

A well-oiled process

Media producer Don MacBain tapped by JRA for museum project

by Joe Kleiman and Judith Rubin

"A dream you dream alone is only a dream. A dream you dream together is reality." - Yoko Ono

Don MacBain's dream was always connected to movies. "My Dad worked for Mattel and he was the engineer on set during commercial shoots in case something happened to the toys. He'd bring me along, and I became fascinated with what went on behind the scenes, what makes things work."

That fascination led to a career in visual effects and film production – including commercials, giant screen films, and media-based attractions. At pretty much any point in his career, MacBain could be found working on or near the forefront of special venue cinema, whether analog or digital, flatscreen or dome, big screen or small, entertainment or education or corporate, 2D or 3D or even 4D. At this writing MacBain was just wrapping up a 15-month project with Jack Rouse Associates (JRA), which contracted him to oversee media production for the extensive re-imagining of the Permian Basin Petroleum Museum (Midland, Texas USA), set to open in the first quarter of 2016.

According to JRA senior creative and project director Rob Morgan: "The project actually began a decade ago, but was put on hold when oil prices dropped, affecting the museum's fund raising. Then a couple of years ago, when things had stabilized, the client called us up and the project was back on. This was when Don came in. As part of the process, we had to re-envision the hardware and software. Don was heavily involved in that process."

MacBain had collaborated with JRA several years earlier on two motion simulation attractions for Ferrari World Abu Dhabi, "Viaggio in Italia" ("Flying Over Italy") and "Driving with the Champion." JRA oversaw the creation of the park as concept designer, executive media producer and project manager. MacBain was then digital and post producer for Rhythm & Hues.

The media component of a contemporary museum can be substantial, which is why design firms such as JRA may bring in an outside specialist to oversee its production. Morgan described the Permian Basin Petroleum Museum as the

company's most media-intensive project to date, with "more films and live productions than any other project we've worked on." MacBain's responsibilities encompassed overseeing a body of work including two live action time lapse films, eight live action movies, fifty archival movies, five fully animated pieces, 20-plus screensavers, 16 audio-only pieces including ambient gallery soundtracks, three live datastream exhibits, and 16 interactive games and quizzes.

Don MacBain on location in Midland TX,
where time-lapse and live action footage for the
Permian Basin Petroleum Museum was filmed.
All photos courtesy of Don MacBain





On the PetroTrekker set in Orlando, FL.

Clara Rice and Rob Morgan of JRA, Kathy Shannon of P.B.P.M., and Don MacBain

As content producer he was responsible to successfully see through development and supervise installation of the media software exhibits (based on JRA's design briefs), to liaise between the production company and the client, and to attend all live shoots, conferences and approval sessions, while keeping the project budget and schedule in mind.

First, you communicate

JRA's team on the project was headed by Clara Rice as acting project manager and by Rob Morgan. Other suppliers included Nassal building the physical sets, GoConvergence handling the massive video production needs, and Technomedia as AV integrator. Kathy Shannon, Executive Director of Permian Basin Petroleum Museum, represented the museum and its Board throughout the design and installation process.

As media producer, MacBain works to keep the project moving, with an acute awareness of available time and resources. If a concern arises, it must be communicated while there's still a window to effectively address it. "When I see the needs of the client and the needs of the production differing, I have to immediately find a way to reconcile that. Addressing any issues early on keeps them from heading in the wrong direction, which could become a huge problem with both scheduling and budget."

His demeanor is gentle and courteous - but persistent. "At the start of a project, finding out each person's communication style is of utmost importance," he said. "Do they read more than the first two lines (or even that) of an e-mail? Are they someone who requires a phone conversation? Are they good with texting? Maybe they have to see the other person, eye to eye, whether its a physical meeting or via Skype. Whatever their style, I need to know it so that I can be sure that critical information has gotten across. Issues, sometimes, must be brought up even awkwardly, otherwise people will walk away from a meeting thinking that everyone is on the same page - when on occasion nothing could be further from the truth. But you have to let each person feel they've been heard before announcing the disconnect. This is tricky."

Once the channels of communication are open, in addition to conveying concerns and production information, there's an opportunity to learn, share and grow on both sides. That included, on this particular project, MacBain learning about the petroleum industry, and Shannon learning about media production.

"During this process, I was inundated with items to review and approve - graphics, architecture, media," said Shannon. "Don was extremely helpful. He picked up on the small things that needed to be adjusted. We talked every week, and every week

he would send a link to the specific files I needed. Don would talk me through every piece of media, explain what needed to be tweaked. It took a lot of weight off my shoulders with the two of us working on it. He's very thorough and organized."

The changing media landscape

Given MacBain's versatility as a communicator, it's not surprising to find out he has adapted just as readily over the years to changing media platforms, production processes and client needs. In addition to his technical versatility, he can trace the similarities and differences between one industry sector and another, adapt, and bring the best of one to the other - just as JRA and other industry providers move between education, entertainment and corporate fields.

"If you have the experience, you know when the people doing the work are actually doing what they're supposed to do," MacBain said. "Having my history in animation, live action commercials, composing music for movies, and participating in the evolution of digital and all its uses and effects have given me a good compass." He's a member of the Producers Guild, the Visual Effects Society and the Themed Entertainment Association, and has a profile on IMDb.

In addition to the Ferrari World projects, MacBain's special format work includes having produced a number of giant screen films for nWave Pictures, contributing to breakthrough 3D productions such as "Fly Me to the Moon," and "African Safari 3D." One of his early jobs in giant screen was on the 1996 WGBH/NOVA IMAX documentary "Special Effects," directed by long time Star Wars sound designer Ben Burtt. "I produced the opening segment for the film, which recreated King Kong on a mythical San Francisco skyscraper," he said. "Since the film followed many different methods of visual effects, ours was done in stop motion." The film was nominated for an Academy Award for Best Documentary Short.

His career in visual effects was jump-started at the legendary visual effects house, Boss Film Studio, first with optical effects and, once Boss acquired its first Silicon Graphics machine, progressing to CGI. He spent time as a producer with Sony Pictures Imageworks, and with PDI/Dreamworks, where he produced the reformatting of a segment from its pioneering 3D animated feature "Antz" into IMAX 3D. He discovered that when a 2D image is reconfigured for a stereoscopic giant screen experience, the amount of detail and depth changes. "The change in field-of-view required expanding the landscape and populating the image with additional characters and animation."

Don MacBain (center, with his camera) & Mom, Disneyland circa 1966





On the set of Mythcrackers. GoConvergence built and filmed the piece, directed by Warren Rogan and written by Dave Pool.

Following this, he produced the unreleased IMAX 3D version of "Shrek," creating feature animation specifically for giant screen. The project was canceled by the studio, but ultimately proved its usefulness. "It showed the studio that 3D could work for Shrek and instead of applying it to IMAX, they applied the technology to theme parks, where it was used for the 4D Shrek attraction at Universal."

"The great thing about the current state of the attractions industry is that it can blend well with museum exhibit design - opening new avenues of imagination for museum guests," said MacBain.

Inside the Permian Basin Petroleum Museum

The Museum's wide range of media experiences was an opportunity for MacBain to apply much of his past experience with multiple formats and venue types.

Visitors will enter the new museum in the MythCrackers theater, themed as the set of a game show with the audience viewing the contestants. The content explores myths about the petroleum industry, addressing controversial topics such as fracking and who sets the price of oil. The show functions as an orientation before entering the exhibition halls, which are organized into two key themes - history of the industry and modern technology.

While MythCrackers acts as an introduction to the entire museum, PetroTrekker, which sits between the two themed sections, provides an interactive media introduction to the modern technology portion of the exhibition, introducing concepts that visitors can later explore in detail. MacBain named PetroTrekker as his favorite part of the project, and the most complex. On this simulated air trip in search of oil and gas around the world, 18 guests at a time enter a theater themed as a spaceship, for an 8-minute multimedia experience. The captain and crew (filmed at a soundstage in Orlando) appear on the main monitor plus three others. Three interactive stations allow visitors to engage thrusters, set shields, and perform other tasks. Subwoofers set in the floorboards provide a vibration upon takeoff while a circular screen set into the floor allows visitors to see what's below, including the Earth after launch. During their simulated journey, visitors learn about developing technologies, including drilling with lasers, and a sea-spider that is able to comb the depths of the ocean floor seeking indications of oil reserves.

Throughout the museum will be a series of touchscreen interactives. Shannon points out that "Don understood the touchscreen and games and how to make them more friendly for visitors. He also understood if an interactive piece was missing something to wrap it up, and made sure that was handled."

Morgan also spoke of MacBain's ability to address issues with the medium. "Interactives were an extensive part of this project," he said. "In this area, I was really impressed with Don's stick-to-it approach in getting things done."

Throughout the entire process, be it working on one of the theater experiences, an interactive, or simply audio playback, Shannon depended on MacBain's quality control and expert eye. "Production would record 10 voice-over actors and then whittle it down to three. He knew what voice would match the personality we were looking for. Don also was very adept at understanding the relationship of sounds to an exhibit and explained to us how, for our needs, looping videos can work better than videos that start when you're in their proximity."

Looking Forward

"This museum project is now one of my top 3 favorite projects I've ever worked on," said MacBain. (The other two are "Viaggio in Italia" and an animated spot for Wells Fargo Bank, a "living painting" based on the corporate logo, for which MacBain was animation producer in addition to writing and producing the score – he is also an accomplished musician and composer.)

"Working for design firm JRA was a fantastic and rewarding experience, as was working with the Museum. I treasure the experience and the relationships I developed with both."

Where might MacBain's dream and his knack for teamwork lead him next?

"I think one of the great untapped resources for museums may be augmented reality," he said, having just returned from a Visual Effects Society roundtable on the subject. "Right now, it's primarily being used for cars and retail advertising. But today's visitors – of all ages, really – come to museums with their heads down in their phones and tablets. We can incorporate those devices into the museum – I know it's already happening here and there, but I see the potential as still mostly unrealized. Augmented reality could be the next bridging of a technology to bring forth experiences within a museum you might not otherwise expect." ...

Don MacBain is attending the IAAPA Attractions Expo. Contact him at don.macbain@mac.com.

F-26 "Viaggio in Italia" (Flying over Italy) Dome ridefilm venue at Ferrari World Abu Dhabi.

Toshi Kato, R&H Image Engineer and Don MacBain, Digital Producer.

