CW CHASING TIPS FOR NEWCOMERS

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Roy Clayton, G4SSH has been using CW for more than 50 years and was Chief Morse Examiner for the UK from 1990-1999. He is one of the most active and successful chasers in the SOTA-community.
- Dzianis, DD1LD -

I have been asked to publish some chasing tips to assist the many stations who are now becoming confident and increasing their speed using CW, but who are hesitant about attempting to crack the pile-ups, especially on 7032 KHz. I will not tell you what to do, but I will explain the methods that work for me (and have allowed me to become a super-sloth on CW) and leave it up to you to decide if these will work for you.

Successful chasing depends on three elements:- Equipment, Location and the skill and experience of the chaser. Improving your equipment is expensive, changing your location is not really an option, so the cheapest choice, by far, is to improve the skill of operator.

TIMING

Timing is everything, and the No.1 key to success in a CW pile up. You must ensure that you are never sending at the same time as the activator. If you are, then the activator cannot hear you and you will be causing QRM to other stations. You will be amazed at the number of stations who do not understand this fundamental rule. Your aim is to transmit only when the activator is listening. Sadly there are some regular "Alligators" (all mouth and no ears) amongst the regular chasers. One station in particular will call blindly over the top of an existing QSO.

The best way to operate CW is to use full break-in so that you can immediately stop sending if the activator starts sending. Next listen, listen and listen again before calling. You MUST determine the closing procedure being used. Activators are creatures of habit and with experience you will recognise their idiosyncrasies. For example:-

LX1NO/p
Norby is a first class super-slick operator who always maximises his contacts by using contest style procedure. Sota Refs will be sent on initial CQ and then at intervals only:-

CQ SOTA DE DL/LX1NO/p
G4SSH
G4SSH 579
R 559 TU
TU
In this case send your call immediately after Norby sends TU (often sent as an "X")

DF2GN/p
Klaus always closes a contact by sending TU DE DF2GN/P K

In this instance you must wait until Klaus finishes his full call. Sending your call after the TU will be a waste of time.

OK1CYC/p
Miro usually closes a contact by sending DE OK1CYC/P QRZ? So you must wait until after the QRZ? before transmitting.

Some French activators use DE F9ZZZ SOTA QRZ? K and other stations send the full SOTA reference before QRZ? If you do not wait for the last "K" or the final "?" then the first part of your callsign will not be heard.

It is important to realise that, as a new CW chaser, you will not manage to copy every activation that you can hear. Many SOTA activators use an FT-817 on internal batteries giving around 3w output, so signals from distant European countries are going to be very weak with QSB at times. With a single vertical antenna I am rarely able to copy QRP activators from HA, OK or HB9 during a couple of hours either side of noon and some stations in France and all of the UK are inside my skip distance on 40m. This is a fact of life and knowing my limitations allows me to concentrate on SOTA stations with whom I have a reasonable chance of success.

A typical SOTA activation goes through four distinct stages.
1. The activator initially calls CQ SOTA.
2. A few minutes later the activator is spotted
3. A pile up develops as many chasers react to the spot
4. The pile up slowly decreases until all chasers are worked and the activator goes QSY or QRT.

The best time to work the activator is at stage 1, when the frequency is clear, but this involves keeping a constant monitoring watch and is not an option for many chasers. If you have an audio alert you might also just get in and out at stage 2 before the majority arrive. With the pile-up's generated by experienced activators giving strong signals such as the "Big Three" LX1NO, DF2GN and DH8DX, then working the station at this stage this can save you 30 minutes of calling..

Stage 3 is the most difficult, when dozens of callers are trying to make the contact and it sounds like an undisciplined rabble, with stations calling over the activator and everyone trying to be the last tail-ender calling. There is no need to panic at this stage, remember that there are no bonus points for being first in the log.

Newcomers should assess the stage of the activation at which they first hear the activator. If you have a typical 100w to a dipole antenna station, (or less) then you are most unlikely to break a pile up of dozens of stations from across Europe using high power and beam antennas.

This is where a knowledge of the activator and their operating habits is invaluable (I will return to this subject in a later newsletter). For example, if it is DF2GN or DH8DX calling then you might as well go and have a cup of tea because they will call until the frequency is clear and then QSY to a different band and then later return to 40m for final calls, so you are 99% certain to work them with ease in 20 or 30 minutes time. Some French activators will often remain on a summit for up to 3 hours.

BANDWIDTH

Some CW ops feel that a very narrow filter is essential for CW working, others think they are expensive and a waste of money. It is personal choice. However, whatever your view you must not monitor or search with your CW filter switched in. I never monitor or search for SOTA stations at less than 2 KHz, which can be configured to 4 KHz by using the 2nd receiver in my rig. This means, in effect, that I can monitor 7030-7034 KHz constantly. I will switch to 2 KHz to work an activator because I have more than 50 years experience of reading CW and know that the best filter is between my ears. For very weak QRP stations I will use the DSP or APF control but still keep the bandwidth at 2 KHz because I need the background noise as a fixed base level with which to compare the just-above-noise level whisper of a QRP CW signal and I wish to be aware of the activity of the other chasers. However, if you prefer a filter then bring this into use once you have identified a target activator. However you must be aware that if, for example, you have a 2-pont activator isolated on a very narrow filter then you are not going to hear another activator worth 10 points calling CQ SOTA one KHz away, which often happens at weekends.

EXPERIENCE

This will come with time and you will be able to assess a situation within a few seconds after switch on. A knowledge of the callsigns of your fellow chasers using the current mode is invaluable and can often be the first indication of an activator. Single calls from any of the leading CW chasers such as GM4FAM, HB9AGH, DL7RAG, G4OBK, GW0DSP or myself are a dead give-away that there is an activation on the spot and you can start searching around the frequency.

I think that it goes without saying that the main aim of a chaser is to ensure that their callsign is correct in the activators log. Which is why I am always puzzled when a regular chaser from Germany sends his first call with the prefix D2. (which is Angola). This is always corrected to DL2.. on the second call. This puzzles me every time I hear it. Perhaps this is in his autokey? but surely he must hear the side tone? I suppose this is one way to crack the pile-up.

Become recognised by the regular activators

When you work an activator for the first time always give your name. This only needs to be done once. The reason for this is that there are many instances on CW when the activating station is weak and fading and other chasers are causing QRM. Under these conditions your name coming back can be the one confirmation that the activator is calling you. I often hear …339…OY 73. That is all I need to confirm that the activator is replying to me (Roy). I am fortunate in so much that my first name is not only short, but contains a lot of dashes, which always punch through QSB better than the fraction-of-a-second dot, which is often lost.

It is probably too late to change your callsign unless you are about to upgrade, however, if so then choose a callsign that can be instantly remembered; this means that an activator hearing just part of your callsign will reply. I am doubly fortunate that suffix of my callsign is all dots because a single SSH will bring an instant reply from

the activator. I could probably send 10 dots and still receive a reply. Other calls registered to me are 2E0OOO, G0OOO and M0O; my daughter is licenced as M5OOO and my son G4UUU, all chosen for instant recognition. Once heard, these calls are never forgotten and I estimate that they are worth 2 S-points in a pile-up.

Keep a profile list of all activators

This is the most important working aid that you can devise to increase the success rate of your station. Activators are creatures of habit and a knowledge of their individual working procedures, favourite frequencies and habits can give you a tremendous advantage when attempting to make contact.

Basically, you need a note of callsign, first name, usual working frequencies and any comments. This does not have to be extensive and can be just jottings in a notebook or on a single sheet of paper. I include any information about the rig, antenna, power, and input information from the QSL card when it arrives.

So how do I use this information? I make a list of any alerts posted for the day and by consulting my profile sheet make an assessment of which stations are likely to be audible. I am unlikely to make contact with stations in southern Europe with 2w output to a small antenna around noon, but other stations using 10-100w are going to be certain contacts, so, if possible I can plan to be around the shack at that time.

Another advantage is that I can immediately reply to an activator with their first name, which is not always given on the spots page and many stations use a shortened name on CW. I also know who will call on 7030 instead of 7032, who will call on 7118 KHz CW during a contest weekend, who will stay on a summit for at least 2 hours, who will make just enough contacts to qualify the summit then QSY, who will always commence an activation by calling on 10118 KHz, who has a chirpy Tx that drifts upwards, which OK station will usually be active in the late afternoons etc. When two or three stations are active together this allows me to prioritise the order in which to make contact. The list is also invaluable in event of a crash of SOTA Watch or your own computer.

As an example, on the 30th May Andre F5UKL/p was active on 7032 KHz on F/PO-171, but he was just a whisper to me. However, his alert said he would be active on “7, 10 and 14 CW” (no frequencies were given) , but with the info on my profile list I was able to monitor 10.123 KHz, where he called CQ SOTA shortly afterwards and I was able to spot him as active here for the benefit of other chasers.

It is also possible to identify an activator if you are struggling to read the callsign. All I need from a chaser is (for example) “TNX Milan” and I can narrow the possibilities down to one or two activators. Most regular chasers will have some of this information in their head but it is difficult to instantly recall these facts without notes.

One final tip for the month concerns signal reports

These are meant to be assessed by ear, not your S-meter, which are often “lazy”. This is compounded by modern rigs where the digital display actually displays an S-number. The majority of QRP SOTA signals I log never even move the S-meter needle off the stop, so if believed my eyes then most all my reports would be 519.

When attempting to make contact with a weak and fading activator always use the KISS principle (Keep It Simple, Stupid). Most stations could not care less about the actual report so long as this is received correctly for a valid contact. So in marginal conditions always double up on the figures. Reports of 229, 339, 559 (or 599) are the only SOTA reports I give. This doubles the chance of the activator receiving it correctly first time. I despair when I hear stations giving a “UR 329” report, which is a recipe for disaster when the correspondent asks for a repeat, which is swamped by the calling chasers.

CHASING WITHOUT SOTA-WATCH

Being in my seventies, I am very much a computer user, not a programmer. I can operate one sufficiently well to get by, but the computer revolution came too late for my generation and what lies beneath the cover is a total mystery to me. Setting up new hardware and loading software is left to my son, who lives in the next village, and is happy to come around to sort out my problems.

My difficulties started mid May, when my computer began to lock-up at intervals and these intervals gradually became shorter, in direct relationship to the temperature. My son diagnosed a corrupt hard disk and advised me to ensure that any essential programs were backed-up. As an enthusiastic amateur photographer I had around 1000 images on the computer, which were all backed-up CD’s, but I hastily copied all text files, e-mails, addresses and favourites.

The computer struggled on for a few days then crashed completely. I ruefully stared at the useless hunk of metal and mentally budgeted for a new one. Fortunately my son persuaded me that it could be brought back to life with a new hard disk, additional memory and an external hard drive as back-up, which were promptly ordered. Sure enough, he had me back up and running by the end of the month with a good-as-new computer at a fraction of the cost of a new machine. (I always knew that teenagers would grow up to be responsible citizens).

So how did I fare during the two weeks without access to SOTAWatch? As an enthusiastic chaser I was interested to see what difficulties (if any) this presented and how the lack of spots and alerts would affect my performance.

When I joined SOTA, a few years ago,, I decided that in order to keep chasing to reasonable proportions as a hobby, and fit around ordinary life, I would select a single mode only. As my favourite interest was CW, this was my obvious choice. In those days very few amateurs had broadband, so most chasers used a dial-up, pay-as-you go connection to the internet to download a list of alerts for the day and HF SOTA activations had to be found by searching the bands around the recognised QRP calling frequencies.

On HF CW the situation has not changed much and I could therefore ensure a 90% success rate by monitoring 7032 KHz with a wide bandwidth, with an occasional check on 10118 KHz. However, without spots and alerts I missed those activators who use Spotlite to announce the use of a remote CW frequency, such as 7118 or 18095 KHz, used during the WPX contest weekend. However, overall, the loss of SOTAwatch had only minor effect on my success rate. I missed the advantage of

being able to walk past the shack and glance at the screen to see if there is anyone active, as opposed to switching on the rig and checking for a pile-up, which is much more time-consuming.

My one major difficulty was the problem of identifying the SOTA references of weak and fading activators. Time after time I would work a station then wait for the reference, usually sent at intervals every half dozen QSO's, or so, only for this to be wiped out by the horde of chasers calling whilst the reference was being sent. I had to resort to a trip to the local library to access the SOTA spots history page to get the reference – and that produced quite a surprise, because I soon discovered that there were many activations which had been worked by a few dozen chasers, where not a single person had spotted the station.

One advantage of not having access to the spots page was that you are not aware of activations that you have missed !

So, to sum up, SOTA watch is a very valuable and remarkable aid to chasing which can save much time and effort, and on which we come to rely (with much credit to John GM4ZFZ). However, it is not a substitute for expertise and experience and it is quite possible, as a chaser, to manage without it, but at a cost of reduced efficiency. How much your performance will be degraded will depend very much on your personal experience.

73
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