## **Light Curtain: A Brief History**

I had seen and greatly admired Josef Svoboda's work in EXPO 1967 in Montreal. In 1971, although I had the pleasure of recreating Richard Pilbrow's lighting design of *Three Sisters* designed by Svoboda for the National Theatre's Los Angeles tour, I never met him. He introduced Richard and therefore me to the "Beam Light", a light which became a very important tool in my lighting arsenal.

In many theatre productions Svoboda used to use big banks of light, which were extremely interesting as he used them in a very architectural way. The lights he used were manufactured by ADB, a Belgian company, and they made a big statement with a lot of light spill; it wasn't totally contained but was very dramatic.

In 1976 I was asked to light a one-act piece for Ballet Rambert, called "Reflections" choreographed by Robert North and designed by Peter Farmer. The story was about a man in a hotel room who was thinking about his friends and as he would think about them they would appear through the walls of the room. The set was just a floating cornice with a window and door frame. There were no real walls, and I decided to try to make walls of light. I found a PAR56 VNSP light bulb that was originally used as a 747 landing light and it had a very intense beam, 5 degrees by 9 degrees. So I hoped a bank of them would actually make a sheet of light. I persuaded the carpenter to build these lights into the floating cornice and when we added a little bit of smoke to give the air a bit of thickness it worked really well, although more of a curtain than a wall.

Later that year, I was lighting "Dalibor" at the English National Opera designed by Stefan Lazaridis and he was very keen on the Svoboda ADB lights, but we didn't have the money for them. So I said, 'Well I've got this bulb, maybe I can do something with this it'. So we built the first light curtain, which

unfortunately was built in steel and was 2.5 metres long, and very very heavy. It kind of worked, but it wasn't totally successful because I had too many lamps in a unit... there were 10 lamps wired in series, but it turned out it to be much better if you had 9. When we eventually got to "Evita" in 1978 the light curtains were a major element, and by then we were building them in aluminum, so they weren't so heavy.

They allowed me to develop the idea of punctuating the end of a scene not with a black out but with a white out.

They were hung in static positions apart from one bank which was fixed to the underside of a projection screen which travelled and lifted up stage moving the sheet of light with it. I began to get interested in the possibility of being able the adjust the tilt angle of the units during a performance.

In 1980 with the RSC production of "Nicholas Nickleby" the light curtains were rigged on two sets of fly lines which enabled us to do live moves and adjust their position during the performance. Crude but better than nothing.

In 1981 I went to Australia with "Evita" and was talking to the local electrician about my desire to be able to develop the moving aspect of the light curtain, as the two sets of fly lines wasn't really satisfactory. He said "Why don't you try an antenna rotator." I found there were ready made motorized radio and television antenna rotators, designed to achieve repeatable positions. So we tried sticking some of those on the light curtains and it actually worked. The positions were NNE, SSW, ESE etc etc.

In 1989 I designed the lighting for a large-scale production of "Carmen" at Earl's Court designed by Stefan Lazaridis and directed by Stephen Pimlott. By now it was really important to add colour change to the light curtains and I commissioned a Rock and Roll company to build us 2 meter wide 11 colour scrollers. They were attached to the light curtains by the Rock and Roll riggers and when one of the scrollers fell to the stage

from a height of at least 50 feet - we were very lucky no one was hurt.

I decided that DHA would develop an integrated Light Curtain with a built scroller that wouldn't fall off and kill someone. By the time we got to "Miss Saigon" later that year, the integrated light curtain was born. It was a vital element in the lighting design. The units could move and change colour.

Early in 1991 is was announced that "Miss Saigon" would go to Broadway later that year. The New York production electrican visited London to see what he was getting into and encouraged me to build a totally integrated DMX controlled Digital Light Curtain. We had 6 months or so. What could possibly go wrong? In the end they were built and if they wiggled at all, were packed up to be sent off. The kit that arrived in New York was totally untested and not really finished. The "Light Talk" computer control program was only a few hundred kilobytes but it took over 45 minutes on a telephone modem to download updates from London, and there were many. Thanks to the tenacity of the production electricians and the DHA team the story had a happy outcome but it was really touch and go.

In 1994 Richard Pilbrow designed the lighting for the Hal Prince Broadway revival of "Showboat". Richard asked us to make a pitching yoke for the light curtains which would allow him to vary the horizontal angle of the unit as well as the tilt. This turned out to be a really interesting idea and it was with great pleasure I was able to eventually add them to "Les Miserables" in London.

Today there are over 1000 DLCs out there somewhere.

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