

THE SONIC ISLAND

A Recording Engineer's perspective of the Quick Sound Field (QSF)

by Neil Henderson, Equus Recording

"There are no problems only solutions", so said John Lennon.

"No sound system, no sound product, no acoustic environment can be designed by a computer", uttered Ted Uzzle at an AES meeting.

"Necessity is the mother of invention", Frank Zappa? Oh no, that's the Mothers of invention.

At any rate, you may want to remember all these wise and wonderful words when entering the **Quick Sound Field Experience!**

Testing the QSF (8 traps)

On first test of these acoustical timbers, I put them in a horseshoe type circle, almost touching each other, around the vocal mic (a U-87 then a 414), as suggested by the ASC brochure.

I put them maybe 3 feet away from the microphone, in every direction, except where the talent is standing. I set the height of each trap so the vocalist sings towards the center, with the reflective strips dialed inward, towards the talent. When testing the mics, I found it bright and sparkling, like a silver feather sitting on the track. Floating in a sonic island. I didn't hear much unwanted room noise, just pure voice. A nice transparent sound.

As I moved the traps back making the sonic island larger, each trap 6 inches at a time, I closed the "separation" between the backing track and vocal, slightly taking away the bright presence of the voice and still melting the vocal into the music.

Next, keeping the horseshoe circle tight, I turned the tube closest to the talents right shoulder to the dead side and do the same to the trap on the left shoulder. I tested the mic. I turned each trap in order, testing as I went, creating the perfect "Sonic Sculpture" demanded by the music.

Once the right space and sound is found, you can move the mic around within the sonic island with no consequence. This is great news if the vocalist moves around somewhat. In fact, I encourage them to "move to the groove".

Next, I turned all the traps around to the dead or dark side. I moved them in close and got a terrific intimate sound. With the vocalist right on the mic, some compression and the vocals EQ'd, it was so close, so "in my face", I could almost feel the vocalist's breath. I did work with the vocalist for breathing and performance.

I know the Quick Sound Field comes with 8 traps, however 9 traps with 6 to 8 inch spacing in a horseshoe circle is a wonderful

sound and my favorite. It's worth it to add an additional trap.

Remember that all these sets and suggestions can vary due to microphones, musical material and vocal nuances.

One might try the **Heart-Shaped arrangement** of the QSF. 6 inches apart with the 2 traps across from vocalist moved in towards the talent a foot or so. I found it very interesting giving me a very high (10k like), slight "sss" feel to the vocal. I liked it for some applications. I also separated the 2 center tubes of the heart to 8 inches, put the mic on omni pattern and placed it in-between the traps. I faced the reflectors away from the mic, vocalized into the mic at 12-to-18 inches. I got a very cool hollow effect, great for something different.

Now on to the **Egg-Shaped arrangement**. The traps across from the talent are closer than on either side, with the 6 to 8 inch separation. Cool, "Up Close and Personal" sound. I tried it with the vocalist almost whispering. Worked great. I even moved three traps (across from talent), closer to the talent. It was harder to manage, I had to work with the talents performance (breath), but I got a terrific sound. I call it the **"Whisper Sculpting"** image.

The "O" shape. In the "O" shape the traps across from the talent are farther away than those on either side of the talent. Maintaining the 6 to 8 inch separation, it adds a touch of "hall plate" on the vocals' high end only with a tight, but dull bottom end. Worked well with the higher (overdubbed), part of a two-part harmony.

A fun set is the "**Triangle**"; it works like the circle with more of the room bleeding in. If the room is warm, like the one I'm in, this works very nicely. This is a great chorus-type effect if using a room mic in conjunction with the vocal mic. This set should be remembered when working with instruments in conjunction with the room you're working in.

"Triangle Set Against the Wall".

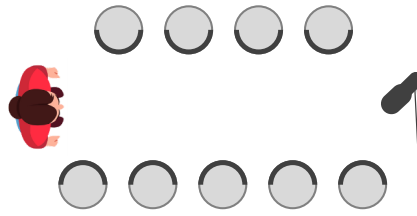
This gives a good blend of room sound and the sonic island. I adjusted the 2 tubes in the center to touch (with the reflectors toward the talent) and left a 2 foot gap for the wall, (which is fabric), on each side. I angled the traps back towards the talent, reflectors inward. Another variation that might or might not work.

I did try one cool thing as another variation of this set: I moved the triangle sides (the right and left) out to create a 'trapezoid' type figure with the vocalist being the long side and facing the wall. It gave great ambience and when I doubled the singer it got a bit of the "Queen" sound.

So, with each set-up I mention, remember, experiment and move the tubes around, it's all sonic sculpting. "Corner Set" utilizes the wall with the traps. The sound goes from the talent to the left wall to the other right wall and back. I put a directional mic on the talent and a directional mic to the right of

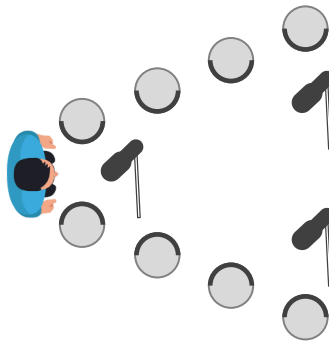
the talent aimed away, towards the right wall. Vocalized a little to the talents left. I hard panned the mics and got a slight stereo echo. It was ok.

The "**Tunnel**" set. With 4 traps in a line, reflectors turned in and 12 inches apart. The other 5 in another row, reflectors turned in towards the other traps. In a line like:



With a lot of room in the sound (and depending again on the individual room sound), it is another bright echo/verb acoustical effect. I enjoyed it. I used it for that "nasal-telephone-rap" effect.

I tried a "**Funnel**" set:



I did get a fast bright slap effect as I moved the mics around, first towards the talent, and then away. I put both mics on omni and took another mic and put in on the talent. That was the best of this set. As I moved the funnel around, I got more and less room sound.

I worked with a Folk/Country singer that needed to play and sing at the same time because of maintaining a certain 'vibe' within

his performance. He sat on a stool and played. I put him in the **Sonic Island** at the normal starting point. A semi-circle of 9 traps, 6 inches apart with the talent at the opening. The traps' reflector turned in. I found it was too brittle and bright.

He is right handed, so the body of his guitar was on his right. I turned the first trap around to the absorptive side. It was a little better in the direction needed. So I turned the first three around on his right. Yes! Then I turned the second in on his left a quarter turn. That was it for him. The **sonic sculpture** was complete. He just needed to relax and perform. The mix was as easy as any that I've done. In fact I pretty much just ran it across to master. It was that easy!

These sets are just some ideas of how the QSF can enhance your studio arsenal.

We have to keep in mind that the basic idea of recording is, and always has been, to capture the artists' performance. We, as engineers, are capturing the moment for all time. The tools we use vary and we use a wide variety of equipment during this recording process. The **Quick Sound Field** is one of those tools. It is kind of like having an acoustical effects rack. Very powerful.

No matter how a person arranges them, listen to the room, work with them and place the mics around the room. I wouldn't arrange them too much or organize them too carefully. Play with them and create your own identity for each session.

Create your own sound sculpture.

Create your own sonic island.

Experiment with it! Have fun!