Recording U2

In 2002, Carl Glanville received an invitation from U2 to track 'How To Dismantle An Atomic Bomb' at the band's Dublin-based Hanover Quay recording facility. Now in 2005, Glanville recounts the unorthodox approach to the recording of U2's latest success. Strother Bullins reports.

Anyone who's spent some time in a large and/or popular commercial recording facility is likely to have some idea of what a stereotypical tracking session for international superstars might entail. Fame-nourished egos clash daily, narcissistic and self-important monologues flow endlessly from the control room while trays of exotic fresh fruit, pots of French-pressed Jamaican Blue Mountain coffee, and coke-sniffing supermodels sit wasted and ignored in the studio lounge. If you're with me, then you've doubtlessly been there, or at least heard the stories.

According to engineer Carl Glanville, however, recording U2 – arguably the biggest rock band on Earth – involves a process that bears no resemblance to this clichéd notion. Instead, the members of the group – Bono, The Edge, Adam Clayton, and Larry Mullen Jr. – always balance family, their children's schedules, and an incredible dedication to excellence in their reign as certified international rock superstars. And it's mainly the latter aspect of this balancing act that helped make U2's latest album, *How To Dismantle An Atomic Bomb*, such a gratifying and exciting project for Glanville to be an integral part of. "I wasn't working for anyone else for the past two-and-a-half years," Glanville comments on his longstanding stint at U2's Hanover Quay, Dublin-based private studio. "It was a full-time job. The only time we would take breaks were during the school holidays, but that's it. They kept me busy for a while!"

> 'I'm holding a mic to Edge's guitar, moving it up for him to sing background vocals, then back to the guitar. It's almost like recording at home'

The Prototype

Like most engineering jobs, Glanville's gig began with a phone call. "They were looking for an engineer for their next project," he recalls. "I had a very brief meeting with them before they asked me if I wanted to come to Dublin? Of course I said, 'Sure!' and off I went." From there, Glanville helped the band on a few sundry sessions before diving into what would become U2's 14th full-length release. "We did work on demos for the album and along the way we came up with a couple of songs for *The Best Of 1990-2000* that came out in November 2002." Those sessions gleaned *Electrical Storm*, *Hands That Built America* which appeared on the Best Of as well as the soundtrack for the Martin Scorcese film, *Gangs Of New York*, and remixes of several songs from Pop: *Staring at the Sun*, *Gone*, *Discotheque*, and *Playboy Mansion*. "So there were a lot of other things going on," Glanville understates. "By around November 2002, we felt that those other things were out of the way, and we could really start to focus on the record. That's when the album started to take shape."

Direct Delivery

According to Glanville, the intention of the band was to keep their delivery simple and strong for the album. "For the most part, all the early stages of the record were very guitar-based," offers Glanville. "The intention was to keep it simple: drums, bass, guitar, and the occasional electric piano once in a while. I'm not sure that they said, 'Oh, we're going to make a record like we did in the old days,' but there was no great interest in making contemporary sounds that involve a lot of electronics. They really wanted this record to have the spirit of a band – that feeling was definitely there. Adding some 'sonic disturbance' to things with keyboards or samplers came along later in the game. I think there was always a plan to add the 'Brian Eno Element' or a bit of sonic chaos as well."

With Glanville invariably working alongside assistant engineer Chris Heaney, U2 called upon a variety of producers for the sessions throughout the two-year production period. While the album credits bestow the overall title of 'Producer' to Steve Lillywhite, many talented characters – Chris Thomas, Garrett 'Jacknife' Lee, Nellee Hooper, Flood, Daniel Lanois, Brian Eno, and Glanville himself – applied their unique sonic fingerprints to *Bomb* via 'additional production'. "It all went through several different phases," explains Glanville of the production process. "It started with just the band and me, then Chris Thomas came in as the primary producer and we worked with him from January to December 2003. Around November, Daniel Lanois – who was in town promoting his solo record – came by. He hung out for a week; Danny and the band are old friends. They just wanted him to come in and say hi because he'd been involved in all the other records. He brought his style to the room for a week, which was really great. At the end of 2003, Chris left the project and Steve [Lillywhite] came in. He brought Garrett Lee with him. Garrett added a lot of the synthesizer elements, sonic atmospheres, and some icing on the cake to the project, so to speak."

No Rules, No Jokes

Naturally, a free-flowing production scheme complemented U2's writing sessions. But for Glanville, this is where the omnipresent challenge of this project resided: as an engineer for U2, you must always be ready for anything.

"They have absolutely no rules when it comes to making records," says Glanville assuredly. "Sure, many say, 'There are no rules for making records,' but I think even those people still generally follow certain principles. Not these guys, though – it really is 'no rules' for them." From musical ideas abruptly turning on a dime to impromptu vocal overdubs, U2 kept Glanville and Heaney on their toes. "Edge would come in with an idea; a basic form of a song," Glanville recalls. "But when the band entered the studio to play as four people, that idea would suddenly – and completely – change shape. It might happen because somebody started the click at the wrong tempo or somebody hit a wrong note, but it created some other sound that everyone got off on, or something like that. Bono would then say, 'What was that? Let me hear that again.' Suddenly, that thing we were planning on doing would be sidelined. Something entirely different had sprung up and then we would work on that."

After finishing a take, this bohemian song construction continued in the control room. "They might record for 20 minutes, come in to listen and suddenly Bono would get an idea for a melody," explains Glanville. "A nod to Chris (Heaney) meant, 'Drop me in at the next chorus.' While doing that, he may turn to Edge and say, 'Quick – acoustic guitar,' then I'm holding a mic to Edge's guitar, moving it up for him to sing background vocals, then back to the guitar. It's almost like recording at home – a refreshing and different approach for making an album."

According to Glanville, once a song was written, correc

Letting rip during the rehearsal phase of the recording of the new album.

'How to Dismantle an Atomic Bomb' engineer, Carl Glanville.

and improvements never stopped because the members of U2 always asked the question, 'Is this good enough?' "That's the great thing about all of the guys," he commends. "Nobody is precious about their parts. If something doesn't work – if it worked once upon a time but doesn't now – they ditch it and do it again. If we recorded a guitar, and a week later we came back to it, the song may have taken a slightly different form. Edge might say, 'You know that guitar we have? It's a bit too thin… let me play it again with a different sound.' Instead of trying to adjust what was there, he'd simply play it again."

For Glanville, one of the most memorable instances of U2's ceaseless-yet-impulsive quests for excellence took place during the mix session for *Yahweh*, the last track on the album. "We were in the middle of the mix and Larry says, 'I'm not sure about the drums in the middle. Can I just have a go at those again?' As he says that, he is actually getting up out of his seat, walking towards the studio, to play again. We're like, 'What?' But it was no problem. Again, you've got to always be ready to go. All the way along, I knew that once we got to mixing, I needed to have 18 channels available to re-track the entire band at a finger's snap. They would be listening to a mix and someone would say, 'This sounds really, really great. We should have played it like this, because this sounds different from the way we did it. Why don't we go and have another crack at it?' Even with all of those months of work to hone the song there on tape, they'll go in and do it again. They might get something out of it, and they might not, but they'll try."

The 'How Did?' Of 'How To…'

The tracking sessions for *How To Dismantle An Atomic Bomb* utilised Hanover Quay's vintage Neve console with 36 main channels, 24 monitor channels, and 1081 preamp/EQ modules. The straightforward recording sessions were largely 'headphone-less' song quests, and the band freely roamed where necessary to unearth the album's 11 notable selections. "All of the mics stayed on the large faders, all the time, for the whole record," explains Glanville. "We just monitored through the 24-track section." All tracks were initially recorded straight to iZ Technology's Radar 24 digital audio workstation, then dumped to Glanville's ProTools24 Mix Plus rig via Apogee AD-8000 converters once they knew what to build upon. Glanville explains: "The songs – which would come from extended jam sessions – would materialise from a nugget of something really good in those takes: a clue to something else. We would take those pieces and dump them to ProTools. In 'Tools, it's quicker and easier to do edits, try different parts in different sections of a song, like 'let's try this bit as a chorus or a verse,' and so on. We would piece together things in ProTools, and before doing any more overdubs, we'd bounce it back to Radar. We only used ProTools to cut and paste things together."

> 'I needed to have 18 channels available to re-track the entire band at a finger's snap'

For monitoring purposes, Glanville used what was there: a pair of KRK 9000 monitors. "They were in the room when I showed up. I thought, 'Well, if this is what everybody's used to listening to, I'll go with the flow.' They sounded great, so there was no reason to change them."

All of Bono's vocals were recorded via a hand-held Shure SM58 through a Neve 1081 module, Teletronix LA-2A compressor, and then straight to Radar. "It was a very simple chain and he would always sing in front of the control room speakers," Glanville explains. "We would just turn them up and go for it. He has such a powerful voice that there weren't issues with leakage. He knows how to work a microphone so well – when to move in and when to back off – that it makes recording very easy." Before recording alone in the control room, Bono would first lay down a scat-based guide vocal while performing with the band in the live room, subsequently replacing the track as he completed lyrics he was most content with. "Very often, he wouldn't have lyrics at the time they were writing songs. Once we formed a song, he would put down another scat vocal in the control room before laying down his final take."

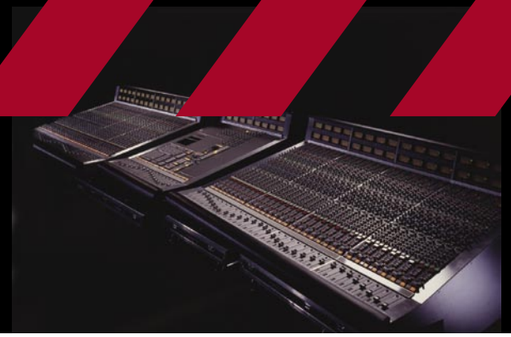
As for recording The Edge, Glanville insists that he simply captured the magic that the guitarist and his tech, Dallas Schoo, expertly created on the other side of the glass. "Edge would work very hard with Dallas to get a specific sound out in the live room," he offers. "I wouldn't really want to mess with that sound very much, unless it was a case of, 'Oh, let's really twist this up by over-compressing it,' or something like that. So many of these sounds just came out of his amp. It's just the way he plays it and there's the sound. I didn't want to do anything to it – it was perfect."

One Studio Becomes Three

When the time came to mix the album during the last eight weeks of the project, Lillywhite opted to set up three mix stations: one in HQ's Neve-equipped control room, one in the main tracking room, and one geared more towards editing and effects manned by Jacknife Lee. The control room mix station utilised a unique SSL 4000 Series console owned by Sting, while Lee's station was centred on a 32-channel Mackie analogue eight-bus console.

"Sting has a mobile studio called Steerpike," explains Glanville. "The modular SSL comes in three big road cases. We put it into the space that the band had been playing in, and this allowed us to have two studios on the go at once; Steve and I – who were mixing on the SSL – could look through

U2 back home in Ireland performing to countless thousands live at Slane Castle.



SSL 'to go': Sting's go-anywhere SSL 4000 Series arrived at Hanover Quay in three rather large flight cases.

the glass and see Flood in the other room mixing on the Neve." This configuration was a big help as the album's deadline steadily approached. "We really had to turn up the steam," Glanville recalls. "Everyone was running from room to room to do last-minute overdubs and to mix. We kept it all in-house, but at the end of the day we needed three rooms to do it."

While it wasn't part of the plan to mix at the Mackie station, one of the album's selections, *One Step Closer*, was deemed 'done' by Bono upon hearing one of Lee's in-progress playbacks. "Garrett was quickly getting a rough mix together," tells Glanville. "Bono walks up and says, 'This sounds great. Let me do a vocal.' So he sings over it, and declares it done! Everyone else is asking, 'Are we sure?' When you listen to it, though, it does sound great, so we used it."

When Glanville and Lillywhite began the mix of *Vertigo* – the album's highly successful first single – Lillywhite decided to try bouncing its all-digitally-captured tracks to analogue, but quickly decided against it. "Steve thought, 'Maybe we should transfer this to two-inch,' just to see if it added something. But it sounded awful. We had everything sounding great coming through the Radar – crossing over to two-inch just didn't work. The original plan was to do that for all the songs but we quickly bailed on it. Steve normally does basic tracks to analogue first, then transfers that into the digital domain and overdubs from there. He hadn't worked in a situation where the basic tracks hadn't gone to analogue tape first, and he wanted to satisfy that curiosity for himself. I was interested as well, but when we played it back… dear, oh dear!"

Another interesting aspect of the *Vertigo* mix is that Lillywhite and Glanville did it without the assistance of console automation. "It's completely manual," Glanville states almost proudly. "It was just Steve and I, sitting at the desk. Steve did the drums and guitars; I did bass, vocals, vocal effects, and a guitar that plays on the outro of the song – four hands. We had all of our pencil marks on the faders, completely old school."

According to Glanville, neither he nor Lillywhite are fans of SSL automation, so they both decided to try mixing without it. Further, the duo had been listening to the song on the Neve for quite a while, and – in comparison – a standard automated SSL mix just wouldn't do. "For the longest time I had an API 560 graphic EQ on the mix bus insert and an Alan Smart C2 compressor across the mix bus instead of the SSL compressor. We'd been listening to so many of the mixes on the Neve desk with that same API/Smart combination across the mix bus and the rough mixes were always sounding better than the mixes we had up and running on the SSL. So I did everything I could to bring it back to what we had going in the other room."

Since *Vertigo* only used 24 tracks, both Glanville and Lillywhite felt that it would be no big deal to do the mix manually. "We just sat there for days doing manual mixes," Glanville explains. "If one of us made a mistake, we would just rewind and drop it in. Now, every time I hear the song I can see us doing the moves."

Uno, Dos, Tres, Catorce!

Yes, Glanville fully realised the magnitude of *How To Dismantle An Atomic Bomb* upon its completion. But still, nothing could prepare him for his first public listening session for *Vertigo*, which took place at a New York pub during a commercial break for a baseball game. "It was very funny to hear *Vertigo* for the first time," recalls Glanville of the Apple iTunes ad featuring the song. "I was watching a game at a bar when the ad appeared on TV. I heard, 'Uno, dos, tres, catorce' and thought, 'Oh, my God!' It was great!"

In retrospect, Glanville is adamant that the *How To…* sessions – unburdened by rules and preconceived ways of working – were ultimately successful because all involved were only concerned about how things sounded, not about how they were done. "It was a fantastic way to work," he says. "When working that way, you're not hung up on the details. You always want to make sure that something is as good as it can be, but if something sounds great coming out of the speakers at the studio, in your car, and at home, then I guess it sounds great. There's no reason to change it, right?"