

# Tips for Being a Better Single Operator

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# Winning Contesters are...

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A winning tester is...

**Prepared**

# 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

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- **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

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- **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!**



A winning contender is...

**Strategic**



# Choose the Game

- **Select category**

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

- **Set a goal**

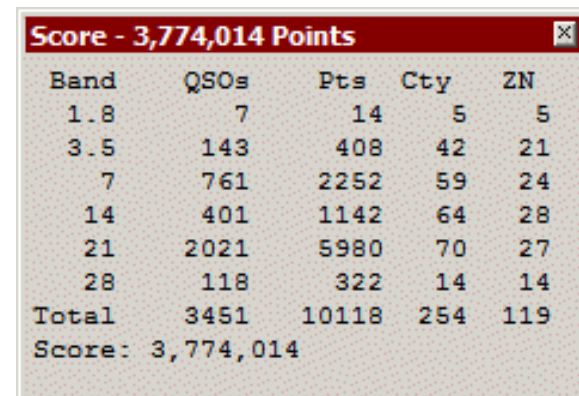
- Have fun?
- Win a certificate?
- Set a record?



# Understand Scoring

- **Points for each QSO?**

- Per mode?
- Per continent?
- By band?



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				

- **What is a multiplier?**

- Section? Zone? Country? Prefix?

- **Constantly evaluate what you are doing against the final score**

# Example – CQ WW

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- You have 1000 QSOs, 100 Zones, 250 countries ~ 980,000 points
- Which is more valuable?

- Getting the 40<sup>th</sup> zone on 20 meters?
- Working 10 more contacts?

1001 x 352 = 986,586 points

1010 x 350 = 989,800 points

**Each mult is only worth 2.8 QSOs!**

@60 QSOs/hour – 4 minutes

@30 QSOs/hour – 7 minutes

All scores assume 2.8 points/QSO



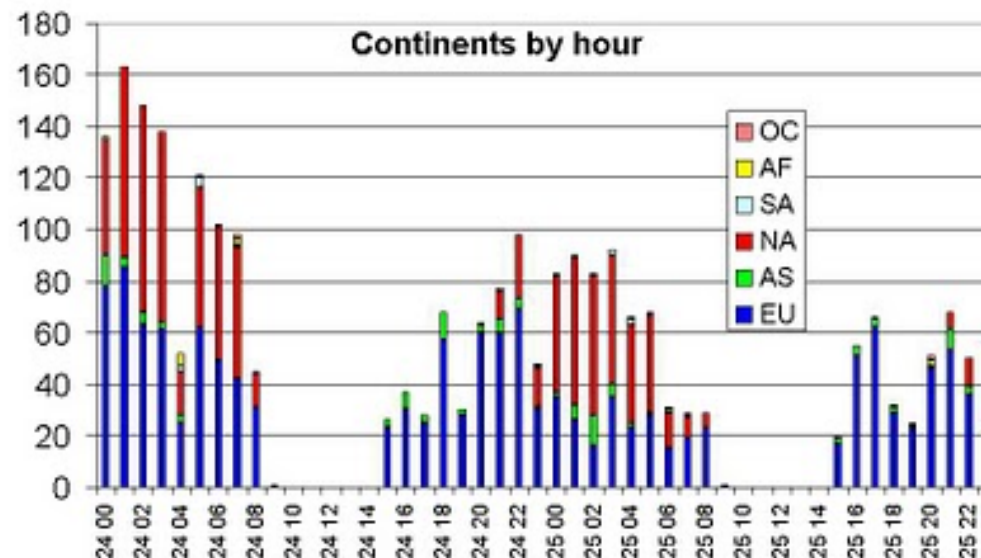
# Make a Plan

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

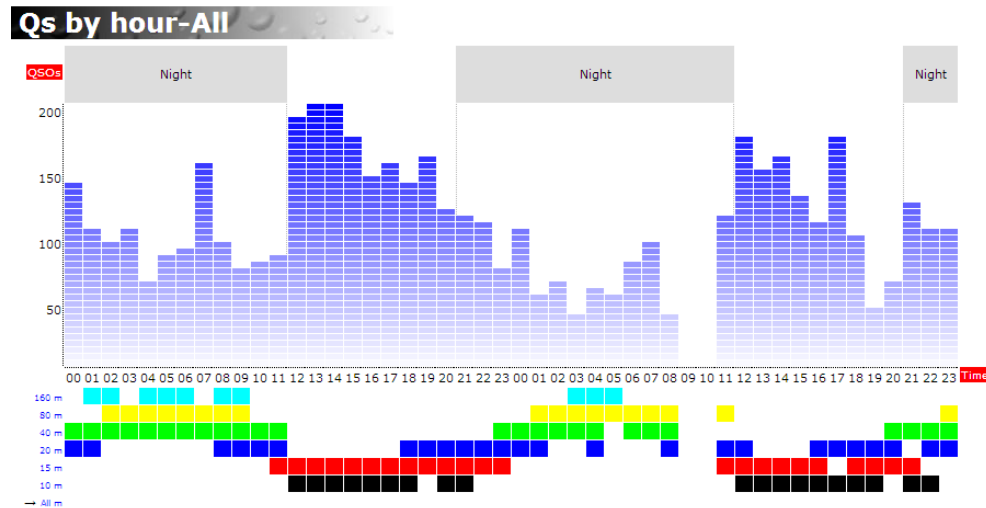
# Log Analysis

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

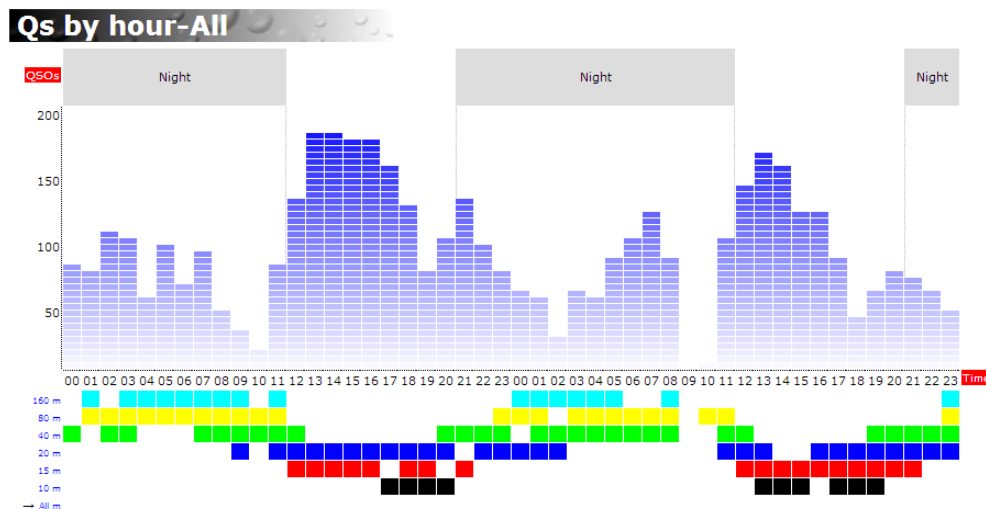


# Activity Patterns Repeat

K5ZD/1  
WW CW  
2013



K5ZD/1  
WW CW  
2006



Rate charts by SH5 software



A winning contestant is...

**Efficient**

# Skills Development

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- **Know the “flow”**
  - Contest QSOs have a rhythm and sequence
  - Good operating habits require less thinking, less energy
- **Driving a car**
  - Had to think about everything at first
  - With experience, able to focus on other things
- **Learn to type**
  - Contesting requires a lot of typing without room for errors



# Know when to...

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## 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”

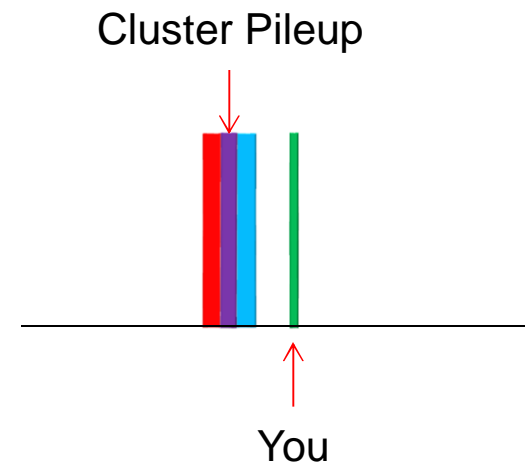
# CQ-ing For Mid-Sized Stations

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- **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
- **Be aware of your “surroundings”**
- **Get whole calls the first time**
- **Know your rate goal and thresholds**

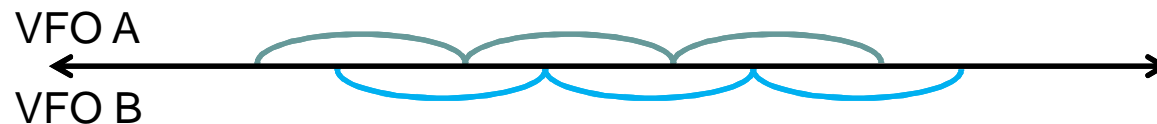
# Attacking a Pileup as a Caller

- 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



# Practice

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- **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***

# Evaluate yourself

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- **Listen to Good Ops**
  - Study what they are doing that makes them good
- **Record an hour of your own operating**
  - Listen to it and think about places you missed a call or wasted time



A winning contender is...

**Accurate**

# Cost of Errors

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- **Many contests have a penalty for errors**
  - Loss of QSO
  - Loss of QSO + 1x, 2x, or 3x penalty
- **Errors happen**
- **Focus on yours and how to prevent them**
- **Post contest “log washing” is not an acceptable practice**



# Improve your Vocabulary

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- **English has 180,000 words**
  - Average person uses 10,000 – 12,000 words
  - College educated uses 15,000 – 20,000 words
- **CQ WW SSB 2013 logs had 108,210 calls**
- **60,991 only appeared in only one log**
  - Experience says >95% of these are errors
- **18,343 appeared in 20 or more logs**
  - You should “know” 5,000 – 10,000 calls

# Common Busts

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## SSB

- V and W
- E and I
- G and J
- WW SSB Most Busted
  - HA3ØS
  - B9/BY9GA
  - DFØHQ
  - TC9ØA
  - ES9C

## CW

- I, S, H, 5
- V and 4
- B and 6
- WW CW Most Busted
  - JS3CTQ
  - ES9C
  - HF9Q
  - V47T
  - HA3ØS

# Which of these calls are bad?

C73NL	FY5KE	LY7A	RG8U
CD6416	GT8IOM	OB9DCM	TM6M
E2E	1B1B	M5O	W0ASH
EY8MM	HI3TIJ	P3W	YU15OTC

# Which of these calls are bad?

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E2E	1B1B	M5O	W0ASH
EY8MM	HI3TIJ	P3W	YU15OTC

## Correct Calls

C37NL	FY5KE	LY7A	RG8U
CD6416	GT8IOM	HB9DCM	TM6M
E2E	IB1B	M5O	W0AIH
EY8MM	HI3TEJ	P33W	YU15OTC

# Make Good QSOs

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



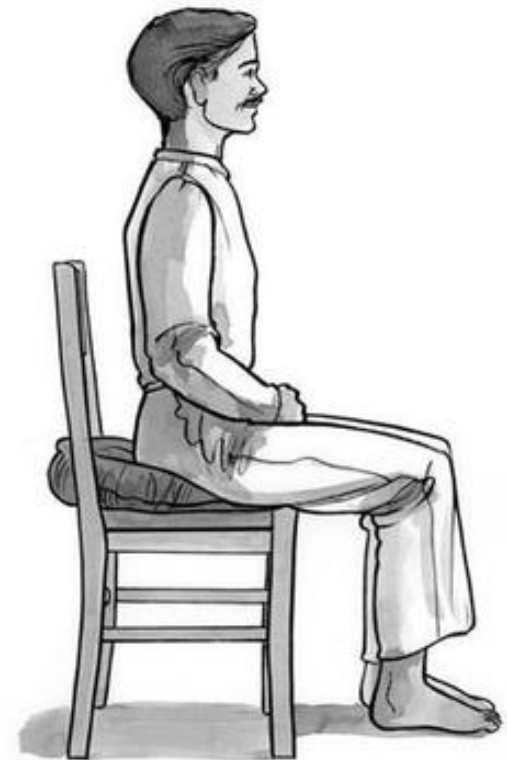
A winning contender is...

**Motivated**

# BIC – Butt in Chair

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



# BIC Strategy

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- **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

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- **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

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- **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!

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- **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

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- **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



# Questions?

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Hour 43 – The “look”