The masters of the Beatles remasters

By Jim Boulden CNN

LONDON, England (CNN) - They were entrusted with gold.

When the Beatles' longtime record label, EMI, decided to remaster the Beatles' music, they gave the raw material to a handful of men. Among them were EMI engineers Allan Rouse, the project coordinator, and Sean Magee.

Rouse, in particular, was familiar with the tapes. He was the person who'd copied them from their original analog form to digital as a safety backup in 1991. He's since worked on the Beatles' projects "Live at the BBC," "The Beatles Anthology" and "Let It Be ... Naked."

CNN's Jim Boulden was given the chance to sit down with Rouse and Magee. The following is an edited version of the interview.

CNN: Why was this project taken, and why so long?

Rouse: It was started four and a half years ago, and it has taken over that period of time about a year to do the whole thing. On average, about two weeks per album.

CNN: What does this allow you to do that you couldn't have done to these songs before?

Rouse: When they were originally transferred to CD in 1986, digital technology was in its infancy and the gap of 22 years has allowed for a great increase in that technology. So the transfers are far superior now, and that was before we actually did any work to them.

In addition to that, we had decided that we wanted to remove or improve technical faults within the recordings that could have been a bad edit, a dropout, vocal sibilance, vocal pops. Things that were directly related to the technical recording rather than the human recordings, so in other words, we haven't taken out breaths or little coughs or squeaky chairs or Ringo's occasional squeaky bass drum pedal.

CNN: Tell us about the process. And that is where you came in, [Sean].

Magee: I came in just after that, but the first part of the process is choosing what equipment you are going to use to do the image and the transfers, so there is the choice of tape machine, there is the choice of analog-to-digital converter and also the choice of which lineup tape to use -- the lineup tape is a set of tones that allows you to set up the tape machine to its optimum performance.

So they transferred all the tapes with a varying combination of machinery into the computer and then blind-tested all the various ones to see which ones they preferred. And then after choosing that, everything was transferred track by track into protocols, making sure the tape heads were nice and clean and the tape speed was constantly monitored, so the best possible transfer could happen.

Then Guy Massey, who did all the transfers, went in with the restoration engineer -- a guy named Simon Gibson. They then looked at all the various ticks, pops, sibilance and sorted all that out so that once that is all on protocols, that now becomes your master tape, and that's when we started, really.

So you have the tape if you like, albeit in a digital format, and you now start deciding what you are actually gonna do to the tracks, what you are actually gonna do to the albums, what needs to be done or doesn't need to be done.

CNN: So there's no way to say it took the same time for each song or each album, because each one had its own challenges.

Magee: Absolutely.

CNN: What were the differences? Would it take a week on a song, six months on a song?

Magee: More likely four or five hours on a song. On average, we took about two weeks per album. But sometimes it might be three or four hours on a song, it might be 10 minutes on a song. We'd start off in the morning, listen to the album all the way through, [then] we would then check that against what had already been out, whether it was mono or the CD if it had been on CD before. We then decide what we are going to do with it. We then EQ and fix problems, if there were any. We then go in the evening, or the morning after, into Studio Three to listen all the way through, decide if we have gone too far or not. Decide whether there are any things that really need attention. Then we go back and we do it again.

CNN: Was there anything about doing it at Abbey Road that was more than just historical significance, or was there something about making sure it was done in the same place?

Magee: I'd say it's a bit of both, really.

CNN: How much involvement was there from the Beatles themselves, or was that not anything that you had to deal with and that only came much later?

Rouse: They weren't involved in the process. Obviously, they have to sign off on it. So when we finished it, we provided them with a copy of every album. But the process was over such a long period of time, and it would be very complicated to have involved them anyway. I'd like to think they have some trust in us because we've done numerous other jobs for Apple, and invariably [it's] what we end up doing, particularly when we

do surround work for "Yellow Submarine," for example. We would actually get them in here, and they would sit and listen in Studio Three. But as far as listening to these here over the period of four years, it wouldn't have been possible.

CNN: And you haven't heard back, and that is good news?

Rouse: Basically, if the phone doesn't ring, that is good news, yes.

CNN: What was particularly challenging about this?

Rouse: One of the little challenges, I suppose, was the fact that for the last dozen or so years, we've become accustomed to remixing the Beatles, and when you remix the Beatles, you can do things far more extreme than you can do when you are remastering it. I think that that was, in a sense, particularly for Guy and Paul, who were the two main engineers involved in the remastering. They have remixed an awful lot of Beatles material, and now suddenly they were faced with just working with the original two tracks or mono masters. And what you are capable of doing with those is far less than you can do in a remix.

CNN: Because in a remix, the song can sound very different, whereas [in] remastering, you are trying to bring out the best of the original song.

Rouse: That's right. A remix means you are going back to using the original multitrack tapes, which could be four-track or eight-track, and therefore you can alter the balance and you can change [things]. One of the things people find a little strange today [on the oldest tapes] is that the vocals appear on one side and the drums appear on another side, so one of the things that sometimes you can correct is bringing those into something more acceptable for today, which is put them in the center. Remastering simply is using the tapes that were created during the 1960s that ended up on vinyl.

CNN: There always will be people who say, you're playing with something, you are messing with something in the original --

Rouse: Playing with the crown jewels.

CNN: There probably will be a critic out there that will complain.

Rouse: Yes.

CNN: But you are clearly pleased with your outcome?

Rouse: Yes, I think, actually before we even started work on them, by doing an EQ, as I said earlier, they actually sounded better, and I think quite frankly, probably the closest they have sounded to the original masters, than they have done ever before.

CNN: Would you agree the [early] CD era actually took away the richness of the music, and now we have moved beyond that and are going back to the original, or is that just a lot of ...

Rouse: No, I still think that probably the CDs aren't up to the sound vinyl gives us, but it is the CD that we have got. So we have to make do with that as it stands at the moment. And I would like to think that what the guys have attempted to do is to make it sound more acceptable in that format.

CNN: Anything surprise you by going through this whole process?

Rouse: That's the problem you see with having done remixing -- all the surprises in that sense really have gone. Probably the only surprise is that when I started buying the vinyl in the '60s, I bought stereo, so I had never heard mono, and to be honest with you, it was actually quite a fascinating experience to sit and listen to, particularly "Sgt. Pepper" in mono.

I mean, up until "Sgt. Pepper" and beyond, up to the White Album in fact, the monos were considered to be the real masters in the sense that in the '60s, Britain wasn't up to speed, we hadn't quite got to stereo. The only people who really had stereo in those days were people who could afford it, and invariably that meant they were listening to classical music or middle-of-the-road music.

And so the monos were certainly the king at the time, and that didn't matter to me, I didn't realize that, I had already bought into stereo as a teenager, but to suddenly hear the monos, I don't think, in fact, I had listened to the mono "Sgt. Pepper" in all the years I have been doing Beatles work. Until this particular time.

CNN: Sean, you worked on the monos. What was different about that? Was there a technical difference other than the obvious mono/stereo?

Magee: Stereo goes out this space, mono stays right here.

CNN: Does that make it harder to do what you were doing?

Magee: Absolutely, the cause, or rather the effect, of only a tiny amount of EQ makes a hell of a difference in mono. Whereas in stereo everything has space, in the mono it's right dead center. The thing that surprised me about the monos was how good they actually sounded and how well-mixed and well-balanced they were. They actually had a feeling of space and depth.

CNN: The press release says you took out bad edits. I didn't know there would have been bad edits in the original Beatles. What does that mean, and what is it you could take out?

Rouse: There wasn't many, to be honest. I mean, it was just an issue that we could deal with now. There were a few songs where they had created it over two takes and they wanted to use a part of one take and a part of another, and sometimes the edit wasn't as good as it could be. In some cases, we couldn't do anything about it. But if we could, we would try and smooth it over so it wasn't so obvious.

We have treated the stereos and monos just slightly differently in the sense that we think the stereos are going to the product that is going to sell the most, because most people are into stereo -- but obviously the collectors and people who grew up in the '60s are going to be more familiar with the monos.

So from that point of view, one of the things that is a contentious audio problem today is limiting, "brick-wall limiting," which is making the music as loud as you possibly can. And you make it louder than somebody else's so yours sticks out a little bit more. For something like the Beatles, a band from the '60s, it would have been inappropriate to have given it that treatment, but we have made them slightly louder. So that they are at least slightly contemporary for today but certainly not as loud as the more contemporary bands. But the monos we haven't, for example. The monos remain unlimited.

CNN: I found that really interesting, that whole thing about making CDs louder. I remember that in the news. Just made it loud, loud, loud, which isn't necessarily better, it's just loud.

Rouse: The thing about loudness in terms of today and modern bands is that quite frankly, some bands are probably writing their music and they actually hear that sound. It's probably fine. There is no problem with a modern band wanting perhaps to use that. But in terms of using a retro band and trying to compete with the bands that are performing today and making records today -- that would be totally insensitive, and apart from which one of the major problems with limiting is you take away the dynamics of the music. So that everything that was quiet suddenly becomes much louder and you don't hear this high and low level, and you have ruined, in effect, what the song should sound like.

CNN: And certainly you are dealing with songs that are icons, so you just can't go out there and say, "I think the guitar should be louder, so I'll decide [to make] the guitars louder."

Rouse: Up to a point, that does take place in mastering in mono that is very difficult, as Sean pointed out. In stereo, you have got a little more flexibility in the sense that if you thought the guitar was slightly down in level, you might decide that you try and help it. But again, that is still a problem in terms of remastering; you can't do it like you can in a remix, if you decide a guitar is too low, then you turn it up on the fader, that's fine. But you can't apply that to remastering.

CNN: You said sometimes, the songs were from two sessions. Did that mean you went back and got those two session again?

Rouse: No.

CNN: Or did you take the song that was actually released?

Rouse: That's already the created master -- they have already done that. So the tapes, if it's got an edit in it, it is still the master. It's the tape with the version from one take and the version from another taken put together.

CNN: So you didn't go back to the before then?

Magee: There wasn't anything before then.

Rouse: There wasn't anything before then. That is it.

CNN: That's what's left.

Magee: It's what came out of the studio and then went to the cutting room.

CNN: Sounds to me you like the remixing better because that was the one that was more surprising to you.

Rouse: The remixing is another challenge, and it's also potentially quite dangerous in the sense that when we did "Yellow Submarine" with Peter Cobbin, nobody outside of the Beatles had actually remixed their material before. So in that sense, that was actually quite frightening. Particularly when you are sitting in the room for the first time with Ringo and Paul sitting there and you are wondering what their reaction's gonna be. And hoping it's gonna be good. As it turned out, they loved it.

But I wouldn't necessarily say I prefer remixing over remastering. I think the most important thing about the remasters are, they are the masters that were created by the original engineers, by George Martin and the Beatles. They are the real thing. What we create if we do a remix is only an interpretation. And so it's not in a sense the real thing, it's not, you know, this is modern-day engineers attempting to re-create something that was done 40 years ago. The real masters are the real masters -- they are the most important thing.

CNN: So a remaster is as if the Beatles existed today and are downstairs.

Rouse: Yeah.

CNN: And recorded with today's technology.

Rouse: Yes. That's what you are trying to achieve, yes.

CNN: And did you achieve it?

Rouse: I think that's up to other people to judge, isn't it? The point was there were actually seven people involved in the process. And the reason for that simply was to have had that pressure on one person would have been extreme, and it was much more useful to be able to discuss techniques about how we were going to approach the job, even during the job. The point is that ... the two engineers -- the mastering engineer and the sound recording engineer -- had done their mastering, gone downstairs, listened to it and come back and changed it. Then they give it to me to listen to with yet another guy from EMI, and we would sit and listen to it, and then we would think, "Could they have gone a bit further?" or "Oh no, they have gone too far." Then we would discuss it with them, and then they would make some alterations. So it was a team effort. And I think that was the most important thing -- one person wasn't involved in just doing the one thing. In fact it would have been ...

CNN: Awful?

Rouse: ... It would have been unfair.

CNN: Was there a time pressure as well, or did you have as much time as it needed?

Rouse: No, there was no time pressure. There was a possibility of them coming out sooner, but we were way up anyway by that point. That got extended. I think that when EMI put the press release out, we all did a double-take and thought, "Oh my God, they're coming out now. We can't do anything about it now. Should we go back and start again?" There was some fear and trepidation at that point. Realizing that after four years not quite knowing when they were gonna come out, to suddenly be told "That's it, no more time, lads. You're finished."

CNN: And now they are ready for digital downloads if we get to that point.

Rouse: They are. If they do.

CNN: Any hints you want to give me on it?

Rouse: You know, as far as anything that is done here in the studios regarding any Beatles project, we will get to know about it when we need to.

CNN: Great. Thanks very much guys.