



The Essential Mix

SCRATCH Case Study

Hunt Angels

SCRATCH Lays Pipeline for Hunt Angels

A common problem with almost all imagery productions is a lack of funds. Tight budgets are nothing new, but if you're attempting hundreds of visual effects shots, a full color grade, mixed media, stock photography and restoration work all in one project, then tight no longer seems to do justice to the creative requirements. To achieve this artistic level in *Hunt Angels*, the filmmakers really pushed the envelope of post production technology to minimize the time and effort taken to achieve the desired results, thereby devoting the maximum amount of time to the creative process.

Hunt Angels, starring Ben Mendelsohn and Victoria Hill, is the true story of film industry outlaws Rupert Kathner and Alma Brooks. In their passionate pursuit to make Australian films, the pair began a movie-making spree that took on Hollywood barons, a police commissioner and cultural conventions. *Hunt Angels* scored several wins at the recent AFI Awards with Sue Maslin, producer, for Best Documentary feature; Jackie Farkas, DP, for Best Documentary Cinematography; and Rose Draper and Mike Seymour for Best Visual Effects.

The film, directed by Alex Morgan, is a black and white period documentary-drama. To achieve this look, the film required a range of formats - 35mm, 16mm, documentary historical video, and involved hundreds of visual effects shots, as well as film restoration, blowups and complete color grading. *Hunt Angels* is the first Australian film to be produced using multiple formats within a data pipeline. "Being the first film of its kind ever produced in Australia, *Hunt Angels* presented unique challenges to the creative and production teams," says Maslin.

The post process involved a team of freelancers in both Melbourne and Sydney. Rose Draper, Visual Effects Supervisor, was hired very early in pre-production to work out the approach for using the various effects that would be required, and to provide on-set supervision during principal photography. Mike Seymour's company InCase joined at the end of pre-production to develop the digital workflow pipeline, supervise post production, and to help in creating the visual effects.

Once filming wrapped, the film was edited in Melbourne, with the VFX unit working alongside the editing team. Since so much of the film included effects, temporary shots were vital to achieving a VFX lock on the edit. The Sydney InCase team then completed the online edit as an HD pipeline and

distributed the final-effects shot elements back to teams in both Sydney and Melbourne. As shots were completed, they were returned to the Sydney post facilities where the final assembly occurred and shots were reviewed and approved.



At the AFI Awards: Rose Draper and Mike Seymour win for Best Visual Effects for *Hunt Angels*.



The visual effects unit in Melbourne primarily used Combustion and After Effects, and handled the majority of the shots; the Sydney team used primarily Flame and Shake. To make this possible, the Sydney office automated the pipeline process using ASSIMILATE's SCRATCH Data-Centric Workflow Solution. As a result, even though the timeline seemed impossible, it was a smooth process and there was no last minute panic. "We just had a stack of long weeks and exhausting work," jokes Seymour.

Seymour adds, "The Sydney team used Flame and some Maya for the animated 3D wings on the *Hunt Angels*. The visual effects were heavily stylized, requiring live action green screen to be seamlessly composited into archival footage, along with original black and white stills from the period. Each confirmed shot was bundled into a wrangled packet file (WPF), which contained a unique ID and all the files needed to complete the project. The WPF files were then sent to the individual artists. Upon completion, finalized film files (FFF) were exported back to the InCase offices in Crows Nest, with the same unique ID.



Hunt Angels, starring Ben Mendelsohn and Victoria Hill, is the true story of film industry outlaws Rupert Kathner and Alma Brooks.

The film was broken into five reels and exported via XML from the Final Cut Pro HD system by InCase's VFX editor Nick Deacon to SCRATCH. SCRATCH imported the XML files and data, and then as each FFF packet arrived via firewire, the drive was scanned and the correct ID files were automatically imported into SCRATCH, versioned with the previous temporary grade, and dropped into the correct reel.

As VFX shots were completed, the files came back from InCase in Melbourne. They were then scanned into the XML database and automatically loaded into SCRATCH. This process managed the versioning, allowing real-time preview of reels with immediate test grades. Because SCRATCH allows real-time 2K grading using metadata, various test grades were applied during the direct review to determine if the shots could be finalized in the DI or if they needed to be revised first.

In this manner, and because SCRATCH is very cost effective, days could be spent reviewing material and color correcting without eating into the post production budget. It also meant that with SCRATCH in CONstruct mode, the review process happened with the shots in context of the edit and not just in isolation. According to Seymour, "This process saved days of work in EDL matching, conforming, and color correction. Had we not automated the task, it would have required another two full-time staff members." Once shots were approved and the reels were locked, InCase moved the completed film as data to the LaB in Sydney for final grading, titles, adjustment and output.

A DaVinci 2K was used for the final color grading of the film. Maslin explains, "Senior color grader at the LaB in Sydney, Dwaine Hyde, worked closely with our Director of Photography (DP), Jackie Farkas, to achieve this period look, which is completely original and astounds critics and cinema audiences alike wherever the film screens."

SCRATCH provided the data management and data pipeline capabilities for *Hunt Angels*. Seymour notes, "It was great to have all the creative groups and vendors working together and using this vastly more efficient data pipeline. All the artists did incredible work, but frankly, we could not have done this project had we not been willing to undertake this innovative data pipeline approach. As a resolution-independent digital pipeline, SCRATCH enabled us to break the traditional offline, online model to enable the use of Combustion, Flame, SCRATCH and FCP XML."

Seymour adds, "The LaB in Sydney did a great job in supporting the visual effects team. Will O'Connell, the Fire Editor, did a particularly outstanding job. The final 35mm film out was done brilliantly by Atlab. And because we were able to review first in real-time 2K with SCRATCH, the film at the Sydney premiere matched exactly to what we were seeing at our InCase offices at Crows Nest."



Hunt Angels, directed by Alex Morgan; AFI Awards received by Sue Maslin, producer, for Best Documentary feature and Jackie Farkas, DP, for Best Documentary Cinematography.