



Boom op Gregg Harris, mixer Joshua Anderson, CAS, utility Terence McCormack Maitland ⊕ Jason Stasiuml - playback

Created by Theresa Rebeck, NBC's Smash infuses the heart of musical theater with intimate storylines that celebrate the beauty and backstabbing of Broadway musicals. The series centers around the successful songwriting duo of Tom Levitt (Christian Borle) and Julia Houston (Debra Messing) as they create a musical based on the life of Marilvn Monroe.

As the season unravels, the competition between Karen Cartwright (Katharine McPhee) and Ivy Lynn (Megan Hilty) to see who will be cast as Marilyn begins to boil. Eventually, Ivy takes the lead for rehearsals and Karen stays on as a member of the chorus. But wait, the plot stirs more drama. When movie star, Rebecca Duvall (Uma Thurman) grabs interest in the project, Ivy's role as Marilyn is taken away. To add to the intrigue, at the request of Rebecca, Karen now becomes the understudy instead of Ivy. Still with me? Good. When the curtain on the preview of the now titled Marilyn musical, Bombshell, finally lifts, it suffers poor reviews, and Rebecca has second thoughts about her decision to be part of the project.

The series finale leaves the audi-

ence with no lead, a poisoned Rebecca Duvall, and Tom and Julia scrambling to rewrite their musical. To say the least, the show has layers. It also does something no other show has done before - bring Broadway to the little big screen. Picked up for a second season, now executive produced by Josh Safran with an initial 13 episode order, production sound mixer, Joshua Anderson, CAS, is tasked with recording some of the trickiest dialogue in television.

Josh was born in Philadelphia and raised in Minneapolis. If you've never been to Minneapolis, you'll be pleasantly surprised by how prevalent arts and culture bind the city streets of the small, mill city. Growing up, they influenced Josh as well, going from a childhood of following his father's interests in music and arts by playing his dad's old trumpet and the cello in school bands, to applying to NYU's film program in 1997. "Our high school had several different areas of study to choose from. I remember asking my mom what she thought I should go into since I loved watching movies and I felt like I wanted to play a part in creating them. She told me to choose the liberal arts program, to get a solid education, and looking back, I couldn't be happier with her advice," says Anderson.

At NYU, it wasn't until Josh took a production audio course taught by Chat Gunter that he began to gravitate towards sound. "His class was so interesting. In the other classes I was taking, we would watch the same clips from the same movies and discuss them. It was



(l-r) Frank Houston (Brian d'Arcy James), Ellis (Jaime Cepero), Tom Levitt (Christian Borle), Ivy Lynn (Megan Hilty), Dev Sundaram (Raza Jaffrey), Karen Cartwright (Katharine McPhee), Julia Houston (Debra Messing), Derek Wills (Jack Davenport) ⊕ Eileen Rand (Anjelica Huston)

a bit mundane," says Anderson. "Chat would give us script pages from random movies and set up various types of blocking. He would challenge us. He would ask us to take microphones and show him how we would mic the scene. It was a practical learning experience. I thought to myself, this was cool. This was something I could do."

Another push to Josh's eventual sound career was the simple idea that people "didn't do sound" in film school. They wanted to write, direct or do camera work. "I felt like I wanted to direct at the beginning of college, but once I started doing sound for a few student projects, I ended up being the sound guy for everyone else," says Anderson.

In 2001, Josh graduated and stayed in New York. He worked as a waiter to pay his bills while at the same time he mixed non-union independent films. "My first job out of college was this short film for three weeks," says Anderson. "It was really strange, because it ended up being a 55 minute film. So it wasn't a full feature nor was it a short. I even added a special section for it on my resume called long form."

Over the next three years, moving from project to project while also working at the restaurant, Josh would take any money he made doing sound work and use it to build up his package. "I'm still not sure my plan of spending future money on equipment was always the best idea, but each time I got a job, I'd calculate the numbers. If I was going to make a certain amount of money when the film was over, I would spend that amount on equipment prior to shooting," says Anderson.

Though Josh focused solely on mixing from the start, he boomed for two weeks for Larry Hoff. "I didn't know much about booming, but my time with Larry was really educational. We stayed in a hotel in Upstate New York and would drive to set together. Each morning, I would ask him all of these different questions about what gear to buy. What's the best mic to get? But Larry is an old school guy and would say things like, 'you should learn how to make adapters.' He taught me how to solder and showed me the fundamentals. He shared a wealth of experience with me in a short amount of time and it was fantastic," says Anderson.

When 9/11 hit, the film industry dropped a bit and Josh lost the little headway he had in the industry. He decided to go back and work on films for NYU students again. While working on

a project, he met his future wife, Gabriella. "It's kind of small world stuff. She hired me to mix her thesis film, but afterwards we lost track of each other. Through some mutual friends, we ended up getting back in touch seven years later, and now, we're happily married," says Anderson. In '04, Josh's career started picking up steam doing a lot of indie movies that year. He eventually was able to quit his restaurant job and apply to join Local 52 in '06. "I got so tired of negotiating for things like overtime. What got really frustrating about those negotiations was that I would say to a production manager 'It's not just me. You're going to have problems getting your grips and electrics to do time and a half after 14,' but the PMs would respond with 'Oh, the DP thinks he can find some guys who will do it."

Josh was lucky enough to get into the local his first time applying and landed utility jobs on shows like *The Knights of Prosperity* and, later on, *Law & Order*, with none other than Larry Hoff. "Thankfully, Larry didn't remember me as that kid who asked all the questions," laughs Anderson. He stayed on *Law & Order* four seasons doing utility on 17 and 18. Larry left after season 18, but the newly hired mixer ended

up also leaving halfway through that following season. "At this point, I had mixed a couple of tandem days, second unit and had done one full episode of television. The producers called me during winter break with the referral from the leaving mixer saying he told them to hire me for the rest of the season. It was a big surprise. I showed the producers my resume of the small indie movies I had mixed before joining the union. I thought they would be unimpressed, but they said they liked that I had done all of these movies where you don't have much time or money - sort of like episodic television. I stepped up and boom operator Alfredo Viteri and I made it work. We finished season 19 and also did season 20 before they cancelled the show. We had a lot of good times on that show. It was great to work on a show that I had grown up watching," says Anderson.

When Josh got the call to possibly work on Smash, he didn't know at first the complexity of what he was getting himself into. Josh and most of the crew didn't work on the pilot. "We didn't realize how complicated this show would become," says Anderson. "What it turned out to be was a lot different than what any of us were expecting. We thought the actors would talk, then sing a complete song and that we would always play the music through speakers. We found out that the show was far from being that simple."

The sound team of boom Gregg Harris, utility Terence McCormack Maitland and Jason Stasium, who does playback, had their hands full from day one. Scripts were riddled with scenes with live singing, partial songs or prerecorded songs that abruptly stopped or were interrupted with lines of dialogue only to be instantly picked back up again. In order to break down the episodes, Josh will identify each musical moment and make a chart for each episode. The chart helps to organize the basic structure of how each musical moment fits into the scene diegetically and what the equipment requirements might be. Through discussions with the music supervisors and music producers, Josh will get an idea if songs are to be pre-recorded, recorded live or a hybrid of both. He'll email the breakdown to his crew, production managers, postproduction, the music department and the assistant directors. Josh and Jason will then figure out which of the two



Boom Gregg Harris captures dialogue while on location in New York



Derek Wills (Jack Davenport) gives Ivy (Megan Hilty) notes in the rehearsal room

possible camps the pre-recorded numbers will come from. "We have a great music department on this show," says Anderson. "We have original music by Marc Shaiman (composer) and Scott Wittman (lyricist), and this season the cover songs are handled by Jenn Ross and Jojo Villanueva. So besides the fact that we need to figure out if a song is going to be pre-recorded or recorded live, we also need to be aware of who is responsible for getting us the song."

To add to the layers of complexity, Josh and his team will also talk with choreographer Joshua Bergasse to see what's happening behind the musical numbers. "I have to make sure a lot of different people are getting what

they need from the presentation of the music on set. Sometimes that involves speakers, ear wigs, subwoofers or combinations of the three. Oh, and we're supposed to record dialogue too." Josh paints a typical scene in one of their trickier locations, the mirror walled rehearsal room. "The scene will have someone like Megan singing and dancing with a small ensemble of dancers. In the middle of the song and dance, we'll have a piece of dialogue, let's say Jack interrupts her. When we shoot the coverage for Megan and the dancers, we'll play the song over speakers, stopping the music when Jack interrupts her and allowing Megan to say her line clean. But when we shoot Jack's cover-



Ivy (Megan Hilty) and a group of dancers practice a number from Bombshell



Rehearsals can quickly jump into a fantasy sequence

age, he's standing in front of these mirrors that also see Megan and the dancers in the reflection. For that shot, we'll start the music in the speakers, but then drop it from the speakers right before Jack's line and only send it to Megan's earwig so she can continue to lip sync. At the same time, we'll keep a thumper going for all the dancers to keep them in rhythm. Jack will say his line - it's clean. We'll cut the music from the earwig and speaker. Megan will stop singing. The dancers stop dancing. Megan will say her line. It's clean in the reflection. Then we will start up again and play the music through the speakers," explains Anderson.

The team will also contend with scenes where talking is part of the song. "The talking parts are usually part of the pre-record, but we will try to record the talking live," says Anderson. "It's tough sometimes on actors to lip sync to something that is spoken or arrhythmic so we'll try to record it to supply post with another option besides the pre-record."

The luxury of having everything pre-scripted doesn't always go as planned either. In one of the first episodes of season one, Megan Hilty's character, Ivy, is at a bar and her friends

urge her up on stage to sing. The actors portraying the jazz trio were, in reality, accomplished musicians. The director decided to begin the scene with the jazz trio finishing a song. There wasn't a pre-record for that song, so the sound team started plugging in mics to record it live. "Luckily, the drummer took it easy on us and didn't blow us out," says Anderson. "We were able to get a pretty good track."

Another staple of the show is Tom playing the piano while he and Julia fine tune their Marilyn numbers. In these scenes, Tom may play bits of a song or just 'noodle' melodies while he and Julia have dialogue. Because the music is sort of the germ of the compositions and unstructured, the composer Marc Shaiman will provide live music for the actors. The challenge then is to get clean dialogue and record the music in a manner that Marc and his Music Producer, Scott Reisett, can use later. "We'll have Marc off set in another room with a video monitor and a keyboard. He sends what he is playing to our playback operator, Jason, via MIDI. Jason will then send me the audio track of the keyboard, and at the same time, he'll record the MIDI file. Jason will also send a feed to an earwig for Christian Borle (Tom) so he can hear what Marc is playing. I also feed Marc a prefade track of his piano coupled with a mix of the scene to his headphones so he can hear his own playing and what's happening on set. Marc will watch Christian on his monitor and Christian will hear Marc in his earwig. They will play off of each other as Christian fakes playing the keys on a muted piano. It adds an authenticity to the show that is a nice touch," explains Anderson. "Because of the amount of playback on this show, I really depend on Jason. We'll take a lot of our own cues and timing in scenes for initiating and stopping the music. The coordination he has to do with the actors in terms of where parts of songs begin and which vocals or instrumentation is being sent through which speaker or ear wig can be immense. Combining that with the occasional live singing and not having the music step on dialogue gets challenging. I look at it this way: Typically, our job is to record the dialogue and to discourage any sounds that step on that dialogue. But on a show with music, we have, in our department, the person who can single-handedly obliterate any



Julia (Debra Messing) & Tom (Christian Borle) & work on fine tuning Marilyn's musical numbers



Michael Swift (Will Chase) @ Ivy (Megan Hilty) work on vocals with Tom (Christian Borle) @ Julia (Debra Messing)

dialogue just by pushing the space bar on his computer. The playback operator is like having the nuclear option. We have to be responsible with it."

When Marc Shaiman plays live piano or when there is live singing, Josh will record two mix tracks. "I'll record a mix for dailies, which is what we recorded on set, plus the music. I'll also record a mix for editorial, which is what we recorded minus the music. This way everyone is happy. If you watch the dailies, you hear the music. If you're in editorial, you don't hear the music married to the vocals," says Anderson.

Josh uses the Sonosax SX-ST8 8-channel mixer with two Sound Devices 788Ts to record the 48K 24bit 23.97 tracks. "I tend to mix pretty hot. I love the limiters on my Sonosax but I try not to peak it too much. I do like to stay real close to zero, and have my ISO tracks coming in about 10-15db below that," says Anderson. "On this show, I started to use the 12/24 level switch on the board when we had two booms going with a very dynamic conversation. Instead of jumping up from the fader to the trim, I'll use the 24db switch on the fader." Though most of the time Josh will run 2-4 tracks, he has gone up to 8. For these instances, he'll submix. "I can only record up to 8 tracks since I send the exact same audio tracks to both recorders. If we're doing a livesinging music scene, I'm using up 4

tracks just for 2 mixes, boom ISO and music ISO. If I have to also wire more than four actors, then I can't give evervone their own ISO track. Thankfully, Gregg is such a good boom operator, I end up recording a lot of scenes with just 2 tracks - mix and boom. Maybe 3, if Terence is picking up off camera lines or overlaps. Gregg also does the majority of the wiring on the talent. He's got a lot of tricks up his sleeves on how to hide a mic and make it good sound. Besides being great with any last minute changes, 2nd boom, a new wire on an actor, or speaker placement, Terence helps us to stay one step ahead in planning and organizing. I'm very fortunate to have the team I have. I depend on them everyday and it shows in the tracks we put down."

Gregg Harris takes pride in the booming he does on set, working with a wireless Lectrosonics UM450 on a custom K-Tek pole and a Schoeps CMIT-5U microphone. He'll try his best to do it all with one boom, but depending on what they're doing with B camera, Terence will step in to pick up a stick if needed. "Our DP David Mullen is very talented and, for us, reasonable in the way he lights. David's lighting and framing always looks great, but lucky for us, he's also very accommodating with how he utilizes the B camera. He doesn't burn us with too many wide and tights, but often uses two more similarly sized frames instead. This gives us a chance to do the majority of the dialogue on one or two booms. Of course, there are days with the big musical numbers where we contend with three cameras, but those are typically non-dialogue scenes so we can relax and listen to the great music." says Anderson.

Josh prefers a second boom over radios, but when they do go wireless, a combination of Lectrosonics SMQV and SMV transmitters with Sanken COS-11D and Countryman B6 lavaliers are used. The actor's prop microphones also get to go hot sometimes. Josh will use a Lectrosonics HH handheld transmitter or a cabled SM58. "Katharine McPhee and Megan Hilty have beautiful voices, and the show allows them to sing live a lot. We actually used the HH on the very first day of the show. We turned it on for her dialogue before the song, but kept it recording while she sang along with the pre-record. We weren't intending to get a clean vocal of the song, but the isolation from the



Boom op Gregg Harris waits while Ivy (Megan Hilty) gets a makeup touch up



Gregg extends his K-Tek boom pole in the rehearsal room



Mirrors can get a little tricky for the sound and camera team

speakers was actually pretty remarkable," says Anderson.

The team will also use Schoeps CMC-6/MK41s for plant mics which come in handy for some of the locations. They have a stage in Greenpoint, Brooklyn and another not too far in Long Island City, Queens. Season one also had the crew run around in Times Square, which Josh says was completely crazy. But most of their sixty-hour weeks consist of three stage days to one location day.

The rehearsal room proves to be the bane of the show. It is built on top of a 24-hour plastic bag factory so the team constantly battles noise. In addition to that clamor, the room itself is lined with a wall of mirrors on one side, while and the ceiling is connected to the outside world, so they hear the rain pouring down and the exhaust fans roaring from the factory. The surface of the floor is a hard wood, sprung dance floor to protect the dancer's knees and there's no furniture in the room so the sound bounces all around the walls. "It's one of the more difficult places we shoot. Those are days I really depend on my guys. A lot of the scenes in the rehearsal room have music so I spend a

lot of time coordinating with Jason, the director, the actors and the ADs. I rely on Gregg to be the point person for the department in terms of doing what a sound department normally does: facilitate the recording of the dialogue. Between the carpets, the cable rerouting and the Comtek coordination, I think Terence must clone himself on those days because he ends up needing to be everywhere at once," says Anderson. "If we have three or four days in a row there, it can really wear us out." To add to the intricacy of a troubling location, directors, like Michael Morris, love to use the show's steadicam operator, Jeff Muhlstock, for long tracking and 360 steadicam shots. "It's challenging. We have to make sure we hide a lot of stuff from being seen in the reflections of the mirrors. But Jeff Muhlstock does wonderful work in that room, and he and David Mullen are really helpful," says Anderson.

Depending on the director, the team will get 3-4 takes per shot, but Josh isn't afraid to ask the director if they could get one more for sound. "I don't do it all the time. I try to be judicial with my requests. Instead, I try to deduce what parts of the coverage are important for which parts of the scene. Getting another take for sound doesn't guarantee that the director will use that take for the line that is problematic. I'd rather get another shot at a line when I know it's the shot for that line. I try to take the coverage and editing into consideration," says Anderson.

Some of the more visually satisfying sequences from the show come when they smash cut from the rehearsal into the fantasy part and then back to the rehearsal. "Those days are intense," admits Anderson. "We can jump from dialogue to dancing and lip syncing and back again. Every director is different in how he sees it cutting together so we have to get onto the same page as the director as soon as possible."

With the start of season two, creators look to bring even more musical elements to the show, and Josh and his crew are ready. "This show is an enjoyable challenge. Everyone works so well together, and as one of our guest actors remarked to us one day: this is probably the only set you'll hear grips singing show tunes," says Anderson.

You can catch an all new season of Smash this fall on your local NBC network or online at nbc.com.

