9PUB W8GG K9BTQ K9IAC W8DD	13,080 B 11,840 B 4,080 B 3,248 B 3,040 B	B B B B
K8CC (N8NX, op) W8JUZ W9JA VA3KA AB9LA	64,032 B 3,232 B 3,026 B 1,634 B 660 B	00000
N8AP AE8M N9SF	12,096 C 11,336 C 6,552 C	A A A

N9TF K9EW	4,356 700	C	A
W9PN	20,648	С	В
W9ILY	10,640	C	
			В
WB8JUI	10,400		В
WA8KSS		C	В
W8RU	5,760	C	В
K9BGL	132,632	C	C
W8AV	63,168	C	C
Al9L	37,968		C
W9RE	37,440		C
W8DO	20,424	C	C
W9IU	124,024	D	
K9CT	100,640	D	
NZ9R	37,506		
N2BJ	26,376	D	
KG9N	24,880	D	

Midwest Region

(Dakota, Midwest, Rocky Mountain and West Gulf Divisions; Manitoba and Saskatchewan Sections)

N0NI WA8ZBT W5GAI AC5AA N0UR	48,690 18,348 12,480 6,496 1,254	A	AAAA
WD5K N5DO W5ZL AC0W W5WP	348,480 115,080 79,532 74,694 70,858	AAA	B B B B
W0BH K5NZ N0KE W0JPL (K0JPL, op) N0VD	154,650 143,752 130,832 111,900 99,918	AAA	CCCCC
K0HW WW0WB ND0C WD5FGZ N0JK	1,204 900 560 240 112	B B B B B	AAAA
K5LBU WW5TT W5TMC KA0FSP WB5R	45,448 36,648 27,436 23,160 20,976	B	B B B B
W5PR K5TR (WM5R, op)	213,440 176,176	B B	C

W0SD NA5TR K0RH	103,456 83,136 40,128	B B B	CCC
KG5U W7JI W5ESE K0XI K0TCP	63,672 11,252 8,740 5,928 4,144	CCC	A A A
N5CHA W0VX K5EWJ K5SM N5AW	67,404 54,432 53,424 52,560 40,640	CCC	B B B B
K5NA N5NA N5ZK (W5ASP, op) K5HP N5PO	309,760 98,992 98,560 68,544 64,416	C	0000
NX5M NR5M W5YAA KD0S KR0B	671,830 480,962 306,160 126,344 107,338	D	

West Coast Region

(Pacific, Northwestern and Southwestern Divisions; Alberta, British Columbia and NWT Sections)

WA6FGV N6WG	3,210 928	A A	A A
K6AM W6ZL K7TR K6DEX N6NF	45,496 7,774 7,458 6,678 6,324	A A A A	B B B B
K9WZB NT6X KY7M W7IJ K6XX	42,900 39,524 17,352 15,996 12,840		CCCCC
W7YA W6QU (W8QZA, op)	1,248 264	B B	A A
W7UPF W7KAM N7LQT KB6NAN K7VIT	3,000 1,656 1,080 440 180	B B B B	B B B B
W7EB	6,672	В	С

W7LEA WR5G NB7V K6HNZ	1,344 1,080	B B	C C C
WA6L K9JM AD6GI K6DBG KD4HXT	64 40 40	CCC	A A A A
K7HP N7YK VE7XF W7RV K7WP	20,160 16,988 13,680	CCC	B B B B
KN5H K7RL KC7V W6RLL K7BG	33,600 31,104 25,752	CCCCC	C C C C
WA7XX W6YX SZ1A W7PU K7UAZ	34,504 8,694 5,678	D D D D	
Africa			
V5/DL5XL EA8BEX EA8OM C56JJ	2,528 1,260	A A	B B B
ZS1EL	47,838	Α	С
EA8AJO	322	В	Α
EA8TX EC8AFM	720 108		B B
ZS6DXB EA8CER	39,888 928	B B	C
D2NX (JM1CAX, op) ZS4JAN AO8NQ (EA8NQ, op)	9,472 2,976 672	C	B B B
6W1SE	4,416	C	С
EA8BQM	2,132	D	
Asia			

JK1TCV JH7RTQ	380 168	A A	A A
J39BS 7J1AQH (VE7HA, op) JA6WFM JA2PFO BG4DVK	1,800 1,430 1,288 702 594	A A A A	B B B B
JH4UTP JH3PRR JA1HP JA7NVF JA2AXB	7,160 4,968 2,040 1,892 608	A A A A	0000
JAZDLM	400	В	Α
KSØZCW BG7NWF 7N2UQC 9W2QC JA2GHP	2,190 840 240 132 12	B B B B	B B B B
JA7OWD	1,120	В	С
VU2UR JR1NKN JF3WNO RV9AZ	288 208 64 4	CCCC	A A A
JA2KVB UA6AK JH3CUL BD7JLR JA1CPZ	1,008 540 420 240 192	00000	B B B B
ZC4LI JO7KMB JA1YPA (JA1PEJ, op) JH1NXU 7J1ABD	416 176 156 132 80	CCCCC	C C C C
JE1ZWT BD7IXG B3C JL3RDC	5,520 576 64 16	D	
Europe			
9A2EY	66	Α	Α
YT9A UA3ABJ OE3GCU OE3KAB	4,888 2,730 2,310 2,268	A A A	B B B

DIVINE	4 200		_
DK4WF	1,200	A	В
YT5T F8AOF	34,692 12,084	A	C
DL4WA	7,840	A	С
UR5IEE EI4CF	7,830 930	A	C
	000	6.5	
I5KAP EA3FF	792 260	B	A A
IK3XTY	60	В	A
DF1RK	36 30	B	A A
IU9A			
PD1DX PA25HSG (PE4BAS, op)	2,244	B	B B
DG0CC	350	В	В
AO1Y (EA1YB, op) F4FDA	288 192	B	B B
DL2ARD	17,864	В	С
DL5L (DG0OKW, op)	6,248	В	С
DD5FZ F4DXW	4,120 3,002	B	C
G0AEV	2,788	В	C
DL2TM	144	C	Α
US5VX	96	C	Â
UX8ZA PA0FAW	16 4	C	A A
RN3QP	2,700	С	В
HA8TP	1,248	c	В
OK1CZ 9A3VM	1,144 1,104	C	B B
SF3E (SM3EAE, op)	1,104	C	В
S57DX	13,312	C	С
OL5M (OK1GI, op) EA3KU	12,432 10,912	C	C
OH6QU	5,888		č
DL2OM	5,796	C	С
EA5KV	19,694	D	
S57S	9,196	D	
9H1XT IO5O	5,940 5,850		
F5KEE	5,684	D	
North America			
VEGE	24 400	Α.	
XE2S WP4I (WP3C, op)	24,108 18,216		B B
W1IVB/VP9	4,532	A	В
V4/W0XG	1,760	A	В

6I2AUB (XE2AUB, op)	1,260 A	В
XE2K	2,040 A	С
TE2M (TI2KAC, op) HI3T (HI3TEJ, op) VP5UB (KB7UB,op)	2,250 B 1,452 B 180 B	A A A
HI3C TG9ANF HP1AVS 6H1AKM HP1RIS	7,560 B 4,998 B 4,074 B 738 B 686 B	B B B B
XE2WWW	10,746 B	С
VP5E (K0OK, op)	1,980 C	Α
HP1AC NP2L XE1CT	7,300 C 5,192 C 4,032 C	B B B
HP1WW XE1ZW	10,788 C 1,344 C	C
Oceania		
VK4FRAJ VK5MAV	9,576 A 944 A	A
WH2D (K3UOC, op) ZL3NB YB3MM	6,292 A 1,160 A 108 A	B B B
9M6XRO VK2GWK VK7GN	5,472 A 4,676 A 2,376 A	CCC
VK4ATH	312 B	Α
VK7WPX DV1JM	152 B 12 B	B B
VK8AA (VK2CZ, op) VK4ZD VK3AVV	13,770 B 2,808 B 256 B	CCC
ZL1TM ZL3TE (W3SE, op) VK4TT DS5KJR	5,984 C 3,016 C 2,800 C 224 C	B B B
ZM1K (ZL1AIH, op) VK2AYD KG6DX VK2NU	5,720 C 3,696 C 1,764 C 624 C	CCCC

South America

PY2NY 4M2L (YV5YMA, op) PY1WW	7,752 4,320 80	A	A A A
LU5WW LU8EOT LW4HBR PY2SRB LW6DW	130,192 17,700 16,376 13,020 9,472	AAA	B B B B
PY0FF CE3BFZ PY3CAL	19,734 11,880 868	A	CCC
LV6D (LW3DC, op) PY2BN	4,698 1,110	B	A A
PU2LSM PY2CX LQ5H PY2ZY LU4WG	20,094 16,512 14,400 12,880 11,360	B B	B B B B
LU1HF PY5HOT PP5JR PY3PA P40K (K6KO, op)	84,196 34,404 10,804 2,900 2,756	B B	CCCCC
PJ2T (W0CG, op) CW2C (IK1PMR, op) LW1E PY3YD PY4CEL	30,240 27,800 21,328 3,936 2,280	00000	B B B B
PY2WC LU1DZ	45,540 1,560		C
LR2F CX5BW ZW5B LR4E CV5K	305,920 264,300 227,080 214,420 198,528	D	

2007 ARRL Ten-Meter Contest F

Top Ten, W/VE

Mixed Mode, QRP:

NONI	48,690
W2MF	24,860
KA1LMR	18,700
WA8ZBT	18,348
W5GAI	12,480
K4CIA	7,050
AC5AA	6,496
K3TW	5,632
N2TM	4,228
NA4BW	3,808

Mixed Mode, Low Power:

WD5K	348,480
N5DO	115,080
K2PS	98,356
N4IG	91,542
W5ZL	79,532
AC0W	74,694
WQ5L	72,900
W3EP	72,704
W5WP	70,858
K0TT	67,980

Mixed Mode, High Power:

W0AIH (NE9U, op)	304,774
N4PN	281,008
WB9Z	265,000
WE3C	230,690
K8LEE	196,992
N4UU	179,850
K4ZGB	179,252
N8II	176,610
N4WW	170,694
W4NZ	160,064

Phone Only, QRP:

W1KLM	5,750
KB0OLA	2,844
W7YA	1,248
K0HW	1,204
N8MWK	1,110

W5TMC	27,436
K5KDX (KE5QKA, op)	24,168
KA0FSP	23,160
WB5R	20,976
W4GKF	18,496
K3TD	16,456
N5KGY	15,488

Phone Only, High Power:

W5PR	213,440
K5TR (WM5R, op)	176,176
W0SD	103,456
NA5TR	83,136
K8CC (N8NX, op)	64,032
W3LL	44,772
N2EOC	41,082
N8RA	40,700
K0RH	40,128
KR5DX	40,080

CW Only, QRP:

KG5U	63,672
N4JF	45,900
KC5R	33,792
N8AP	12,096
AE8M	11,336
W7JI	11,252
W5ESE	8,740
AA1CA	7,728
N4AU	7,476
N9SF	6,552

CW Only, Low Power:

WA1FCN	93,400
N5CHA	67,404
WK2G	65,700
W0VX	54,432
K5EWJ	53,424
K5SM	52,560
W2RR	50,760
WB4TDH	45,600
N1BAA	45,232
WF4W	42,000

CW Only, High Power:

K5NA	309,760
K1TO	217,744
K9BGL	132,632
WJ9B	103,040
N5NA	98,992
N5ZK (W5ASP, op)	98,560
NY3A	91,160
W4FDA	72,420

K5HP	68,544
Multioperator:	
NX5M NR5M W5YAA N4ARR K4SO AA1JD N4RV K4FJ KD0S	671,830 480,962 306,160 188,640 148,918 147,264 131,740 126,828 126,344 124,024
Top Ten, DX	
Mixed Mode, QRP:	
VK4FRAJ PY2NY 4M2L (YV5YMA, op) VK5MAV JK1TCV JH7RTQ PY1WW 9A2EY	9,576 7,752 4,320 944 380 168 80 66
Mixed Mode, Low Power:	
LU5WW XE2S WP4I (WP3C, op) LU8EOT LW4HBR PY2SRB LW6DW XQ4CW WH2D (K3UOC, op) PP2RON	130,192 24,108 18,216 17,700 16,376 13,020 9,472 7,920 6,292 6,072
Mixed Mode, High Power:	
ZS1EL YT5T PY0FF F8AOF CE3BFZ DL4WA UR5IEE JH4UTP 9M6XRO JH3PRR	47,838 34,692 19,734 12,084 11,880 7,840 7,830 7,160 5,472 4,968

HI3T (HI3TEJ, op) PY2BN I5KAP JAZDLM EA8AJO VK4ATH EA3FF VP5UB (KB7UB,op)	1,452 1,110 792 400 322 312 260 180
Phone Only, Low Power:	
PU2LSM PY2CX LQ5H PY2ZY LU4WG PU5AOS PU1KGG LU2NI HI3C LU5CAB	20,094 16,512 14,400 12,880 11,360 11,340 8,640 7,688 7,560 7,140
Phone Only, High Power:	
LU1HF ZS6DXB PY5HOT DL2ARD VK8AA (VK2CZ, op) PP5JR XE2WWW DL5L (DG0OKW, op) DD5FZ F4DXW	84,196 39,888 34,404 17,864 13,770 10,804 10,746 6,248 4,120 3,002
CW Only, QRP:	
VP5E (K0OK, op) VU2UR JD1AHC JR1NKN DL2TM US5VX JF3WNO UX8ZA RV9AZ PA0FAW	1,980 288 280 208 144 96 64 16 4
CW Only, Low Power:	
PJ2T (W0CG, op) CW2C (IK1PMR, op) LW1E D2NX (JM1CAX, op) HP1AC ZL1TM NP2L XE1CT	30,240 27,800 21,328 9,472 7,300 5,984 5,192 4,032

HI3T (HI3TEJ, op)	1,452
PY2BN	1,110
I5KAP	792
JAZDLM	400
EA8AJO	322
VK4ATH	312
EA3FF	260
VP5UB (KB7UB,op)	180

Phone Only, Low Power:

PU2LSM	20,094
PY2CX	16,512
LQ5H	14,400
PY2ZY	12,880
LU4WG	11,360
PU5AOS	11,340
PU1KGG	8,640
LU2NI	7,688
HI3C	7,560
LU5CAB	7,140

Phone Only, High Power:

LU1HF	84,196
ZS6DXB	39,888
PY5HOT	34,404
DL2ARD	17,864
VK8AA (VK2CZ, op)	13,770
PP5JR	10,804
XE2WWW	10,746
DL5L (DG0OKW, op)	6,248
DD5FZ	4,120
F4DXW	3,002

CW Only, QRP:

VP5E (K0OK, op)	1,980
VU2UR	288
JD1AHC	280
JR1NKN	208
DL2TM	144
US5VX	96
JF3WNO	64
UX8ZA	16
RV9AZ	4
PA0FAW	4

CW Only, Low Power:

PJ2T (W0CG, op)	30,240
CW2C (IK1PMR, op)	27,800
LW1E	21,328
D2NX (JM1CAX, op)	9,472
HP1AC	7,300
ZL1TM	5,984

PY3YD	3,936
ZL3TE (W3SE, op)	3,016
CW Only, High Power:	
PY2WC	45,540
S57DX	13,312
OL5M (OK1GI, op)	12,432
EA3KU	10,912
HP1WW	10,788
OH6QU	5,888
DL2OM	5,796
ZM1K (ZL1AIH, op)	5,720
LA9VDA	4,536
6W1SE	4,416
Multioperator:	
LR2F	305,920
CX5BW	264,300
ZW5B	227,080
LR4E	214,420
CV5K	198,528
AY8A	188,928
HD2A	84,800
LU2EE	77,608
LS2D	73,710
PP5ABG	55,250

Checklogs

Callsign Cat Sec Score
OpTime Ops Club LU7BTO QS0s Mults Class Pwr LU 6480 110 30 CL

	YO5CBX	CL	YO	240	10	6	-	С	1:12:0	0 AM
PG7V	CL	PA	24	3	2	-	С			
12:00:00 AM			RV3D	BK	\mathtt{CL}	UA3	8	2	1	-
YO4AAC	\mathtt{CL}	YO	4	1	1	CW	A			
12:00:00 AM KF6PQT K6PFA KE5LHC AB1HG KD0ANV W1BUD										
	KE5EL WB1BUO W			3NK, op)	EA5GVZ	WV7T K6	MI XR3A			
(CE3DNE	P, op) AD4TT KK	GTV VR2	ZQZ							