CW Skimmer is a software application developed by VE3NEA. It is a CW decoder, but not the kind that you may have encountered before. By using an SDR (software defined radio), it allows you to decode all CW signals on a whole amateur radio band (and if you have the right receiver hardware, even on several bands at once), in parallel, at once! The information is then presented in the format of a normal “DX Cluster” and will tell you who is calling CQ on which frequency, the relative SNR and sending speed, like this:

DX de El6IZ-#: 1822.0 GM3YTS 28 dB 22 WPM CQ 2156Z
DX de SV8RV-#: 1823.9 SM6CPY 12 dB 22 WPM CQ 2156Z

It means that the "Skimmer" at EI6IZ received GM3YTS calling CQ on 160m, and in the same minute SM6CPY was "skimmered" in Greece.

Reverse Beacon Network is an international network of over 50 receivers on all continents running a "Skimmer", which are aggregated in a common "feed". To us this technology you don’t need Skimmer software but you do need to access the Reverse Beacon Network at this URL - http://www.reversebeacon.net/main.php As well as showing the Spots there are a number of useful facilities including the ability to search for a particular callsign and also compare signals between up to 10 stations heard by a single reverse beacon on a given date. You can instantly find out what stations, from a given country or zone, have been heard, at what times and on what frequencies. You can see when you have been ‘spotted’, who ‘spotted’ you, and how loud you were.

The FOC RBN is a filtered RBN developed by Fabian DJ1YFK that only shows the callsigns of FOC members, or callsigns being used by FOC members. Several of us used it in the Marathon and found it very useful. There was some good discussion on the FOC CWCWCW Reflector after
the Marathon as it was found that the link occasionally dropped out, Fabian was able to get it stable which it still is. He reported to us “The connection should be very stable now, i.e. no more disconnects each 5 minutes or so. It took some time to trace down the root cause of this, and once I found it I was embarrassed how trivial the problem was!” New FOC calls can now be added by a command, eg SET/FOC TT8DX will add TT8DX to the database of FOC calls. Anyone can add calls with this command, and it doesn’t matter if a call is added twice. There's now a minimal website at http://foc.dj1yfk.de/ explaining the FOC RBN.

**Connection to FOC RBN** is achieved through Telnet which is a program that is contained in all computer operating systems to remotely connect to any machine in the network. Simply follow Fabian's instructions to access this program:

- Click on the "Start" menu of your computer
- Click on the "Run..." menu entry
- Enter the command "cmd"
- Hit the enter key
- A window with black background will open this is referred as being the "DOS Command Window"
- In the DOS command window, enter the command "telnet foc.dj1yfk.de 7300"
- Hit the enter key
- You will connect to the FOC RBN server, just enter your call
- Wait for a while until the first spot is sent by the server and you will see the spots coming

This is how the display will look:

```
Callsign: G3SJJ
Hello G3SJJ!
Welcome to the FOC RBN feed. Description and statistics:
http://foc.dj1yfk.de/ -- 161 de Fabian DJ1YFK
DX de OL5Q-#: 10118.5 G4XRV 19 dB 28 WPM CQ 0710Z
DX de K3LR-#: 3502.1 LA5HE 22 dB 18 WPM CQ 0715Z
DX de OY3JE-#: 3506.8 LA5HE 21 dB 18 WPM CQ 0715Z
DX de N7TR-#: 7022.7 W1UU 25 dB 22 WPM CQ 0715Z
DX de K3LR-#: 7007.6 ZL2AGY 15 dB 22 WPM CQ 0717Z
DX de OL5Q-#: 10118.5 G4XRV 19 dB 28 WPM CQ 0718Z
```

In early May I decided to do some experimentation and found I could get access from the Telnet window on my general logging program Logger32 by opening the Telnet window and setting the Remote Host as foc.dj1yfk.de and Port Number 7300. Lines of data were displayed in the window and these were transferred into a more as DX Spots into the DX Spot window.
It certainly brought FOC activity to light. ZS1EL was spotted on 10m, I hadn’t thought the band would be open but sure enough Vidi was audible and we chatted for over 20 minutes. I also found several other members as you can see from the screen print of my log. One of the disadvantages of RBN is that you don’t just get one Spot because all of the beacons that can hear the station put out Spots. It is something you learn to live with but on the other hand you can see the comparative signal strength in various parts of the world. One interesting observation was that Spots only occur when a station is CQing.

Whilst modern technology has its advantages it raises a number of negative issues. Fabian summed this up nicely on our Reflector “One may indeed ask if it is ethical to use this kind of assistance in the FOC Marathon or any other contest (and I readily admit that a good dozen of calls might now have made it into my Marathon log without the Skimmer). My personal pragmatic opinion is: This technology exists and it is available to everyone, so I use it. When in doubt, your competition will use it and so do I.

Perhaps I can give the last word to Kevin M0AGA who I asked to assess FOC RBN during the May FOC QSO Party “Easy to access once you type the correct details!! When I used it to monitor how it worked on Friday, it was good with some members listed who are rare for me. I noted where they were spotted, listened to see if I could hear them (Just in case) and it made a good guide for bands open. Last night I switched it on and I was able to see how the bands were and even in very poor conditions and QRM worked a few stations on 20m. So I thought “If it allows me to work stations in the QRM, then it may work for me to call CQ. That is what I did and was able to work a few more stations by doing so. When I looked at the report afterwards I saw my call spotted and believe it was purely that alone that allowed my extra QSOs. So it benefits those who are chasing awards, Augies etc and can be a great propagation aid by seeing where the spots are coming from. I do not think you could conduct a serious attempt at winning awards without...
such tools today. You know I advocate the use of a VFO and listening but this made me realise what a Luddite I am and why I could increase my Windles without spending as much time by the radio. However, if it was just Windle chasing and not working anyone that replies to a CQ, I would not bother at all with radio. On the other side of the coin, I complain that not enough members use their VFOs and this system would allow me to get more contacts when spotted. So the pros and cons balance I believe. I think the motto has to be "Get spotted....Call CQ"