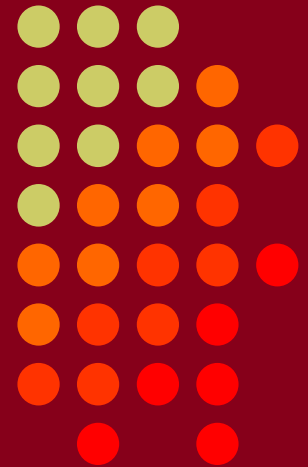


Small Station Bang for the Buck

Ward Silver, NØAX
Thanks to CTU and Icom America



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Overview

- Assumptions
- “The Next Level”
- Priorities
- Building On Success
- Bang for the Buck
- Refine & Enhance
- Q&A at the End

The Beginnings



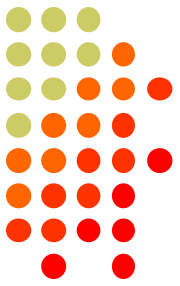
- Every operator and station is different
- We *all* started low and slow
- What's the best way to get better?
- The path is its own reward!

Assumptions – Your Station



- Modest station
 - One radio
 - No amp or not-legal-limit amp
 - One PC available
- Modest budget
- Limited space
 - City or suburban lot
 - Some aesthetic constraints

Assumptions – About You!



- Familiar with contesting
- Willing to study
 - Contest technique
 - Propagation
 - Basic technical practices
- Pick your battles
- Committed to practice, practice, practice



What's the “Next Level”

- Success is incremental: layer by layer
- Peel the onion
 - Be heard, then hear, then be heard, then hear...
 - S&P then CQ then CQ faster
 - SO1R then SO2R then ???
- Operator improvement is continuous
- Study and analyze and plan
- Pick the low-hanging fruit first

Cycle of Life



Observe

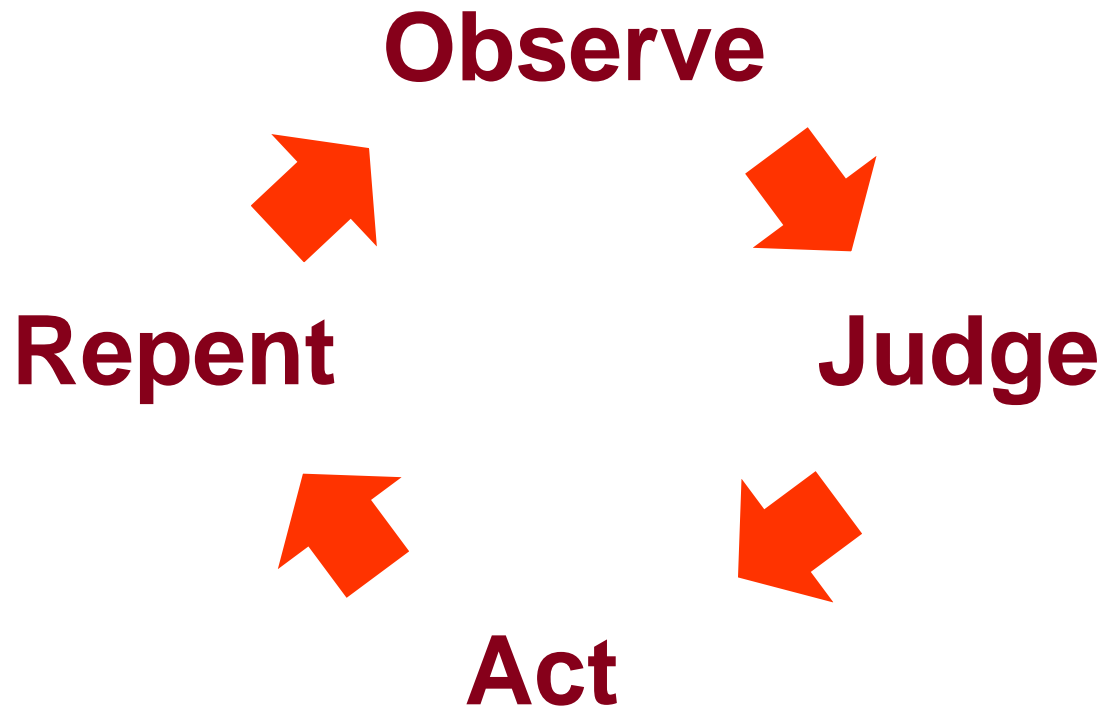


Judge



Act

Cycle of Life



Priorities

- Operator First
- Technique Second
- Antennas Third
- Radios Fourth
- Gadgets Last



The Operator – A Human!



- Head and Eyes
- Back & Arms
- Your Butt
- Fitness (Before and During)
- Diet and Rest Cycles
- Stay Alert & Engaged

The Operator – Mental Acuity



- Incredibly important
- Fun or Slog? – Choose!
- Maintain concentration, remove distractions
- Preserve and enhance accuracy
- Labels and logical, consistent layout

The Operator – Know-How



- Know your station
- Study propagation
- Learn your software
- Copy and recognize calls
- Study your old logs
- Compare with logs of your peers
- Study the logs of winning stations



Technique

- Number one source of “score dBs”
- Practice makes the master
- Listen to the masters – up close
 - Start working with multi-op teams
 - Or start one!
 - Ask them questions!
- Trade recordings or listen live



Technique – Gimmes

- Run more and whenever you can
 - Find propagation that allows your station to run
 - You don't have to be on the band edge!
 - Think signal-to-noise on **both** ends
- Type – send – speak – copy accurately
- Breathe, be consistent, find a rhythm
- A second radio – make it play



Technique – Accuracy

- Go for World Class accuracy (<1% error)
- Study that LCR/UBN report
 - What do you consistently miss?
 - What do others consistently miss from you?
- Pull out full calls
- Be wary of databases and spots
- Learn not to guess and when to move on

Technique – Managing Time



- Running is key
- Rate meter – QSOs per mult
- Distractions
 - Packet and DX-ing
 - Too much adjusting and tweaking
- Operating time and off-time planning
- Go get that next contact!
 - No magazines, no TV, no texting, no browsing

Technique – Managing Score



- Watch for & move mults (Sunday!)
- Avoid penalties at all costs
- Expeditions – work ‘em all!
- Make skeds – during the contest
 - Know the propagation
- Quick reviews of the situation now and then
- Review and adjust your plan

The Second Radio & Antenna



- Keep it simple
- “Temporary” is OK
- Integrate into your station
- Target low-rate periods
- Don’t diminish your primary rig & antenna
- Consider adding automation

The Second Radio – Using It



- In-band tuning
- The quick QSY
- Running and tuning at the same time
 - Learn to listen to two audio streams at one time
 - Practice shifting your focus
- Great for spot-chasing while slow-running
- Operate for a net gain

CQing

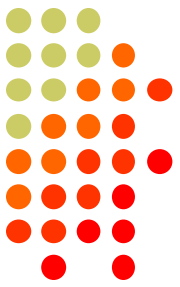


- Call away from the Big Guns for best SNR
- Respond consistently & efficiently
- Work the fast stations first
- Pull out a full call whenever you can
- Listen for “DX sound” and odd prefixes
- Manage your RF Gain & Attenuation
- Learn to rely on your ears for filtering



Antenna Selection

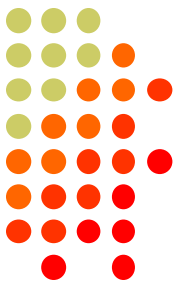
- Biggest bang for the hardware buck
- Improve for the next level
- Simplify switching and aiming
 - Contesting is not DX-ing
- A small fixed Yagi to EU, Carib, PacRim, or ?
- Simple low-band receive antennas
 - Reduce noise = reduce fatigue



Radios

- Clean receiver – most important
 - Wide dynamic range
 - Gain management
 - Filtering
 - Low audio distortion
 - Modern radios are all just fine, used correctly
- Clean transmit – code, phone, digital
- Learn to use it!

Gadgets



- The fewer boxes to manage, the better
- Carefully evaluate the need
- Are there alternatives?
- Is the extra complexity worth it?
- Integrate into the station
- Learn to use it!

Software



- Turn off unused features & windows
- Upgrade and test **before** Friday
- Arrange windows to match your layout
- Learn how to
 - Edit a previous QSO while not suspending a run
 - Switch focus between radios
- Put the monitor where you can see it easily



Resources

- Other testers & your contest club
- 3830scores.com soapbox
- SO2R tutorials, station photos, videos
- Towertalk, Amps, Top Band reflectors
- *National Contest Journal* & ncjweb.com
 - Check out the Bonus Content
- Contest club newsletters

Priorities



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- Technique Second
- Antennas Third
- Radios Fourth
- Gadgets Last

Thanks!

