

TRANSCENDING DIFFERENCES

LD Bob Dickinson Lights The Opening Ceremony Of The
2007 Special Olympics World Summer Games

By Michael S. Eddy



“I have now watched the production several times, and it is perhaps one of the best examples of large-scale lighting design that I have ever been involved with; in a way, I think it is one of the most significant things I have ever done,” explains Bob Dickinson of his role as lighting designer for the Opening Ceremony of the 2007 Special Olympics World Summer Games held in October in Shanghai. Dickinson is no stranger to large-scale work, having done multiple such events worldwide as well as four Olympic ceremonies and two previous Special Olympics. The Ceremony in Shanghai marked the first time the Special Olympics World Summer Games were held in Asia and only the second time they were held outside the US. The Opening Ceremony played to a packed house in the 80,000-seat Shanghai Stadium, with a worldwide broadcast audience and close to 400 million viewers in China alone.

How do you approach designing something on such a scale, far from home base and your normal production support system? You bring the crew with you. Noah Mitz, lighting director, broke down the personnel. “Staffing-wise, from Full Flood there was Bob, Ted Wells, and me and Tony Ward [of PRG] as our project supervisor,” he says. “We had about nine people under Full Flood, including some American followspot operators. We had about 14 people from PRG, including programmers and technicians. Procon Event Engineering [of Germany] contributed about 30 individuals, including eight followspot operators. They had server technicians and Vari-Lite technicians, and Alpha One had techs to support the Falcons. We also had a staff from Procon’s Shanghai office, who ended up being our translators and local guides. In addition to our team, we had a whole Chinese lighting staff. We had a Chinese lighting designer, and he had a crew of 15 assistants, gaffers, and crew chiefs. We had about 60 Chinese stagehands and, depending on the day, 50 to 100 Chinese laborers; at strike, we had 300 laborers, so the Chinese aspect of this is another critical point. They were very much involved with the crewing of the show.”

Dickinson feels that it was the group effort that led to their success. “Doing a large project anywhere overseas involves a lot of collaboration and a lot of tolerance from every perspective,” he says. “Gathering this much equipment from all over the world basically requires a lot of coordination and back-planning the shipping, and the movement of personnel took an incredible amount of effort. Noah committed nine months of his life to this project.” All involved from the US and Germany were on site for at least six weeks, some as long as two months leading up to the October 2 show.

Of course, once they had everyone assembled, they had to quickly address communication. “Certainly, language was one of the most difficult aspects

of the show,” comments Mitz. “Luckily, the German crew almost always deferred to English, unless they were speaking among themselves, and then we had to have translators for both Mandarin and Cantonese.”

Ward notes that the language barrier was an obstacle they couldn’t allow to derail them. “There were three different Chinese dialects being spoken at times,” he says. “It got challenging, but the Chinese crew was pretty experienced.” And Mitz adds, “Of course, interacting with the other designers had to be handled differently when Ted and I consulted with them. We ended up sketching back and forth and found a certain common language in



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being able to draw a concept. We also did a number of full-scale mockups. We had a high degree of collaboration with the scenic department that came out quite well.”

Overcoming the language differences was, perhaps, most imperative for Wells, lighting director in charge of followspots. “The challenge that Ted had was enormous,” notes Mitz. “The spots are what Bob used to basically key the whole show for the camera, except for when there were 3,000 athletes on stage. We had a total of 36 followspots, 24 of which were manned by Chinese operators who spoke no English. However, he ended up with a translator that was fantastic, and she was able to become a simultaneous translator for him.” (See sidebar “Followspots In Three Languages” on p. 24 to read more about Wells’ experience.)

Besides learning to communicate, Wells also had to explain the art of using followspots for television. “Spot operators over there handle spots differently than we do,” explains Wells. “For them, followspots simply meant

Ted Wells, lighting director with Full Flood, was in charge of all of the followspots for the Opening Ceremony of The 2007 Special Olympic World Summer Games. He talks about his experience of calling followspots and overcoming language barriers.

FOLLOWSPOTS IN THREE LANGUAGES BY TED WELLS

It was a demanding, challenging process. It took about a month-and-a-half in China to do the cueing where we had 24 Chinese, eight German, and four American operators. None of the Chinese operators spoke any English.

We had three crews of Chinese operators: one from Shanghai, one from Guangzhou, and another from Beijing. I quickly learned they worked by territory; I found it was a mistake to put a member from Guangzhou on a platform with a member from Beijing. In the interest of harmony, I followed that rule—just one of the little things that came up in the learning process.

There was excitement all the way through, but there were things lost in translation, so to speak, or misinterpreted. One fun example—though it wasn't fun as it happened—was when we couldn't figure out why the Chinese operators and the supplier of the Chinese followspots were so upset with us when we referred to their equipment. I would say things like, "We want the ballast that goes with the followspot up on the platform." Well, the translation for "ballast" in Chinese is "trash," but we didn't know that. They got very upset. It would have been so much easier earlier if I had known they thought we were insulting the equipment. However, overall the translation went very well.

The wonderful translator I used, Libby, was a young lady who knew nothing about followspots or lighting, but she was very calm. She also got American slang very well. When I asked her if she would want to do the followspot translations, she was nervous. I said, "You will have to trust my judgment. I believe you can do it. I will walk you through every step of it, and I will teach you about followspots, so you will know what you are talking about when you speak to the operators." We took her to one of the spots on the roof, and we taught her about the unit and let her use one. Luckily, she took the position as my translator.

Followspots require constant talk; it is constant instruction. Once the process begins, I don't stop talking. The most amazing thing that I discovered about Libby was that she was able to translate simultaneously. She just had this innate ability; we established a rhythm. We were incredibly fortunate to find her, because she did it amazingly well. I was in awe.

I was very pleased with the results. I am sure the followspot operators were just as apprehensive as I was about whether or not we could actually accomplish this, whether we could get our communications straight and still accomplish what we had to accomplish. It was a most pleasant surprise that it worked out the way it did.

You know, these kinds of events are once in a lifetime opportunities that you look back on and know were totally worthwhile for everyone involved.

you moved left and right, up and down, and used an iris. They had never done work where you follow somebody who starts 400' away and ends up about 150' away, and you have to continually work the intensity, trombone, and irises. To their everlasting credit, they were quick learners. It is scary, because a 1/8" movement on a followspot from 600' away translates to a 5' movement. The operator has to be able to keep it stable; even a breeze can be a problem."

Dickinson acknowledges that Wells' training on the followspots was crucial to the design. "When followspot operators are not familiar with the sensitivity of television, there is a training process that we go through," the designer explains. "Television is really intolerant to contrast and intensity fluctuations, and followspots are our primary tool for exposure in long distance circumstances. In truth, even though we were very concerned about a successful audience experience for the people in the stadium, we were extremely concerned with the quality of the television broadcast. The integrity of that broadcast relied heavily on our controlling a consistent intensity level, and that, in this circumstance, was very dependent on those followspots."

Getting and installing the equipment itself was a challenge that required careful coordination. Mitz, Ward, and Wells brought in lighting equipment from PRG in the US, Procon in Germany, and from local vendors in China—no small job, as Ward points out. "PRG has done large stadium jobs before, but this was a very, very large environment, and I believe that this might have been the most fixtures yet on a single show," he says. Approximately 2,954 various fixtures and devices via three Virtuoso VX consoles.

Dickinson adds that designing a production of this scope requires lighting that will not become intrusive to the overall creative impact. "In this case, the producers did not want any light in a traditional mounting position...they did not want to have lights that were local and close in proximity to the performers," he says. "So we were forced to use lighting positions that were rather far away. In this case, the stadium happened to have quite a few really good positions to sustain the weight of a lighting rig, but the distance we were throwing was, in some cases, enormous. From the outer ring to the center of the field was probably 200m." In fact, some of the followspot throws were over 650'. For the 36 followspots, they went with 12 4kW Lycians, 20 3kW Ushios, and four 4kW Kupos.



PHOTO COURTESY OF FULLFLOOD, INC.

The Ceremony ran around 2,954 various fixtures and devices via three Virtuoso VX consoles.

The Chinese made certain that at least some of the equipment was locally manufactured or supplied when possible, a consideration Dickinson took seriously. "The Chinese have a great number of new lighting products that are coming onto the market, and some of them appear very promising," he says. "However, we had two problems with them. First, we had to decide on the vendors within a certain time frame, yet we could not get enough solid information in that time, and we were not assured of the inventory. Second, because we had designed one of the largest moving light installations ever, and some of the units were in very, very difficult areas to access for maintenance, we had to consider experience and reliability. Based on the lack of information and, more importantly, the lack of experience we had working with them, we decided to use the fixtures that have been more established in the marketplace."

"Doing a large project anywhere overseas involves a lot of collaboration and a lot of tolerance from every perspective."

—Bob Dickinson

They also used 44 Alpha One Falcon™ 7kW searchlights for mainly dramatic effects, opting for more traditional shorter throw units to do some long-throw duties. According to Dickinson, "In truth, I have a great deal of enthusiasm for Xenon technology, and I think that, ultimately, Xenon technology is going to play a great role going forward. We used the Falcons in this instance for dramatic effect more than for actual illumination only because, until just recently, the dependability of Xenon luminaires was just not there."

"What I used was a series of instruments designed for much shorter throws but performed very well," he continues. "MAC 2K Wash units, given the right configuration using the PC lens option, can throw distances that are still controllable at up to 250m, which is incredible. The color options and consistency between units were extremely uniform, which is always a big concern on televised projects. Because of their intensity and long-throw abilities, they allowed me to light more of the vast areas at one time. We also depended very heavily on the VL3500 Spot, which, for all intents and purposes right now, is the only ellipsoidal—with its 6:1 zoom ratio—that can deliver any kind of output over these long distances. The great thing is that these are known instruments; they are not rare, and they are in reasonable quantity. We weren't trying to reinvent something and use some kind of new technology; it was a very dependable rig, and we had a lot of success considering that we were very far away from where they were supplied."

Other major components of the design were 184 Vari-Lite VL5 Arcs and 116 VL6C+ supplied by PRG. Reliability was key for these units due to their placement in stage arches, which presented its own challenge. "We literally had to have guys climb up into the arch and actually hang the fix-

"We ended up sketching back and forth and found a certain common language in being able to draw a concept."

—Noah Mitz

tures from inside, since the arches were maybe 24" deep by 5' across, a big rectangular truss arch that had been scenically skinned," says Ward. "Thank goodness the fixtures worked so well, because it would have been really ugly to replace fixtures."

"My perspective on the VL6C+ is that it looks like the old unit, but the new unit is definitely crisp, bright, and dependable," adds Dickinson. "Where else can you find an instrument that puts out as much performance as compact as that? It is almost silent; you have to walk within 2' of it to even hear the fans. It is what I consider one of the most essential tools we have on the lighting market right now."

Due to the size of the stadium and the quantity of fixtures, there were voltage problems, and it was a challenge to keep everything stable in the multiple-power environment. "We actually had a lot of the gear running at 230V, the European power standard, and then, we had some of the PRG gear running at 120/208V," says Ward. "There were some challenges keeping voltages where the lights needed the voltage to be at the end of these runs." Dickinson notes that Alpha One actually redesigned the ballast of the Falcons in anticipation of this type of situation. "They have now modified their entire worldwide inventory to be able to compensate for these fluctuations," he says.

Control, handled by the three Virtuoso VX consoles, also included three backups. "The Virtuoso is an incredibly solid platform that I have learned to depend on," Dickinson says. "It is a platform that can control a large number of moving instruments without any kind of piggybacking of other consoles or daisy-chaining of other processors. This platform can control comfortably 1,000 lights, and in this circumstance, they were just very, very dependable. Also, the way the information is distributed is extremely dependable. The data runs, in some cases, had to be a couple thousand meters. We did not have any problem getting that data moved around the stadium."

The production also employed PRG Series 400 Power & Data Distribution racks at the main control position. "Basically, the Series 400 was used as the control backbone, along with Series 400 nodes at every dimmer rack position," says Ward. "We also used some of our Series 400 for power distribution down on the field, which worked out very well. It helped distribute control and power for the 1,000 Chinese LED wash lights from PR Lighting that outlined the shape of the set and lit some scenic elements."

The final result of Dickinson's design was a well-received visual accomplishment. "We had a lot of unknown variables going into a project like this. We were working in a new environment that is exciting and amazing but, at the same time, not familiar," he says. "So given all that, I really was expecting something that was far more difficult. Thankfully, with the people we were working with—our Chinese counterparts but also because of Tony, Noah, and Ted—it was not easy, but it was not impossible."

The Opening Ceremony of the 2007 Special Olympics World Summer Games is available for purchase at iTunes to benefit Special Olympics. **LD**

Michael S. Eddy writes about design and technology. He can be reached at msteddy2900@btmail.com.

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SHANGHAI SPECIAL OLYMPICS OPENING CEREMONY

LIGHTING EQUIPMENT

850 Martin Professional MAC 2000 Wash
 105 Martin MAC 2000 Performance Spot
 184 Vari-Lite VL5 Arcs
 114 Vari-Lite VL3500 Spot
 115 Vari-Lite VL6C+
 30 Vari-Lite VL2402
 122 Clay Paky Alpha Spot HPE
 44 Alpha One Falcon 7kW
 95 Martin Atomic 3000 Strobe
 12 Lycian 1294 4kW Followspot
 4 Kupo XS-400 4kW Followspot
 18 Ushio XPS-3000 3kW LSR Followspot
 2 Ushio 3000A 3kW Followspot
 1,000 PR LED Wash Luminaires
 325 Existing Stadium Roof Washlights

6 PRG Virtuoso VX Console (3 Active & 3 Backup)
 60 PRG Virtuoso Node Plus
 5 PRG Series 400 Power and Data Distribution System Racks
 24 PRG Series 400 Ethernet 7-Port Switch
 21 PRG Series 400 Ethernet 10-Port Switch
 2 Catalyst V4 Pro Media Servers (pixel-mapped PR LED units)
 4 PRG Mbox Extreme Media Servers (Two video feeds for low-res screens)

LIGHTING STAFF

Lighting Designer: Bob Dickinson
Lighting Director: Ted Wells
Lighting Director: Noah Mitz
Project Supervisor: Tony Ward
Draftspersons: Dan Reed, Noah Mitz
Lighting Designer, China: Mr. Liu Wen Hao
Project Supervisor, China: Mr. Quan Xiao Jie
Moving Light Designer: Mark Butts
Moving Light Programmers: Peter Radice, Paul Lennon, Jason Rudolph
Moving Light Project Supervisor: Jason Trowbridge
Lead ML Techs: James Beaghan, Peter Jackson, Simon Kayser, Jens Modigell
ML Techs: Jeffrey Anderson, Zac Cromwell, Geoffrey Smith, Anthony Ciampa, Chris Lose, Brent Linas, Eugene Boht, Gunnar Johansson, Claus Jensen, Veit Schlopschnadt, Angelika Appel, Johannes Mossal, Alexander Schmidt, Marco Herzog, Eric Heupel
Gaffers: Jeff Gregson, Oliver Ebel, Matthais Meyert
Followspot Technicians: Olaf Pottcher, Thomas Alberghini
Media Server Technician: Jan Schroder
Falcon Technicians: Tim Obermann, Rachid Makrini
PRG Account Manager: Tony Ward
Procon Account Manager: Udo Willburger
Procon Project Managers: Michael Brockmann & Derek Au
Alpha One Account Manager: Marco Niedermeier