

## **Sound Techniques Studio, Chelsea: Folk Rock Mecca**

This is an article originally printed in Sound on Sound Magazine, and written by Matt Frost

In the summer of 1965, a newly converted recording studio just off the King's Road in London's soon-to-be hip district of Chelsea, opened its doors to the world. During the late-'60's to late-'70's, this bijou ex-Dairy arguably produced some of the finest British recordings of the era. Matt Frost tells the as yet largely untold story of Sound Techniques.

If you're a fan of British '60's and '70's music, particularly Psych Folk and Folk Rock, you'll no doubt be familiar with a little tagline gracing the liner notes of some of your favourite records, 'Recorded at Sound Techniques, Chelsea'. John Cale, Nick Drake, Fairport Convention, Incredible String Band, Jethro Tull, John Martyn, Pentangle, Pink Floyd, Richard Thompson, Sandy Denny and Steeleye Span were just a few of the luminaries to grace the mics of this unassuming but seminal English recording studio.

The early 1960's was a time when the majority of studios in London had a reputation for being stuffy and oppressive, manned and administered by scientists in brown lab coats who had little interest in the 'nasty' guitar music that had so rudely thrust itself upon them. But by the middle of the decade, the predominance of the major label studios was being eked away by a handful of hip new young independents bristling with teams of young enthusiastic engineers and producers with as much passion for popular music as the musicians they were recording. By the end of the '60's, Sound Techniques had firmly established itself as one of London's finest studios of choice with that famous 'Sound Techniques sound' drawing in anyone who cared about the quality of their recordings. Just take a listen to Nick Drake's 'Bryter Later' or John Martyn's 'Solid Air' and you'll know exactly what we're talking about when we refer to the unique 'Sound Techniques sound'.

### **NEW VENTURE**

Sound Techniques was the veritable brain child of Geoff Frost and John Wood, who in mid-1964 were both working at Levy's Sound studio in New Bond Street, a very busy 'jobbing' studio where they spent much of their time producing 'copycat' versions of current hits for Woolworths' budget Embassy label as well as laying down tracks for proprietor Morris Levy's own 'Oriole' label. Geoff had been Chief Engineer at the studios since 1959 whilst John had joined the technical staff in '62. Their decision to start their own venture was partly due to the fact they wanted to be their own bosses and partly because Morris Levy had just sold out to US giant CBS records, leaving the pair with some uncertainty about their future employment. As often tends to be the case with the music industry in the 1960's, there was no grand design or meticulous planning involved in their decision.

"We decided we'd start a recording studio," John Wood tells me, "And with that wonderful ignorance is bliss mentality, impetuousness of youth, we thought we'd just get on and do it and do a better job than Levy's... so Geoff left in the September (1964) and started looking for premises and that was it!"

The variety of different skills that Geoff, 28, and John, 24, brought to the table helped ensure that Sound Techniques had an excellent grounding for future success. In his role as Chief Engineer at Levy's Geoff had taken the lead technical role building and maintaining the equipment in addition to engineering sessions. John meanwhile had previously plied his

trade in the cutting room of Decca records prior to his move to Levy's and the many hours working with their classical catalogue undoubtedly helped train his ear for the classic folk rock records that lay ahead.

The finance for the venture came via Geoff's savings and a loan from Barclays Bank and the company was duly registered at Companies House in December 1964, after a name had been decided upon during a swift but inspired telephone conversation between the two entrepreneurs.

"Geoff rang me up from Peter Godfrey's office, who was our solicitor, saying, 'We've got to have a name for the company!'", laughs John, "And I'm sitting in the control room at Levy's, and there's a Pultec on the rack and an Altec compressor and I see Pulse Techniques underneath Pultec so I said, 'Well, what about Sotec or Sound Techniques?' ... and that's literally where our name came from. And it was a great name! The biggest mistake we made was not registering it across the world!"

As far as the studio premises go, Geoff and John already knew the kind of thing they should be looking for following Geoff's swift sojourn to the United States in '64.

"I got on a plane to Nashville to look at the American studios to find out why they got such better sounds than the English studios," Geoff tells me, "There was an incredible difference in the sound. American stuff was open, it was loud – the stuff from British studios was very sort of twee and dull. The sound coming out of America, particularly from Bradley's, really impressed me personally. So the first thing I did when we got off the plane was, after finding a hotel, I knocked on Bradley's door and said, 'I'm a chief engineer from London, is it possible for your chief engineer to show me round?' and they said, 'Well, of course!' And Bradley's was by the far the most impressive studio I saw and just the kind of studio that John and I wanted to build. It wasn't full of deadening materials like English studios were – with English studios the idea was to make everything as dead as possible but Bradley's just had a very minimal acoustic treatment with a very high ceiling. They also had very minimal equipment. In order to make the English sound more and more American, English studios were buying up more and more equipment. But Bradley's had a very simple desk – I think it was an ex-broadcast desk – a Bendix or a Gates or something like that and they had outboard EQ's – they had Langevins and all the Langevins were locked in at 3k 8db boost position and left there!"

These deceptively straightforward lessons learned would be an important influence on the Sound Techniques story.

## **CHELSEA SET**

After months of trawling estate agents and trudging the streets of the capital, Geoff finally found a building with some potential. Situated near to Chelsea's King's Road and hiding down the end of a small alley, 46a Old Church Street was part of an early 19<sup>th</sup> century dairy originally run by the Wright brothers (no relation). Part of the ground floor belonged to a pottery whilst the other part of the ground floor and the first and second floors were both available to lease.

Part of the deal Geoff and John negotiated was a clause giving them permission to remove part of the second floor to give them the height they required to get a "Bradley's type sound." A team of Polish builders were duly set to work to knock out the middle section, leaving the

left and right sections in situ to be developed into the control room and an office respectively, both of which would be accessed by separate staircases leading from the live room. An eighth of an inch of asphalt was laid on the floor to dampen the sound to an extent, another Nashville tip, then covered with carpet, although the original gradual slope from the dairy days was left as it was, possibly contributing to the room's sound once they commenced recording. The time now came for a minimal amount of acoustic treatment.

“We cleaned the place up, put double glazing in where it was convenient to, where it wasn't convenient we didn't bother,” says Geoff, “As far as acoustics go, John and I went around clapping our hands, and we'd say, ‘Ooh, we need something up there!’ but bearing in mind we were so short of money, we did as little as possible! Underneath the office, we left the old fashioned lathe and plaster ceiling which did great things for strings.”

Once the construction work had been completed, it was time to build the first Sound Techniques mixing desk and at this point, John Wood also left Levy's and for the next few months both he and Geoff built the mixer in the middle of the studio's live room (see box out). With regard to other equipment, John and Geoff were again limited by their rapidly disappearing budget so they opted to build as much as they could themselves. They could not afford complete Ampex tape machines so they managed to negotiate a deal in which they bought just the decks leaving Geoff to build the electronics for three machines - a two track, a four track and a mono - which they housed in second hand consoles purchased at the BBC's redundant stores at Chiswick. Geoff also built four monitor speakers using a design from electronics bible, the Audio Encyclopaedia and housed them in a single cabinet to “make things more rigid.” The monitor speakers would change progressively as the studio's fortunes moved into more liquid times and in 1968, as more ‘rocky’ artistes began to filter through the doors, the studio underwent a revamp including the installation of an 8 track desk designed by Geoff and more sophisticated acoustic treatments to make things a little less live.

However, John and Geoff did splash some cash an EMI limiter, a couple of Altec compressors and a slew of top quality microphones including Neumann 67s, KM56s, KM54s, AKG D19s and an RCA ribbon. The studio would later move to 16 track and ultimately 24 track by the mid-‘70's and as the years passed by, the equipment was continually added to so Geoff and John could further perfect the sound including the purchase of U47 microphones and Fairchild 660 limiters.

As far as reverb was concerned, John's preference was to buy an EMT plate but their funds had almost run dry so the pair opted to use what little spare space they had to build an acoustic echo chamber by the front door out of a pre-fab garage kit of parts. But aside from the fact it was a very small space, it also filled with water whenever it rained excessively so, not surprisingly, as soon as they could afford it they bought their first EMT.

## **BOOKING HELL**

Happy with how the studio was sounding after a few demo sessions, it was time to open for business although London's music biz fraternity was not exactly beating the doors down in anticipation.

“We put one advert in Kemp's music directory, which cost a bloody fortune but we never had a single enquiry!”, recalls Geoff, “We were sitting around waiting for the phone to ring for weeks and it didn't ring. In the end, I think we were about three days away from going bankrupt and the phone rang and it was Frank Barber who did all John Schroeder's

arrangements at Levy's and he said, 'I've got a client who's looking for a studio. He wants to book it for four days a week for about four months and I can't find anywhere where we can get in!' so I said to Frank, 'Alright Frank, just let me look at the diary!', and I did actually get the diary out and looked at all these blank pages – and I said, 'Well Frank, I think we can probably move things around a little!'"

The client turned out to be prolific classical soundtrack composer, Phil Green, who had been contracted by 3M to produce around a staggering 2000 tracks of soft orchestral "elevator music" that they were planning to market with a new cassette based system they had developed for retail outlets and hotels. Sound Techniques got the gig and John and Geoff were left thanking the Gods although the first day's recording didn't quite go as planned.

"The interesting thing was that we'd always thought that we would put the strings in the middle of the room where we had twice the ceiling height and that they would sound good there," says John, "And we thought we'd put the rhythm section at the end under the office. On what must have been the first day of the Phil Green sessions, we put the strings in the middle, the rhythm under the office and I think we probably had brass as well under the control room – and it just didn't work. They complained they couldn't hear, they couldn't hear the rhythm and they couldn't hear this... so we had to change the whole thing round and we ended up with the rhythm in the middle, the brass one end, and the strings under the office... and it worked fine! After that, that became our standard set-up and the interesting thing was that the low end of the studio, where we would put the string section had a sort of natural resonance around 500-700 hz or something, and you would get this really big string sound from a small section. That was one of the things that I suppose we were quite lucky with or famed for in latter years... the string sounds on the Nick Drake records people are always going on about!"

The Phil Green sessions proved to be a turning point for Sound Techniques Ltd. and the work began to trickle in, largely because potential clients were so impressed by the tapes they heard. By this time, the company had also received orders from other studios for mixing desks so Geoff immersed himself in console manufacturing in the upstairs office come workshop whilst John settled into the role he would fill until the mid-1970's – Sound Techniques Studio Manager.

## **ROCK ON WOOD**

An even more significant turning point came when Elektra Records began booking time at the studio. Sound Techniques was recommended to the US label by mutual friend, ex-EMI engineer Malcolm Addey. The first Elektra recordings to be made at Sound Techniques were two orchestral concept albums based around the signs of the zodiac and the sea, which John engineered with producer, Mort Gamson. Elektra had decided to record in England for the same reason that 3M had opted to with their "elevator music" – British string players were both cheaper and of a higher quality than their American contemporaries. At the end of one of these sessions, the musicians needed paying and so Elektra head honcho, Jac Holzman, instructed his UK Office Manager to go down to Chelsea loaded with the lucre. The manager's name was Joe Boyd.

It would be the records that Joe worked on with John Wood for both Elektra and later on, Joe's Witchseason Productions company that would first expose the Sound Techniques sound to the music-listening masses. John Wood and Joe Boyd immediately hit it off during Joe's first visit in early 1966. The early records they worked on together were quickly recorded

straight-to-tape recordings such as Alisdair Clayre, Martin Carthy and Dave Swarbrick and the first Incredible String Band album. It would be during the recording of this latter record that the two became very close and their relationship both in the live room and the control room would later bring the best out of Sandy Denny, Nick Drake, Fairport Convention, Pink Floyd and Richard Thompson to name but a few. The way they worked was in no way your typical engineer/producer relationship – they worked in partnership.

“In some ways some people found it a curious relationship but for me it’s the way I like to work with anybody really,” explains Joe Boyd, “I get nervous if I feel people are pulling the punches around me – you know, if someone disagrees with what I want to do, I want to hear about it and then at least I can make up my own mind. I want as much information as I can get and John’s view is very gruff and ready to speak his mind and he never suffer fools gladly and he’s never shy of voicing an opinion. I find that a very good way to work because for me, I want to know what he thinks of everything I’m doing ... sometimes I had ideas that worked okay on paper but didn’t in reality and he’d sober me up on my getting carried away with what the possibilities were because John was always looking ahead to the mix and what would actually work.”

## **SOUND JUDGEMENT**

There is a distinctive sound and style that filters through not just the Joe Boyd records but many of the Sound Techniques records to the extent that people have referred to it as the John Wood sound or the Sound Techniques sound. We need to take a close look at the various factors that gave records made at Sound Techniques during the late 1960’s and ‘70’s such a distinct, rich and colourful sound.

As with all the great studios in the era before excessive multi-tracking, the individual facets of a particular room gave each studio a unique sound and the Sound Techniques room certainly contributed to the great sounds it produced – the high ceiling in the middle, the space under the office on the right hand side that gave such a big string sound, the sloping floor. The natural leakage between microphones would allow the room’s dynamics to come shining through.

“It did have a bit of an ambience to it. I think it made a difference, whereas most of the pop records of the era were done in much deader environments,” says Livingston manager Jerry Boys, who moved to Sound Techniques as an engineer in 1968, “In a place like Sound Techniques or Livingston... you move your mics away and you get some space on it, so you can use that if you want to. You don’t have to – you can close mic and not use it but even with close miking... even then, you’d think it wouldn’t make a difference but it does!”

“With a medium size room which isn’t too neutral, you can get a honk out of the room which sometimes you like and sometimes you don’t,” says John Wood, “In a way that one end of Sound Techniques, under the end opposite the control room, the low part of that... that coloured things but it coloured them to your advantage particularly the strings which is why we got the string sound we got. You would never have expected to shove the strings in such a small area but you could shove maybe 12 players in there and that space worked for you! It wouldn’t work for you if you put a drum kit in there because it would not be the right kind of colouration but it did work really well for strings!”

Just as the strings sounded great under the office, a band’s rhythm section was almost always placed in the centre of the room under the high section of the ceiling, again using the

particular idiosyncrasies of the old dairy to bring out the best in the sounds that ended up on tape.

## **PLATE FULL**

Another factor that often gave classic studios a unique sound was their reverb whether this be from the use of echo chambers or echo plates. At Sound Techniques, John Wood used to spend a lot of time tweaking his EMT plates to perfection.

“They were certainly very nice plates,” says Joe Boyd, “They certainly shaped my approach - I can’t mix without an EMT now really! Those plates were one of those mysteries that John looked after... he would go sometimes and tweak the plates or go have somebody do it... there was a lot of discussion about the plates!”

“We took a lot of trouble over them!,” says John Wood, “Again studios are very much characterised by the sound of their reverb or then they were anyway... empirically, echo plates were a bit eccentric because they would depend on how you set them up, they would depend on the weather, where they were - a hot or cold part of the building. Everybody had their own ways of messing about with these devices and we spent a lot of time and I spent a lot of time I suppose, for me, deciding how I wanted to use them at different ratios - you could put delay on them and the sound would depend on what EQs you sent to them. You’d fiddle about with all the parameters, let alone the mechanical ones, until you got the sort of reverb that you wanted!”

## **HOUSE BAND**

One aspect of the great records made at the Chelsea studio that has to be recognised is the quality of the musicians that were employed on the numerous sessions there and this was no happy accident. Over the years, John Wood built up a close pool of musicians that he would regularly draft in for recording sessions although he tended to keep away from the usual suspects of the session man circuit. If you take a look at the liner notes of LPs recorded at Sound Techniques during this period, you’ll notice the same names cropping up again and again, including: Dave Mattacks and Gerry Conway on drums; Danny Thompson, Dave Pegg and Pat Donaldson on bass; Richard Thompson, Jerry Donahue and Simon Nicol on guitars. These musicians knew each others’ playing backwards so when they turned up for a session, there was not only a great social camaraderie, there was also a musical telepathy. In this respect, you can draw likenesses to the house bands that US studios like Chess, Motown, Sun and Stax regularly used, helping to give their records their own unique sound. And just as with the great records produced in those great spaces, John’s ethos was also always to record as much as possible completely live. There was certainly no love lost between John Wood and the fixers that still presided over many of the session men and women in the late-‘60’s.

“We never used a fixer for a string section on the Nick Drake records,” says John, “On his first record I rang the LSO and I used to book all the strings that way. The others never sounded any good...the ones we got... they’d be a lot of deadbeats who’d be out the pit or whatever. The regular session musicians that you got in the 60’s or the early 60’s anyway were very jaded... they really were quite snooty a lot of them and so I never really got them in!”

## **FAMILY VALUES**

The atmosphere of Sound Techniques is something many of those that worked there and recorded there have talked about. It was laid back and relaxed with neither the clinical hospital-like feel that some studios adopted during the latter part of the '70's and '80's nor offering the ponderous luxuries that the excesses of the era made the norm for many a rock star. The closest thing to a luxury daubed on a particular artiste was a couple of pints of ale at The Black Lion which lay temptingly just across the road.

“There was absolutely no attempt to make it impressive or luxurious,” Simon Nicol tells me, “It was functional. The concrete staircase and the galvanized hand rail could always have done with a lick of paint. It was clean but in comparison to studios I came across later on, where some of the lobbies outdo five star hotels - that was not the case with Sound Techniques. Function came above form, substance above style and that was the ethos of the place. It was a very social business too – I suppose in other places you might have ploughed a natural division between the band and the staff but when we did take a break to go to the pub we all went out together! It was always just a very cool place to be!”

“It was much funkier than places like CBS or Abbey Road, the bigger studios that people had spent lots of money on,” says Dave Pegg, “But those studios never had very good ambiances as far as I was concerned. Sound Techniques was like coming home to us – and there was the cake shop next door and the pub opposite – I remember the pub opposite really well!”

“I can remember the feeling of the place,” says Verity Adams, who worked at the studio in the 1970's as Office Manager, “I just can remember the lovely atmosphere of the place and that's what I think must have been partly responsible for the wonderful music that came out of the studio!”

The quality of those timeless Sound Techniques recordings also has to be credited to those that made it all happen the studio engineers - Jerry Boys, Harry Davies, Victor Gamm and Roger Mayer - and of course, the two entrepreneurs that started it all, Geoff Frost and John Wood.

## **END OF AN ERA**

The Sound Techniques studio under the stewardship of John Wood and Geoff Frost came to a sad end in 1974 after the existing lease ran out. The existing landlords wanted to sell the building but Geoff and John could not raise the finance necessary to meet the (then) high valuation of 120k that had been put on the property. They did attempt to find alternative spaces to buy but could find nowhere that was both a) viable and b) affordable. This, combined with the fact the pair could see that the record industry was entering a period of decline, led them to take the difficult decision to opt out. John Wood continued in the music industry becoming a successful freelance engineer and producer while Geoff continued to use the Sound Techniques to run a burgeoning software development house. The Chelsea studio freehold was bought by Olympic who continued to run it as a going concern until the early 1980's when it was eventually sold off and converted into executive flats.

However, the magic of the place will always live on through the records it helped create. And there's little doubt that the musicians that had the fortune to record at Sound Techniques during its decade-long heyday will always hold onto their fond memories.

“The 60's was a different time – it was a very different time, a very special time,” remembers Robin Williamson of the Incredible String Band, “Especially in London, the whole city had

an atmosphere and a magic about it...a Peter Pan kind of Neverneverland – it was just very surreal and Sound Techniques was very much a part of that.”

## **MIXER MAKERS**

### **Sound Techniques Consoles**

At Levy’s Sound studio, Geoff Frost had designed and built a raft of their equipment and, aside from engineering sessions, had developed the technical skills and understanding that would enable him to design and build mixing desks not only for Sound Techniques but for studios across the world. Again, there was no grand design to move into equipment manufacturing and, apart from anything else, John and Geoff did not have the finance to purchase a desk from anyone else in 1964.

“We never started out to manufacture mixers for anyone other than ourselves,” laughs Geoff, “It came as a bit of a surprise when people saw the first desk at Chelsea and said, ‘Cor, this sounds great, can you make one for us?’”

Indeed, the desks that Geoff designed for Sound Techniques would also help characterise the sound of the records made at Chelsea and of course later on at the other studios they supplied. Trident and De Lane Lea (at both Kingsway and Wembley) bought a succession of Sound Techniques mixers over the years as did Sunset Sound and Elektra studios in California. Initially these desks were made in the little office in the studio above where the string sections used to be placed.

“We were making mixers up there,” says John, “And as soon as the red light went on, it meant stop drilling and hacking about and hammering and there were two or three people working up there!”

The biggest manufacturing success came in 1969 when Geoff and John collaborated to design and build the System 12, arguably the world’s first compact mixing console. Forty or so of these desks were sold and effectively mass-produced at a small unit factory in Mildenhall, Suffolk. The idea for the System 12 came during a brief beverage stop on the A1.

“It must have been about ’69 and I remember John Wood and I were sitting in a very early forerunner of the Little Chef in Hatfield coming back to Suffolk from London,” recalls Geoff, “It was pissing down with rain, we were fed up so we went in for a cup of tea and I was moaning about the fact that every time we made a mixer, it was me who had to go and install it and lie on my back with hot solder falling in my face and that was the main thing – and so we were talking about this and also talking about the fact we felt that the potential market for the A range was becoming largely saturated so I said, ‘I think we should build a smaller desk that we can virtually mass produce as a complete unit. It could have a patch bay in it and after it leaves the factory and it gets to the studio, all they need to do is plug their mics in!’ I remember John having to continuously go up to the waitress to get more napkins which he used to sketch out his ideas and functionality and I used to sketch out my ideas for the circuitry. By the Monday morning I had the drawings for a prototype!”

Sound Techniques equipment and modules are now extremely scarce and when they are discovered, change hands for vast sums of money. The technical secrets that Geoff

impassioned into each mic amp and circuit board have helped secure Sound Techniques gear a reputation for being some of the finest ever made.