CYBER-NATIVES ON THE CUTTING EDGE

Herman Begay **David Hamilton**
Douglas Spotted Eagle (seated)

In the 1940's, 50's, and 60's, the First Nations were generally portrayed as being ignorant, illiterate, and behind the times. If time itself has not changed this warped perspective, then the Gathering of Nations 2000 definitely shatters those stereotypes.

The Gathering of Nations is the world's largest social gathering of indigenous peoples, and accomodates more than 50,000 persons per day in the 3 day event. Dancers and drum groups from the far corners of the United States come together to socialize, compete, and add strength to their cultural spirit.

The drum groups are recorded each year at the Gathering, and the resulting edited material is released on a CD, sales of which go provide greater prizes and awards at the annual event. In years past, the event has been recorded on DAT tapes, and 2 track reels. The millenial year brought several changes.

Imagine a venue with 50-65 stages, 4 sound system locations, dozens of various radio systems in operation, Halogen, tungsten, carbon-arc lighting, and cabling in every which way, all in an area more than a hundred feet beneath the surface of the earth. Couple that with source SPL's greater than 125 dB 6 feet off axis, no ability to hardwire due to dancer's feet and foot traffic, sound systems out of phase and hitting peaks of 120 dB less than 3 feet from a performance, dozens of people circling the performance area with clipboards, bells, loud voices, and tape recorders clicking on and off, and you've got yourself one heck of a challenge.

Each drum group takes a turn performing for the dancers. The drummers are arranged in a circle around an NBA basketball court. Sometimes there is no pause from the end of one groups' song before the next group begins. With 12 hours a day of music for 2 days straight, there is no wonder that over 200 songs are performed at this awesome event. And all of that music needs to be captured with pristine quality, and no second chances. So how is this feat accomplished?

Native Restoration has carried the day for several years with the Gathering of Nations, releasing more than 15 CD's on the SOAR Record label in Albuquerque, NM. Last year's release won the Nammy (Native American Music Award) for Best Traditional Recording. And this year's recording will prove to be even better. So how is it done?

Taking the lead is Douglas Spotted Eagle, Virgin/Higher Octave recording artist, Emmy-winner, and veteran of more than 300 CD, film, and television projects. At the Gathering, he opted to take a different approach in 2000 for capturing the music and spirit of the annual event.

"We chose to do this recording on a hard-disk system this year. I felt that processor and hard drive speeds are up to the task of an all day, non-stop marathon. We also wanted to do video this year, in the DV format, for archiving, experimental, and stock footage purposes."

Using Sonic Foundry's products as an arrow to his bow, Spotted Eagle set out to capture the video via Sonic Foundry's BETA ware, Vegas Video. "I'd had the opportunity to work with the Vegas Video product early on in the year, as a Beta tester. I was suitibly impressed with it. Enough so that I pretty much staked my reputation as a recording artist and engineer on it. And now that it's over, I can say I was right."

Audio was captured via a standard film fish-pole, with a T-adaptor on top. 2 Audio-Technica 831 mikes, wired into Audio-Technica's 7000 UHF wireless system delivered audio to one central location.

"We have to go wireless, because our field of use is greater than 200 feet by 300 feet. And we can't use cabling due to the number of areas/stages that must be handled, and due to the dancer's feet. Wireless comes with it's own inherent issues, but there simply is no other way to accomplish this task. Several years of experience have taught us that."

Hotel room editing gives a new meaning to "editing suite"

The wireless recievers are routed to a Mark of the Unicorn 2408 DAC, where it's split out to a Pentium III750 singler processor. It is also split out via SPDIF to a Tascam DA-45 and a DA-20. "We used the MOTU as the input device, and the TASCAM as a backup, because it was important to be able to capture the audio in 24 bit format. We couldn't go 96K with the TASCAM, but that ended up not being an issue, because the DATS were only for backup, in the event of an overheated hard disk," said Spot, as his friends call him. "The Vegas product allowed us to maintain integrity all the way through, and frankly, I haven't even checked the DAT's to be sure they are error-free. Once we had it in at 24/96, we used a batch dither on the audio files so that they could be imported to Sound Forge. We did all of the CD prep in VEGAS and Sound Forge.

Once we had the video captured, along with the audio, the audio was stripped off the video, and placed into Sound Forge, where all of the final editing and mastering was completed. For the pieces we wanted to place back with video, we just dropped it into place, and looked at the timeline, replaced the video, and the editing was complete. The audio was then imported into CD Architect, where it was correctly sequenced, checked again for output level match, and burned the master CD's. They're already on their way to the duplicator."

"The video is being treated a bit differently. We just wanted to create a short promotional video for the new CD, that can be found on the Indigenous Pictures website. (www.indigipix.com)We partner with them a lot on various projects. For this one, we wanted to challenge Vegas Video, and see if we could do everything in one desktop app. And so we did. The video was edited, with streaming files created, right in the Vegas environment. It's really surprising how fast it all went. The Vegas environment is very user friendly, but more than that, it's pretty intuitive as well. Remember, this is a BETA version of the software we are working with. We fully expected and anticipated crashes, lockups, and other issues. None of those issues occured. The only hiccup of the weekend was a conflict between the drivers for the rented video monitor and the MOTU screen draw drivers. And that took all of about 5 minutes to resolve. The really cool thing, was that we were able to preview our compressed files before rendering them. We're targeting the reservation modems, which means they're pretty slow. Many of them run off of a microwave, and some are as slow as 14.4. Our target speed was 28.8 on most everything we did. Previewing with compression allowed us to see and hear exactly what we were getting in various formats. We chose the .asf format, as it seemed to offer the best quality at the lower target speeds. It's important to us to be able to show the event to those who couldn't make it, and to those who don't know about powwow."

Spotted Eagle, Begay, and Hamilton completed production of the Gathering of Nations 2000 double CD on Monday, May 1st, while still in Albuquerque, NM. The CD is scheduled for release later this summer. This is Sound of America Records (www.soundofamerica.com) first double CD, with the Northern Drum groups on one CD, and the Southern Drum groups on the other CD. Sound of America Records, Native Restoration, Indigenous Pictures, and Sonic Foundry products all pulled together to make this project a successful one.

The Vegas Video product is currently a BETA version, available for a free download, with no timeout until July 1, 2000. Vegas Video is a complete editing, compositing, streaming media-compression toolset that allows for full-blown production to be accomplished in a single desktop application.