The world according to...

Avid hi-fi

Hi-Fi Choice catches up with Avid hi-fi founder Conrad Mas, to talk turntable inspiration and business philosophy. Interview: Malcolm Steward

Where do you imagine that a small British turntable manufacturer would base itself these days? Under a railway arch, or in a similar low-rent commercial facility in the poorest part of town? A run-down factory building maybe? Think again. Avid has made its home in what used to be the offices of the CIA on the former USAF base at Alconbury, near Huntingdon.

Amid a welter of industrial and commercial operations housed in ex-military barracks, hangars and munitions silos, Avid operates from a spacious and bomb-proof, yet highly anonymous-looking HQ. The office's solitary window, company chief Conrad Mas told me, still contains bulletproof glass. Apart from the usual office areas – reception, storage and demonstration/training room – the building also houses the company's extensive engineering facilities, complete with CNC machinery and lathes, which all help to reduce Avid's reliance on external suppliers to virtually nothing. Interestingly, while this machinery is grinding, drilling and doing whatever it's meant to do – usually the type of operation that calls for ear-defenders – the noise levels in adjacent rooms remain eerily low. Non-existent, in fact. One can only speculate why the CIA wouldn't want sound to travel very far within its premises...

HFC: How did you begin designing turntables?

CM: Like many hi-fi enthusiasts, I first owned a Connoisseur BD1 then progressed to a Thorens, which ended up tweaked and covered in Blu Tack. Eventually, I reached the stage where, probably very arrogantly, I felt that everyone else was doing things wrong.

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Avid's turntables aligned in special DEFCON-1 configuration

I sold the lot and sat down with a blank sheet of paper to design every aspect of a turntable the way I thought it should be done. I designed it the way you'd design an electrical circuit, because I believe that one can convert most electrical circuits into mechanical circuits. I wanted to channel paths and signals, and electrical signals are only vibration. Then it was just a case of figuring out how to convert my drawings into a functional mechanical object. I had no qualifications or any background in engineering, which in hindsight I feel was an advantage. If you look at most audio engineering companies, they usually began life as engineering companies and then found their way into hi-fi for some reason.

A lot of the materials we use are cast components and I didn't have any knowledge or experience with foundries and the casting process. I got around this, and my lack of engineering knowledge, the obvious way: by taking a job in a foundry, where I was able to learn everything I needed to know about castings. All the other disciplines I've learned by either approaching universities and using their facilities, or by studying the narrow fields required. For example, I learned technical drawing from a library book. Years later I was introduced to CAD (Computer Aided Design), which we now use exclusively.

Initially, Avid started by sub-contracting much of its work out; effectively assembling components that were produced outside the company, from my garage. I then progressed to a double garage and from there moved to a 1,500 square feet facility. Now we have 15,000 square feet and that space has enabled us to install all our own engineering equipment and bring nearly every aspect of our turntable construction business in-house.

HFC: It must have been an expensive operation investing in all that heavy machinery you have next door.

CM: It was, and we didn't get much change out of £200,000. However, I always take a

long-term view of things and that was a very sound investment. Having all our own machinery also enables us to carry out the contract work we get asked to do – we produce close-tolerance components for medical, military, automotive and petrochemical companies, as well as for other hi-fi manufacturers.

What's more, having our own manufacturing capability enables us to carry everything we produce in stock – we don't have to build-to-order and the customer can have what he wants the following day rather than facing several weeks' wait.

HFC: So where does Avid stand as a company at the moment?

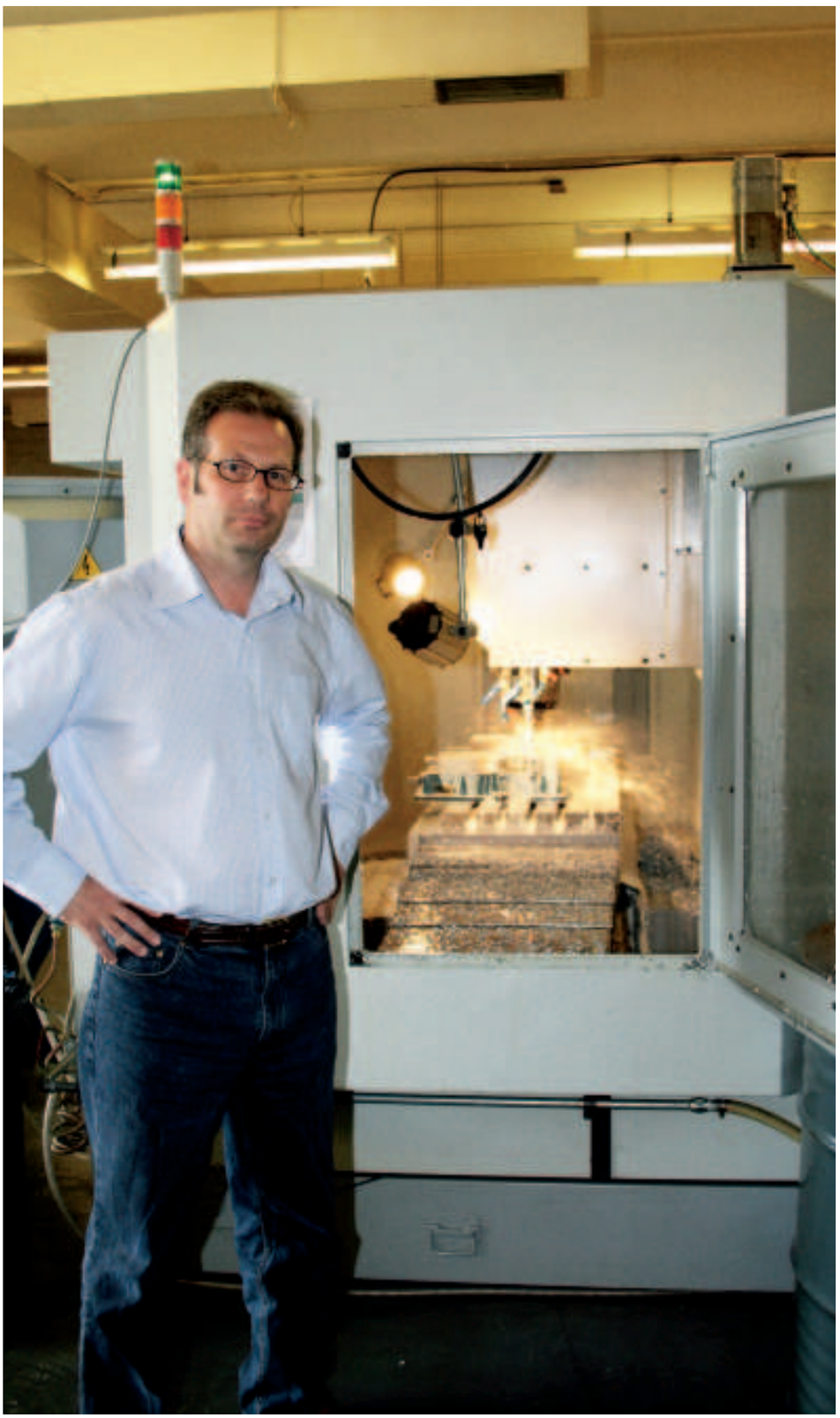
CM: We're currently shipping to over 30 countries around the world and we have about 30 UK retailers, which we hope to increase shortly. We're selling more turntables abroad though because, historically, UK retailers would phone and want to order one turntable while America would be on the other phone simultaneously ordering three pallets' worth, and as in any business, money talks. After I returned from a UK show recently – where I was amazed by the interest in Avid shown by retailers and the public – we decided that we had to start carrying stock in order to satisfy the UK market.

HFC: Isn't holding stock bad news for any business, though?

CM: It would be costly if we were having our parts made by sub-contractors, which we'd have to order in large quantities to keep costs as low as possible, but because we buy raw materials and make everything ourselves it isn't so prohibitive. On average we'll have ten or 15 of each model in stock at any one time. If we have the parts it makes sense to turn them into products, which we can test thoroughly and package ready for dispatch. That's one problem with the 'just-in-time' manufacturing process that many people employ: it doesn't offer the time we like to ensure that our products will not fail in our customers' home. For example, we often test our power supplies for three weeks and then package them, drop test them, and then re-test them again for a week. We don't want to send stuff to, say, the USA and have it returned because it failed to withstand the shipping.

HFC: How do you view the state of retail in the UK?

CM: I can see a lot of retailers going to the wall because they're not keeping up with changes in the market. Their customers have changed and have different requirements now, but many stores seem to want to carry on doing business the way they have for the ▶




Conrad's years of training as a stage hypnotist clearly paid off

which we can offer our engineering services. Audio is probably 80 per cent of our business turnover now, but who knows how long that situation will prevail?

HFC: What's the latest news in terms of product development at Avid?

CM: One of our retailers who sells a lot of Naim equipment recently asked if we could produce our mid-range turntables in a fashion that would better suit Naim cosmetically. Hence the Black Series, which, when we showed it at a UK show, generated so much interest, especially from overseas, that I was gob-smacked. As a result of this, my relationship with Naim, I'm pleased to say, has flourished – no doubt helped by the Linn Keel upgrade, which precludes owners of the Naim tonearm and has, effectively, left a lot of Linn/Naim owners feeling 'orphaned', because to enjoy the turntable upgrade means they'll have to jettison their preferred tonearm. So we've developed what I consider to be an improved mounting system specifically for that tonearm on our turntables, which has generated quite a lot of interest around the world.

HFC: I also hear that you've been making moves into custom installation, which has me confused. I thought that custom install was all about hiding equipment away and I can't see that working for your turntables. Can you explain?

CM: We're actually making 'double-sided analogue replay systems' that fit perfectly into the custom install ethos! In this country I see custom install as a fledgling industry with retailers fitting out small home cinemas with a plasma screen, an AV receiver and five loudspeakers. In America it's a completely different ball game: there are installers there who won't look at a job worth less than $200,000 and they're very well-sorted businesses – they're not selling the equipment for nothing and making their profit on cables, for instance. Their customers spend $100,000 without even thinking about it and those retailers have realised that when they sell these people a plasma they make $100 or $200: when they sell one of our top decks, they make a whole lot more and they've caught onto the idea of asking their very rich clients whether they have any LPs anywhere in their homes. The answer is normally, "Yes, but you can't buy them any more, and they don't sound very good." When the dealer shows them one of our turntables and says that it will make their records sound much better and that, in fact, they can still buy LPs, they usually order one. So much so, in fact, that the USA has become our biggest growth market by far.

Many rich Americans don't want to hide away their Avid turntables: they have them out on display as a bit of hi-fi bling!

HFC: What materials do you favour, and how do they affect the sound of your turntables?

CM: The majority of our turntables are made from aluminum because if you use just a single material you can far better predict and control resonances – where they're going to go and how they'll affect the sound. The sub-chassis is a coarse-grade aluminum coated with a paint finish that we specially developed to reduce the skin tension in the aluminum: low frequency energy stays in the core of the material while the high frequencies make their way to the surface – not unlike the 'skin-effect' in cables. This approach makes it very simple to dissipate energy within the sub-chassis rather than using outwardly superior beaded anodised aluminum, which is less effective.

HFC: None of your turntables have a plinth. Is that a purely cosmetic consideration?

CM: None of our products are primarily designed 'aesthetically'; they're all a case of form following function. For example, The Acutus, our first design, contains nothing that doesn't fulfil a purpose. Even the shape of the base, which looks like it might have been a cosmetic consideration, is the way it is to avoid having parallel surfaces, which are bad for resonance. The core design and fundamentals of all our turntables are the same but they use different materials and ways of doing things commensurate with their cost.

Our sub-chassis is a unique design that is founded on the view that absolutely nothing is rigid. Everything vibrates and everything moves, so it's important to ensure that the join between the arm and the bearing is very rigid, while the less important areas, such as the suspension points, can be less rigid. In fact, the turntable is allowed to flex there because it has no effect on the sound. Our sub-chassis was designed in the early 1980s during some free time on a time-shared computer that was then being used by Saab to develop its turbo, and Windscale Nuclear to design reactor components.

What with the company being housed in a formerly 'secret' location and Conrad's tales of developing his sub-chassis using 'borrowed' time on a computer being used to develop parts of nuclear power stations, it was clear that there is far more to Avid than meets the eye. At which point we closed the interview and headed off to tour other covert attractions that Alconbury airbase had to offer. **HFC**

"This industry needs all the manufacturers to get together to try and revive its appeal rather than fighting for greater market share."

past 30 years. Thankfully, there are new retailers coming up that are more in tune with today's market and I expect they'll do well. Specialist retailers denigrate Comet, but at least when you walk into one of those stores somebody takes the trouble to speak to you: they might only ask "Can I help you?" but at least they've acknowledged your presence in the store, which several specialists I've visited couldn't even be bothered to do. Sadly, many retailers' response to the present downturn in sales is to ask manufacturers to give them a larger profit margin rather than try to do something about the situation themselves.

This industry needs all the manufacturers to get together to try and revive its appeal rather than fighting amongst themselves for greater market share. I think it was Russ Andrews who recently suggested organising a large show at a venue such as the NEC, but I can't see that being a success. That strikes me as closing the stable door after the horse has bolted – only in this instance the horse bolted so long ago that it has died and turned to dust. What we need is a concerted effort from all parties involved to make hi-fi more appealing – sexier, even – to a much wider public.

I feel sure that we'll still be selling turntables and CD players in 30 years' time, even if it's to a much smaller, niche market. But that's why Avid is looking at avenues other than audio in