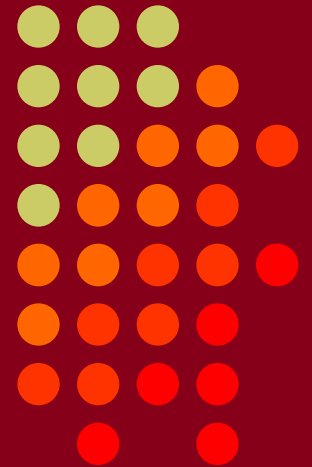


CTU Presents

**Preparation and Practice
for Better Contest Scores**
Randy Thompson, K5ZD



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CONTEST
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ICOM®

Purpose of this Session



- Explore the value of preparation and practice for better performance in radio contests

Practice? Preparation?



Yo-Yo Ma



Mariano Rivera

Yeah, they do that.

No instant experts



*“There are no instant experts in chess—
certainly no instant masters or grandmasters.*

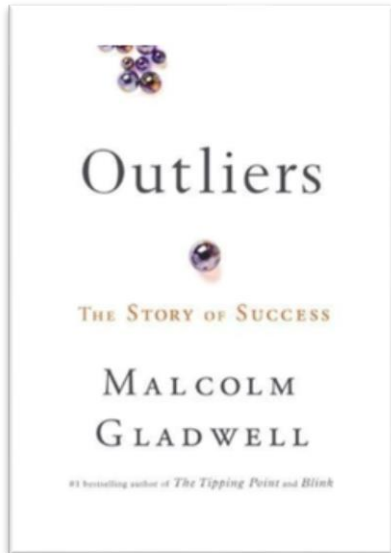
*There appears not to be on record any case
(including Bobby Fischer) where a person
reached grandmaster level with less than
about a decade's intense preoccupation with
the game.*



*We would estimate, very roughly, that a
master has spent perhaps 10,000 to 50,000
hours staring at chess positions...”*

Herbert Simon and William Chase, *American Scientist*, 1973

10,000 hours



"the closer psychologists look at the careers of the gifted, the smaller the role innate talent seems to play and the bigger the role preparation seems to play."

Malcolm Gladwell

Contesting Requires Skillz



- How well can you type?
- Copy CW or SSB?
- Is that callsign valid? What country?
- When are the bands open?
- What is the multi-single 10-minute rule?
- What countries are in CQ zone 22 or 39?
- What is the beam heading to 9V1?
- What is polar flutter and what does it mean?

Practice



- No one expects to play sports at a high level without practice and coaching
- Why is radio competition any different?

**CTU provides the coaching,
you have to do the practice!**

Skills Development



- Driving a car
 - Had to think about everything at first
 - With experience, able to focus on other things
- Know the “flow”
 - Contest QSOs have a rhythm and sequence
 - Good operating habits require less thinking, less energy
- Practice
 - Converts thinking to flow

Necessary Contest Skills That can be Improved with Practice



- Copying/Logging
- Callsign Vocabulary
- Running
- Search and Pounce
- Changing Bands

Copying/Logging



Objective

- Translate sound to keyboard – accurately!
- A callsign is only 4 to 12 characters
- Exchanges have expectations

Practice

- Get on the air and listen/make QSOs
- “Log” along to recordings of good operators
- Record yourself and notice good/bad
- Review your log checking reports



Repetition is a key learning aid because it helps transition a skill from the conscious to the subconscious.

Know Your Logging Software



- Find a consistent set up that you use for all contests
- Practice entering calls and exchanges by typing in old contest logs
- Practice FIXING typing errors
 - Learn the accelerator keys (start, end, wipe)
 - Know how to transit the entry fields
- Logging needs to be automatic so you have brain power left for processing other info

N5DX 10,000 QSO Routine



- Make 10,000 Qs before the start of each contest using DXLog in Dual Run mode.
- Practice for at least one hour per day in ten minute increments.
- Track number of Qs per 10 minutes, average number of Qs, Overall Qs, average pileup size, and average speed.
- Make notes after sessions in order to document thoughts or strategies to improve performance.
- Use a tailored database comprised of the most active DX callsigns.



Spacing out the rehearsal of a task is important for making sure a task "sticks."

Contest Simulators



- Morse Runner by VE3NEA
 - CW only
 - Simulated pileup
 - Any Windows PC with sound card
- Contest Super Simulator by W5XD
 - CW, SSB and RTTY
 - Can simulate SO2R or 2BSIQ
 - Requires WriteLog
- RUFZ by DL4MM
 - CW only
 - Simulated pileup that adjusts speed as you work stations
 - Used in HST competitions

Improve your Callsign Vocabulary



- English has 180,000 words
 - Average person uses 10,000 – 12,000 words
 - College educated uses 15,000 – 20,000 words
- CQ WW SSB 2018 logs had 65,590 raw calls
- 39,870 remained after checking
 - 13,475 only appeared only once
 - Experience says >90% of these are errors
 - 11,467 appeared 20 or more times
 - Learn to “recognize” >5,000 of these calls

Common Busts



SSB

- V and W
- E and I
- G and J

- WW SSB Most Busted (2018)
 - OG6ØF
 - TM3R
 - HC0E
 - IK2YCW
 - DF0HQ
 - JE2YRB
 - EF8R
 - ED3M
 - YT7ØSRV
 - VE3JM

CW

- I, S, H, 5
- V and 4
- B and 6

- WW CW Most Busted (2018)
 - PE75W
 - ES9C
 - UA4S
 - RM9A
 - CR3W
 - EF8R
 - TI7W
 - DR4A
 - CN3A
 - SN8B

Which of these calls are bad?



C73NL	FY5KE	LY7A	RG8U
CD6416	GT8IOM	OB9DCM	TM6M
E2E	K5BLC	M5O	W0ASH
EY8MM	HI3TIJ	P3W	YU15OTC

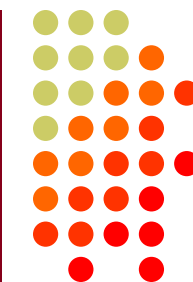
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E2E	K5BLC	M5O	W0ASH
EY8MM	HI3TIJ	P3W	YU15OTC

Correct Calls

C37NL	FY5KE	LY7A	RG8U
CD6416	GT8IOM	HB9DCM	TM6M
E2E	KH6LC	M5O	W0AIH
EY8MM	HI3TEJ	P33W	YU15OTC



**Super Check Partial can help –
but it doesn't replace ability to
copy calls!**

Running



Objective

- Get calls in the log as fast as possible
 - Talk/send less
 - Get calls right the first time (less repeats)
 - Be in command
 - Talk and type at same time!

Practice

- Operate where you are the hunted
 - In-state QSO parties
 - Be loud and CQ as band opens
 - Be new near end of a contest
- Use a simulator

Technique – Phone



- Breathe
- Consistency & efficiency
 - Find a rhythm that suits the conditions/rate
 - Learn not to say, “Uh”, “Please copy”, “Roger the 5914, you are...”; “QSL, QRZ?”
 - Say your call often – almost every QSO
- Answer guys with the phonetics they use
- Speak clearly
 - Go slow to go faster

Technique – CW



- Let the computer send
 - Learn to hit Insert before you finish typing
- Sending speed depends on conditions
 - Go slow to go faster
- Cut Numbers
 - Sometimes OK, sometimes not
- Practice
 - CW is a learned skill that improves with practice
- Be consistent

Search & Pounce



Objectives

- Acquiring the next station/call
- Recognition
 - Partial call
 - Accent
 - Exchange

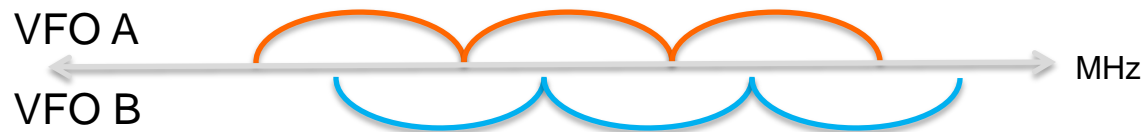
Practice

- Find a regional contest and see how quickly you can tune up the band and work everyone
- Then repeat
- Take a break
- Repeat

Speed Search-and-Pounce



- Tune in a station on either VFO
- Set VFO-A = VFO-B
- Tune in another station and switch VFOs
- Assess, call, switch...repeat
- When one is worked, switch and equalize your VFOs
- Leapfrog your way along the band



Know when to...



Run

- When you can

Search and Pounce

- When you can't run
- When you need mults
- When looking for a new run frequency

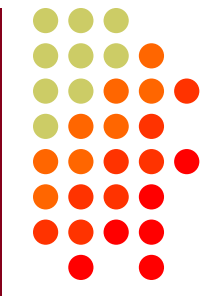
There is no magic formula for when to Run vs S&P

Decision based on log analysis, scoring formula,
band conditions, a “feeling”

Changing Bands



- How long does it take to change bands in your station?
- Is it hard enough that you don't want to do it when tired?
- Spend the time to make band changes easier
 - Less manual operations
 - Mark all settings on amps, etc.
- Practice



Automate everything you can!

Preparation



“It’s not the will to win that matters – everyone has that. It’s the will to prepare to win that matters.”

Paul Bear Bryant



Contesting Elements Requiring Preparation



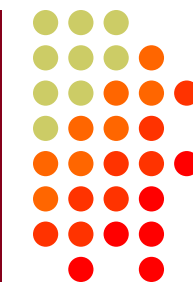
- Goals
- Strategy
- Operator Commitment
- Station Readiness

Define Your Goals



- Select category
 - All band or single band?
 - Power – High, low, QRP?
 - Assisted or unassisted?
- Objective
 - Have fun?
 - Win a certificate?
 - Set a record?





If you don't know where you are going, you won't get there...

Understand Scoring



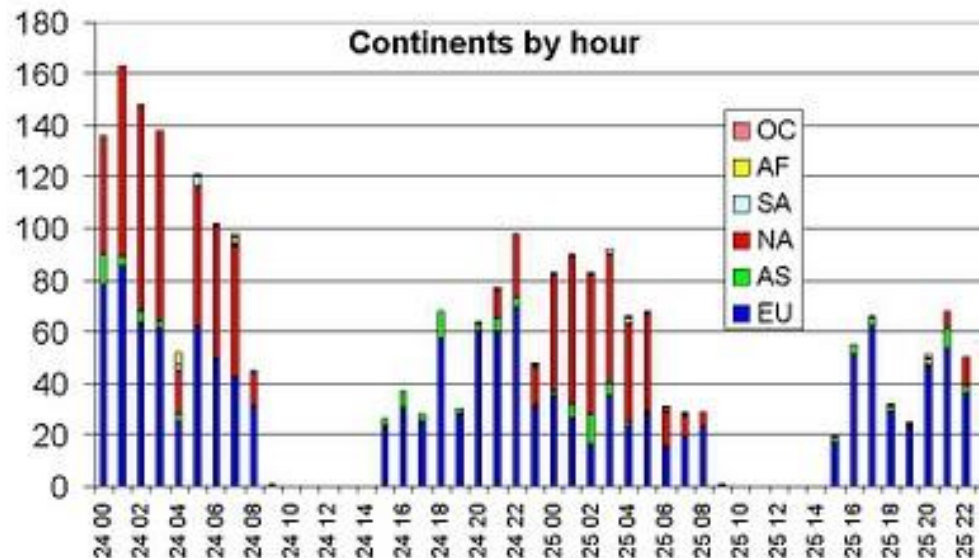
- Points for each QSO?
 - Per mode?
 - Per continent?
 - By band?
- What is a multiplier?
 - Section? Zone? Country? Prefix?
- Do your homework to know what contributes to a good score

Band	QSOs	Pts	Cty	ZN
1.8	7	14	5	5
3.5	143	408	42	21
7	761	2252	59	24
14	401	1142	64	28
21	2021	5980	70	27
28	118	322	14	14
Total	3451	10118	254	119
Score: 3,774,014				

Build a Strategy



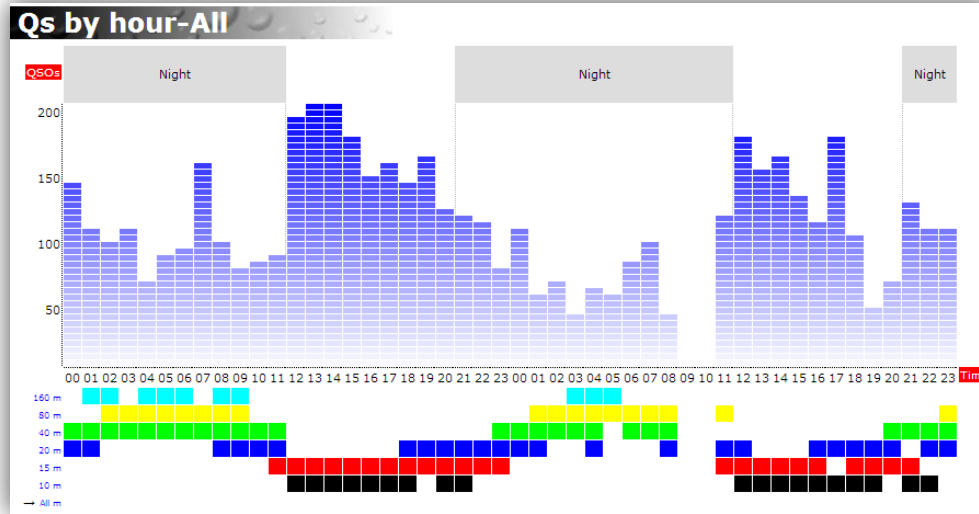
- Study past results and logs
 - Do the winners focus on QSOs or multipliers?
 - Where do the QSOs come from?
 - Do activity patterns repeat?



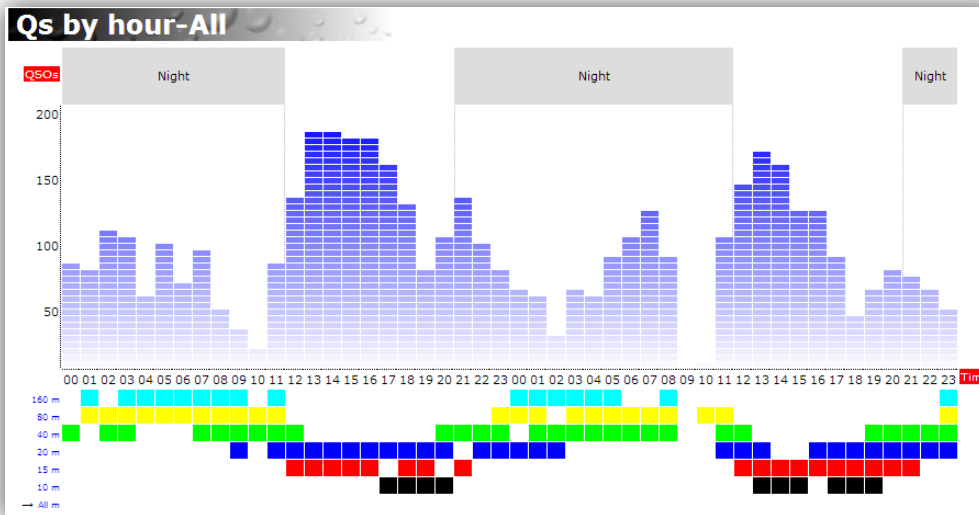
Activity Patterns Do Repeat



K5ZD/1
WW CW
2013



K5ZD/1
WW CW
2006



Understand What it Takes



- CQWW and WPX logs are open...what did your closest peers do differently?
 - Where do the QSOs come from?
 - What hours to be on the air?
 - Expected opening times for each band
 - When to “run” and when to “search”

N5DX Visualization



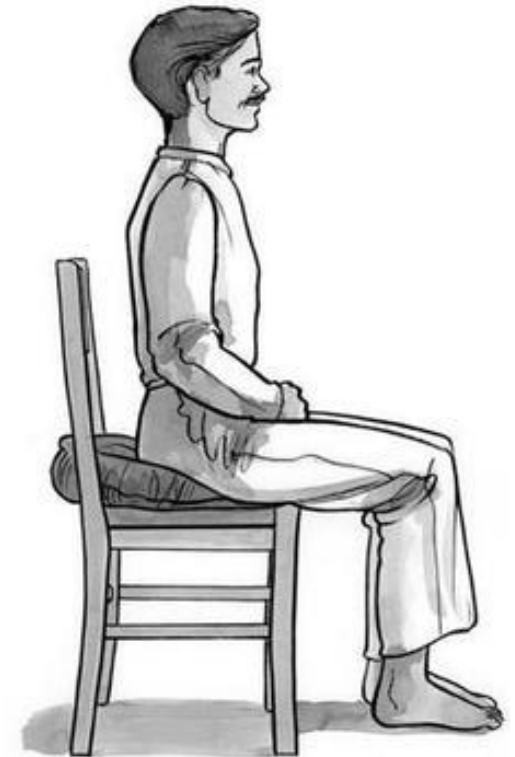
“Below is a checklist of items that I attempted to think through and visualize on an hour by hour basis for the contest:”

- Decide which bands each radio would be operating.
- Visualize which operating strategy to use (e.g. dual run or SO2R).
- Visualize specific frequencies and beam headings.
- Create alternate plans in case the primary operating plan for that hour might not work.
- Make mental notes of target areas outside of Europe to find.

BIC – Butt in Chair



- No other single thing will help you more to improve your scores
- It only works if you spend your time working people



Operator Commitment



- Plan your life to meet your contest goal
 - Work, family, food, rest, station repairs
- Part time?
 - BIC for the best rate or at different times each day
- Outline an operating plan
 - Bands and times
 - Likely off times

**Decide.
Commit.
Succeed.**

Sleep Facts



- You can not train for lack of sleep
- You can not store sleep
- Under sleep deprivation, highly **practiced skills** will deteriorate more slowly than those which require new or creative thought

Contest Sleep Strategy



- Preparation
 - Have good physical fitness
 - Stay on your normal sleep schedule
 - Get extra sleep 4-7 days before the contest
 - Take 3 hour nap before contest starts
- During the contest
 - Sleep for 90 or 180 minutes
 - Avoid caffeine until needed



Station Readiness

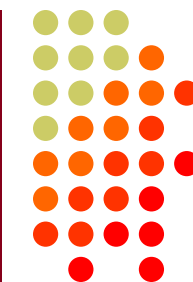


- Invest in antennas
 - Effectiveness
 - Flexibility
- Station Configuration
 - Everything within easy reach
 - Comfortable chair
- Reliability
 - Do things right
 - Have spares!

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



**Every time you are on the air
you are gaining experience and
knowledge.**

Be active

Acknowledgments



- This presentation draws on material developed by:
 - Ward Silver, NØAX
 - Kevin Stockton, N5DX
- And thousands of people I have met and learned from over 35 years