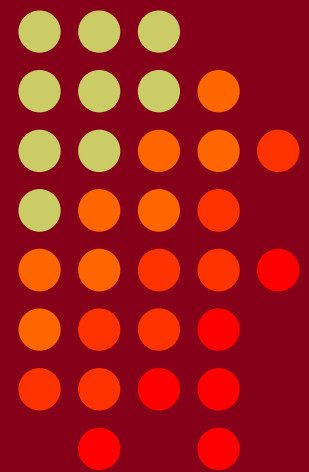


Tips on Being a Better Single Operator

Randy Thompson, K5ZD



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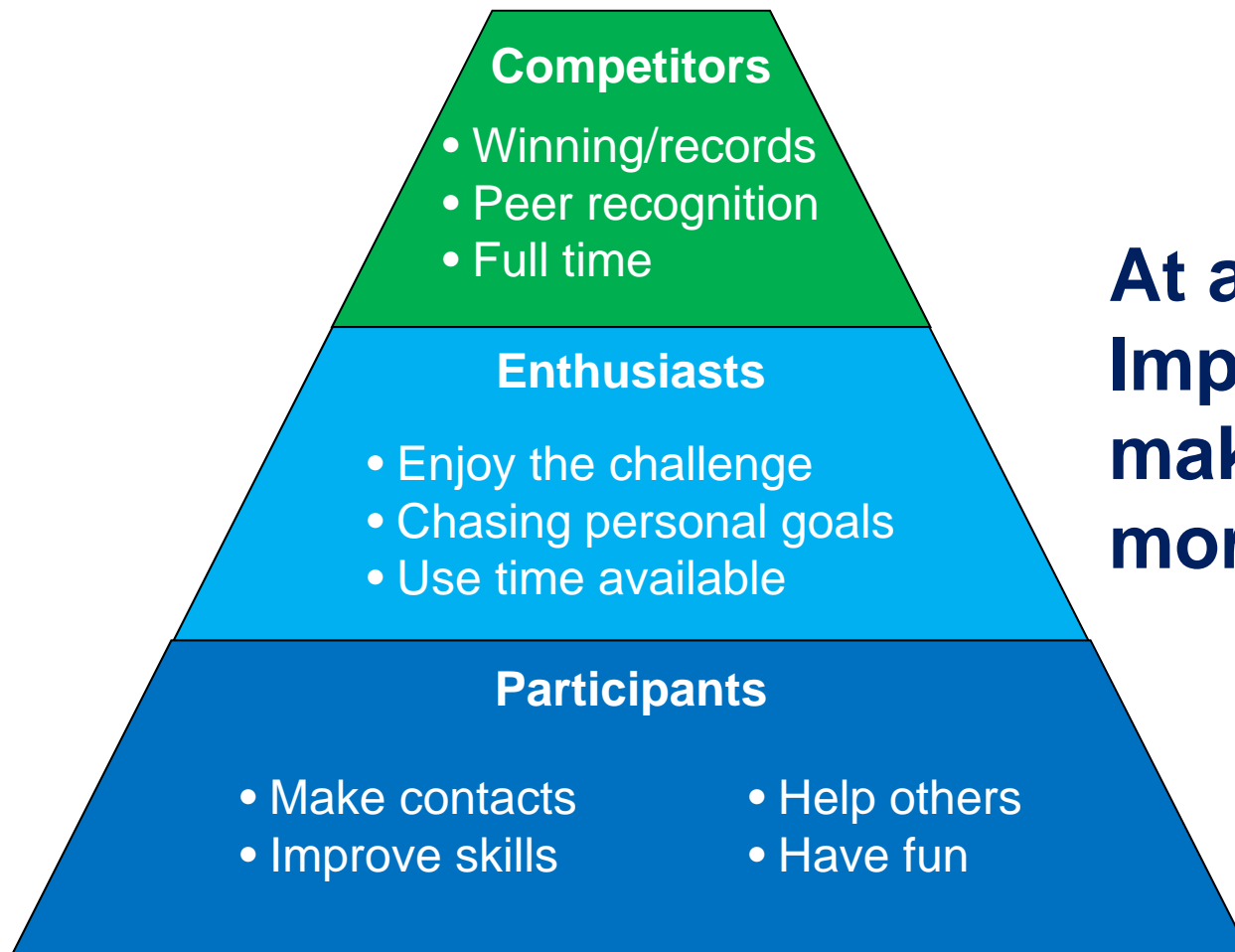
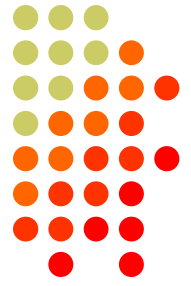
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Contesting is a Game



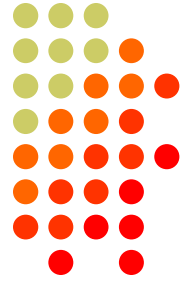
- A game is a structured activity, usually undertaken for enjoyment.
- Rules
- Players
- Method to determine winners (score)
- Strategy

The Players

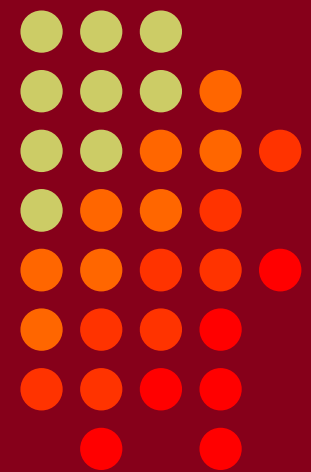


**At any level...
Improving your skills
makes the game
more fun!**

Winning Contesters are...



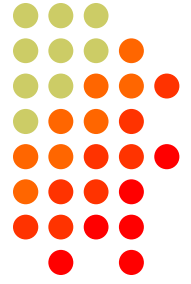
Prepared



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Station Design

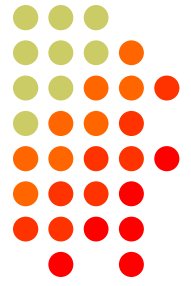


- Invest in antennas
 - Effectiveness
 - Flexibility
- Station Configuration
 - Everything within easy reach
 - Comfortable chair
- Reliability
 - Do things right
 - Have spares!

Station Layout



Automate Everything You Can



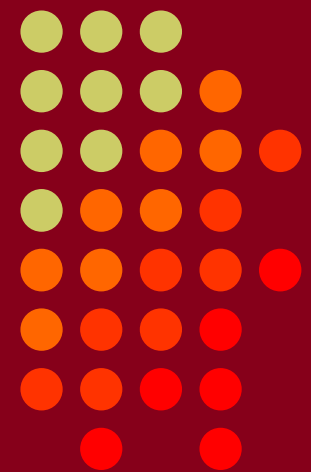
- Interface rigs to PC
 - Frequency control (serial/USB interface)
- Use all the control outputs available to you
 - CW output (serial or parallel) and paddles (parallel)
 - PTT output to key radio(s)
 - Sound card or voice keyer control
 - Parallel port band data for antenna and filter selection

Station Evaluation Question



- When you are tired...
- What prevents you from wanting to change bands?
- What causes you to forget a step in the process?
- Work on those!

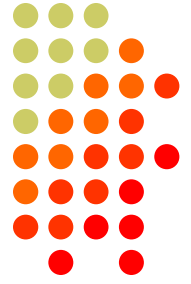
Strategic



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Choose the Game

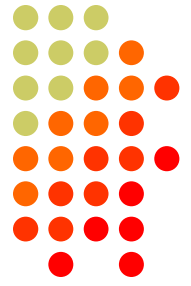


- ▶ Select category
 - All band or single band?
 - Power – High, low, QRP?
 - Assisted or unassisted?

- ▶ Set a goal
 - Have fun?
 - Win a certificate?
 - Set a record?



Understand Scoring



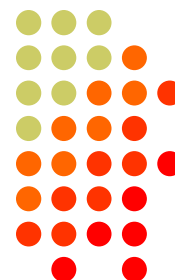
- Points for each QSO?
 - Per mode?
 - Per continent?
 - By band?
- What is a multiplier?
 - Section? Zone? Country? Prefix?
- Constantly evaluate what you are doing against the final score

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				

Example - ARRL Sweepstakes



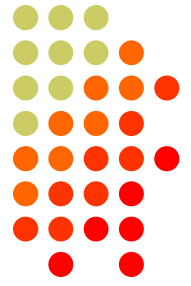
- You have 1000 QSOs x 80 sec
= 161,000 points
- Which is more valuable?
 - 1 more section or 10 contacts?



Example – CQ WW

- You have 1000 QSOs, 100 Zones, 250 countries ~ 980,000 points
- Which is more valuable?
 - Getting the 40th zone on 20 meters?
 - Working 20 more contacts?

Tips



- Calculate trade offs based on expected final score!

- Short cut method

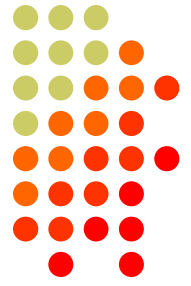
- $Mult\ value = \frac{QSOs}{Mults}$

- $Time\ value = \frac{QSOs}{Mults} * \frac{60}{Rate}$

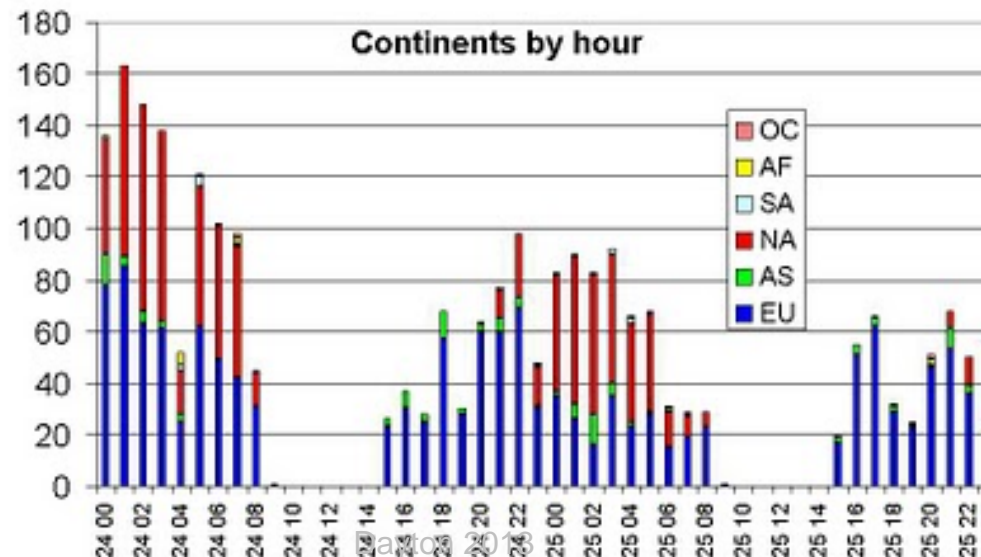
The higher the rate
The less time you can spend

- Your logging software can display this calculation for you – use it!

Log Analysis



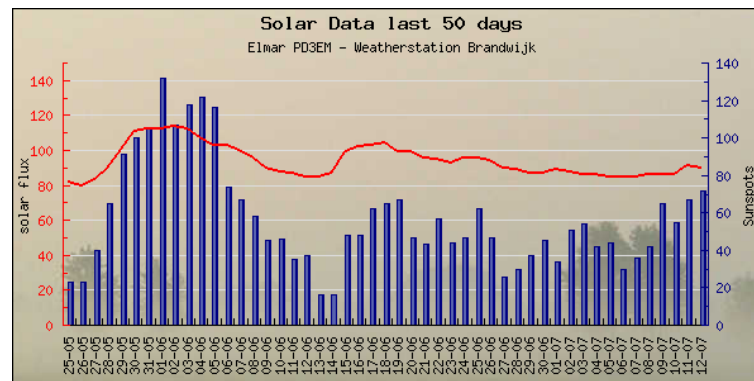
- Study past results and logs
 - Do the winners focus on QSOs or multipliers?
 - Where do the QSOs come from?
 - Do activity patterns repeat?



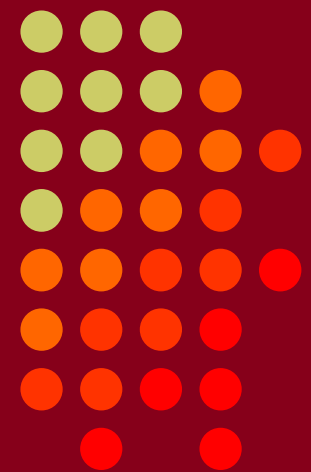
Make a Plan



- CQWW logs are open...what did your closest peer do differently?
 - Review your log from the previous year
 - What hours to be on the air?
 - Expected opening times for each band
 - When to “run” and when to “search”



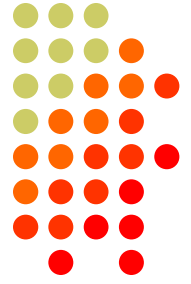
Efficient



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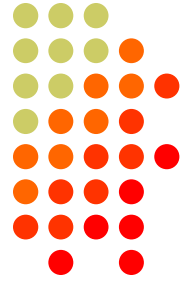
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Skills Development



- 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
- Learn to type
 - Contesting requires a lot of typing without room for errors

Phone Technique Hints



- 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
- Speech - Clean it up
 - Just enough processing

Technique – CW



- Be consistent
- Let the computer send
- Cut Numbers – Yes and No
- Speed Control
- PED, RUFZ-XP, Morsemaster, MorseRunner, practice

Know when to...



Run

- When you can

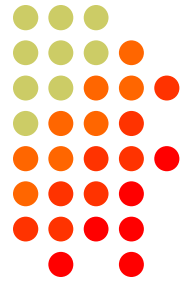
Search and Pounce

- 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”

CQ-ing For Mid-Sized Stations

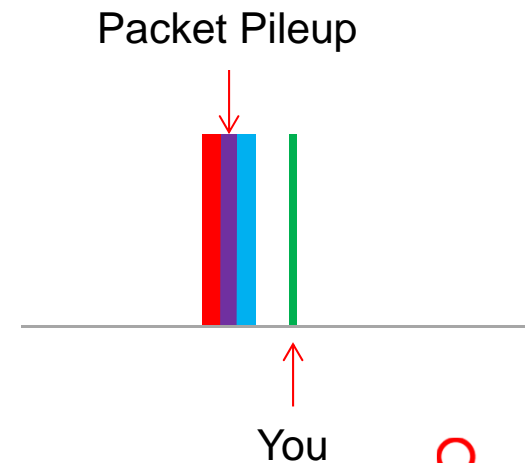


- Timing
 - Be the first or last on a band
- Don't fight with giants – move
 - High in the band is perfectly OK!
 - Position yourself where you can be heard
- Know your rate goal and thresholds
- Be aware of your “surroundings”
- Get whole calls the first time

Attacking a Pileup as a Caller



- Think “opportunity cost”
- Assess the worth of the target
- Assess the size of the pileup
- Is propagation improving or decaying?
- Smart beats loud
 - Avoid zero beat
 - Varying timing



Speed Search-and-Pounce



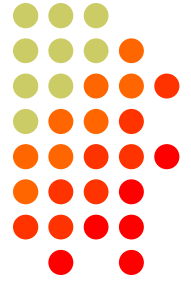
- Tune in a station on either VFO
- Set VFO-A = VFO-B
- Tune in another station and switch VFOs
- Assess, call, switch...repeat
- When one is worked, switch and equalize your VFOs
- Leapfrog your way along the band



Make Good QSOs

- Know who you are calling
 - NEVER NEVER TRUST CLUSTER SPOTS!
- Know who is calling you!
 - Does the prefix make sense for the situation?
- Ask for repeats if you are not sure
- “Prefill is pre-bust!”
- *ERRORS REDUCE YOUR SCORE!!!!*

Practice

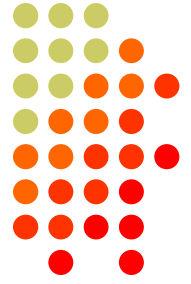


- To exercise oneself by repeated performance in order to acquire skill: *to practice at making QSOs.*
- *Learn to listen*
- *Learn to call*
- *Learn the bands*
- *Learn your station*

*“In theory there is no difference
between theory and practice.
In practice there is.”*

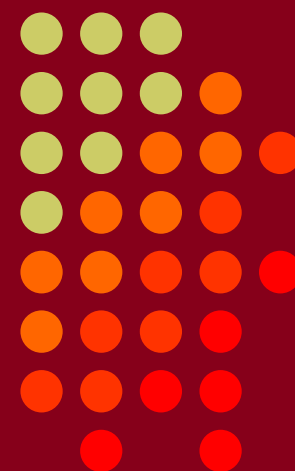
Yogi Berra

Evaluate yourself



- Listen to good ops and bad ops in minor contests
 - Which one sounds most like you?

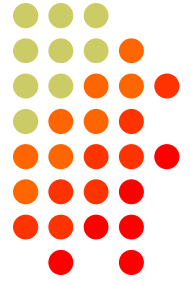
Accurate



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Cost of Errors



- Many contests have a penalty for errors
 - Loss of QSO
 - Loss of QSO + 3x penalty
- Errors happen
- Focus on yours and how to prevent them
- Post contest “log washing” is not an acceptable practice

Improve your Vocabulary



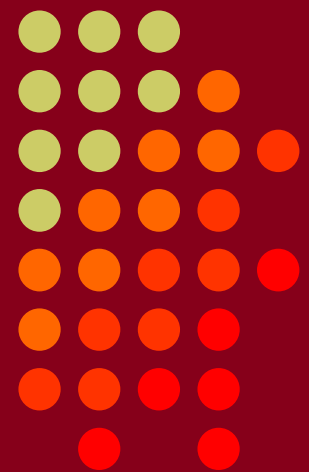
- English has 180,000 words
 - Average person uses 10,000 – 12,000 words
 - College educated uses 15,000 – 20,000 words
- The CQ WW SSB 2012 had 101,112 calls in the logs
 - 56,319 only appeared in one log
 - Experience says >80% of these are errors

Which of these calls are bad?

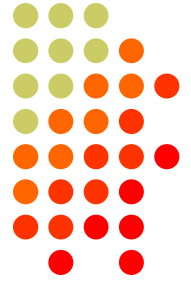


C73NL	FY5KE	LY7A	RG8U
CD6416	GT8IOM	OB9DCM	TM6M
E2E	IB1B	M5O	W0ASH
EY8MM	HI3TIJ	P3W	YU15OTC

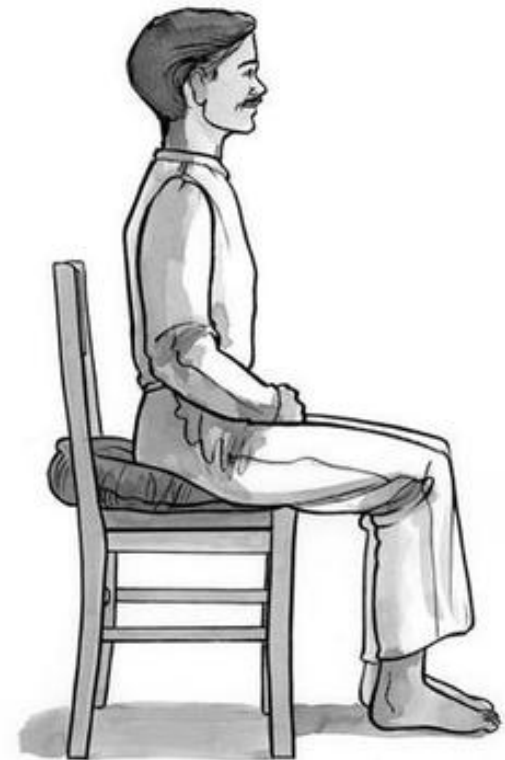
Motivated



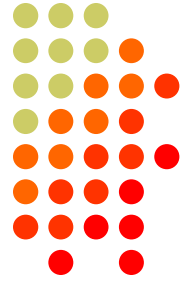
BIC – Butt in Chair



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

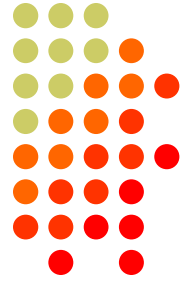


BIC Strategy



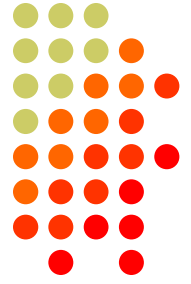
- Plan your life to meet your contest goal
 - Work, family, food, rest, station repairs
- Part time?
 - BIC for the best rate or at different times each day
- Have a goal!

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

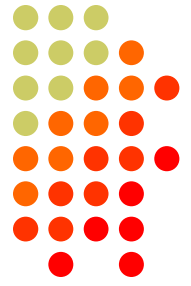
Contest Sleep Strategy



- 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

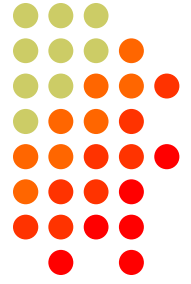


Remember your goal!



- Fatigue will make you want to quit
- A short nap is better than quitting
- Sleep during low rates so you are fresh during the high rate periods

Keep Pushing

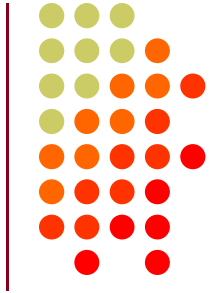


- Use time wisely
 - The clock never stops
- The next QSO could make the difference!
 - Pay attention to accuracy
- Everyone is experiencing the same conditions!
 - Don't get frustrated





Hour 43 – The “look”



Questions?