SOTA CW BASICS

Golden Rule;
Send at the speed you can receive at.

If you send at 25 wpm the other guy is likely to send to you at 25 wpm. Send at 10 wpm and he will send at 10 wpm.

Starting a transmission
The accepted practice if you want to send a start signal is to send CT, that is -*-*-
For a basic bare bones SOTA QSO it isn't necessary because you won't start until the other station has gone into receiving mode.

Ending a transmission.
The minimum you must send is a "K' that is -*-
More experienced CW ops will often send "BK" which can be thought of a "Back to you"
The handbooks recommend sending AR K,   *-*-*   -*-

Essential Extra Morse characters
The underlining signifies no letter spacing between characters. * is a dot and − is a dash.
/   The oblique slash: DN -**-*
-    Or =   A dash or double dash: BT -***- frequently used instead of the oblique slash and often used as the CW equivalent of "um" or "er" a pause and space filler while thinking what to say next
?   Question mark: UD **--**
     Error: EEEEEEE ******* Doesn't really matter if you send only 6 dots or more than 7 dots as the other op will understand
A useful extra character.
.   Full stop AAA *-*-*-

Note that often a question mark **--** is also used instead of a QRZ (Who is calling or who is there?)

Some useful Hints from CW activators
Sending things twice or even three times is important as it allows the activator or chaser to be confident they got it right. From past experience asking a nervous CW station to send their call or report again usually ends in silence. Possibly they did not understand the request. On a similar note if a station sends an R of less than 5 then definitely send the report and call sign more than once. QSB and interference happens at the most inconvenient times.

Write a "cheat sheet", which has the SOTA summit reference, summit name, and any other relevant info such as National park name, WWFF reference etc, to avoid the mental blank or help answer a non SOTA station who calls expecting a chat.

If people want to make CW contacts during an activation and if time and timing permits why not do CW before UTC midnight and voice after. That way the CW chasers are rewarded for their efforts.

Example SOTA CW QSO Template
NOTE: each operator will have a slightly different approach but this is a good way to start.

Activator calls
CQ SOTA CQ SOTA DE VK3ZLP/P VK3ZLP/P on VK3/VC 123 VK3/VC 123   BK
Or optionally
CQ SOTA CQ SOTA DE VK3ZLP/P VK3ZLP/P K

The summit will have been announced on SOTAwatch but it is useful for the activator to send it at least occasionally when calling CQ. Although strictly speaking the summit should be sent as VK3 DN VC BT 123 it will usually be sent as VK3 BT VC 123. As long as the letters and numbers are sent and received that's what matters. The punctuation is nice but it's not a hanging offence to just use spaces and omit it when starting out.

Chaser calls activator
VK3ZLP/P de VK3AFW VK3AFW VK3AFW K

Activator replies with a report for the chaser
VK3AFW ur rst 579 579 579 DE VK3ZLP/P K

Note in this example the report is sent three times as the signal is not really really strong and the chaser will have more local noise and get a weaker signal from the activator.

Chaser confirms receipt of his report and gives one to activator
R R UR RST 559 559 de VK3AFW K

Activator acknowledges report and signs off
RR TU 73 de VK3ZLP/P E E

This is preferred for simplicity although sometimes you may hear
 RR TU 73 de VK3ZLP/P AR K
or
RR TU 73 de VK3ZLP/P SK

Chaser may then send 73
TU 73 de VK3AFW K
or simply
E E

The E E is preferable for brevity .

TU 73 EE or just TU are alternatives you may hear.
If the chaser sends TU 73 etc the activator may send a final final, pause and then call briefly in anticipation of a pile up

E E
CQ SOTA de VK3ZLP/P K

The shorter versions will be applicable as UTC roll-over approaches or if there is a pile-up.

Some Common CW Abbreviations - a subset for SOTA

Essential Abbreviations
CQ   General Call
DE   This is
R   Roger, Romeo, OK, received. Usually sent as R R
U   You
UR   Your ALSO You are
RST   Readability, signal strength, tone
TU, TNX   Thank you, thanks.
K   Invitation to transmit
BK   Break or in this context back to you
73   Good Bye, best regards.
E E   Sent at the end of a contact as a shorthand final final acknowledgement.
N   A substitute for 9 (Nine)

Abbreviations you will hear and should become familiar with

QRS   Send slower
FB   Fine Business – often used as a bit of padding whilst preparing something further to send.
AGN   meaning call me again or repeat the last transmission information
        or AGN RST PSE or AGN CALL PSE
PSE   please
QSL   copied
QSL?   Did you copy?
SRI   sorry, such as SRI NIL COPY HERE

Abbreviations more common with an actual QSO and not a "contest" exchange.

<call sign> QRX   used during a two (or more) station pile up. Means that the <station> will be called
                  shortly. Not really a problem with VK SOTA CW at this time
AR   end of message
GA   good afternoon
GM   good morning
ES   And
FER   For
WID   With
BT   Used as a pause, often a number of times.
HPE   Hope
CUAGN   See You Again. Often used towards the end of a CW contact (HPE to CIAGN)
SK   End of QSO
QTH   Location
WX   Weather

There are countless others!

More Hints. Not necessarily in any particular order.

1. Use a paddle rather than a straight key. Less tiring & lighter, better formed dots and dashes.
2. Always use head phones.
3. Use your radios memories (if available) to store pre-recorded messages such as CQ.
4. Learn how your radio switches between SSB and CW (CW tone offset) so you will be on about the right frequency.
5. Sending signal reports: Ever wondered why practically all DX-Peditions and contest stations give 599 reports? It is easier! If someone is really solid, send 599. If they are good copy but not solid send 559. Only use other figures if things are really difficult. Unless the station worked is using home brew equipment or you are on VHF and there is an aurora, the tone will be 9 (If aurora propagation the tone is sent with an "A" as a suffix). More often than not, the same report will be used by both stations in the qso.
6. When practicing, try to take in the CW sent without writing it all down. Just take a few notes. Journalising will occur in live transmissions. Certain combinations of letters often follow each other. This is actually the beginning of learning CW by whole words (by sound) rather than each individual character.
7. Practice tuning into CW transmissions. Look for signals on DX clusters then try tuning them.
8. Get as much listening practice as possible. Some sources are:
VK2WI 80 metre CW beacon 3.6990.
VK CW nets 40 metres on Sunday morning are good.
Any other live to air CW that you can here. Contests are good.
ARRL practice files http://www.arrl.org/code-practice-files
ARRL Bulletin & Code transmissions http://www.arrl.org/w1aw-operating-schedule
Live to air is good as there will be interference, fading and other normal stuff.
9, Experiment with filter settings when monitoring live CW.
10. Don't be afraid to answer a CW CQ call.
11. Knowing the call sign of a station is worth 3 to 6db. There are a limited number of active SOTA CW operators. However you will from time to time come across a regular CW operator that may want to chat. What to do? You are the activator. Take control, send TU 73 CQ.
11a. A Chaser will probably have information on the Activator prior to the QSO. The Activator will have little information on the chaser. Chasers, send your call sign 3 times initially.
12. Know your name in CW. Abbreviate it if too long. Not sure what to do with Marshall?
13. As an activator, qualify the summit first on CW. You will find chasers being prepared to work you on CW in order to avoid the SSB dog pile & fear that there may not be an SSB operation. The exception to this maybe when first coming up on air; some operators start by looking for S2S contacts, any mode and usually this is on 40 metres.
14. Technically, if a VK3 operator is portable in VK2 they should sign as /2
15. Have a scribble pad as well as your log book.
16. Have fun!