Moving image design studio Spov uses Adobe® Creative Suite®
Master Collection to create stunning visuals in support of Treyarch’s
highly anticipated blockbuster Call of Duty: Black Ops video game.

A man wakes up, tied to a chair and disoriented. Interrogators begin questioning him about the time he spent working as a special agent for the CIA. The scene immediately draws viewers in as intense flashbacks—set in cinematic locations—reveal the story a little at a time until it reaches a climactic ending.

This could easily be the plot of the latest summer blockbuster, but in fact it is the storyline of Call of Duty: Black Ops, the video game developed by Treyarch and published by Activision. The past ten years have seen console games evolve from simple, one-dimensional challenges to deep, movie-like entertainment experiences. The latest release in the famed Call of Duty franchise is no exception. Gamers pop in a disk and embark on a journey back to the Cold War, when nothing was as it seems. Design and animation studio Spov worked in partnership with developer Treyarch to craft the spectacular visuals in the loading movie sequences that are included in the riveting new game, which unfolds across a plethora of black ops scenarios set to the backdrop of the Cold War.

The rich, compelling content produced by Spov includes never before seen archive material, in-game capture, 2D and 3D animation, sophisticated graphical layouts, and extensive post effects. Working with Adobe Creative Suite Master Collection components—specifically Adobe Illustrator®, Photoshop®, After Effects®, and Bridge—Spov delivered brilliant graphics and video for the loading movie sequences that help drive the immersive experience and deep story line forward.
Challenge
• Help set the scene for the latest installment in the blockbuster Call of Duty series
• Create authentic Cold War-era visual content for loading movie sequences
• Advance the story via loading movie sequences with movielike graphics and video

Solution
• Design microfiche content using Adobe Illustrator
• Composite still images and video using Adobe Photoshop
• Produce video content using Adobe After Effects

Benefits
• Created a stark and compelling art style reminiscent of the Cold War-era theme
• Added to the game with stunning video sequences and haunting graphics
• Supported the storyline with archive material, in-game capture, 2D and 3D animation, sophisticated graphical layouts, and extensive post effects

Embracing the challenge
After working a number of previous Call of Duty titles, including Call of Duty: Modern Warfare 2, Call of Duty: World at War, and Call of Duty: Modern Warfare, Spov was proud to once again contribute to the record-setting series. The process for Spov began with research into the Cold War, followed by basic designs sketched on paper and then redrawn in Illustrator. The team settled on a stark and compelling art style reminiscent of the Cold War-era theme to craft the visuals for the loading movie sequences.

“In a game, a lot of what you see on screen is information driven,” explains Allen Leitch, managing director at Spov. “You have 30 to 90 seconds to deliver massive amounts of information to inform players where they are, where they’re going, and where they’ve been. Adobe Creative Suite software was crucial to helping us create visuals that were both informative and compelling.”

The Spov team designed two primary information delivery mechanisms. The first is a microfiche look that includes montages of graphics. The second is a video-oriented look, with archived footage and treated 3D renders. The multitude of complex narrative strands, both graphic and video, are interwoven as the story evolves.

Adobe Creative Suite software was used during the critical prototyping process, which helped set the tone for the entire project. Adobe Photoshop helped the team quickly prototype the look and feel of the game and gave them the ability to experiment with different creative directions. Next, they put together the prototypes in After Effects to help craft the animatics, determine how the sequences would look, and convey different moods. The team mapped out the sequences in the pre-visualization process, then developed the animations further using After Effects and plug-ins.

Bringing the story to life
During the Cold War, number stations broadcast strange number sequences as a way to communicate encoded information. The number sequences, often delivered by children, would be cut up and broadcast to sleeper cells across the globe. Using Red Giant Trapcode Form, a plug-in for After Effects that simulates a particle system, Spov created the number strand that runs throughout the game and facilitates transitions between archival footage, 3D animations, and gameplay segments.

In addition to shooting original footage for the loading sequences, Spov also integrated a wealth of archival footage. This footage required detailed photo manipulation and compositing to replace backgrounds and make scenes even more contextually accurate. For example, in one scene the team replaced the background behind a shot of former Cuban President Fidel Castro to suit the storyline.
Photoshop was used for detailed photo manipulation, compositing, and shading and texturing 3D models, helping to add realism and visual interest throughout the content.

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Allen Leitch
Managing director, Spov

Photoshop was also used to build textures from 2D images that were projected onto geometry in 3D to create a quasi-3D city. Shading and texturing 3D models in Photoshop helped to add realism and visual interest throughout the content.

The innovative microfiche segments of the project, created in Illustrator, reveal information-rich content that helps to advance the immersive gameplay. During the game development, military advisors provided both the United States and Communist perspectives, which is reflected in the graphics and the reality of the microfiche content.

“A big selling point for our studio is that world-class game developers like Treyarch don’t have to hold our hands,” says Leitch. “For Black Ops, 90% of what we delivered is original content created with Adobe Creative Suite Master Collection components. The microfiche content is a great example of how Illustrator helped us creatively iterate and realize the full potential of our ideas.”

Producing powerful content

Treyarch’s narrative in the single player game mode follows a story line based around a main character that wakes up behind enemy lines. Cinematic sequences in the game present emotive, haunting, hallucinogenic dreamscapes that reveal the cryptic narrative. The character’s internal struggle is reflected in a visual style that illustrates the tension, paranoia, and confusion that were omnipresent at the height of the superpowers’ hostilities.

Everything generated by Spov was output from After Effects. Massively heavy pre-comps were stripped back and edited non-destructively in the application. The team chopped up long, slow video shots to make them more dynamic, adding tension to live action sequences. This process saved significant time that would have been spent continually making small edits—reordering, and rendering out the content.
"To achieve the kind of effects we were trying to achieve, treating the footage, rendering, bringing it back in, and editing again would have been too time consuming," explains Leitch. "Adobe After Effects let us take a pre-comp and start editing with it nondestructively, saving valuable time and supporting a continuous creative workflow."

The team at Spov does a lot of film and photography in house and uses Adobe Bridge as a visual organizer. A single shoot can result in thousands of stills. Bridge helps the team visually locate shots and integrates seamlessly with the other components of Adobe Creative Suite. For the project, Spov delivered a tremendous amount of video to Treyarch that convey a number of settings, from a freezing Russian winter to the tense jungles of Vietnam to the striking view from a Blackbird spy plane.

"We spent 12 months working in our role to support Call of Duty: Black Ops and we’re immensely proud of our contribution toward the final product," says Leitch. "Adobe Creative Suite software helped make the game as deep from a story line point of view as any game could be, enabling us to deliver what we believe is some of our best work to date."

For more information
www.adobe.com/products/creativesuite/mastercollection