



Low Power Contesting (100watts and a wire antenna)

Jay – KT5E

Low Power Contesting



100 watt rig



A simple wire antenna

A microphone



OR



A paddle

Low Power Contesting Agenda

- + What is contesting
- + Why contesting
- + How to get started
- + Advancing from search and pounce
- + Improving your station and scores
- + Links

What is Contesting?

- + Also known as “radiosport”
- + Contacting other amateur radio operators
 - + Various modes (SSB, CW, or RTTY)
 - + Various power levels (QRP, 100watts, High power)
- + Stateside and DX
- + Single operator, multi-operator or Assisted
 - + Assisted is utilizing online tools to find stations/multipliers

Why Contesting?

- + For fun – of course
- + For points
- + For bragging rights
- + For certificates and plaques (1st, 2nd, 3rd, etc.)
- + To help get other awards
 - + Worked all States or Counties
 - + Worked all Continents/Zones
 - + DXCC
 - + Prefixes
 - + Japanese Prefectures
 - + Russian Oblasts
 - + 100s of other awards (see ARRL Handbook)
- + You will become a better operator
- + You will better understand your rig, antennas and propagation
- + Do you enjoy ARES, Nets, etc? - contesting will make you a better Net operator



How to get started

- + Choose a popular contest
 - + CQ Worldwide – US works DX and vice versa
 - + CQ WPX – US works everyone (DX and US) – lots of activity
 - + ARRL Field Day – US (great for low power, wire ant, and activity)
 - + ARRL DX Contest – US works DX
 - + ARRL Sweepstakes – US, great exchange, lots of activity
 - + One of many state QSO parties – California and Texas are big, Colorado QSO party makes you the DX
 - + See the contest calendar at www.contesting.com

How to get started

- + Try a single band entry
 - + Allows for other things on the weekend
 - + You will learn this band very well
 - + Listen to the DX beacons prior to the contest to understand propagation on the band - <http://www.ncdxf.org/beamcon/beamconschedule.html>
 - + Beacons are CW so note SNR compared to SSB
 - + Modest antennas
- + Sit with one or more experienced operators during a contest
- + Get with a few others and do a Multi-operator entry
- + Search and Pounce
 - + Start low or high and slowly work the other way
 - + Pick off those loud stations – If you can hear them you can work them
 - + Pay attention to how others are working stations – learn
 - + Those that are fast and have good ears will get you in sooner
 - + Those that are less experienced will be frustrating – so move on

Advancing from search and pounce

Holding a frequency

- + For success here make sure the band is playing well
 - + Your ease of working others during search and pounce
 - + Loads of S9 or better signals
 - + Lots of multi-hop propagation – many various signals
 - + Listen to the DX beacons prior to the contest (or during) to understand propagation on the band prior to running

- + Search & pounce until you find an opening
 - + Start from low to high or high to low
 - + Work stations until you find a crack
 - + Call CQ and keep up the chatter
 - + Keep the calls short (CQ contest Kilo Tango Five Echo, or contest Kilo Tango Five Echo)
 - + Leave only 2-3 seconds between calls
 - + Do not expect to eliminate all QRM when choosing a frequency – it is a contest! – remember K5tr

Improving your station/contesting skills

- + Antenna
 - + Orientation
 - + Note height for DX vs domestic
 - + Think about how you can upgrade given your restrictions and budget
 - + Wire arrays, loops, etc.
 - + See ARRL antenna book or ON4UN low band Dxing for ideas

- + Use a headset and a footswitch
 - + This keeps your hands free to enter calls, work the rig, etc.
 - + Quicker than moving your hand to the PTT

- + Use a logging program with a built in keyer and rig interface
 - + Sending CQs during the late hours can be tiring
 - + Automated CQs can give you some pleasure reading when things are slow
 - + Quality helps hold a frequency

Improving your station/contesting skills

The screenshot displays a multi-windowed software interface for a ham radio contest. The main window, titled "14200.00 Manual - A", contains a control panel with buttons for "Wipe", "Log It", "Edit", "Mark", "Store", "Spot It", and "Buck". Below these are function keys for "Esc: Stop", "F1 S&P CQ", "F2 Exch", "F3 Thank!", "F4 KT5E", "F5 His Call", "F6 QSO B4", "F7 QRZ?", "F8 Again", "F9 NR?", "F10 Prec?", "F11 CK?", and "F12 Sect?". A status bar at the bottom of this window shows "73/0/26" and "3,796".

To the right, an "Available - 0 Mult..." window shows a list of "Mults" and "Qs" with values ranging from 0 to 160. Below it is a "Call" and "Freq" input area.

The "Info - KT5E - Exch: 59" window displays "Rates - Q's/hour" with a table showing "Last 10 Q's" and "Last 100 Q's" for "Since 12:36" and "Since 13:00". It also shows "Last 60 min" with a value of "56" and "Import Goals" with a "Goal = 56".

The "11/5/2010 13:37:40Z ARCI QRP Contest - ham.mdb" window contains a table of contest data:

| TS | Call | Freq | SNT | RCV | Exch | Mult | Mult2 | Power | Point |
|-------------------|--------|----------|-----|-----|------|------|-------|--------|-------|
| 8/4/2010 01:49:03 | N5YFC | 14056.00 | 599 | 599 | LA | No | No | WAYNE5 | 2 |
| 8/4/2010 01:49:31 | NJ4H | 14056.00 | 599 | 599 | VA | No | No | KEV5 | 2 |
| 8/4/2010 01:50:02 | K4ARRU | 14056.00 | 599 | 599 | VA | No | No | MIKE5 | 2 |
| 8/4/2010 01:50:43 | W7MSW | 14056.00 | 599 | 599 | MA | No | No | MATT5 | 2 |
| 8/4/2010 01:52:33 | K6P4V | 14056.00 | 599 | 599 | CA | No | No | DALE2 | 0 |
| 8/4/2010 01:55:14 | N1CCW | 14056.00 | 599 | 599 | NY | No | No | GUS5 | 2 |
| 8/4/2010 01:55:55 | K7GD | 14056.00 | 599 | 599 | MT | No | Yes | LEW5 | 2 |
| 8/4/2010 01:56:20 | ND2D | 14056.00 | 599 | 599 | CO | No | No | PETER5 | 2 |
| 8/4/2010 02:02:43 | K0EVZ | 14056.00 | 599 | 599 | NM | No | Yes | DOC1 | 2 |
| 8/4/2010 02:03:46 | N4QLB | 14056.00 | 599 | 599 | AL | No | No | MIKE5 | 2 |
| 8/4/2010 02:09:34 | K0FRP | 14056.00 | 599 | 599 | CO | No | No | AL5 | 2 |
| 8/4/2010 02:12:24 | K7TG | 14056.00 | 599 | 599 | ID | No | Yes | RANDY5 | 2 |
| 8/4/2010 02:18:29 | AB4QL | 14056.00 | 599 | 599 | AL | No | No | BARRY5 | 2 |
| 8/4/2010 02:22:40 | K5DX | 14056.00 | 599 | 599 | TX | No | No | RENE5 | 2 |
| 8/4/2010 02:24:29 | NA4D | 14056.00 | 599 | 599 | GA | No | No | MARK5 | 2 |
| 8/4/2010 02:28:50 | K0H5V | 14056.00 | 599 | 599 | CO | No | No | SCOTT5 | 2 |

The "Manual - A" window shows a frequency display at "14200.00" with "SH/DX" and "Wide" buttons, and "0.00 RIT XIT". Below is a vertical frequency scale from 14000 to 14350 kHz.

The "check" window shows "Master.DTA: 1/19/2009 11:11:18 AM" and "1153232 Bytes".

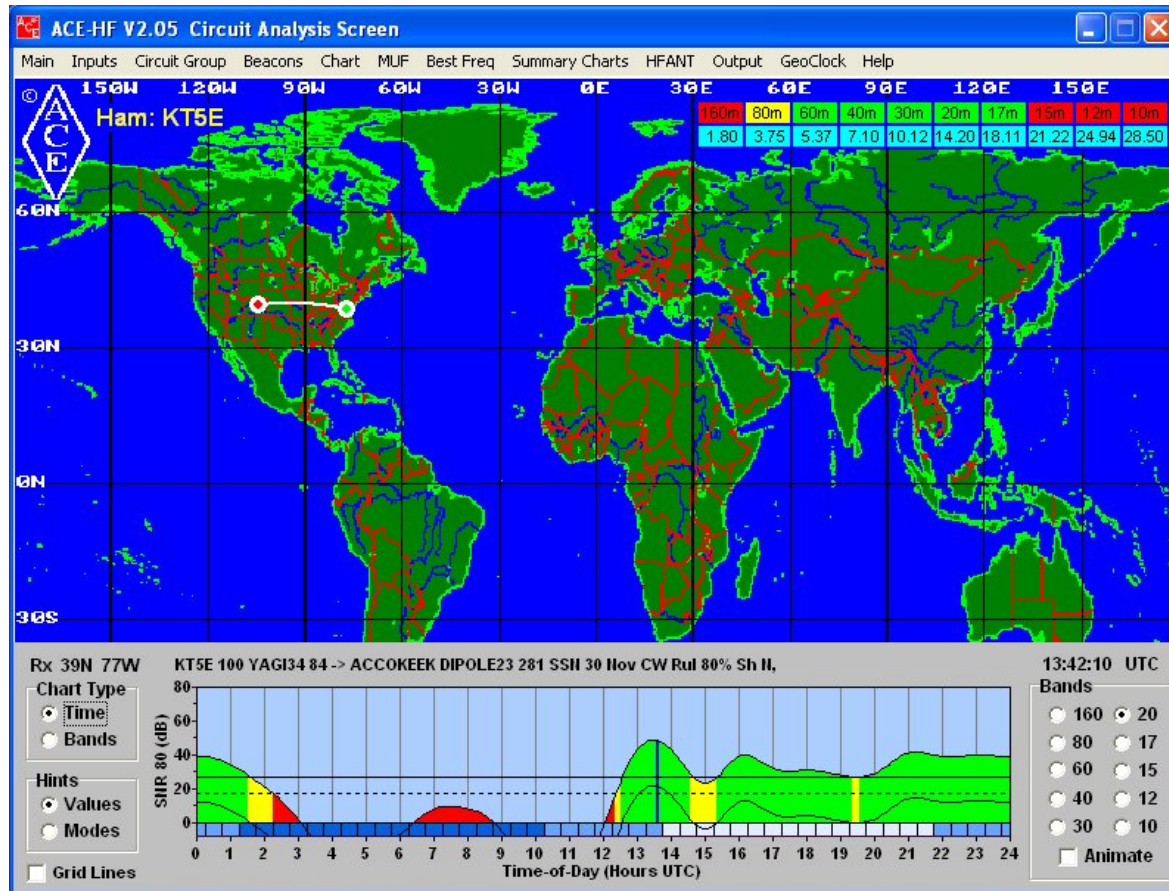
The "Score - 3,796 Points" window displays a summary table:

| Band | Mode | QSOs | Pts | Cty |
|--------|------|------|-------|-----|
| 14 | CW | 73 | 146 | |
| 0 | 26 | | | |
| Total | Both | 73 | 146 | |
| 0 | 26 | | | |
| Score: | | | 3,796 | |

The Windows taskbar at the bottom shows the "start" button, open applications "14200.00 Manual - A" and "Jasc Paint Shop Pro", and the system tray with the time "7:37 AM".

Improving your station/contesting skills

Get propagation software – understand the best time to switch bands



Improving your station/contesting skills

- + Learn CW
 - + Increase your skills
 - + Better signal to noise ratio (10db or more)
 - + Wire antennas sound like SSB yagis
 - + 100w CW signals like KW SSB signals
 - + Longer band openings
 - + More dx more frequently
 - + More bandwidth
- + 160 meter (example)
 - + Wire antenna - dipole
 - + 300 qsos, 71 sections, 48 states
 - + 5 watts



Links

- + www.contesting.com - The contesting alternative to Eham
- + www.solarcycle24.com - Check to see how the cycle is progressing
- + <http://www.arrl.org/contests> - ARRL contest pages
- + http://www.cq-amateur-radio.com/cq_contests/index_cq_contests.html - CQ Magazine contest pages
- + <http://www.ncdxf.org/beacon/beaconschedule.html> - DX beacons to help you study propagation
- + Propagation prediction software
 - + Ace HF - <http://www.mygeoclock.com/acehf/>
 - + Wincap - <http://www.taborsoft.com/wwizard/>
 - + W6EL - <http://www.qsl.net/w6elprop/>
- + <http://www.ncjweb.com/> - The National Contest Journal sponsored by the ARRL