Autograph: Twenty-Five Years of Sound Success

This is a profile of Autograph Sound Recording who, by the time you read this, will probably just be putting the parties and jollity of their silver-jubilee year behind them and getting started on their 26th year in business.

But first, a little detour for some history. In 1956, a bright young thing called Richard Pilbrow founded a company, renting lighting equipment while also offering his services as a lighting designer. Over the years, the company thrived, establishing many of the techniques that are now taken for granted in the British theatre, and also collecting together an enviable team of lighting designers - the likes of David Hersey, Andrew Bridge, Robert Bryan and Robert Ornbo, who would progress from assistant to co-designer to sole designer in projects. Eventually, the company over-expanded and the design team went their own separate ways. Pilbrow himself, reflecting on this in his recent book, remembers thinking "Perhaps our designers would do better independently, out in the real world", though also adding that "Sadly, a unique laboratory atmosphere was lost."

The reason for that little diversion? Well, though the lighting laboratory has vanished, the same sort of thing seems to be thriving today at Autograph's North London headquarters, where founder Andrew Bruce has gathered around him a team of talented designers and engineers. The ethos is the same, sound engineers working as assistant sound designers, then perhaps co-designing rigs before moving on to design complete shows on their own. And with those designs backed up by Autograph's superb support staff and comprehensive hire stock. A quick glance at Autograph's list of credits - or the posters spread around their offices - confirm that this 'sound laboratory' is thriving. During 1998 alone many new design projects included a production of *Les Miserables* in Antwerp, a *Les Miserables* concert in Cardiff, the *Oliver!* UK tour, the arena production of *Madam Butterfly*, the *Hey Mr Producer! Concert*, Peter Hall's new production of *Amadeus* at the Old Vic while new and ongoing hire projects include *Rent, Saturday Night Fever, Showboat, Beauty and the Beast, Cats, Smokey Joes Cafe, Miss Saigon, Les Miserables, Grease, Starlight Express* and the current UK tour of *The Phantom of the Opera*, amongst many, many others.

Time for a little more history, then, this time back to the late sixties. Though now seen as a leader in sound systems for large scale, commercial musicals, Autograph's roots lie in a completely different field, though one they have returned to in recent years: opera. Having spent a spell in America working as a photographer, Andrew Bruce returned home and, combining his schoolboy interests in music and theatre, found himself a job at his local theatre: Glyndebourne. After a tour and a summer season for them, he heard that the Royal Opera House in London was recruiting heavily following the introduction of a new shift-working system. In the first of many instances of being in the right place at the right time, the theatre's chief electrician overheard Bruce asking for work at the stage door and took him on.

Bruce ended up working in the sound department at the ROH, making effects for shows and

looking after communications and CCTV. The head of the sound department was Phil Clifford and in 1973, the pair of them hatched a plan. "The Opera House had a rental budget for shows, but not a large capital budget," Bruce recalls. At the time, the ROH regularly rented from TSL and Stage Sound, but Bruce and Clifford saw an alternative, though they they felt a little unsure about it. "We went to the production manager cheekily asking if he would object if we personally bought some equipment and rented it back to the ROH when they required it. He agreed, so off we went and bought a Revox".

Thus Autograph was born, though the full name Bruce and Clifford gave their offspring, - Autograph Sound Recording - suggests that they had plans other than simply renting equipment, with Bruce expecting them to expand rapidly into classical music recording. Whilst still at the ROH and running this part time operation they picked up their first commercial theatre contract. Michael Codron, a theatre producer, contacted the ROH sound department for some impartial advice, Bruce and Clifford went to see him and Michael explained how he felt about the poor quality and reliability of the equipment he had been renting from the main players in the market place.

Bruce and Clifford took it upon themselves to visit Michael's theatre shows over the next few weeks and came to the conclusion that although much of the equipment was fairly antiquated it was all he was likely to get for his money. Thus they embarked on a 25 year crusade to educate producers about the cost of renting sound equipment. After delivering their report to Codron, they were taken aback to be faced with one of these once in a lifetime decisions that you ignore at their peril. Bruce recalls, "I remember Codron stood there as we were leaving the office and basically said that if we ever thought of opening up our own hire company to let him know and we could do all his work!"

The operation started to demand full time attention, moving into what Bruce describes as an "... upstairs garret" in Primrose Hill, with equipment having to be carried up and down a narrow staircase without damaging someone else's vintage Aston Martin parked in the rented garage that was the ground floor. A hallmark of this early period as Bruce recalls was "Complete fearlessness - neither of us ever thought, what would we do if our plans didn't work?". In part this was because they "...hadn't invested enormous amounts of money in it, so we built things up slowly, sub-hiring when we needed to. I remember buying XLR's in ones and twos, because that was all we could afford!". Early customers from this period still continue to return to Autograph, Tupperware shows helped the company early on and have taken them all over the world in years since.

Autograph continued to pick up theatre clients, renting bits and pieces of equipment as needed, but even then they were looking beyond the current techniques and at new equipment that could help with this new approach to sound. *Doctor Who and the Daleks* saw them using cart machines for the first time; "The whole show revolved around the sound effects, zaps and pows, and we took a bold step and put the operator in the auditorium because all the cues were visual. We needed instant start and everything had to be quiet: so no clunky old Revoxes". Bruce also recalls

that "By the time we'd filled the box behind the desk with 136 different cartridges the noise of the operator - Jonathan Deans who eventually became a full time member of staff - clattering through the cartridges had to be heard to be believed!"

A big breakthrough came shortly afterwards, with a 1976 play called *City Sugar* starring Adam Faith and produced by Michael White. "It featured a disc jockey at his console in the centre of the stage throughout the entire play, playing records - an enormous amount of recorded music was being used. There was much discussion about who should actually control the music". Autograph won the battle that they, rather than the leading actor, should control the sound effects and everything seemed to be going well until Adam Faith insisted that his friend Joe Brown of rock-and-roll company Tasco supply the sound equipment. "Robert Fox and Andrew Treagus, Michael Codron's general and production managers, were very embarrassed but had no option but to ask us to step aside. We thought it was very unfair but we agreed to go".

"Three or four days later, they phoned us and said "If we asked you to come back how soon could you get here?!?!". The show was already in the theatre by this point; Autograph had to install their rig overnight, then had just one day to rehearse. The new technology won the day.

It also acted as an important calling card for the company when, a few months later, Abe Jacob, a leading American sound designer (as well as personal engineer to stars such as Jimi Hendrix) came to London to decide upon the equipment supplier for the UK production of the Broadway hit *A Chorus Line*. "He went to see a show of TP's, he went to see a show of TSLs, and he came to see *City Sugar*" Bruce recalls, "and apparently decided that we were the people for him". He pauses. "And the rest is history..."

Certainly that decision set the company onto the course they have sailed ever since. Jacob had an enormous influence on both Autograph and Andrew Bruce personally, teaching them "…how to do a big musical in a big theatre, how to communicate with Americans at long distance, how to get what they wanted or turn them round to what we had". A few years later Jacob would also bring to the company a product which has been central to their work ever since, though the path to the Meyer UPA-1 loudspeaker wasn't a direct one.

Selected as sound suppliers for *Evita* - (in part, curiously, thanks to Julian Beech, who would later join Autograph but was then head of sound at the National and suggested Autograph to Evita's productions managers, Richard Bullimore and Martin McCullum), Autograph received Jacob's spec which called for JM-1s, JM-2s and JM-3s, available for rental only from an American company called McCune Sound. Later quoting for another of Jacob's jobs, the *Best little Whorehouse In Texas* at the Theatre Royal Drury Lane, the request had changed to new loudspeakers called a UPA-1s from a company called Meyer Sound, designed by one John Meyer - the JM of the earlier designs. "They looked exactly the same then as they do now" Bruce notes. "They were also eye-wateringly expensive and we bought them without ever hearing them, I remember thinking "These had better be good!" I also remember when the eight boxes turned up, we were very impressed, they offered the combination of power and clarity in a compact box ideally suited for the

theatre environment!". Jacob specified the same loudspeakers for *Cats*, an unexpected little hit that is still bringing rental income into Autograph seventeen years on!

The show also brought Andrew a new partner. Phil Clifford left Autograph in 1978, subsequently moving to the Manchester Royal Exchange and more recently on to South Africa, and Julian Beech arrived the following year, with a gentleman's agreement that if he and Bruce got on they might one day become partners. Then Abe Jacob specified a Midas mixer for *Cats*, at a cost of thirty six thousand pounds, "Of course we did not have that sort of money to spend on a mixer" says Bruce. So Autograph went to the bank, told them the amount and as Bruce recalls they said "We are going to need your house as security and we are going to need another house...". So Julian and I went into another room and suggested we become partners sooner rather than later". Autograph got the money, the contract, the desk, a new shareholder and have never looked back.

Beech stayed with the company until the beginning of 1998, when he took early retirement due to ill health. Much of the credit for the company's financial stability was due to Julian's role as financial director, but he also kept an active interest in the core function of the company, designing the sound for *Five Guys Named Moe, The Sound of Music, 42nd Street* and others. The Midas deal also introduced Autograph to David Solari, who took great care of the high-value order and was later lured by Andrew and Julian to start up Autograph Sales.

As *Cats* moved across to New York, another new figure entered the Autograph story: artistic differences between Andrew Lloyd Webber and Abe Jacob led to Lloyd Webber bringing in Martin Levan, who had been the recording engineer for many of the composer's cast albums. Levan was subsequently appointed sound designer for *Little Shop of Horrors* in London and, through him, Autograph discovered the second part of what is now often considered their 'standard' system: Cadac mixing consoles. Cadac were then a manufacturer of studio consoles, which Bruce remembers "...seeing at the APRS shows, when we were searching for a new console for the Opera House in the early 70s, enormous things!"

Martin Levan had used Cadacs in recording studios, and wanted to use one for *Little Shop*, which was to be produced at the Comedy Theatre: a tiny auditorium, with the seating at the rear of the stalls particularly cramped. Levan and Autograph therefore persuaded Clive Green of Cadac to drop everything and make a one-off special desk for the show, designed to occupy only one row of seats. "Because of its shape, it was nicknamed the Coffin", Bruce recalls. "Cadac designed and built it in just over four weeks start to finish including oddly shaped PCBs, metalwork and screen printed front panels. It was astounding".

So impressive was Cadac's work that Levan and Autograph turned to them again for the next show in 1984: *Starlight Express*, where the demanding sound requirements - 21 radio mics on a cast roller-skating out and around the audience - led Levan to request a desk with computerised routing and fader level recall (but not moving faders). Cadac built the desk and, though the fader level recall never quite worked properly, the rest of it was a triumph, and is still running the show fourteen years on. "After that, it should make an interesting exhibit for technology scholars" says

Andrew: "It was specially built for that show, and when *Starlight* is finally over there will be no other use for it, except perhaps at the Theatre Museum". Subsequently, Autograph and Cadac collaborated to design more flexible modular products and the results are in the A, B, C, E and F Type consoles and most recently the J Type, all of which are in use on productions of all types across the world.

Starlight also marked a milestone in Autograph's development into a 'grown- up', responsible company with regards to radio frequencies, all thanks to twenty-one radio mics and the furore that followed the ensuing chaos. Autograph spent a lot of time and energy lobbying the appropriate organisations to ensure that such chaos was never repeated and that radio spectrum in the theatre was acknowledged and respected by the policy makers. At the time, only three general frequencies were legally available for theatres to use; *Cats* was already using 10 radio mics, making use of frequencies allocated to television broadcasters, but the low power of the transmitters and shielding of the theatre building meant that the chances of interference were minimal and the subject wasn't discussed in polite company.

For *Starlight*, Autograph started using then-new diversity-based systems with directional aerials, which worked well but were still, technically, operating illegally. There was a mild panic when a Royal Gala of the show was organised prior to its opening, but careful liaison and frequency planning between Autograph and the television and radio companies ("…who all went wide-eyed when we said 'we're using 21 radios!''' Bruce recalls) meant that problems were avoided.

That is, until the first night a few days later when suddenly, in the interval, "Something very big started transmitting right in the middle of our principal frequency band". The second act of the show was chaotic, with major interference on just about every microphone channel. "I never actually heard the worst of it", Andrew Bruce recalls. "I was outside like a shot, circling the theatre trying to find out what was causing it. I eventually spotted what looked like an ice-cream van... with an enormous mast sticking out of the top!". This BBC relay unit had just established a link back to Broadcast House for audience reaction, at the end of the show...

"After the show, everyone was shell-shocked. Trevor Nunn just looked at me and sighed "Ah well". But the next day the newspapers were full of reports that the new Andrew Lloyd Webber extravaganza had been ruined by the BBC. As you can imagine, engineers at the BBC weren't at all happy at being cast as the villains!".

Bruce ended up appearing on LBC and BBC Radio to relate what had happened and explain the root cause of the problem. He then went onto to address his findings to an independent committee set up by the DTI, to examine the usage of radio spectrum. The committee rejected all of the suggestions made by him and other members of the theatre industry and refused to acknowledge that there was even a need for RF spectrum in the theatre. It wasn't until the Society of West End Theatres started lobbying influential theatre people and Andrew Lloyd Webber in turn began complaining to a neighbour - trade and industry minister Paul Channon - that things started happening.

The result, after endless reports, committees and meetings, established a clear set of frequencies of which theatres could become licensed secondary users and Autograph helped found the Association of Service Providers which subsequently became the licence-issuing body for those frequencies on behalf of the government. The high quality sound on complex recent shows owes much to Autograph for this dedicated work, themselves pushing up to 54 channels of wireless for the recent *Hey Mr Producer! Concert* in celebration of Cameron Mackintosh's 30 years in the business.

The other important change, post-*Cats*, was that producers realised that there was a team of people in Britain who were just as capable of designing high-quality sound systems and that using them would save on the cost of trans-Atlantic airline tickets. Andrew Bruce and other members of Autograph have since designed the sound for countless productions, though the one they are most closely associated with is perhaps *Les Miserables*. Autograph's involvement with this show actually predates the now well known Cameron Mackintosh / RSC production. "Just after we had opened *Evita*, I got a phone call from Alain Boublil who said he was writing this new musical and wanted to know about using radio mics. He was at CTS studios recording a concept album, I drove there to meet him and ended up taking him to the airport in Friday night rush hour!". In spite of his promise to call again Bruce never heard a word.

Nine months later however, Autograph received a call from a radio mic supplier asking if they would be prepared to drop everything and go to Paris for a client who was having terrible difficulties with their RF mics. Bruce and his team set off by car and arrived to find five mixing desks, operated by five different engineers. Also a cast and director of *Les Miserables*, who had so completely lost faith with the sound department that at one point they became so frustrated that they charged the sound crew on masse, "...climbing over the seats, shouting and swearing in French...!"

In the end, the problems were resolved and Autograph have worked on every production of the show since, though, realising that producers wouldn't always be prepared to pay for an airfare from the UK to the US either, the Broadway production and American tours are looked after by an American associate and for some of the more recent productions Terry Jardine has acted as sound designer in Bruce's stead. Bruce has also served as sound designer to the same authors' more recent shows *Miss Saigon* and *Martin Guerre*.

Which, with a bit of a forward leap, brings us up to the Autograph of today, where Bruce heads a dynamic team with a huge collective range of experience. There doesn't seem to be any clear recruitment policy: the company doesn't directly employ that many people, preferring to use a talented team of freelancers for the majority of the work and for running shows. But every now and then someone gets sucked into the organisation and very few then leave.

Everyone has their own particular areas of speciality. In sound design Bruce and Jardine (recently appointed a director of the company) design theatrical style musicals while Bobby Aitken specialises in the more contemporary shows, though he has also recently received considerable acclaim for his work on arena operas. Matt McKenzie and Nick Gilpin have produced high quality soundtracks for a variety of plays and smaller scale shows, with McKenzie also creating his own mixer control and sound effects replay software and Gilpin running Autograph's all-digital sound-effects studio; Terry Saunders has specialised in arena shows from *Tosca* at Earls Court through to the more recent *Magic Flute*. Each has their own approach to design and equipment, though if there are any hallmarks to an 'Autograph design' they perhaps include a scientific approach to system design, including consideration of the performance space, attention to detail and setting-up the system, often through the Meyer Sound's SIM.

The designers are backed up by production sound engineers such as Chris Full, Andy Brown and Nick Lidster - responsible for the integrated touring systems now featured on shows such as *Les Miserables, Oliver!* and *The Phantom of the Opera* - service and support engineers such as Tony Robinson, Scott Arnold and Phil Leaver and the whole administrative team, many of whom have a sound background - financial controller Duncan Bell was production engineer for shows such as *Miss Saigon, Carmen Jones* and *Cats*, before moving behind a desk.

It is the cross-fertilisation of knowledge and support that gives Autograph its strength. "For example, if we ever need any thing that is not an off the shelf product, we are lucky to have the experience of in-house personnel who can design and manufacture any bespoke equipment we require. This helps the design process when you are not limited to the commercial products available." comments Terry Jardine.

The company have also set a very high standard for the equipment they use and the way that equipment is maintained and installed, Andrew tells us, "Having realised quite early on that there's almost as much equipment in a modern show as would be in a small regional TV station, and that if it is conceived and installed properly it would be easier to diagnose and fix things when they, inevitably, did go wrong". In particular, their systems revolve around patch bays, allowing sound crews to work around faulty equipment with ease, whilst causing as little disruption as possible to the audience. And their approach goes beyond just the technical aspects. "We try to think ahead", Bruce explains, "For example, we always measure out and plan the orchestra pit, because we now know how much space the various musicians need. This is in order that their environment is workable and even comfortable." He describes the job as "Equal measures of psychology as well as art and science".

Much of this attitude stems from the fact that Bruce is married to a Siobhan McCarthy, an actress and singer who is just about to go into rehearsals as the lead in the new Abba musical *Mamma Mia*. He is able to hear and appreciate the performer's view on modern sound systems as well as the sound designers! As a result, he is always keen to get to know the cast as early as possible, to the extent of flying out to Chicago just to be there for the first hour of rehearsals of a new production: "If your first appearance is any time after that critical introductory session, then you're just some kind of technical person and you have a lot of catching up to do with the cast". Autograph also take a great deal of care selecting their sound crews, especially the radio mic runners -

"The first line of contact with the cast".

During their 25th year, Autograph have been looking to the future as well as back at the past. The technology continues to develop, and Autograph continue to be at the forefront, constantly experimenting. Bruce's main area of concern at the moment is reducing the size of the mixing desks and the number of revenue-earning seats they occupy, and the company have already been experimenting with smaller, digitally-controlled systems, such as Beta testing the Soundcraft Broadway on *Martin Guerre* in London. Here the advantage of the combined designer-supplier experiment is clear, the design was based around a Cadac system with the Broadway running alongside it until everyone was happy with it. This meant supplying two desks, one installed fully in the auditorium and the other with its racks under the stage, two sets of cabling (including fibre optic cabling), with detailed plans for switching between the two desks quickly. Unfortunately and as expected the Broadway desk was immature and the experiment didn't work, the Cadac stayed for the entire run of the show, but that won't always be the case. Two years on the research continues and Autograph hope to be the first company to use a digitally assignable desk in the theatre.

Today the company is pondering its own future: whether to stay at its current size, to expand, to enter new markets. Though the company is already dabbling in new areas, including consultancy on sound systems for new theatres, it seems likely to stick to what it knows best, avoiding the over-expansion that killed off the original version of Theatre Projects. Bruce looks around his company's headquarters, which they moved to in 1984 from a much-loved series of Victorian stables in Camden (when they were eventually claimed by property developers) and proclaims it to be "...an ideal size - right now I could never conceive wanting to be bigger than this, but I know we may have expand as new markets open up for us". That size is now comfortably supported by musicals from both Britain and at the moment from the US with Autograph operating quite happily as both a service and hire operation. The company learnt the American language from Abe Jacobs, and passed it back to a generation of American based designers - Jonathan Deans, Mark Menard, Steve Kennedy and Tony Meola - so now there is a global sound language.

"Twenty-five years is certainly a watershed," comments Andrew Bruce. "And it has been one of our busiest years ever and I want it to continue; I feel we still have a lot to give to the theatre and I'd possibly like to have something to give to my children, of course, I don't know if they'll want it... but they always seem to want to come and see what we are doing, because it seems like fun to them. I can understand that because it still is fun for me."

A professional and innovative approach to sound. That could be Autograph summarised in a sentence.

Happy birthday!