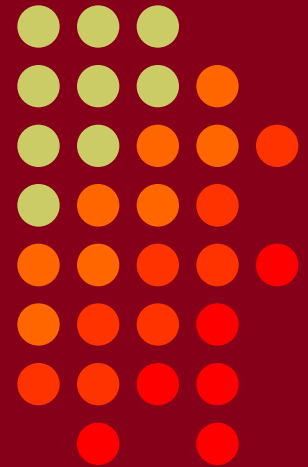


CTU Presents

Contest Hints and Kinks –
Technique and Station
Ward Silver, NØAX



• CTU •
CONTEST
UNIVERSITY

ICOM®

Goals of the Session



- Provide tips, suggestions, and guidelines
- Give you ideas for your own circumstances
- Find “Score dB’s” and “low-hanging fruit”
- Develop confidence in your own abilities
- Laff

Assumptions about you



- Contesting for a couple of years
- You feel comfortable with CQ or S&P
- Maybe a Division, State, or Regional winner?
- Decent radios and antennas
- Taken and given some lumps
- Want to give some more lumps
- What's the best way to get better?

How To Use This Course



- Not a how-to cookbook
- Follow in the text
- Take short notes
- Record those ideas!

Continuous Improvement



- When asked what was the most powerful force in the Universe, Albert Einstein replied, “Compound interest.”

Continuous Improvement



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Continuous Improvement



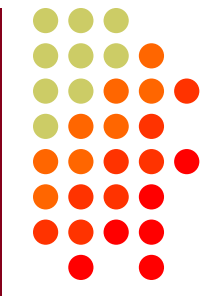
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Continuous Improvement



- When asked what was the most powerful force in the Universe, Albert Einstein replied, “Compound interest.”
- Incremental improvement, applied relentlessly, is unstoppable.
- Plaques are won a dB at a time
- Hints & Kinks are the ham radio equivalent of incremental improvement.

Cycle of Life



Observe

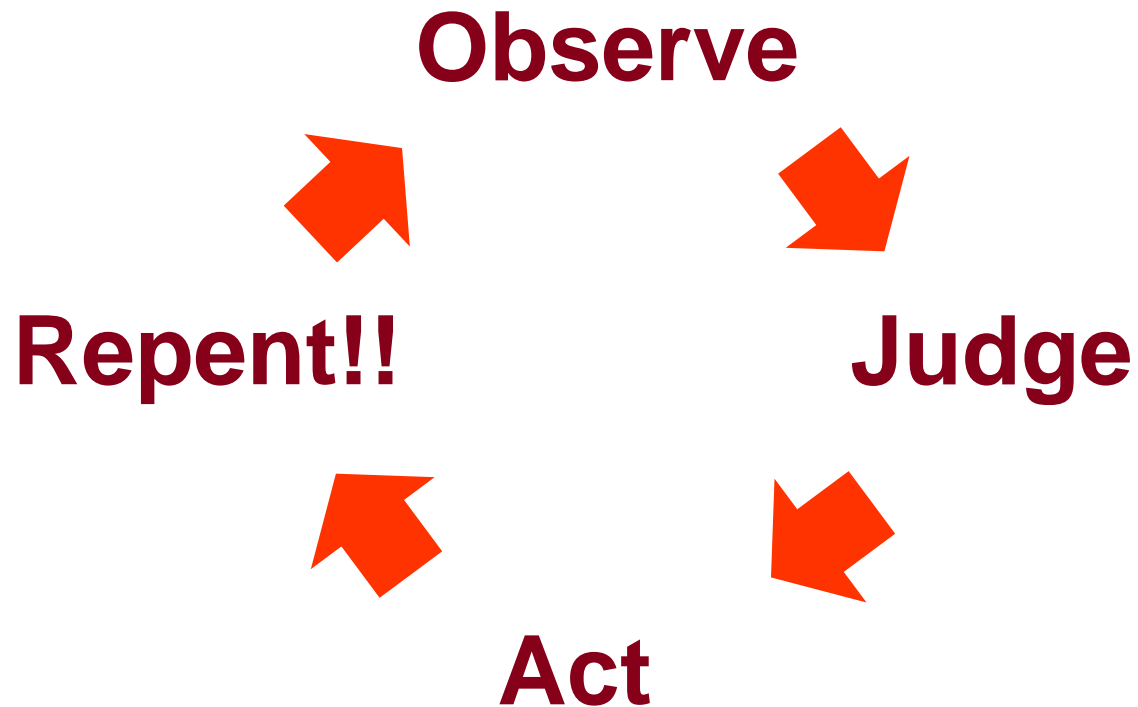


Judge



Act

Cycle of Life



Layers



- Contest success is incremental
- Think and plan in layers
 - Be heard, then hear, then be heard, then hear...
- Station improvement is continuous
- Study and analyze and design
- Address the obvious deficiencies first
- Choose wisely, grasshopper...

Technique – Managing Time



- Running is key
- Rate meter – QSOs per multiplier
- Distractions
 - Spots and DX-ing
 - Fiddling with the antennas and rig controls
- Plan your operating time but be flexible
- Go get that next contact!
 - No TV, no Facebook, no browsing, no chat

CQing



- Call where your SNR is best
- 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

Technique – Managing Score



- Watch for & move mults (Sunday!)
- Avoid penalties at all costs
- Expeditions – work ‘em all!
- Make skeds – during the contest
 - Plan for propagation before the contest starts
 - Know the grey line and when long path works
- Quick reviews of the situation now and then
- Compare to last year or the competition

The Second Radio



- Start simple
 - Spare transceiver
 - Amp not necessary
 - Vertical and 100 watts can work a lot of stuff
 - Filters are worth it – build or buy
- Learn your program's keystrokes
- Make SO2R *normal*

The Second Radio



- Taking it up a level
- The quick QSY – be ready!
- Running and tuning at the same time
 - Learn to listen to two audio streams at one time
 - Practice shifting your focus
- Automate to beat fatigue
 - Build or buy a single-box controller
 - Make the layout match the equipment

Antenna Selection



- Improve for the next level
 - They already hear you!
- Simplify switching and aiming
- Contesting is not DX-ing
- Beam widths are 30-60 degrees on HF
- Automate rotator control if feasible

Antenna Selection



- A small fixed Yagi to EU, Carib, PacRim, or ?
- Low dipoles for high-angle success
 - Dipoles are great for domestic contests
- “Temporary” antennas
- 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
 - Comfortable headphones – noise canceling?
- Clean transmit – code, phone, digital
- Learn to use the receiver functions!

Gadgets



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

Pileup Management



- Don't panic – set a rate you can maintain
- Respond in a consistent amount of time
 - This establishes a rhythm and keeps order
- Pick the fast guys first
- Listen for “DX sound” and odd first letters
- Manage your RF Gain and Attenuation
- Learn to rely on your ears for filtering

Interstation Interference



- Filters at the exciter, stubs on the amp
 - Wide-band noise must be filtered at the xmtr
- QRP (and maybe LP) can S&P on the same band as the run radio!
 - Protect the receiver front end
- Bypass diodes connected to wires
 - Rotator control boxes, relay kickback diodes
- Good RF bonding of all equipment

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
- Put the monitor where you can see it easily
- Be familiar with several major programs

Resources



- Other contesters, your club, 3830scores.com
- SO2R page - www.k8nd.com/Radio/SO2R/K8ND_SO2R.htm
- Amps, Towntalk, Top Band, cq-contest email reflectors
- W2VJN's "Managing Interstation Interference" from International Radio
- W4RNL Antenna design via antennex.com
- ARRL *Contest Update* and NCJ

Thanks!



- And go get 'em!