

Contesting

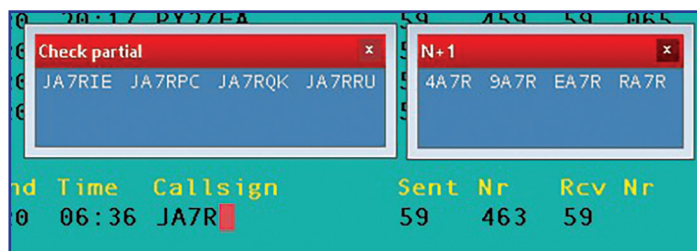


FIGURE 1: DXLog, Win-Test SCP and N+1.

Accurate logging is part of the foundation of contesting success. Experience has a big role, but being organised, knowing how to avoid mistakes and familiarisation with the tools available in your contest software can contribute enormously to logging accuracy and your score.

UBN reports and common errors

Penalties for logging errors vary by contest – in some you simply lose the QSO points, in others you receive a points deduction. Post-contest, most contest organisers will send each participant a Log Check (aka 'UBN') report. Among other things, this report will detail errors by you (or your team) and the points deducted. Making an error on a multiplier QSO can be significant, so the score reduction following application of penalties is often much greater than the lost QSO points. Some log check reports also give a comparison to the average error rate across all participants. This is useful as a benchmark.

As you improve individually, or as a team, look at the errors carefully – when were they made? What is their nature? They are often caused by simple typing errors, or misheard exchanges – but how can these be avoided? The best approach is to error-check a log entry *as you do it*. Easy errors to check include:

- Invalid or 'impossible' callsigns
- Serial number out of sequence with previous QSO(s) with the same station
- Different exchange on previous QSO with the same station when using fixed exchanges
- Very similar callsign previously logged in the contest – one of them may be 'busted'
- Missing /P on a callsign, having previously worked it when it was /P
- QRA square – sanity check the direction and signal strength

The risk of such errors can be reduced by:

- Knowing when errors may occur and being more prepared or careful
- Being more alert, less tired
- Practice and experience – familiarisation with callsign syntax, QRA locator squares, participating callsigns etc
- Checking as you log and using software tools designed to improve accuracy

Callsign accuracy

Popular contest loggers (DXLog [1], N1MM+ [2], Win-Test [3] etc) contain tools to assist with checking log entries as you do them – using them on every single QSO is the aim. Let's assume you are running (calling CQ) and a station comes back to you.

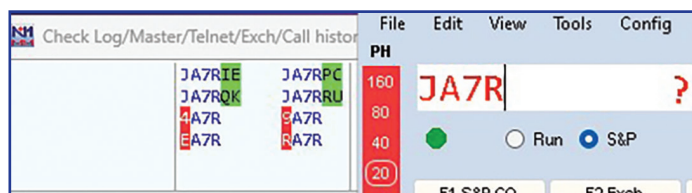


FIGURE 2: N1MM+ 'Check Log' window.

Check 1: Is the callsign valid and complete?

Some software has a callsign syntax check but there are often special event or DXpedition callsigns that defy normal rules. Familiarisation with callsign prefixes and formats through regular operating really helps. Think about the likelihood of the callsign – a P5 prefix (North Korea) is valid, but most unlikely. Similarly, DX prefixes are unlikely on the LF bands during daylight hours.

If you are unsure about the callsign, ask for a repeat. Remember though that the other station usually has no interest in you getting their callsign correct – they will generally not lose points if you make an error, so it may be more reassuring to have it confirmed before handing over the exchange.

Check 2: Is the callsign a duplicate?

There are no lost points for logging a 'dupe' – always work them! The other station may not have correctly logged you previously so you will not appear as a duplicate to them. If you refuse to work them, they may (quite reasonably) respond by asking for the previous QSO serial number – it will take you longer to find the information and convey it than it would to work them again. Finally, if you were not in their log the first time around then you may be losing points if you don't work them again, particularly if they are a multiplier. Always work them!

Check 3: Is the callsign a 'known' callsign?

Experienced operators build a 'database in their head' of frequently used contest callsigns. The good news is that such a database exists for real.

Super Check Partial (SCP) [4] (aka 'Master File') is a method of matching a typed callsign to a database of known contesting calls. The SCP file is common to all contesting programs. It provides a regularly updated list of active contest callsigns used over the preceding 24 months. The data comes from Cabrillo logs contributed by contesters when submitting contest entries – it is good practice to contribute if you are prompted by your software to do so.

SCP N+1 is a useful extension to the SCP function in your contesting software that will show all callsigns in the SCP database that match against your logged entry by either removing a character, adding a character, or swapping two characters of the entered callsign. It is most useful when conditions are poor and only a partial callsign is being received.

As you type a callsign, you will start getting matches against the SCP file – see Figure 1 showing SCP and SCP N+1 in DXLog (similar to Win-Test) and Figure 2 showing the 'Check Log' window in N1MM+. In both cases, a partial callsign 'JA7R' has been entered in the logging line. The two programs present the information differently, but the outcome is the same.

This check against the SCP/Master File should always be done whenever you start logging a callsign. If there is a full match against a single callsign, then you have logged a known contest station. If not, then question yourself – how confident are you that you logged it correctly? Often when you have a partial call and can see matches in the SCP, the received callsign starts to make more sense. If unsure of the callsign, ask for a repeat or, if conditions

Check multipliers					
57	80	04:41	K5ZD	154	
66	40	05:22	K5ZD	208	
158	20	12:42	K5ZD	266	
327	15	11:45	K5ZD	748	
10					
K: United States					

FIGURE 3: Checking previous Exchanges in DXLog/Win-Test.

are difficult and you can't get the full callsign, assess the risk of logging a callsign suggested by the SCP database.

Confidence when logging an uncertain callsign should increase if it has been previously worked on a different band ie the station is known to be active in this contest. For this reason, contesting software also highlights matching callsigns previously worked. N1MM+ displays these in the 'Check Log' column. DXLog and Win-Test will present a callsign in green in the SCP and N+1 windows if it has been worked on another band.

Logging a callsign that is one letter different from a previously logged callsign should alert you to a potential error. A common error on Field Day is to omit /P from a callsign while logging. This can be checked against previously logged occurrences of the same callsign. Act on it at the time or make a note to act later. Popular contest software provides a function to make a note against a QSO (Alt-N in Win-Test and DXLog, Ctrl-N in N1MM+).

Exchange accuracy

Contest exchanges often consist of an RS(T) report plus some other information depending on the contest rules. Some contests have fixed exchanges eg QRA locator, district code, DXCC prefix, age, membership number, ITU or CQ zone. Other contests have differing exchanges on each QSO, usually serial numbers. Some contests (eg IOTA and RSGB VHF contests) have a mixture of fixed and variable exchanges.

Checking serial numbers: After an initial QSO with a station, it's to be expected that the serial number will increase on subsequent contacts. The only exception here is contests where multi-operator teams give out 'per band' serial numbers, so check the rules. In DXLog/Win-Test, previous exchanges can be seen in the 'Check Multipliers window' (see Figure 3) where the sent exchange is on the left and the received exchange to the right. In N1MM+, previous exchanges can be seen at the bottom of the 'Log' window (see Figure 4).

Checking fixed exchanges: Popular logging software will auto-fill known exchanges from an in-built, regularly updated database. In DXLog/Win-Test this is known as the 'Exchange Guessing File'; in N1MM+ it is the 'Call History File'. Always check the values provided by these files while logging as they are not always correct. Stations can operate from different QTHs, so QRA locator squares, postcodes, IOTA references and CQ zones can change with them between contests. Always trust your ears and double check the auto-filling.

Multi-operator environments

Teams will always attract operators of varying experience and abilities. Working in a team is a great way to improve skills, share knowledge and have someone else sanity check the log as it's being populated. When the UBN report is received, there is often an awkwardness about attributing errors to individual operators, however nothing will ever be learnt if errors are not reviewed. It's important to avoid finger-pointing and blame in these scenarios. The ethos should be one of continual improvement both individually and as a team. Natural testers are self-analytical and self-critical, seeing errors as an opportunity to improve rather than an unfortunate mishap. For this reason, I would always recommend using the operator 'logon' function on the logging software, so QSOs can be attributed to the operator (type 'OPON' into DXLog or Win-Test, Ctrl-O in N1MM+).

29-07	20:46	SM7CIL	7015.60	599	599	CW	559	384	EU-037
29-07	12:08	SM7CIL	14028.50	599	599	CW	17	5	EU-037
30-07	07:20	SM7CIL	21013.20	599	599	CW	1146	503	EU-037
30-07	07:49	SM7CIL	28018.80	599	599	CW	1187	515	EU-037

3509.00 CW Manual Radio 1		Op: G4IRN			
File	Edit	View	Tools	Config	Window
CW	PH		Snt	SentNr	Rcv
160	160	SM7CIL	✓ 599	1439	599
80	80				
					IOTA
					EU-037

FIGURE 4: Checking previous exchanges in N1MM+.

The human mind copes better with predictability and steps can be taken to reduce errors as follows...

Operating rota

In 24- or 48-hour team events, people will generally want to eat, rest and attend to other matters as well as operate. Team performance will improve if operating periods are known up-front by each team-member – rest periods and other commitments can be planned. Having a rota is also useful to make sure everyone has a fair crack at operating and, furthermore, you may wish to allocate certain operators to specific bands or operating periods eg a 160m specialist around sunrise on that band. While matching skills to roles, also be aware of development opportunities for improvers.

Operator changeover

This is often a source of errors – a new person takes over the operating position and while changing headset, rearranging the desk, adjusting the key (on CW), clearing the previous operator's litter and still waking up after a snooze... errors are made. An approach by some teams is to have the incoming operator listen to the pile-up in tandem for a few minutes prior to changeover. This new operator can then arrange the desktop as required. It also helps if the outgoing operator clears the desk in advance!

Contest adjudication

Having submitted your contest log for adjudication, the organisers will use bespoke software to compare all the logs and produce the scores and error reports for each entrant. Some contest adjudicators publish their approach to adjudication. In RSGB HF contests [5, 6], high importance is placed on accuracy. Errors will be penalised so using techniques discussed in this article will certainly help increase your contest score.

Reminder: to increase your logging accuracy, sanity check everything you log. As you log a contact, use your experience and contest software's features to check callsign validity/likelihood, previous QSOs with the same station, previous exchange(s), exchange validity/likelihood and similar callsigns logged to correct your errors as you find them. Your accuracy will increase and your scores will follow!

References

- [1] DXLog Contest Software: www.dxlog.net/
- [2] N1MM+ Contest Software: n1mmwp.hamdocs.com/
- [3] Win-Test Contest Software: www.win-test.com/
- [4] Super Check Partial Database for Contesting: supercheckpartial.com/
- [5] RSGB HF Contest Adjudication: tinyurl.com/HF-SandA
- [6] RSGB HF Contest Adjudication Principles: tinyurl.com/HFC-APS

John Warburton, G4IRN
g4irn@dxdx.co.uk