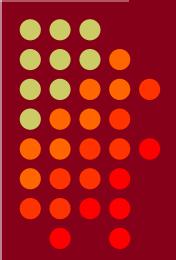
Contesting 101 Operating

Doug Grant K1DG



• CTU • CONTEST UNIVERSITY



The reason for this talk

- Many talks about station building/improving
- Operating skills seem to be declining
- Some in the audience are new here
- Many in the audience can carry the message
- You are welcome to re-use this talk at your local radio club(s)





The Object of the Game



- Contact as many other stations as possible...
- …in as many other states/countries/zones…
- ...in a given time period (anywhere from 30 minutes to 48 hours)
- Contacts only count if they are accurately executed (callsign and "exchange" logged correctly)





During the contest - A Contest QSO

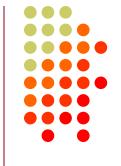


- "CQ Contest, Kilo One Delta Golf"
 - K1DG, using standard phonetics is soliciting contacts
- "Whiskey One Alfa Whiskey"
 - W1AW is calling K1DG
- "W1AW, 59 1234 New Hampshire"
 - K1DG is giving W1AW a signal report, serial number, and his state
- "Thanks 59 001 Connecticut"
 - W1AW confirms he copied K1DG's exchange, then gives his exchange
- "Thanks...K 1 Delta Golf, Contest"
 - K1DG confirms he has received W1AW's exchange, announces he is ready for the next caller





A More Realistic Contest QSO



- "CQ Contest, Kilo One Delta Golf"
 - K1DG, using standard phonetics, is soliciting contacts
- "Whiskey One GLB#FY%ST%KQ@WX&ZSK"
 - A W1 and a bunch of other guys are calling K1DG
- "W1something, 59 1234 New Hampshire"
 - K1DG only heard the W1 part of the callsign, and is giving that station a signal report, serial number, and his state
- "K1DG, my call is W1 Alfa Whiskey...QSL, 59 001 Connecticut"
 - W1AW repeats his call, confirms he has copied K1DG's exchange, then gives his exchange
- "W1AW...thanks...K 1 Delta Golf, Contest"
 - K1DG confirms he has the callsign correct now, has received W1AW's exchange, announces he is ready for the next caller







A Very Bad Contest QSO



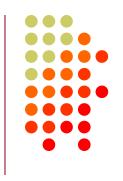
- "CQ Contest, Kilo One Delta Golf"
 - K1DG, using standard phonetics is soliciting contacts
- "Whiskey One PQMN&XW%PR\$YO@WI#LJDHFKSLJ"
 - A W1 and some other stations are calling K1DG
- "W1something, 59 1234 New Hampshire"
 - K1DG only heard the W1 part of the callsign, and is giving that station a report, serial number, and his state
- "K1DG, this is KC4XYZ Kentucky Cocacola 4 X-Xray Y-Yellerbelly Z-Zinjanthropus - KC4XYZ - did you come back to me?"

What part of this is wrong?





How do you make more QSOs?



- Call CQ if you are loud enough and conditions permit it
- Search and pounce if you cannot CQ
- Say as little as possible, but not less

Keep moving





Two basic operating modes

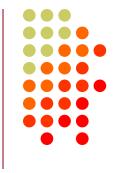


- "Search and pounce" (or: "Click and call")
 - You find a station that is calling CQ or has a pileup
 - You call him
 - He answers you, you exchange reports
 - You log it
 - Rinse, repeat
- "Running" (or: "Park and Bark")
 - You call CQ
 - Other stations answer you





How to Search and Pounce



- You tune in a station
 - (maybe on a "partial kHz"...that is OK!)
 - If you click a spot, you may have to adjust tuning a bit
 - Make sure it is not a duplicate
- Call once, <u>with phonetics</u>
- Possible outcomes:
 - 1. He answers you and gives a report
 - 2. He answers someone else
 - 3. He answers with a partial call (not yours)
 - 4. He answers with a partial call (yours)
 - 5. he just calls CQ again







- He answers you with your call correct and gives a report
- You respond with your report no more, no less
 - DO NOT SAY "PLEASE COPY"!
 - Would you want to hear that a few thousand times on a weekend?
- Do not repeat his call or report back to him unless you did not copy it (he already knows what he said)
- Make sure he got your report
- Log the QSO, move on to the next station
 ভেদ্বাত



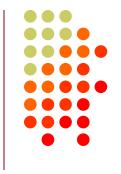




- He clearly answers someone else
 - Unlike FT8, if you transmit, you will interfere with the station he is working, so stand by!
- Wait until he finishes the QSO, then call again (once, with phonetics)
 - If many stations are calling, figure out his timing
- Repeat until logged...or move on
 - "Know when to hold 'em, know when to fold 'em"
 - If he is answering stations in another region, move on...







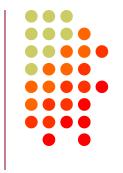
 He responds to a partial call (not matching anything in your call)

Refer to Case 2 – Stand by!

If you call again, you will slow everybody down



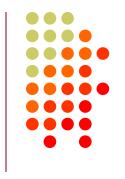




- He answers a partial call matching yours
 - If he also gives a report, he thinks he will copy your next transmission OK
 - Give your full call and report
 - If he only says the partial call, he is not sure he will get it
 - Give your call again with phonetics
 - Repeat until he copies your call and gives your report
 - Once he has your call, don't repeat it he will think you are correcting him!







- He just calls CQ again
 - Try a few times he may have QRM or QRN that will go away
 - If other stations are also calling and not getting through, the problem is on his end – move on
 - Check your wattmeter, antenna, "Split", etc.
- After a few unsuccessful tries, move on





Efficient S&P Operating

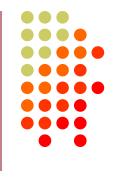
- Don't get stuck on one station
 - Exception: ATNO for you
- Keep moving

- Make sure you have the call correct
 - Many bad spots, especially late in the contest
 - Logging a bad callsign makes your score go down





Limits to S&P operating



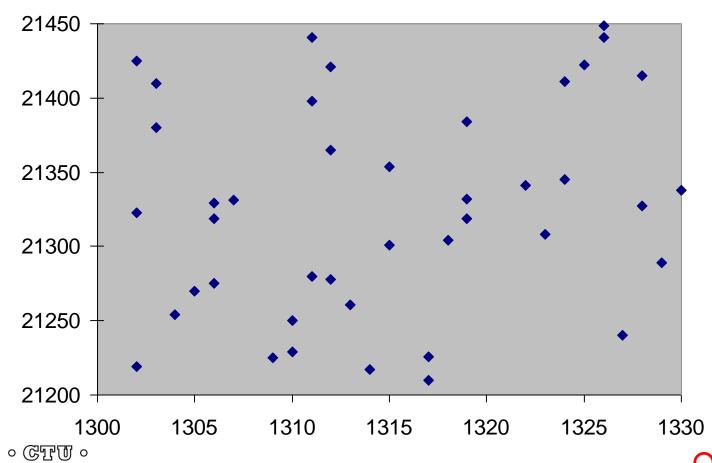
- 15M SSB example
 - Stations spaced 2 kHz apart
 - 21200 21450: 250 kHz; 125 stations
 - There are always more stations S&Ping than CQing
- If you are loud enough, that is about 1-2 hours
- Then what?





A good rate in S&P mode ~40 QSOs in 30 minutes

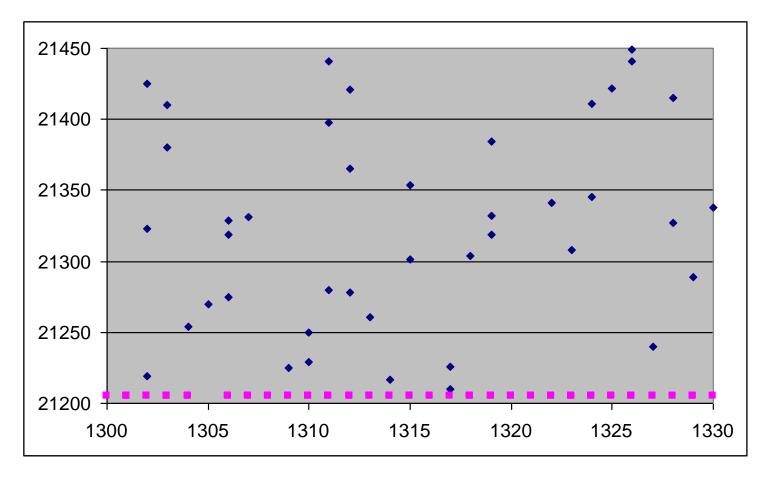






A better rate running (83 Qs)









Run vs. S&P 15M, 2005-ish, Two W1 Ops



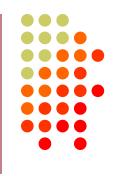
Hour	Runner QSOs	S&P QSOs
D1-1300Z	166	83
D1-1400Z	132	81
D1-1500Z	120	49
D1-1600Z	124	42
D1-1700Z	136	17







05-Mar-22	1350	348	21200	HA5PP	59 KW		3	
00 IVIAI ZZ	1000			_			_	
05-Mar-22	1350	349	21200	F1GRH	59 K		3	
05-Mar-22	1350	350	21200	OZ4MU	59 100	OZ	2 3	
05-Mar-22	1351	351	21200	PA1H	59 400		3	
05-Mar-22	1351	352	21200	PF1SCT	59 100		3	
05-Mar-22	1351	353	21200	DL9MDI	59 100		3	
05-Mar-22	1351	354	21200	G3ZAY	59 400		3	
05-Mar-22	1351	355	21200	DL1ATZ	59 500		3	
05-Mar-22	1351	356	21200	EA5N	59 500		3	
05-Mar-22	1351	357	21200	IT9SSI	59 500		3	
05-Mar-22	1352	358	21200	HB9CVE	59 K		3	
05-Mar-22	1352	359	21200	PA3ETM	59 400		3	
05-Mar-22	1352	360	21200	5Z4VJ	59 400	5Z	3	

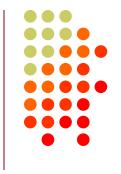








A pretty ridiculous run



- V47T first burst of Ws on 15M
 - "Where everybody knows your call"

 Two ops listening to two receivers on different antennas pulling out calls using WinTest partner mode

Sorry about the audio quality...





10 QSOs in one minute

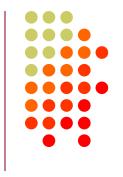
@ @ @	

2015 V47T	59 8	NJ2F	59 05
2015 V47T	59 8	N1CC	59 04
2015 V47T	59 8	KOMZN	59 04
2016 V47T	59 8	N4RA	59 05
2016 V47T	59 8	W1GD	59 05
2016 V47T	59 8	W3MF	59 05
2016 V47T	59 8	AB0RX	59 04
2016 V47T	59 8	K1JB	59 05
2016 V47T	59 8	K3OQ	59 05
2016 V47T	59 8	W3GM	59 05
2016 V47T	59 8	K3PH	59 05
2016 V47T	59 8	WD8S	59 04
2016 V47T	59 8	N7YK	59 03
2017 V47T	59 8	WM7D	59 03
2017 V47T 。 © T U 。	59 8	VA3OB	59 04





How to Run stations



- Find a clear frequency
 - Listen a little to make sure there is not a loud guy in your skip zone (you don't want QRM on the other side)
- Ask if frequency is in use

Keep CQs short, use phonetics





If you get a caller...

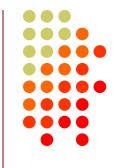


- Three possibilities:
 - You get the whole call and it is in the "Check Partial" window
 - You get a partial call due to QRM from the side
 - You get a partial call due to QRM from too many callers





You get the whole call and it is in the "Check Partial" window



- Answer him with the same phonetics he used, give exchange once
 - If really loud and native/fluent English speaker, skip the phonetics
- When you get his exchange, just say "thanks" and sign your call (maybe with "QRZ?")
- DO NOT repeat his call or exchange back to him (why?)
- If you don't get the exchange ask for a repeat. If you're not sure about something, ask for that part again.
 - Your score will go down if you get it wrong





You get a partial call due to QRM from the side

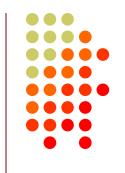


- Decide if you think you'll get it next time
 - Loud caller, mostly-clear frequency, respond with the partial call and report
 - Weaker caller, not-so-clear frequency, just respond to the partial call;
 only give the exchange when you know you have the call OK
- If the caller is strong and you need a lot of repeats, it takes too long, you should QSY
- Repeats are rate killers.
- If you get the missing part of the call on the second (or third) try, you
 only need to repeat the corrected part





You get a partial call due to QRM from too many callers

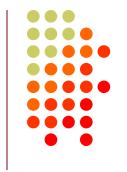


- Come back to the partial and stick with it until you complete it or it becomes hopeless
- End the QSO with just "thanks" the other caller(s) already know who you are and you don't want more callers!
- Pileups are rate killers!
- If you have a big pileup, you are talking too slow or saying too much





If you don't get a caller



- Try, try again. And again.
- After a few unsuccessful tries, either you are on the wrong band or a bad frequency.
- Move. Or go back to S&P.

Rate!





Field Day



- Not really a contest, but the higher scores are listed first
- "Gateway drug" of radiosport
- Best way to teach new ops the right way to operate

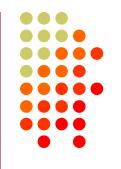








Don't say more than necessary, and NEVER EVER say...



- "Please copy"
- "QSL the 59 1234 New Hampshire, my report to you is..."
- "Who is your QSL manager?"
- "Do you know my friend Charlie up there in New Hampshire?"

Imagine you are the guy on the other end, listening to "Please Copy" 5000 times in a weekend!



