# LVJ
## SCI-FI INDIE CREATES SPECTACULAR VFX WITH BOXX
### CUSTOMER STORY

Chris Taylor is an ambitious guy. The UK based CGI artist may pay the bills by creating visual effects for successful television shows like *Doctor Who* and *Hounded*, as well as major motion pictures like E*lizabeth: The Golden Age* and *10,000 B.C.*, but in his off hours, he's much more diverse, which of course comes with the territory when you're an indie filmmaker. For the past decade (which is not a misprint by the way), Taylor has invested his talent and energy into his roles as director, writer, editor, (and of course) VFX supervisor, on his feature film project *LVJ*, a lively, effects laden science fiction comedy that may very well change the way you think about independent film.

Ten years ago, with his multitalented core crew, producer/actor/composer Mark Shields, producer/cinematographer David LeMay, writer Phil Barron, and acclaimed creature FX supervisor Brian Best (*Gladiator, Batman Begins, Harry Potter*), Taylor set out to create a science fiction motion picture on par with the movies they had all enjoyed as kids and dreamed of one day making themselves. Such an undertaking is considered a daunting challenge for any major studio, but for a skeleton crew with no budget—more akin to impossible. The team shot test



*LVJ* **Auteurs**: Chris Taylor (left) and Mark Shields set up a green screen shot

scenes and short excerpts designed to spark interest from financiers and distributors at Cannes, but although the power brokers were impressed by what they saw, none was ready to take on the risk of bank rolling such a ridiculously ambitious indie project. So Taylor and company decided to go for broke and make the film themselves, operating on a shoestring budget, shooting weekends and off hours, all the while producing a work that

appears as if it cost tens of millions.

Part comedy, part sci-fi adventure, part homage to 70's cop shows, *LVJ* is the story of Roy Vincent (Mark Shields), described by Taylor as, "an office bound British agent who longs for a life of adventure." When planet Earth is threatened with an attack by an alien race known as the Veranyi, the government mobilizes a fleet of spacecraft to defend the
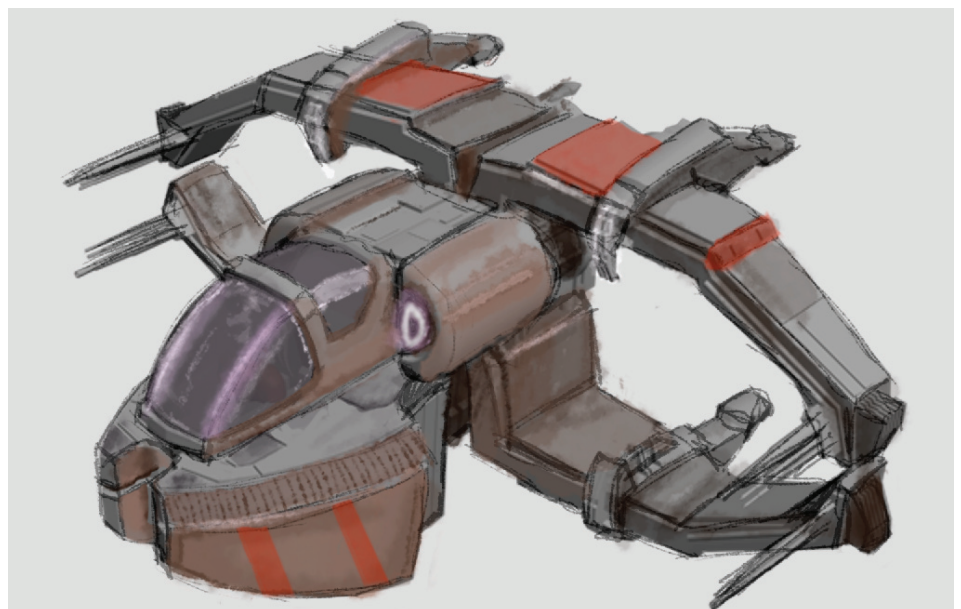
**Alien Attack:** The Veranyl threaten with hit and run attacks in the Wasp Fighter

Taylor's solution allowed him to incorporate the BOXX system into his post production workflow, making the high performance workstation an invaluable part of the process. Having first become acquainted with BOXX through full page ads in industry trade publications like Cinefex, Taylor also encountered their workstations throughout post production studios. "I saw them at post houses and other facilities," Taylor remembers, "and I always thought that if this particular company uses them, they (the BOXX workstations) must be real powerhouses."

planet. Vincent is left out of the action until he accidentally stumbles upon the woefully inept and hilarious Frankie (Maurizio Fichera) and Joey (Nick Harvey), NYPD detectives abducted by the Veranyi in 1974 and dumped back on present-day Earth. In true underdog fashion, this trio of unlikely heroes just might turn out to be the saviors of mankind.

## Incredibly Powerful Tool

And when it comes to the effects work on *LVJ*, Taylor's 3DBOXX workstation is turning out to be a savior as well. "The BOXX machine has been an incredibly powerful tool in my work," he says. And with hundreds of effects shots throughout the film, it's no wonder. Initially, *LVJ* was shot with a Canon XL1 enhanced with Zeiss lenses, but has utilized an assortment of camera makes and models in the ensuing years. Footage was dumped onto an Apple® MacBook Pro and edited using Final Cut Pro. Frames or video files requiring effects are then exported to the BOXX workstation, using the shot footage as background for the newly created VFX. This step was particularly challenging since the film was shot on DVCPROHD, a format incompatible with PC workstations. Taylor explains: "I always knew that if it came to it,

I could render off the DVCPROHD footage on the Mac into an uncompressed QuickTime which would work fine on the PC—not very efficient for disk space, but at least it was a workflow that worked.  Then I did some research on the internet and found that the animation codec would be a good choice because when you put the settings to 50%, it's like creating a 4:2:2 file. At 100%, it's like creating a 4:4:4. So depending on the footage, I would swap between the two settings."

## Bringing BOXX to BBC

When he became part of VFX artist Hugh Johnson's team creating visual effects for *The Wrong Door*, a BBC sketch comedy show, Taylor and Johnson identified an immediate need for the level of performance that only BOXX can provide. Television programming runs on incredibly tight schedules and since the team of twelve artists was required to produce approximately 800 VFX shots on a deadline, Taylor and Johnson made a pitch to convince BBC production honchos that the BOXX workstations were the perfect solution.



**Origins:** Chris Taylor's original Wasp Fighter concept would later be refined by concept designer and digital Artist Lee Ray

"Cost wasn't an issue with the BBC," he says. "They valued our opinions and we told them what we needed. However, the bigger issue is that they have their list of approved vendors and suppliers, so we had to get them to think outside the box—or about BOXX."

The BBC was convinced and once the purchase was approved, Taylor says that the team purchased "8 or 9" BOXX workstations from Escape Studios, a longtime UK BOXX reseller, which went on to impress Taylor with their outstanding customer service. "They're only five minutes down the road," he says, "so when we had some trouble with a cinema graphics card, they let us know that it was under warranty and Hugh Johnson actually took the machine down to them in a taxi. On *The Wrong Door*, they sent a software engineer out a couple of times to help setup Maya so it performed better."

The team ran both Autodesk® 3ds Max® and Maya® on the new BOXX systems with a mixed pipeline (the remaining models were Apple Mac Pro's for compositing with Shake). *The Wrong Door* went on to be nominated for a British Academy of Film and Television Arts (BAFTA) award and winner of a Royal



**The Best Man:** Renowned creature FX supervisor Brian Best brings the Veranyl to life

Television Society (RTS) award for VFX. Following the completion of *The Wrong Door*, the BOXX workstations were enlisted once again in order to complete *Hounded*, another BBC television series with Nuke being used for some compositing. On this production, the time saved by utilizing the powerful BOXX systems was immeasurable, with an astounding 1800 VFX shots completed in only 6 months. "On the same workstations (that

were by now almost 2 years old), we came in on time and on budget which is largely due to the performance of those BOXX machines," Taylor remembers.

He was equally impressed by the systems' rendering capabilities. "It's rendering power is phenomenal," Taylor says. "We couldn't afford a render farm and the BOXX machines, with all those processing cores, performed incredibly well. It was just like having a little render farm."

## The 64-bit Experience

At this point, it would be safe to assume that Taylor was thoroughly sold on BOXX, but in fact, that had already transpired, as demonstrated by his purchase of his own 3DBOXX in 2008. "Between those two jobs, both the VFX supervisor and I bought BOXX machines for personal and freelance work, primarily because they had been reliable, and the rendering performance was always able to deliver renders for the next morning which was essential when we didn't have a render farm."



**Scramble the fighters:** Taylor, Shields, Dave LeMay, and Graham Stone set the scene

However, when he first pressed his new 3DBOXX into service, Taylor was admittedly disappointed. It appeared that his 64-bit workstation was ahead of its time, as well as the available software Adobe® After Effects® and 3ds Max. On the latter application, Taylor attempted to use the 64-bit version but found that at that time, the 32-bit one was far more reliable. Still, it left him wanting to fully utilize the power of his high performance workstation. "I felt as if 4 of the 8GB of RAM were literally taking a holiday," he says. That would change when Taylor began running modo®, the 64-bit polygon and subdivision surface modeling, sculpting, 3D painting, animation and rendering package developed by Luxology®. On *LVJ*, Taylor relies on the program primarily for texture painting, taking full advantage of the 64-bit architecture. "modo was what opened my eyes," he says. "It seemed to perform as I would expect on a machine of this caliber. Not only was it 64-bit and behaved like it, but because it's open GL, it loved the (NVIDIA) Quadro FX graphics card. It's a joy to use modo on the BOXX machine."

For further improvement, Taylor recently installed Windows® 7, 64-bit operating system, coinciding perfectly with the release of the new 64-bit version of Adobe® After Effects®. "I tested it out with a *Dr Who* shot that I had been working on and the program gobbled up 7GB of RAM without breaking a sweat," he says, "and when I switched to 64-bit Photoshop® (while After Effects still had the 7GB of RAM) it did so with no issues at all."

## Just Beginning

Taylor's 2008 model 3DBOXX 8400 features dual four core Intel® Xeon® processors,



**It's just looks like** *The French Connection:* Frankie (Maurizio Fichera) hits the streets of 1970's New York

while the latest dual core BOXX workstations (3DBOXX 8500 Series) feature six core Intel Xeon processors for a total of twelve processing cores. The performance-enhanced XXtreme edition is capable of speeds up to 4.2 GHz, making them the fastest workstations in the world. The 8500 series is also available with four GPU's (with support for seven in all) to provide outstanding rendering capability. For the time being, Taylor remains impressed (and content) with his BOXX model, and as he nears completion on *LVJ*, he also believes that he is just beginning to utilize the performance of a workstation so critical to his post production process.

In order to create an independent motion picture as visually stunning and ambitious as *LVJ*, Chris Taylor and his fellow filmmakers have relied on themselves, as well as the unique talents of their assembled cast and crew. And like determined artists working in

any creative medium, they have also relied on an arsenal of tools necessary to bring their creative vision to the fore. For state-of-the art VFX, so crucial to the success of this film, the 3DBOXX workstation has proven to be a most valuable asset.

Learn more about *LVJ* at www.LVJmovie.com.

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