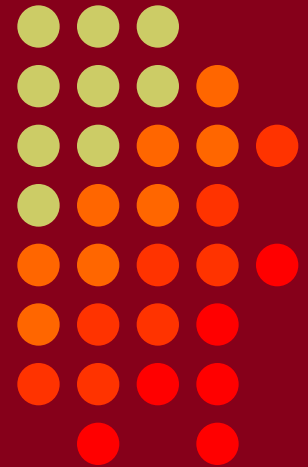


CTU Presents

Small Station Bang for the Buck

“Band Fare for the Common Ham”

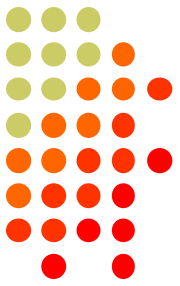
Ward Silver, NØAX



• CTU •
CONTEST
UNIVERSITY

ICOM®

Overview



- Priorities
- Building On Success
- Bang for the Buck
- Refine & Enhance
- Q&A – Anytime!

Who the Heck is NØAX?



- And why do you care?



Goals of the Session

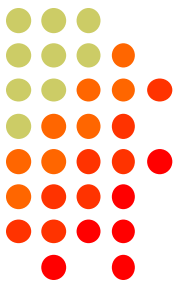
- Define the problem
- Discuss making an overall strategy
- Find “Score dB’s”
- Encourage you to improve
- Laff



Assumptions about you

- Familiar with contesting
- Modest station – one radio, no amp
- Modest budget
- Willing to progress step-by-step
- Taken and given some lumps
- Want to give some more lumps
- What's the best way to get better?

How To Use This Presentation



- Not a how-to cookbook
- Follow in the text
- Take short notes
- Jot down ideas as we go
- Every operator and station is different
- We *all* started low and slow

Priorities

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



Cycle of Life



Observe

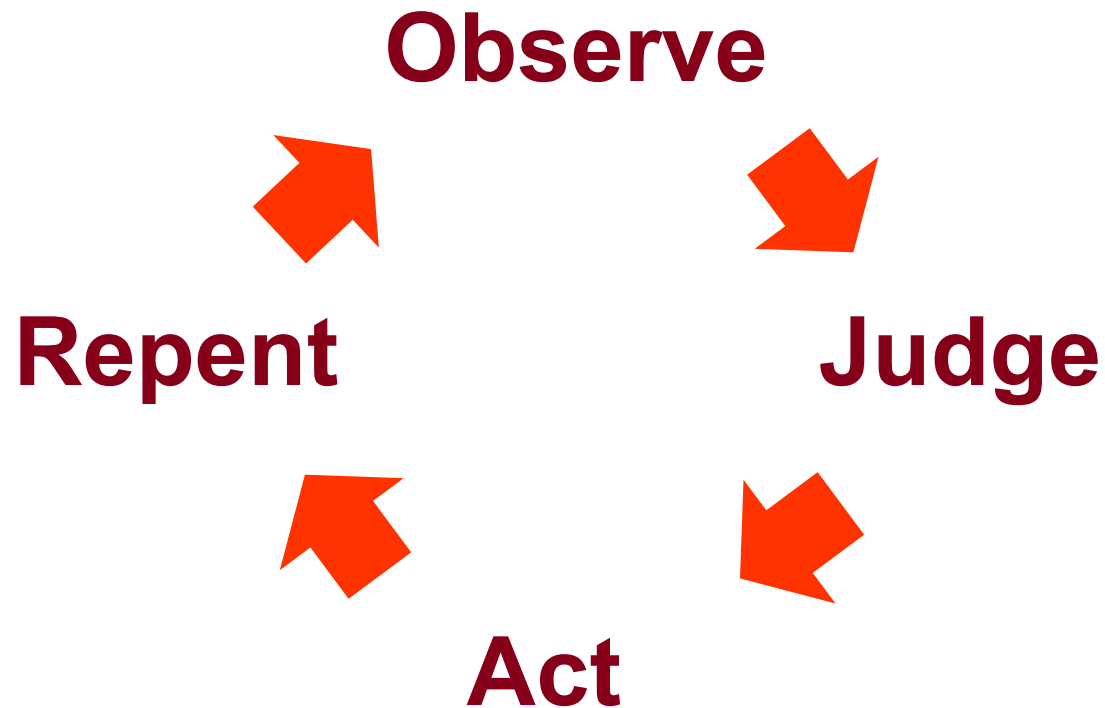


Judge



Act

Cycle of Life



Layers



- Contest success is incremental
- Peel the onion
 - Be heard, then hear, then be heard, then hear...
- Operator improvement is continuous
- Study and analyze and plan
- Address the obvious deficiencies first
- Choose wisely, grasshopper...

The Operator - Ergonomics

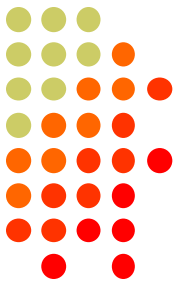


- Incredibly important
- Fun or Slog? – Choose!
- Maintain concentration, remove distractions
- Labels and logical, consistent layout
- Preserve and enhance accuracy

The Operator – A Human!

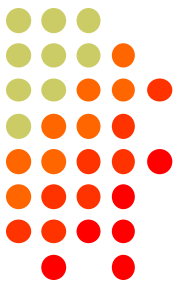


- Head and Eyes
- Back & Arms
- Your Butt
- Fitness (Before and During)
- Stay Alert & Engaged



Knowledge

- Know Your Stuff
- Study Propagation
- Learn Your Software
- Recognize Calls
- Study Your Old Logs
- Study the Logs of Winning Stations



Technique

- Number one source of score dB's
- 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 – Gimme's

- 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
- The 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, Spots, Skimmers
- Learn Not to Guess and When to Move On

Technique – Managing Time



- Running is key
- Rate meter – QSOs per mult
- Distractions
 - Packet and Dxing
 - Too much information
- Operating time planning
- Go get that next contact!
 - No magazines, no TV, no email, 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 - be consistent
- Integrate into your station
- Target low-rate periods
- Don't diminish your primary rig & antenna
- Consider automation

The Second Radio – Using It

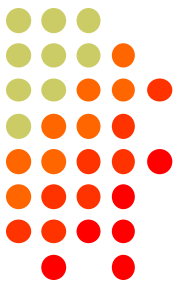


- In-band Tuning
- The Quick QSY
- Running and Tuning at the Same Time
 - Learn to listen to two audio streams at one time
 - Practice shifting your focus
- Great for spot-chasing while slow-running
- Operate for a net gain

CQing



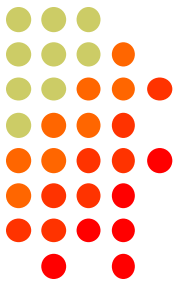
- Call high in the band for best SNR
- Respond consistently & efficiently
- Work the fast stations first
- Pull out a full call whenever you can
- Listen for “DX sound” and odd first letters
- Manage your RF Gain & Attenuation
- Learn to rely on your ears for filtering



Antenna Selection

- 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
- Still the biggest bang for the buck

Radios



- Clean receiver – most important
 - Linearity
 - Gain management
 - Filtering
 - Low Distortion audio
- Clean transmit – code, phone, digital
- Learn to use them!

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 contesters & your contest club
- 3830scores.com soapbox
- K8ND's SO2R Web page -
www.k8nd.com/Radio/SO2R/K8ND_SO2R.htm
- W4RNL Antenna Design – cebik.com
- Towertalk, Top Band reflectors
- *National Contest Journal* & ncjweb.com
- *ARRL Contest Update* newsletter

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Thanks!

