

40 Inside the Podcast

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I'm Doug Fearn and this is My Take On Music Recording

The first episode of this podcast was published on March 19, 2020. As I approach that one-year anniversary, I thought it might be useful to some of you to hear about how this podcast came about. And I would like to share some of what I learned about producing a podcast.

I'm certainly not an expert of this topic, so this should not be viewed as a how-to on podcasting.

Like most things, it starts quite a while ago...

Educating others was another one of those things that I never saw myself doing. But it seems that from an early age, my friends, and even some grownups, would ask me to explain things to them.

I discovered that I liked sharing what I knew with others. Knowledge is something you can give away and still retain for yourself. And the act of explaining something has always given me a deeper insight into the subject.

About 30 years ago, I taught a required course for music majors at West Chester University, near where I live. I took my obligation to teach the students very seriously. I wanted to give them some practical information on recording that would help them in their musical career.

And in the process, I realized that there were a lot of things that I took as solid facts that maybe were not as solid as I thought. If you have one reference book, you have all the answers. Add a couple more and you can never be sure. On top of that, sometimes the classic explanations turn out to be not quite right, once a deeper understanding of the science is discovered.

In my studio, I always had interns. It was pretty easy to weed out the ones who didn't realize that this wasn't their chance to hang out with rock stars, but instead, it was hard work. It really depended on them to master this stuff. I would teach them as much as I could, but I could not pour knowledge into their heads.

Around 2010 I decided that I could make some videos to promote the products my company made. I had to learn about video production, lighting, editing, etc., which was a fun challenge.

The first videos I made focused on each of the products we make. But I didn't want to make the typical 3-minute video of features and benefits. From the beginning I wanted to provide additional content that I hoped would be useful to the viewer.

For example, for a video on the mic preamps, I also talked about why a good mic preamp was vital to make a good recording. I explained why a certain level of performance was necessary. And I talked about the design process.

For the compressor and equalizers, I started with some history of these devices, which I think gives us better insight into the equipment we use today. I talked about the various approaches that led to different types of equalizers and compressors.

After I had covered all the products, I decided to keep going with videos that had nothing, or very little, to do with my products. I did a series on the recording environment. In one video, I documented the design and construction of my control room. This one has become the most-viewed of any video I have produced, with over 130,000 views to date. That doesn't sound too impressive in a world where a cat video can get millions of views in a day, but for such an arcane subject as a recording studio control room, it was pretty amazing to me.

The earliest videos were just me standing there in front of the product, explaining things. I did these off the top of my head. This was easy to do since I had been doing it for years at the AES and NAMM shows.

But as the subjects got more complex, I experimented with different approaches. I didn't want to appear on camera reading a script, or referring to notes. I didn't really want to appear in the video at all. People wanted information, and probably had no interest in seeing me talking.

So I took a different approach to creating the videos. I approached like you might expect an audio guy would make a video: start with the audio.

First, I would write a script. And rewrite it, And then maybe scrap it and start over. I did not want to waste people's time, so I wanted the videos to be information dense.

I do a lot of public speaking, on audio topics and others, so I was pretty good at keeping the flow going and not say "um" and "you know" too often. But scripting it meant that I was going to be reading it, and making it sound like I was talking to an audience, even though it was just me and a microphone.

Speaking to a live audience is an entirely different experience, since you get feedback from the audience which can help guide you towards what they are interested in, or prevent you from droning on about something that is putting them to sleep. Most of you are performers, so you know more about this than I do.

One secret many air personalities use is to imagine just one listener. You are talking to them alone. That is the magic connection of radio, and I think it works in online video and audio as well.

For the videos, I would write and refine the script, record it, and then make the video and visuals to go along with it. Probably not typical, but it works for me.

This is somewhat like making an animated show. You start with a script, get all the voices recorded, and then the animators create the visual part.

Those videos were very time-consuming to make. I would probably spend 50 hours in writing, recording, editing the audio, adding the visual elements, and polishing it up so it looked as professional as I could make it.

Many people can hand-hold their phone and make an effective video. I don't have that talent. But I can work on it my own way until it is something I feel comfortable putting out.

The huge amount of work meant that I could only make a few videos a year.

I was aware of podcasting years ago, and that seemed to me to be a perfect outlet for many of the topics I wanted to talk about. It's just like radio! But without commercials, on my podcast anyway, and with a less stringent show length requirements.

But I decided at that time that it was too time-consuming for me to put out a podcast episode on a regular basis. I did record a pilot episode, but I was not happy with it and put the idea away for several years.

Then the pandemic hit and we were all pretty much confined to home. I thought that if this wasn't the perfect time to start a podcast, then there never would be a time.

My goal for the podcast was sharing what I have learned in six decades of pro audio.

In March 2020 I put together the first episode, on human hearing, which, after a slow start, still gets many downloads per week. Not celebrity-level downloads, but at least there is continuing interest.

Let me explain my process to you. I don't suggest that this is the best way. It certainly isn't the most efficient, and it is definitely not for everyone. But it works for me.

Before I started the podcast, I had to think about who the potential audience would be and the limits on the topics I could cover. I made a list of about 50 topics. And I thought some episodes could be interviews with interesting and accomplished people I know in our industry.

How long would people be willing to listen to an episode? I find these topics to be endlessly fascinating, but I know not everyone shares my interest in understanding every detail. And most people do not need that much detail anyway. The final version is usually about half of what I might say on the topic.

I also considered how far around the periphery of music recording could I venture and still keep the interest of the audience.

Unfortunately, I have too many interests beyond recording that I would like to talk about, but those subjects do not really fit into the nature of the "My Take on Music Recording" title. Perhaps someday I will start another podcast to cover some of those subjects, well, *in my spare time*.

I had to learn about podcast hosting services. I chose Buzzsprout because their approach seemed well thought-out, simple to use, and I liked the attitude of the company. I have not been disappointed. But there are many other great hosting services out there, so if you are thinking of making a podcast, investigate as many of the services as you can before choosing one.

Listeners can get to your podcast by going directly to your hosting service, and there is nothing wrong with that. But the real audience lies in the many podcast apps out there. Apple podcasts is the big one, but there are many others.

Podcasting does not provide the extensive statistics that other platforms have, like demographic details on the listener, like where they are, how long they listen. But you can find out how many people listen to each episode, and what platform they use to listen to you. And that's valuable information.

Once you get the podcast set up with your hosting service, the next step is to get your podcast onto as many of the podcast apps as possible. This podcast is carried by about 30 different apps.

Some are more complicated to set up, like Apple which requires a review by an actual person at Apple before your podcast is approved for their service. Most of the others do some screening, but not as much.

Just a bit under half of my listeners use Apple podcasts. Some other services show only a few listens, but even the least effective app gets some listeners, so it is worth the effort to get listed on them all.

I had to come up with a name for the podcast. I went through dozens of names, but settled on “My Take on Music Recording.” It explains what the podcast is about, and I like the double meaning of “take” in the title. Is it the best title? Probably not. It’s a bit long, and perhaps too focused for the wide range of topics I’d like to cover. But it works and it’s established now. I’m happy with it.

I am cursed with a need for high-quality, which my customers appreciate, but makes things take a lot longer than if I could just sit down and talk, publish it, and be satisfied. Since my products have a reputation for the highest quality, the podcast had to have that same level of quality.

I am never totally satisfied with the final results, but that just makes me consider how I can improve. I will never be as good as this as people I know who are extremely talented in using their voice to convey information or tell a story.

The story concept is important. When I was in high school, I discovered Jean Shepherd on WOR in New York. I even modified a car radio for operation off normal AC power, since it was better at pulling in the WOR signal from 70 miles away.

Jean Shepherd did a nightly one-hour show, from 11PM to midnight. It was obvious that he didn’t prepare much for the show each night. But his great talent was as a storyteller. I would listen to him every night as he talked about growing up in a steel mill town in Indiana during the Great Depression. It was like he was telling the story just to me.

Jean Shepherd was also an Amateur radio operator, and would sometimes talk about that. He loved driving and I think I learned more about driving from listening to him than from any other source.

Sometimes he would just be zany, playing some obscure goofy song and singing along or playing kazoo. He knew exactly how long to tell a story before his listener would get bored, and then he would completely change direction.

I learned how to tell stories from Jean Shepherd. I will never be anywhere as good as he was, but he has always been an inspiration.

I can’t ad-lib like that. My approach is to think about a topic for a while – weeks or months – and how I want to approach it. I compile a list of I want to cover. I do all this in my head, before I write anything. Sometimes I realize that the topic doesn’t have enough content to make an episode, but I keep it in mind to incorporate into another episode where it fits better.

Once I feel I am ready to start writing, I sit down and just write. I may not use what I wrote, or it may be eventually re-arranged, but it works best for me if I do not agonize over my opening sentence and just get ideas down.

Sometimes I will scrap what I wrote entirely and start over. Or I realize I cannot do that topic effectively and it gets scrapped.

Once I get going, I keep writing until it's not fun anymore. Then I put it away for a day or two, and come back and read what I wrote. I want to get to the end before I do the editing, but sometimes an idea will occur to me and I will stick it in during this early review process.

I go through this process multiple times, which may be every day if I have the time.

I always start from the top and read all the way down to where I stopped before continuing with the story.

I often start out with a story, and maybe throw in a couple of additional stories along the way. I don't over-think this, however. The last thing I want is a formula.

There is a saying in filmmaking that a movie is never finished, it is simply abandoned. The point being that you can tinker with something forever and never get anything done. Sound familiar? Ever get stuck with a mix you are never happy with and keep coming back to it for another try?

My podcast is never going to be perfect, and often I think of something that should have been in there but I didn't realize it until after the episode was published. Or I will think, "Why did I say that? That's not helpful." I have trouble throwing out a thought that goes off in another direction, as much as I want to make that point.

You'll never finish anything if you take that approach. So at some point, I simply say, "That will have to do. It's time to record."

I do not have the greatest voice in the world, especially when I compare myself to the great voice artists I have worked with. For one thing, it is difficult for me to talk for a long stretch without getting hoarse. I am sure there are vocal coaches out there who could help me, but I don't have time to pursue that now. But I do try to figure out how to use my voice without wearing it out.

The recording process therefore has to be relatively quick. My approach is to just keep going, taking breaks about every 20 minutes to go do something else that doesn't require talking. Drinking water helps, too. You have probably noticed that sometimes between paragraphs I come back with a totally different sound to my voice. I don't like that, but it is what I have to work with.

I use the radio technique of visualizing one listener and speaking directly to him or her.

To be intelligible, you have to use some degree of projection with your voice. I have sometimes had to speak to an audience of a couple of hundred people without any amplification, which is exhausting for me. For the podcast, I think of one person I am speaking to in the front row, but I have to be heard by everyone behind him.

For me, standing up is the best way to accomplish that.

Speaking too quietly is not effective. An arranger I worked with once castigated his horn players for "playing like they had a secret." It's a fine balance between speaking loudly enough to keep the audience attention, while not yelling at them, and at the same time not straining your voice.

I record the podcast in my control room, which is just easier than using the studio. The control room is small and does not have ideal acoustics, but I have learned how to get around those deficiencies.

I have tried various mics from my collection to see what sounds best to me. I have settled on my AEA R44 ribbon mic, which I like for its naturalness and vanishingly low distortion compared to most condenser mics. On different episodes I have used a U47fet, an AEA KU4, and a Flea 49. I also tried a new mic I recently acquired, a Sennheiser MKH8050, which is a hyper cardioid RF condenser. I like its very low distortion and flat frequency response. It's not made for a vocal, however, so it takes some work to get it to sound good. I'm using the AEA R44 on this episode.

I work the mic from about 2 feet away, slightly off-axis, but without a pop filter. I always stand when I am recording.

Whatever mic I use goes to a D.W. Fearn VT-2 mic preamp, then through a VT-4 mono equalizer. For the 44, I roll off 4 to 6dB at 40 Hz and that's all it needs. That eq is generally good for any of my mics in this application, although the amount of roll-off may vary.

The roll-off is necessary to compensate for the proximity effect of a directional mic. The 44, for example, is not truly flat until 9 feet from the source. That distance is not exactly practical for my podcast.

The condenser mics usually require a small amount of high-end cut to compensate for their presence peak. I know that peak works great as a vocal mic in the mix, but for spoken word, it is too harsh for my ears. Typically, I will use a 2 to 4dB shelving cut at 10kHz on the VT-4.

After the eq, the signal goes through a VT-7 compressor. I used more compression on my voice than I would normally use on a singer. The gain reduction meter reads about 5dB of compression most of the time, with higher peaks.

I aim for a -18 loudness units full scale, with true peaks no higher than -2dB. That keeps the level up for people listening in their cars or in a noisy environment, without sounding over-compressed. I am careful to keep all episodes within 1dB of this target. On interviews, this can be more challenging. The -2 maximum level translates better into MP3 than a zero level.

I use a Merging Technologies Hapi converter into Pyramix for recording. I like the way this converter sounds. The recording is 24-bit, 96kHz sample rate. I find that using a fairly high definition recording format gives me more to work with if modifications are necessary, and it translates better into the 128kb/s MP3 used for podcasting. It's mono, which is fine since I have decided I will not use any music on the podcast.

It is possible to provide a stereo podcast, but I have not encountered any situation where that would be advantageous.

I hit record and let the recording roll until I take a break. Often, I record a sentence a couple of times until I feel that I have the phrasing right. A 40-minute episode will usually take about an hour of raw material.

Determining the ideal length for a podcast episode can be challenging. The world of podcasting has an overall episode average of about 40 minutes. When I interview someone, we might go for two hours or more, but I try to keep the final version to an hour.

I have tried editing the audio in Pyramix, but, like most DAWs, Pyramix is oriented towards music editing and it's more complex than I need. I use Sound Forge for editing. It is a super-simple program that is well-suited for this type of editing, which is basically taking out the bad takes. That goes quickly. Then I do a lot of fine editing.

I have had complaints that I speak too slowly, Well, I see their point, but my podcast is, I hope, content rich, and I think people sometimes need a short amount of time to process what they heard, especially if I think it is a really important point. I know from giving live talks that if you go too fast, you will get a lot of questions at the end about the topics you thought you made clear. I think I get more information to stick in people's heads if I give them some time to think about it.

Listeners, especially younger ones, want this stuff fast. I could speed up the track, but I don't like the artifacts that introduces. And faster does not fit my style anyway.

A podcast app makes it easy to speed up the delivery, or to back up and listen again to something that you didn't quite get.

I tend to run out of breath before I get to the end of a sentence, so I often take a breath between phrases. I don't like the breath sounds, or the pause, so I reduce the level by 6 to 9dB during the breaths and cut out one-quarter to one-third of the pause. That still sounds natural most of the time, and keeps things moving.

Here is an embarrassing example of unedited recording, perhaps exaggerated a bit to make the point:

I run out of breath on long, convoluted sentences, which I try to avoid, but sometimes I think that works best to get my point across as concisely as possible.

Now, here is the edited version:

That editing is slow and tedious. It is my least favorite part of the process. But I feel it is necessary, to compensate for my non-professional delivery.

During editing, I sometimes decide to leave out a paragraph, or perhaps re-arrange paragraphs. There have been occasions when I realize that I missed an important point, or mangled the pronunciation of a word, and I will go back to the studio and record those inserts. That is rare, however.

Once that is done, I listen one more time, all the way through, while following along with the script. Sometimes I have added something, or decided to leave something out, and I want the transcript to accurately follow the audio.

I should mention that not all episodes have been scripted. Most the earliest ones were just done from memory, or with a few notes. I did not want the podcast to sound like I was reading it. But after a while, I convinced myself that having a structured script was the best way to get information across. Still, when it is once again safe to gather people in a room, I want to try doing a podcast episode with a live audience.

When I am doing an interview episode, the process is slightly different. Very few are done with both of us in the same room these days. But I still want studio quality on both sides of the conversation, and this is easy to do since virtually all of my interviews are with people with access to a professional studio.

We each record the entire conversation with a studio mic. I usually pick something from my mic collection that is the same or similar to what the other person is using.

The actual conversation takes place on the telephone, or sometimes via Skype. We don't record the telephone audio. There is no need for it.

It is important that both people avoid any pickup of the telephone audio. Not only is this really bad quality, but it has significant latency, which leads to an awful sounding echo when the interview halves are put together.

The interviewee sends me the audio file and I sync up the two tracks so it sounds like we are in the same room. I use automation in Pyramix to mute either of us when we are not talking. This is usually an excellent solution, but sometimes the latency in the phone system makes us step on each other. On some interviews, you can hear some bleed from the telephone during a quick back-and-forth segment of the conversation.

If I can get the interviewee to use a telephone headset, those bleed problems are usually minimal. Worst is if they use the speaker feature on the phone. Unfortunately, I will not know about this problem until I get their audio file.

But I am working with audio professionals, and they understand the need for good isolation.

Once you set up a podcast, how do you find listeners? Well, once your podcast is carried by the many podcast providers, some people will find your podcast by searching on a topic. But at this point, I don't think I gain many new listeners that way. I don't know that for sure, since there is a dearth of listener information available.

In the beginning, I sent out an email to about 200 people who I thought might find the podcast useful. I did that for the first few episodes, but I didn't want to spam people with email that was not of interest to them. So, I asked the recipients to specifically request future email notifications as each new podcast was available. That cut the list about in half.

I cross-promoted the podcast on other outlets, like YouTube, Facebook, and my company web site.

And I asked listeners to share the podcast link with any of their friends or colleagues who might be interested, and I asked them to share it on their social media. And many did do that, and it showed up quickly in the download statistics.

Another thing I did early on was to create a separate web site exclusively for the podcast. That's [dougfearn.com](http://dougfearn.com)

On that site, I link to all the podcast episodes, along with their description. In addition, for all the episodes that have a written script, I have made the transcript available. For a couple of episodes, I have also posted photos and audio files.

It's not a fancy web site by any means, and I would like to make it better at some point. But it does the job.

I think there is a lot of poor-quality content on the various distribution platforms. The content might be very good, useful, and entertaining, but the technical quality is not good. And that detracts from the message. Others are just useless or provide inaccurate information. I want to avoid those categories, and that means making the content reliable, useful, and hopefully entertaining enough to retain the listener.

We are all exposed to excellent and terrible content all the time. Years ago, I read a book about writing that had one fundamental message: if you want to improve your writing, only read well-written material and avoid the inferior stuff.

I have found that to be great advice. And it applies to many endeavors, not just writing. Watch movies made by masters at the art. Study what they do and try to incorporate that level of quality into your video productions.

Listen to the excellent recordings, and use those for inspiration in your own recording.

And listen to excellent spoken-word material as an example of how to do it well.

Starting a podcast was a challenge for me, pushing me to learn new skills and developing them as best I can.

As a pilot, I review every flight I make, step by step, and evaluate how well I did and what could have been done better. In an airplane, that attitude can save your life. I do the same with each podcast episode.

Content is the most important thing, just like the song is the most important thing in recording.

Thanks to all of you who told me that they have shared this podcast with others. That is much appreciated.

You can reach me at [dwfearn@dwfearn.com](mailto:dwfearn@dwfearn.com) with you comments, questions, or suggestions for topics. Thanks.

This is My Take On Music Recording. I'm Doug Fearn. See you next time.