

Autodesk Vision Series 2024





Through the Lens of History: Rodeo FX on *Masters of the Air*

Join Rodeo FX as they delve into the acclaimed series *Masters of the Air*. Led by VFX Supervisor, Patrick David, this session offers a behind-the-scenes glimpse into the meticulous craft of recreating historical authenticity. Set against the backdrop of World War II, the show demanded a level of attention to detail that went beyond traditional storytelling. Each frame became deeply rooted in research and extensive reference - the VFX process becoming a careful blend of history, technology, storytelling and artistic vision.



Q&A with

Patrick David, VFX Supervisor at Rodeo FX

Audience Member 1:

This is probably a loaded question, but it's more to the industry in general, not just in what you did here. Has anybody ever done the math to determine - is this way of doing these special effects, and not building out the sets to the extent that would be required, cheaper or does it just allow us to do things we couldn't do before?

Patrick David, Rodeo FX:

Yeah, I mean, if you're going to have 10,000 extras and clothe them and feed them, good luck. Maybe in "Lawrence of Arabia," but not these days.

Audience Member 1:

I mean, they did those kinds of things in the past, but never to this extent. It seems like it would be cheaper, but I know that a lot of people in this room are in the business because we'd like to just make the money, they would have paid all those soldiers. So, I'm not suggesting we want it to be cheaper, but I would hope that.

Patrick David, Rodeo FX:

Maybe. The logistics of a show like this, without having to take care of 10,000 prisoners of war and building all these things, is challenging. They did build costumes and sets and shot exteriors, which is expensive. It's easier to shoot in a studio, but it doesn't look as real.

Audience Member 2:

Thank you. Great job on the series. Can you speak to the budget range? What does 400 shots cost or range?

Patrick David, Rodeo FX:

No, I wouldn't (laughs). It is a big series with 3,400 VFX shots. That's the reality of having film-quality visual effects. When recreating World War II, you have to consider the tens of thousands of planes and ships built in real life. Recreating that in VFX is still costly but less than building it all.

Audience Member 3:

This is incredibly impressive. My question is about the historical reference gathering process. Were these references provided by the client, or did you conduct additional research for "Masters of the Air"?

Patrick David, Rodeo FX:

For sure, they had experts on the set. Steven was generous with all the references, even for this presentation. We had military aircraft experts advising us. We also conducted our own research. It's great to have access to expert research that you couldn't compile by yourself.

Audience Member 4:

Thank you for contributing to such an amazing show. How did you track all your production management, and did you use OpenUSD for anything currently or in the future?



Patrick David, Rodeo FX:

We use ShotGrid (now called Flow Production Tracking) for all our production management. We started working on this show three years ago with around 100 artists. For the current show, we're using USD and have switched completely to Houdini. USD could have really helped with variations and overrides that we didn't have on this show. We did it the old-fashioned way.

Audience Member 5:

I'd like to recommend a movie, "Battle for Britain," from the mid-1960s. The aerial photography, dog fights, and pyrotechnics were impressive. It made me think about how they did all that practically back then. You might want to look up the budgets and history of that.

Patrick David, Rodeo FX:

Yeah, they did use actual B-17s for taxi scenes with motors on the wheels. It's not as if everything was created in CG. I recommend the movie "The Memphis Belle" for impressive B-17 photography. We talked about it quite a bit.

Audience Member 6:

You mentioned the delivery resolution was 5K, but the series streamed in probably UHD. Why 5K?

Patrick David, Rodeo FX:

There's a certain company that produces 5K monitors (laughs) that produced the series, right? (laughs)





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