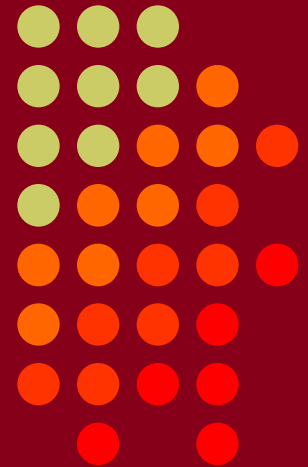


# Contesting 201: Making and Keeping your Score

**Randy Thompson, K5ZD**



• **CTU** •  
CONTEST  
UNIVERSITY

 **ICOM**<sup>®</sup>

# Purpose of this Session



- Discuss factors important to creating winning scores
- Discuss how to avoid score reductions
- Use CQWW Contest as real-world example

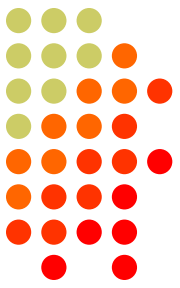
# Choose the Game



- 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  
= 160,000 points

- Which is more valuable?

- 1 more section or 10 contacts?

1001 x 81 sections = 162,162 points

1010 QSOs x 80 sec = 161,600 points

It takes 14 contacts to equal that new section!

@60 QSOs/hour - 14 minutes

@30 QSOs/hour - 28 minutes



# Example – CQ WW

- 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

# Tips

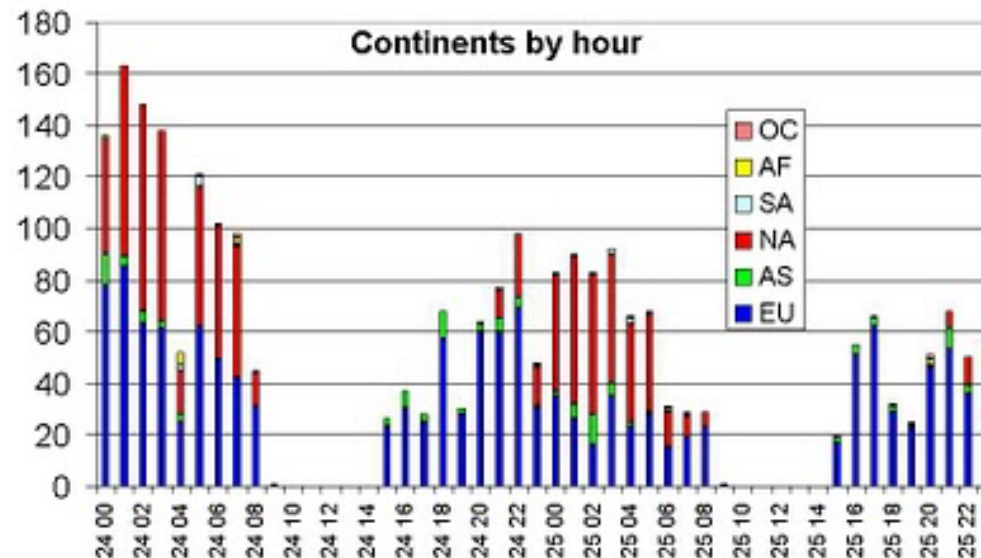


- Calculate trade offs based on expected final score!
- Short cut method
  - $Mult\ value = \frac{QSOs}{Mults}$
  - $Time\ value = \frac{QSOs}{Mults} * \frac{60}{Rate}$  **The higher the rate...  
The less time you can spend!**
- Your logging software can display this calculation for you – use it!

# 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?

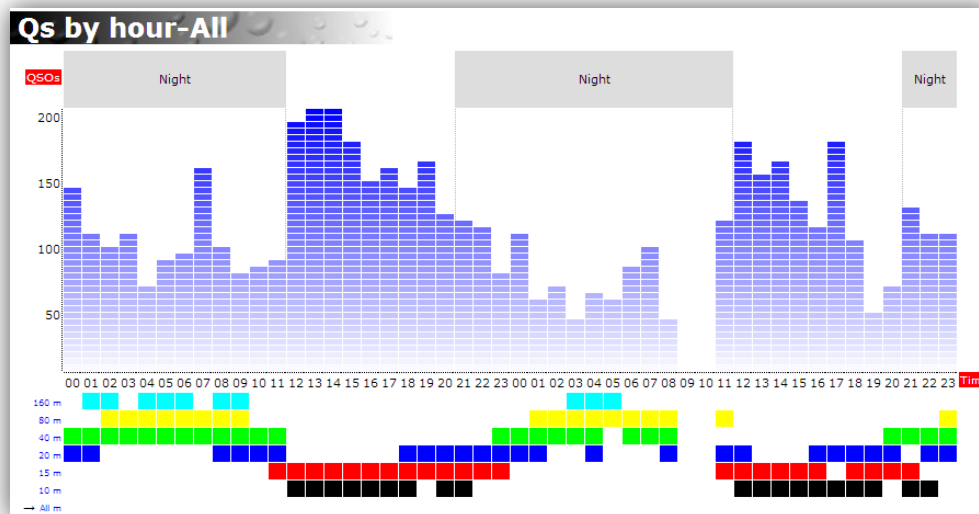




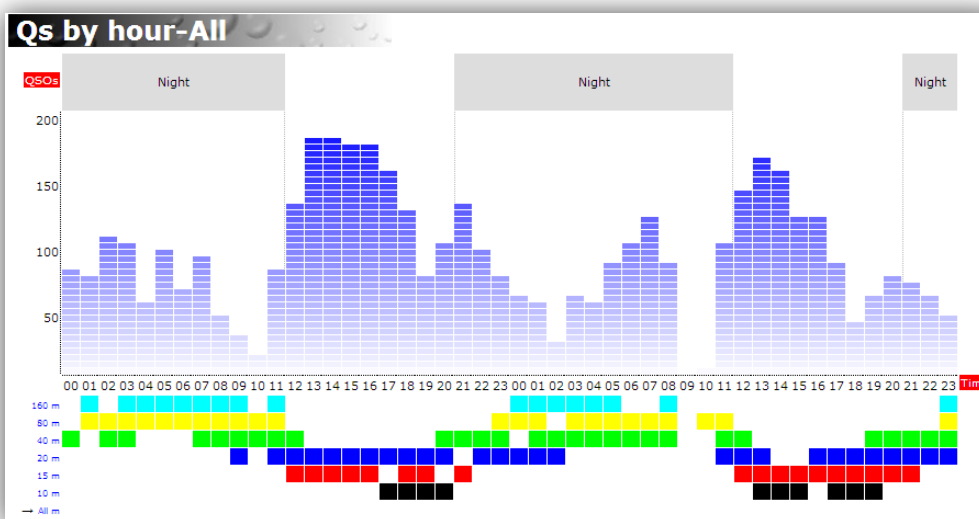
# Activity Patterns Repeat



K5ZD/1  
WW CW  
2013



K5ZD/1  
WW CW  
2006



# Make a Plan



- 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”

# 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
- *ERRORS REDUCE YOUR SCORE!!!!*

# Cost of Errors



- 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



- 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



## 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?

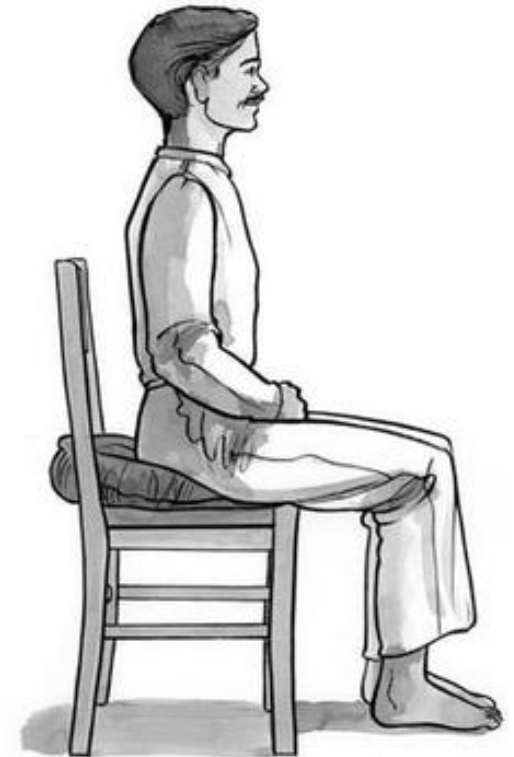


C73NL	FY5KE	LY7A	RG8U
CD6416	GT8IOM	OB9DCM	TM6M
E2E	1B1B	M5O	W0ASH
EY8MM	HI3TIJ	P3W	YU15OTC

# 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!



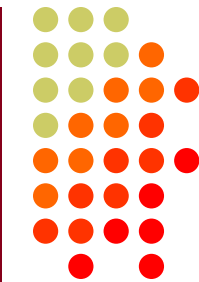
- Fatigue will make you want to quit
- A short nap is better than quitting
- Sleep during low rates so you are fresh during the high rate periods

# 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



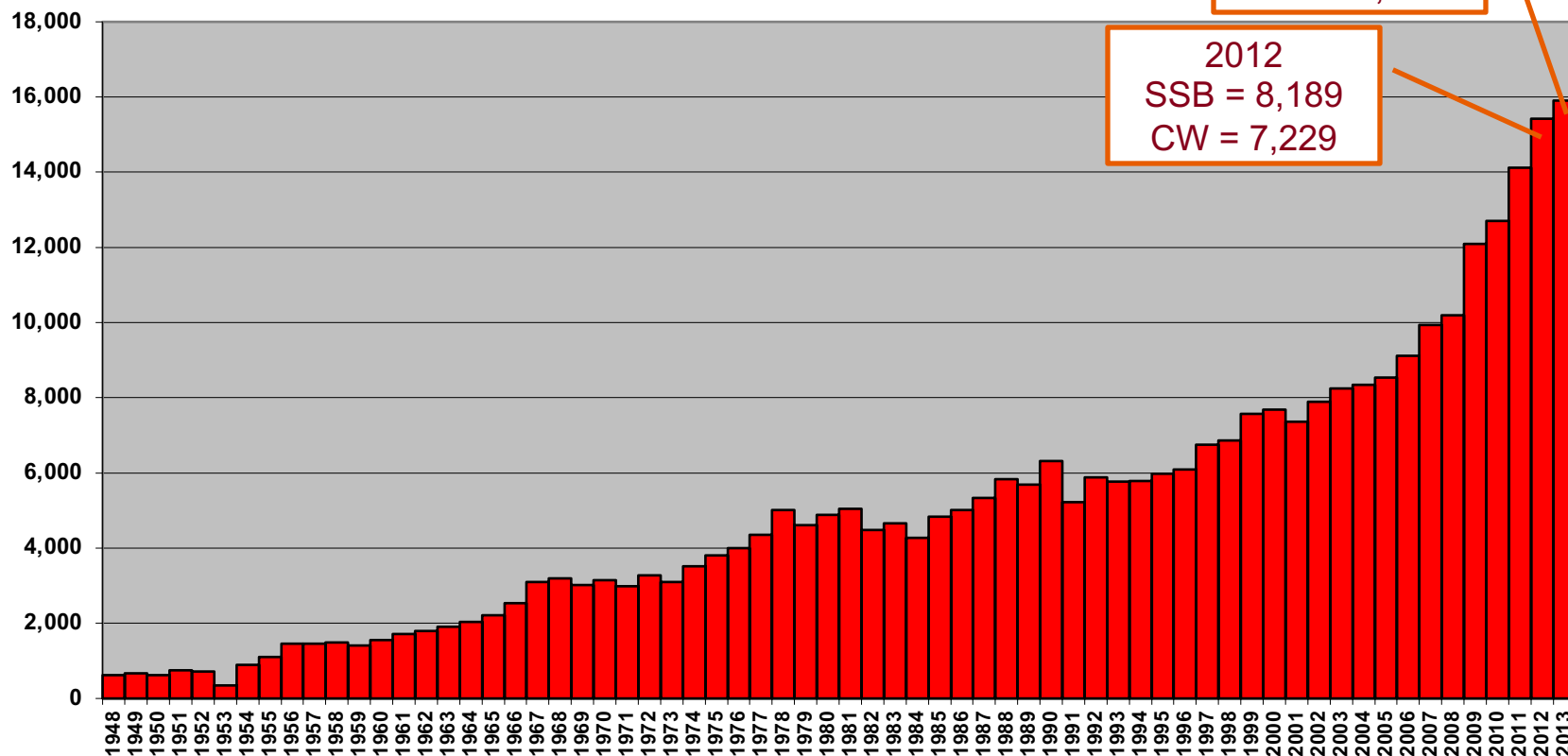


# CQ WW DX Contest

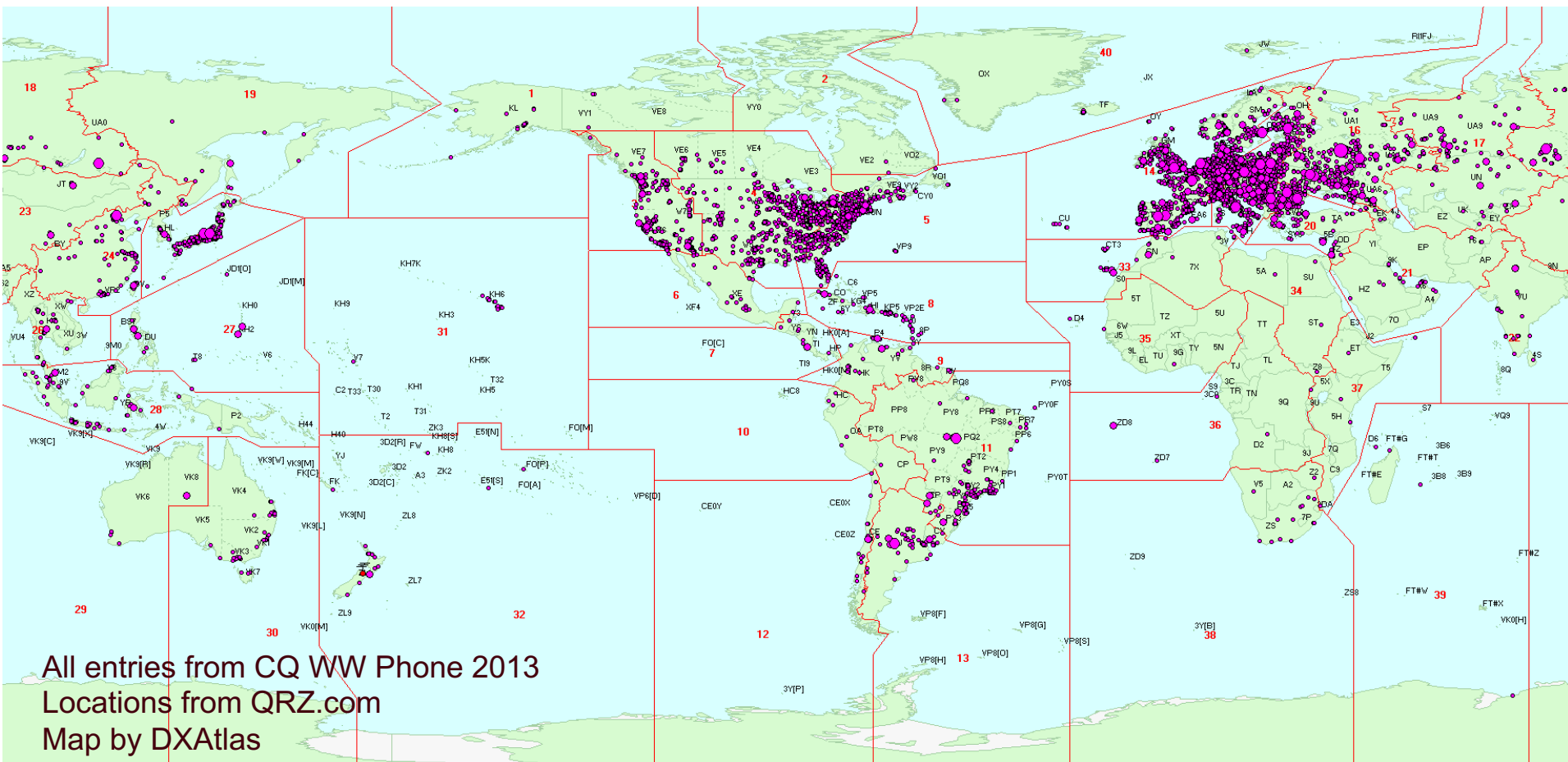
# CQ WW is the Big One!



CQWW DX logs received (SSB+CW)



# Entries - CQ WW Phone 2013





# Entry Categories



	1500 W	100 W	5 W
Single Op All Bands	X	X	X
Single Op Single Band (160, 80, 40, 20, 15, 10)	X	X	X
Single Op Assisted All Bands	X	X	X
Single Op Assisted Single Band (160, 80, 40, 20, 15, 10)	X	X	X
Overlay – Rookie (All Bands)	X	X	
Overlay – Classic (All Bands)	X	X	
Multi-Op Single-Transmitter	X		
Multi-Op Two-Transmitter	X		
Multi-Op Multi-Transmitter	X		
Checklog	X		

◦ CTU ◦

CONTEST  
UNIVERSITY

# New Overlay Categories!



- Overlay Categories (Single Op Only)
  - Rookie – Licensed <3 years
  - Classic – One radio, no assistance, 24 hours
- Enter by adding line to Cabrillo header
  - CATEGORY-OVERLAY: ROOKIE
  - CATEGORY-OVERLAY: CLASSIC
- Entrants will have two scores in results
  - Traditional category score
  - Overlay category score calculated as All Bands regardless of log entry category

# Classic Overlay



- One Operator
- One Radio
- No DX Cluster (no Assisted)
- 24 hours of operating time
  - >60 minutes with no QSO is considered “off-time”
  - You may operate more time, but only first 24 hours of operating time will count for Overlay score



0000 – 0200z	2:00
0500 – 0900z	4:00
1200 – 2200z	10:00
0400 – 0900z	5:00
1300 – 1600z	3:00
	24:00
1600 – 1800z	n/a

# Entry Categories – 2013 SSB



	1500 W	100 W	5 W	Total
Single Op All Bands	960	2104	118	3182
Single Op Single Band (160, 80, 40, 20, 15, 10)	489	1049	134	1672
Single Op Assisted All Bands	974	765	24	1763
Single Op Assisted Single Band (160, 80, 40, 20, 15, 10)	472	396	49	917
Overlay – Rookie (All Bands)	29	227		256
Overlay – Classic (All Bands)	295	500		795
Multi-Op Single-Transmitter	375			
Multi-Op Two-Transmitter	115			
Multi-Op Multi-Transmitter	68			
Checklog	376			

# Submit your log!



- Use Cabrillo format
- One log per callsign
- Put the correct callsign in the log!
- Confirm entry category is correct
- All dates/times are within contest period
- Read the robot confirmation email
- Visit logs received web page to confirm

# Log Check Tool



CQ World Wide DX Contest

Home Rules **Log Check** Plaques Results Records Logs Blog Resources Contact Us

Cabrillo Spec Log Check ADIF Club Names Locations Country Names SSB Logs CW Logs

### Cabrillo Log Check

The Cabrillo Log Check page will check the format of your Cabrillo log file for the CQ WW Contest. Use this to check your log before submitting it to the robot.

1. Select the contest from the list.
2. Browse to the log file on your computer. Log file must be in [Cabrillo format](#).
3. Press process to upload the file and start the check.

You must resolve all errors before you can submit your log.

Select Contest: 2012 CQ WW SSB

Choose a file to upload: Choose File No file chosen

or

Paste Cabrillo Log to upload:

```
START-OF-LOG: 3.0
LOCATION: WMA
CALLSIGN: K5ZD
CATEGORY-OPERATOR: SINGLE
CATEGORY-ASSISTED: NON-ASSISTED
CATEGORY-BAND: ALL
CATEGORY-POWER: HIGH
CATEGORY-MODE: SSB
CATEGORY-STATION: FIXED
CATEGORY-TRANSMITTER:
CLAIMED-SCORE: 5212982
CLUB: Yankee Clipper Contest Club
CONTEST: CQ-WW-SSB
CREATED-BY: WriteLog V10.90A
NAME: Randy Thompson
```

[Return to log upload page](#)

Congratulations! File is correct and ready to submit to robot.

1. Carefully review the summary information below. Is everything correct?
2. Enter your email in the box below. Please make sure you have typed it correctly as this is the address where your acknowledgement message will be sent.
3. Click the Send Log button to email your log to the robot.
4. Watch your email inbox for confirmation from the robot. Correct and resubmit the log if any errors are reported.
5. Come back in 24 hours and check the logs received page to confirm your log has been accepted.

Your email address:  ☒ Send copy of log file to this address

#### Summary

Call sign: K5ZD

Header Information:

CALLSIGN: K5ZD  
CONTEST: CQ-WW-SSB  
CATEGORY-OPERATOR: SINGLE-OP  
CATEGORY-ASSISTED: NON-ASSISTED  
CATEGORY-MODE: SSB  
CATEGORY-BAND: ALL  
CATEGORY-POWER: HIGH  
CATEGORY-STATION: FIXED  
CATEGORY-TRANSMITTER: ONE  
CLAIMED-SCORE: 5212982  
CLUB: YANKEE CLIPPER CONTEST CLUB  
CREATED-BY: WRITELOG V10.90A  
LOCATION: WMA

<http://www.cqww.com/logcheck/>

CQ World Wide DX Contest

Home Rules Plaques Results Records **Log Check** Blog Contact Us

Cabrillo Spec Log Check Club Names Locations Country Names SSB Logs CW Logs

### Cabrillo Log Check

[Return to log upload page](#)

**Errors - 2 found**

Red text is the error. Blue text was found in your log. Please correct any errors in your log file and upload again.

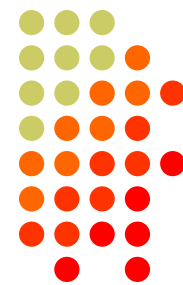
Line 5 CATEGORY-ASSISTED entry is wrong. Allowed values are ASSISTED or NON-ASSISTED. CATEGORY-ASSISTED: NON-ASSISXED

Line 10 CATEGORY-TRANSMITTER entry is wrong. Allowed values are ONE, TWO, or UNLIMITED. CATEGORY-TRANSMITTER:

Please correct all errors in your log file and upload again.

```
START-OF-LOG: 3.0
LOCATION: WMA
CALLSIGN: K5ZD
CATEGORY-OPERATOR: SINGLE-OP
CATEGORY-ASSISTED: NON-ASSISXED
CATEGORY-BAND: ALL
CATEGORY-POWER: HIGH
CATEGORY-MODE: SSB
CATEGORY-STATION: FIXED
CATEGORY-TRANSMITTER:
CLAIMED-SCORE: 5212982
CLUB: Yankee Clipper Contest Club
CONTEST: CQ-WW-SSB
CREATED-BY: WriteLog V10.90A
NAME: Randy Thompson
```

# Penalties for Logging Errors



- Duplicate contacts or Incorrect exchange
  - Removed, no penalty
- Call sign errors or Not-In-Log (NIL)
  - Removed + 2x the QSO point value for that contact
- Multi-operator band change errors
  - Removed, no penalty

# Log Checking Notes



- QSOs must match within a time window (+/-30 minutes)
  - No match = Not In Log
  - Please check the time on your logging computer!
  - Log every QSO you make including dupes!
- Exchange information will be checked
  - Use extra attention when working USA stations



# Log Checking Report



- All entrants in CQ WW will be sent a log checking report
- LCR shows
  - How score and penalties were calculated
  - Lists all errors detected
  - Shows all multipliers counted
  - List of how other stations made mistakes when working you

Contest: 2013 CQ WW DX SSB CONTEST  
Call: K5ZD  
Category: Single Op All Band High Power  
Overlay: Classic



Thank you for submitting a log in the 2013 CQ WW DX SSB Contest.

Your log checking report is below. We believe it is helpful for participants to receive information on how their log was scored. In addition to being fun, contesting helps us practice and develop our skills.

Explanation of the report sections:

\*\*\*\*\* Summary \*\*\*\*\*

3144 Claimed QSO before checking (does not include duplicates)  
3133 Final QSO after checking reductions

9114 Claimed QSO points  
9021 Final QSO points

465 Claimed countries  
464 Final countries

152 Claimed zones  
151 Final zones

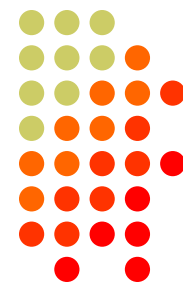
617 Claimed mults  
615 Final mults

5623338 Claimed score  
5547915 Final score

$$\text{Error rate} = \frac{\text{Errors}}{\text{Claimed QSOs} - \text{Dupes}}$$

1.3% Score reduction  
0.3% Error Rate based on claimed and final qso counts  
5 (0.2%) calls copied incorrectly  
0 (0.0%) exchanges copied incorrectly  
0 (0.0%) band change violations  
6 (0.2%) not in log  
15 (0.5%) duplicates (Removed without penalty)  
1 (0.0%) calls unique to this log only (not removed)

# How We Calculated Your Score



\*\*\*\*\* Results By Band \*\*\*\*\*

	Band	QSO	QPts	Zone	Cty	Mult		
Claimed	160M	44	110	12	24	36		
Final	160M	44	110	12	24	36		
Claimed	80M	153	425	17	57	74		
Final	80M	153	425	17	57	74		
Claimed	40M	200	555	25	71	96		
Final	40M	198	540	25	71	96		
Claimed	20M	582	1695	33	102	135		
Final	20M	579	1671	33	102	135		
Claimed	15M	880	2547	33	106	139		
Final	15M	877	2520	33	106	139		
Claimed	10M	1285	3782	32	105	137		
Final	10M	1282	3755	31	104	135		
Claimed	All	3144	9114	152	465	617	Score	5623338
Final	All	3133	9021	151	464	615	Score	5547915



## Your Errors

\*\*\*\*\* Not In Log \*\*\*\*\*

7153	PH	2013-10-26	1018	K5ZD	5	T46A	8
21303	PH	2013-10-26	1114	K5ZD	5	ES9C	15
21417	PH	2013-10-26	2148	K5ZD	5	AH0BT	27
14224	PH	2013-10-27	1103	K5ZD	5	2E0ZAZ	14
21313	PH	2013-10-27	1819	K5ZD	5	ED1T	14
14216	PH	2013-10-27	2232	K5ZD	5	VE7XF	3

\*\*\*\*\* Incorrectly copied \*\*\*\*\*

14181	PH	2013-10-26	0257	K5ZD	5	JA1YBA	25	correct	JA1YPA
7192	PH	2013-10-26	0746	K5ZD	5	IK2ODM	15	correct	IZ2ODM
28378	PH	2013-10-26	1314	K5ZD	5	9A5SZ/P	15	correct	9A1SZ/P
28560	PH	2013-10-26	1807	K5ZD	5	EB6AVK	14	correct	EB6AOK
28323	PH	2013-10-27	1241	K5ZD	5	LY4BHB	15	correct	LY2BHB

\*\*\*\*\* Unique Calls Worked (not removed) \*\*\*\*\*

14227	PH	2013-10-27	1725	K5ZD	5	IZ5TJI	15
-------	----	------------	------	------	---	--------	----

\*\*\*\*\* Lost Multipliers \*\*\*\*\*

28378	PH	2013-10-26	1314	K5ZD	5	9A5SZ/P	15	correct	9A1SZ/P	-C
-------	----	------------	------	------	---	---------	----	---------	---------	----

\*\*\*\*\* Multipliers by band \*\*\*\*\*

160M multiplier total 36

9A	C6	CN	CU	D4	DL	EI	ES	F	G
GM	HA	HK	K	KP2	OE	OH0	OK	PJ2	SP
TI	UR	VE	VP9						

2 3 4 5 7 8 9 14 15 16 33 35

80M multiplier total 74

5B	6Y	8P	9A	CM	CN	CT	CT3	CU	D4
DL	E7	EA	EA8	EI	ES	EU	F	G	GI
GM	HA	HI	HK	I	IG9	IT9	K	KH6	KL
KP4	LA	LY	LZ	OK	OM	ON	OZ	PA	PJ2
PJ4	S5	SM	SP	TF	TI	UA	UA2	UR	V2
VE	VP2M	VP5	VP9	XE	YU	YV			

1 2 3 4 5 6 7 8 9 14 15 16 20 31 33 35 40

## Uniques FYI

## Multipliers



# Mistakes Made By Others

- Study the errors that others make when working you

## \*\*\*\*\* Stations Copying Your Exchange Incorrectly\*\*\*\*\*

14341	PH	2013-10-26	0027	NP2N	8	K5ZD	4	should be 5
3500	PH	2013-10-26	0602	KP4KE	8	K5ZD	4	should be 5
7000	PH	2013-10-26	1016	JA8WKE	25	K5ZD	4	should be 5
14000	PH	2013-10-26	1028	OL9R	15	K5ZD	14	should be 5
28000	PH	2013-10-26	1209	EI4GNB	14	K5ZD	4	should be 5
28378	PH	2013-10-26	1209	OZ5HP	14	K5ZD	4	should be 5
28000	PH	2013-10-26	1212	EI3KE	14	K5ZD	4	should be 5
28000	PH	2013-10-26	1256	DJ4JF	14	K5ZD	4	should be 5
28000	PH	2013-10-26	1342	K1VOI	5	K5ZD	4	should be 5
28352	PH	2013-10-26	1350	HA3HX	15	K5ZD	4	should be 5
28000	PH	2013-10-26	1350	EA1GQ	14	K5ZD	4	should be 5
28453	PH	2013-10-26	1748	DJ7HH	14	K5ZD	4	should be 5
28000	PH	2013-10-26	1755	F5RVO	14	K5ZD	11	should be 5
21322	PH	2013-10-26	1855	5X1NH	37	K5ZD	4	should be 5
21322	PH	2013-10-26	1906	DL0WW	14	K5ZD	4	should be 5
21000	PH	2013-10-26	1914	EI4GNB	14	K5ZD	4	should be 5
21000	PH	2013-10-26	1920	EI9GWB	14	K5ZD	4	should be 5
21000	PH	2013-10-26	1943	EA4GHB	14	K5ZD	4	should be 5
28000	PH	2013-10-26	2102	NP3CW	8	K5ZD	4	should be 5
14000	PH	2013-10-27	0253	LA8UHA	14	K5ZD	4	should be 5
21000	PH	2013-10-27	1125	LA8UHA	14	K5ZD	4	should be 5
28323	PH	2013-10-27	1240	UA3LIU	16	K5ZD	4	should be 5
28000	PH	2013-10-27	1244	UX7FC	16	K5ZD	4	should be 5
28000	PH	2013-10-27	1254	OK1DKR	15	K5ZD	4	should be 5
28322	PH	2013-10-27	1256	M0RBE	14	K5ZD	4	should be 5
28322	PH	2013-10-27	1258	UX0ZAB	16	K5ZD	4	should be 5
28000	PH	2013-10-27	1301	LY2OU	15	K5ZD	4	should be 5
28500	PH	2013-10-27	1303	UA3DDA	16	K5ZD	4	should be 5
28000	PH	2013-10-27	1410	MZ8A	14	K5ZD	4	should be 5
28000	PH	2013-10-27	1415	G4FFN	14	K5ZD	4	should be 5
14000	PH	2013-10-27	1743	EW8OM	16	K5ZD	4	should be 5

## \*\*\*\*\* Stations Copying K5ZD Incorrectly \*\*\*\*\*

14252	PH	2013-10-26	0005	PR5C	11	K4ZD	5
14000	PH	2013-10-26	0104	HI3CC	8	K5JD	5
7212	PH	2013-10-26	0126	A71BX	21	K5KD	4
7207	PH	2013-10-26	0139	EA5RCI	14	K5LD	4
7180	PH	2013-10-26	0146	RN3F	16	OK5ZD	15
3796	PH	2013-10-26	0516	SN2B	15	K5KD	4
7192	PH	2013-10-26	0747	PR5D	11	K9ZD	5
21000	PH	2013-10-26	1103	UA9SUV	16	K9ZD	5
21000	PH	2013-10-26	1127	SP9BMH	15	K9ZD	4
28000	PH	2013-10-26	1201	IR6D	15	K4ZD	5
28378	PH	2013-10-26	1222	PA8F	14	KW5ZD	5
21352	PH	2013-10-26	1955	ED5T	14	K5ZU	5
21204	PH	2013-10-26	2006	PI4M	14	K4ZD	5
21235	PH	2013-10-27	1151	OG3P	15	K5CD	5
21000	PH	2013-10-27	1155	SP9SDR	15	K1ZD	5
21366	PH	2013-10-27	1228	EC2DX	14	K5CD	4
28323	PH	2013-10-27	1251	RA6GW	16	K9ZD	5
28000	PH	2013-10-27	1304	DJ4JF	14	K9ZD	5
28000	PH	2013-10-27	1333	R3ZV	16	K9ZD	5
28200	PH	2013-10-27	1506	OM3TLE	15	K1ZD	5
14180	PH	2013-10-27	1529	YR8D	20	K5ZT	4
28000	PH	2013-10-27	1858	LU8YE	13	K5ZW	4

# Summary



- Have a goal and a plan
- Understand the scoring
- Expand your callsign vocabulary
- B.I.C.
- Submit log
- Study your LCR
- Have fun!

# World Wide Radio Operators Foundation



- Non-profit corporation focused on support of radio contesting
- Developed contester's code of ethics
- WWROF funds
  - CQWW infrastructure including the robot, web site, log checking software/hardware
  - Webinar series
  - Other projects that support contesting
- Learn more and donate at [www.WWROF.org](http://www.WWROF.org)



# Questions?



Hour 43 – The “look”

