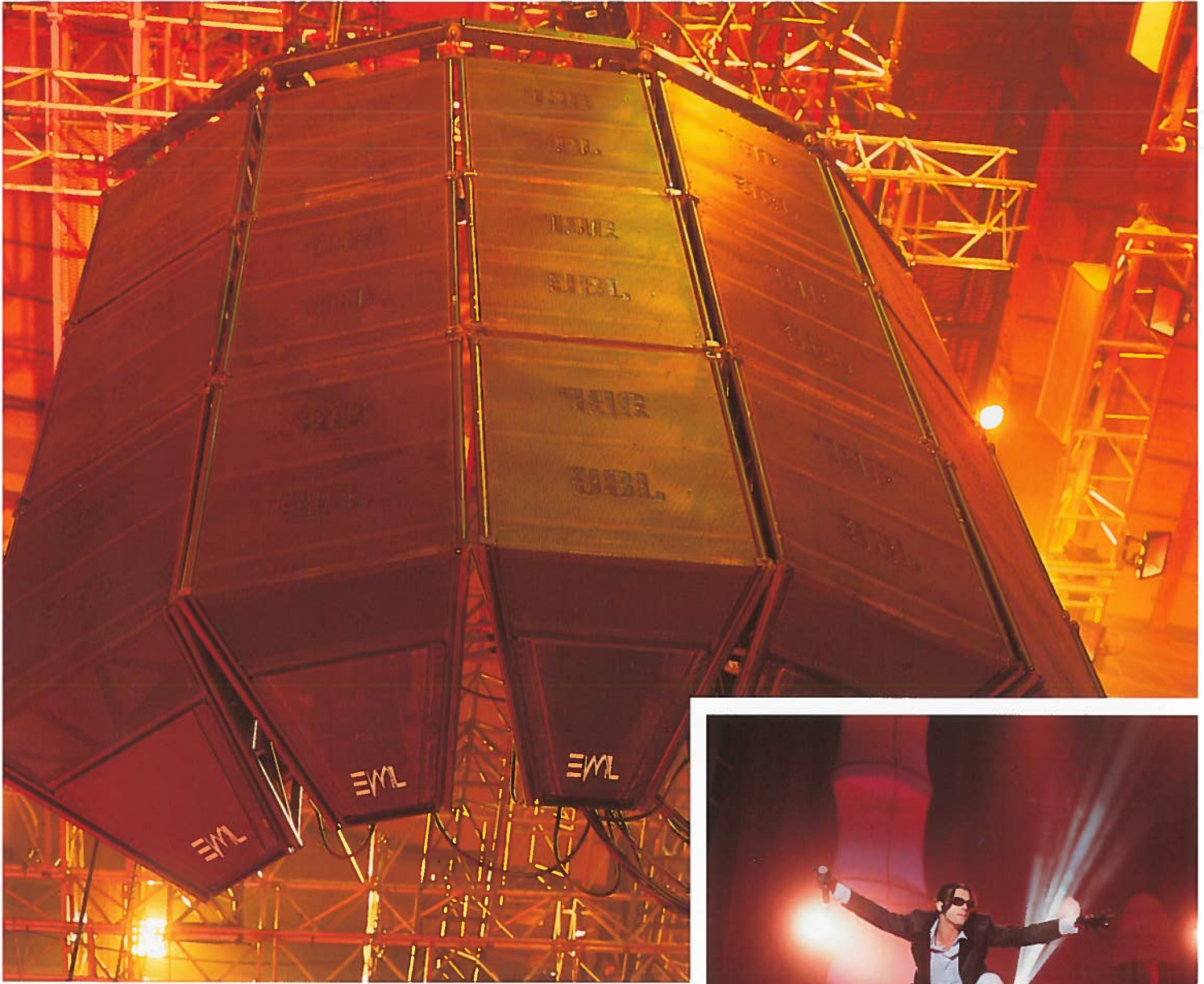


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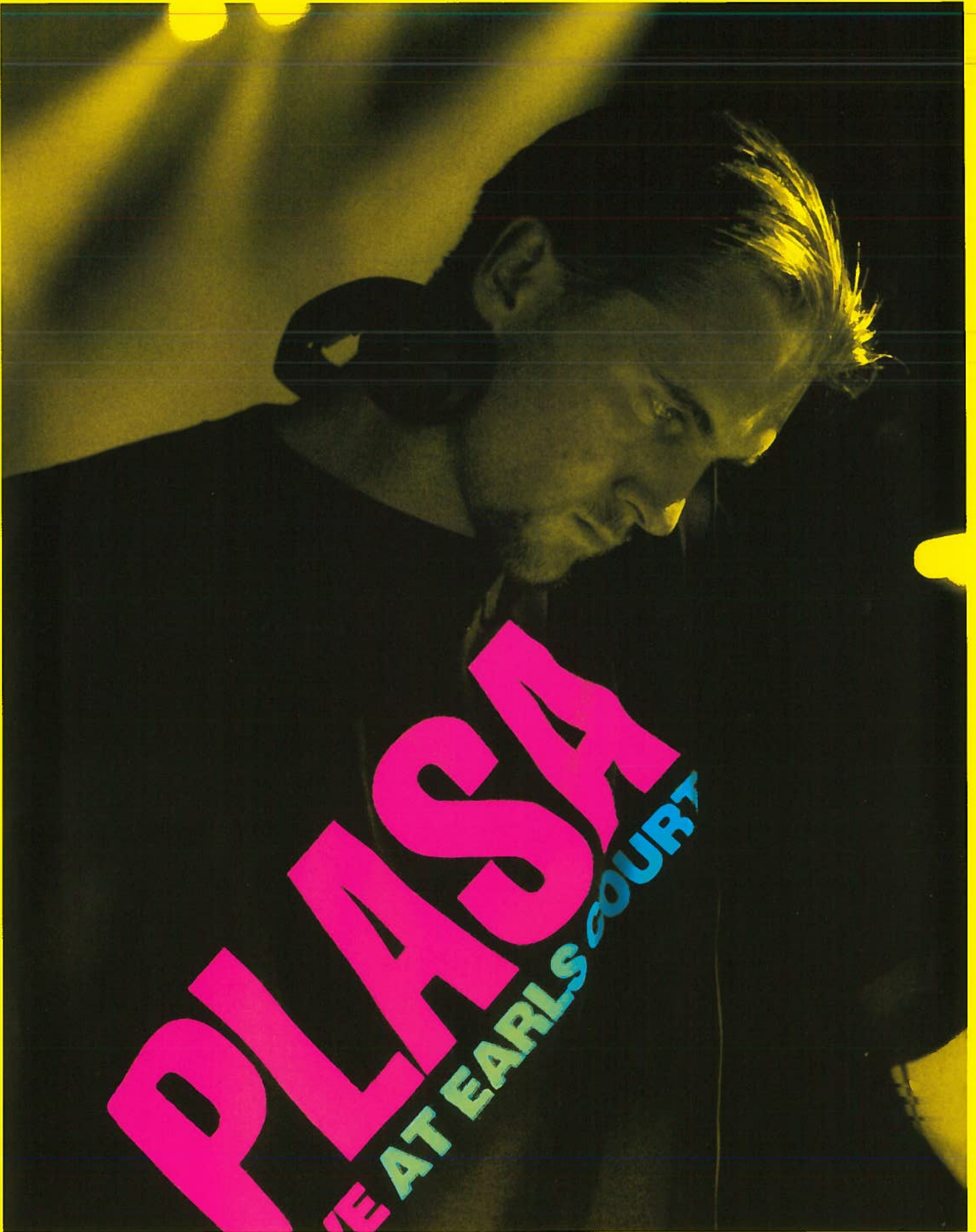
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# LIGHTING+*SOUND* International

**AUGUST 1997**

VOLUME 12, ISSUE 8

## 6 News In L+SI

14 pages of the latest industry news

## 34 Sunset in the Colony



Celebrations and Ceremonials at the Hong Kong Handover

## 41 Rep Returns to Old Vic

Under the direction of Sir Peter Hall, the Old Vic has entered into a dizzying whirl of 13 first nights this season. Robert Halliday joins the technical crew

## 46 On Tour



JBL's new horn loaded array (HLA) system makes its first appearance in the UK with INXS

## 49 Second Take

John Watt's view from beside the camera

## 51 All the Queen's Horses

L+SI Special Report on the Royal Tournament

## 53 Equipment News

## 55 The Cream Ticket

Steve Moles finds himself to be a big fan of the minimalist approach to lighting at the 'Best Club in Europe', Liverpool's dance Mecca, Cream

## 59 Seeing Red

L+SI Special Report on the latest Lee Filters Colour

## 61 Recruitment

## 63 Live Sound

Ruth Rossington talks to Tony Rossell, managing director of Acoustic Sound Systems, to find out the history behind the company's new ReflektA range

## 67 At Ease in the Stalls

Ian Herbert joins the Essex brigade at the Labatt's Apollo for Summer Holiday

## 68 Directory

## 73 International Directory

## 74 In Profile

Rob Halliday talks to lighting designer Ken Billington

The views expressed in Lighting and Sound International are not necessarily those of the Editor or the Professional Lighting and Sound Association

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# LIGHTING+*SOUND* International

published monthly by the Professional Lighting and Sound Association

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ISSN 0268-7429

Editor: Ruth Rossington

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Published from the PLASA Office: 7 Highlight House, St Leonards Road, Eastbourne, East Sussex BN21 3UH England

Telephone: (01323) 642639 Fax: (01323) 646905 Internet: <http://www.plasa.org.uk/plasa/> E-mail: [info@plasa.org.uk](mailto:info@plasa.org.uk)

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The magazine is available on annual subscription

UK £50.00 Europe/rest of world £65.00 (US \$100.00) Airmail £90.00 (US \$135.00) Single copy £3.50 plus postage

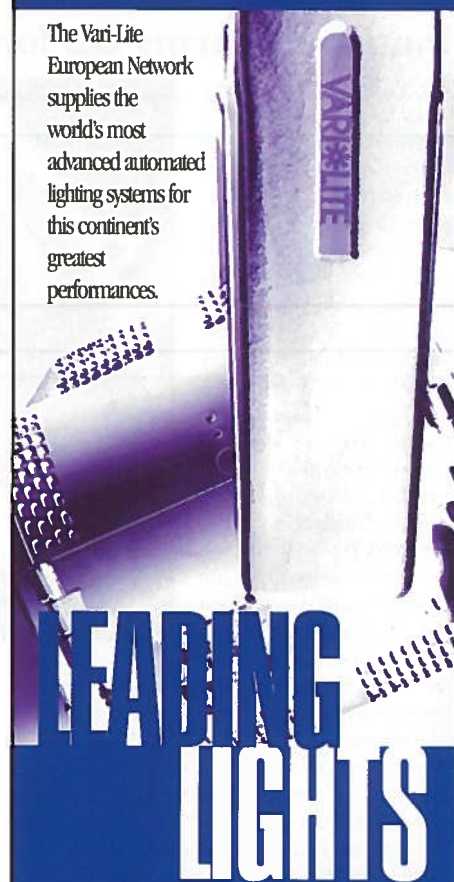
Editorial Advisors: Peter Brooks, Wyatt Enever, Mike Gerrish, Derek Gilbert, David Hopkins, Matthew Griffiths, John Lethbridge, Iain Price-Smith, Neil Rice.

Lighting + Sound International is published monthly for \$90.00 per year by The Professional Lighting and Sound Association, 7 Highlight House, St Leonards Road, Eastbourne, East Sussex BN213UH. Second class postage paid at Rahway, N.J. Postmaster: Send USA address corrections to Lighting & Sound International, c/o Mercury Airfreight International Inc, 2323 Randolph Avenue, Avenel, New Jersey N.J. 07001

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## Industry Warms Up for Twentieth PLASA Show

The PLASA Light & Sound Show has firmly established itself as the leading business forum for the entertainment technology industry, spanning broadcasting, installation, clubs, pro audio, theatre, rigging, DJs and live touring, as well as maintaining the most truly international flavour of any show in its field. The 1996 event attracted over 15,000 visitors from 73 different countries and included exhibitors from every corner of the world.

PLASA 97 will be the twentieth anniversary of the Light & Sound Show, which has once again surpassed the previous records set by the event, having expanded to fill both levels of Earls Court in its own right. There are currently 321 exhibitors booked at PLASA 97, including 79 from overseas and 57 first-time exhibitors, covering an area in excess of 11,000sq.m, whereas at last year's show there were a total of 304 exhibitors (of which 67 were from overseas) covering 10,200sq.m.

The Top Deck will include the Specialist Sound area - a proven success at past shows, a laser demonstration area, the PLASA Café and the PLASA/Lite Structures Pavilion. Also on the Top



Deck, the dedicated AV area will showcase the latest in large and small screen technology, with companies such as JVC, Owl, Electrosonic, Unitek Displays, Screenco and ProQuip catering for the estimated 4,500 visitors expected from the AV sector alone.

Other highlights include the first ever World Light Jockey Championship, co-hosted by Disco International, Pulsar & Clay Paky, Big Bang and European Leisure, and the hugely successful DJ competition, while alongside these attractions the business end of the show

should witness the introduction of over 400 new products across the entire breadth of the industry.

PLASA's chairman, Paul Adams, commented: "PLASA kick-starts the exhibition calendar year. It is the first point of call for all serious buyers, and demonstrates the association's commitment to the industry."

PLASA 97 opens on Sunday 7th September and runs through to Wednesday 10th September at Earls Court 1 in London. For further details on either attending, or exhibiting at the show, contact P&O Events in London, telephone 0171-370 8233.

## Seminar Highlights

This year's PLASA Show will see an eclectic line up of seminars which will broadly reflect current issues and events across the industry. One of the main talking points at the moment is Lottery Funding and Graham Walne will chair a panel including Michael Holden from the Globe Theatre and Jeremy Newton from the Arts Council to assess its impact on the arts today and into the future.

Systems Integration, for so long the sleeping giant of the pro audio industry, looks set to become one of the most significant new markets of 1997. Dave King of the DKT Group leads a discussion on the potential growth in intelligent and total control of an environment.

The Association of Lighting Designers is sponsoring a two-tier forum on the challenges faced by the lighting designer, particularly on day-to-day organisational issues. Mark Jonathan of the National Theatre will lead the round-table discussion and will be joined by a number of high profile lighting designers.

Training for lighting designers will be under discussion with Nigel Morgan and Nick Hunt, tutors at Rose Bruford College, the first to offer degree courses in Lighting Design. They will be joined by television lighting director Bill Lee who lectures at Ravensbourne College and Duncan Sones of the Arts & Entertainment Training Council.

Steve Jones of BJ Auditorium Design will present the ISCE-sponsored Hayden Warren Memorial Lecture on Voice Alarm, one of three papers presented by the Institute of Sound and Communications Engineers during the Show.

The Association of British Theatre Technicians (ABTT) is running the great 15A versus 16A plug and sockets debate. Andy Hales from Theatre Projects Consultants and Mark White from the Royal Opera House will lead the discussion on whether new and refurbished theatres and venues should be fitted with 16A socket outlets to BS4343/EN60309-2 for stage use.

In CDM (Construction: Design and Management 1994) - Theory and Practice, an introduction will be offered to CDM regulations which will evaluate their implications for the industry.

The full seminar programme will be announced shortly before the show.

## Concert-Goers Hurt in Speaker Stack Fall

On the eve of L+S I going to press, the national media carried reports that two schoolgirls had been injured, one of them seriously, when a 20ft high loudspeaker stack toppled over during the 'Party in the Park' concert in Leeds. One 14 year-old received treatment for head injuries in intensive care at St James Hospital in Leeds, while another girl, also aged 14, was treated for a broken leg. Around 30,000 people attended the concert.

Leeds County Council officials and the West Yorkshire Police are investigating the incident, and the Health & Safety Executive have been informed. PLASA has contacted the County Council in the hope of obtaining further information on the nature of the accident. However, no further details about the incident are available at this stage for procedural reasons. We hope to run further details in the next issue.

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## From a Jack to a King

*Forbidden Planet* was a long running success by the terms of British musicals, especially for a light hearted piece that set out to parody, as well as flatter, the Bard. What then could be more natural than to follow the formula? If it were done when tis done, then twere well it were done quickly.

*From a Jack to a King*, based upon *Macbeth* is, you may be surprised to learn, Bob Carlton's first experiment in this genre. Set in a pastiche of fifties Britain that is as accessible as was Shakespeare's original in its own time.

I'd like to wax lyrical about the splendid realisation of Mr Carlton's latest progeny - the marvellous sets by Rodney Ford that so accurately evoke a smoggy, smoky Tin Pan Alley and yet can take light so readily that they easily transform into a concert stage with little effort required on the part of the viewer; or even the crisp presentation of the sound from a complex show that sees a cast of nine switch continually between instruments, providing a little drama of their own for Bob Burnell, the sound engineer.

However, the show is also the first outing for something a little more mundane and prosaic. Lighting designer Chris Jaeger recalls when set designer Rodney Ford asked 'for some of those lights that move around'. "We looked at several options, but Martin Professional's Mac 1200s were the right price and had the potential. However, we did make some modifications, including replacing the colour wheel with gobos. Why do they put a colour wheel in a lamp with dichroic colour mixing?" (Anyone at Martin like to pick that one up?)

At time of viewing the tour had been out 11 weeks and was about to break for the summer. Changing venue weekly and doing six shows at each town, the lamps had experienced a fairly rigorous introduction to the touring life and generally are well liked by both Jaeger and his team of John Harris (assistant and Hog II programmer) and Julian Edwards (board operator). "There were some teething problems," explained Jaeger, "but all in all they've performed well."

The lamps are affectionately known as 'the pigeons' by the cast and crew for the gentle cooing



noise they make when panning and tilting, something that can presumably be attributed to the sizeable lamp enclosure acting as a sound box for the motors. The roadcases are also such that the hanging hooks have to be laboriously unbolted to fit in the lamps, and the awkward lids only fit one way. Details like this may seem of minor significance to the manufacturers when compared to the performance of the lamp, but it's the kind of irritant technical crews are reminded of every time they rig and de-rig the lamp, and are thus a lingering itch they can't scratch.

On the plus side, the 1200W HMI is a nice chunky light in terms of output: Jaeger has 240 1kW Pars in what is a high density rig, but even in the darkest mauves (around the 181 area) the Macs do cut it. The lamps have proved to be reliable (once the teething problems were resolved) and only after 11 weeks were any of the bulbs showing a hint of yellowing. For the right show, and this is certainly one of them, this lamp performs as required and at a very affordable price. The tour re-starts in September and continues in the UK until Christmas.

Steve Moles

## Avesco Buy Slice of AVTS Action

Avesco has purchased 51% (with the option to buy the remainder) of AVTS, a US supplier of specialist technical video services to the broadcast, corporate communications and entertainment markets.

Established in 1985, AVTS operates both in the US and overseas, with offices in both San Francisco and Los Angeles, and was a pioneer in the use of show control systems for audio, video, lighting, scenery and special effects.

Avesco provides specialist television-related services to the corporate broadcast and entertainment markets in Europe, Australasia and North America. Shares in Avesco are listed on the London Stock Exchange and its market capitalisation at the close of business on July 8th 1997 was £38.6m.

## Richard Pilbrow Honoured for 'The Life'

Richard Pilbrow, founder and chairman of Theatre Projects Consultants, has been honoured with both a Tony Award nomination and a Drama Desk Award nomination for Best Lighting Design for Cy Coleman's current Broadway hit, *The Life* (the production was reviewed in the June 97 L+S)

Pilbrow received the Drama Desk Award and an Outer Circle Critics Award in 1995 for lighting Harold Prince's *Showboat*. His lighting of *Four Baboons Adoring the Sun*, directed by Sir Peter Hall for the Lincoln Center Theatre Company, won him a Tony Award nomination in 1992.

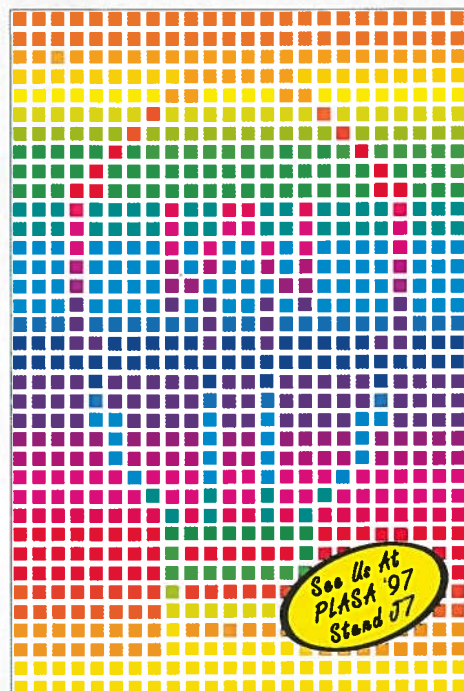
As a theatre producer, Richard Pilbrow has presented 30 West End productions, many in association with Harold Prince. His book, *Stage Lighting*, first released in 1970 with a foreword by Sir Laurence Olivier, has become a standard text book for teaching stage lighting worldwide. A new book, *Stage Lighting Design - The Art, The Craft and The Life*, will be released in the autumn and it is hoped that copies will be available at the PLASA Show in September.

## Motor School Takes to the Road Again

PCM are once again running their annual Motor School, this year taking place in the week following PLASA. Two sessions will run, the first across the 15th-16th September with the second on the 17th-18th.

The courses, which will be presented by Wally Blount of US-based Columbus McKinnon, and supported by PCM's John Jones, will include a mixture of practical and theoretical skills. The training will include the disassembly and reassembly of CM Lodestar units, repairs and trouble-shooting.

As with previous schools, tuition is free of charge, but places are limited and a small, refundable deposit is required to secure a place on the course. For further information, contact John Jones at PCM, telephone 0151-609 0101.



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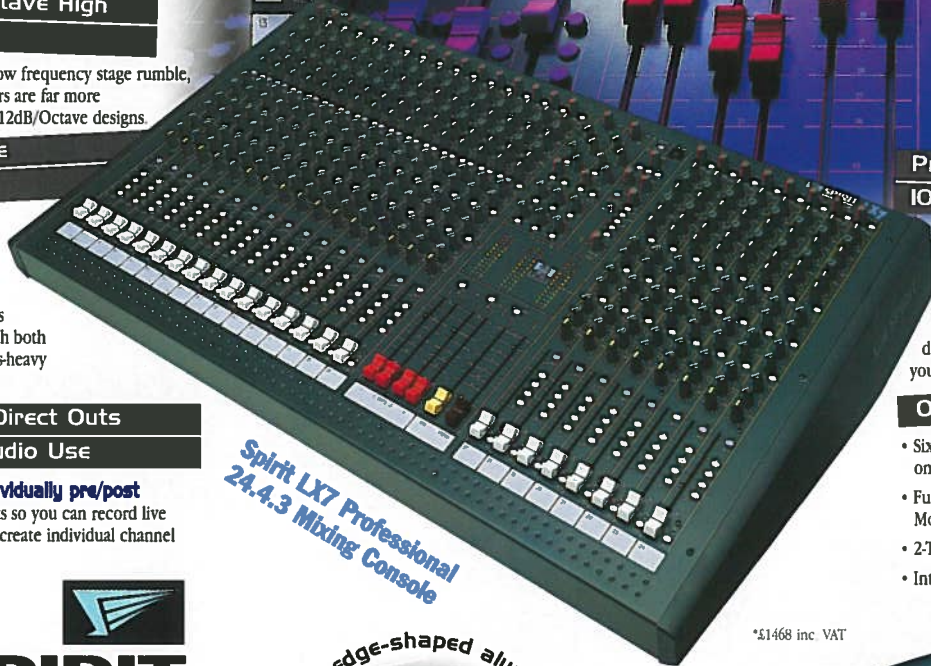
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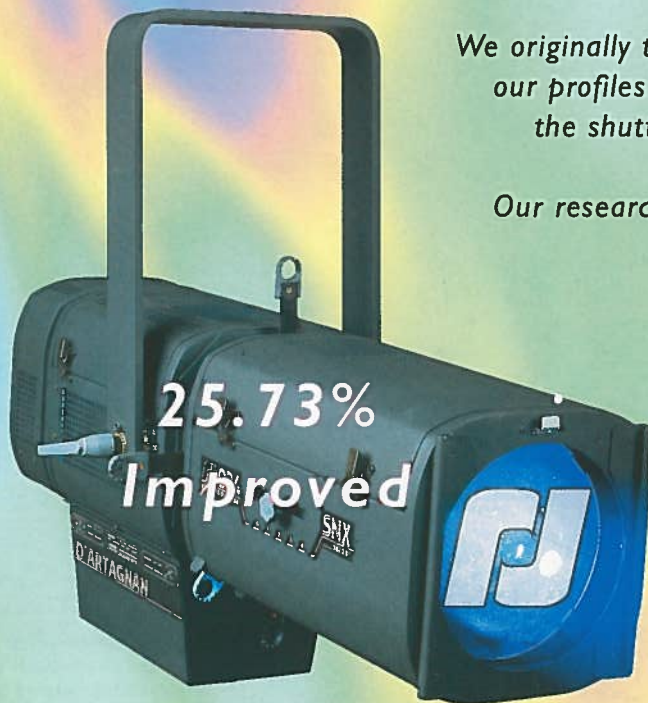
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# PLASA

## LIVE AT EARLS COURT

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Autograph Sales will introduce a number of new products at PLASA this year, including a new digital loudspeaker management system from Lab Gruppen and the new SB-1 Sound Beam from Meyer. Also on stand will be new loudspeaker rigging designs from ATM Flyware, plus Clear-Com's new intercom master station.

- **Autograph Sales - B4**

Owl Video will have their largest ever stand at this year's PLASA, in order to showcase the latest projection products and screen technology, including the high brightness Seleco SDV 1300 DMD projector, the advanced video projection cube, also from Seleco, and the Compact 452 Retro- Projection system.

- **Owl Video Systems - A10**

HirePoint will be asking the question 'Can you afford NOT to run HirePoint 98?'. The latest HirePoint Windows 95 package is the culmination of 11 years of development of hire stock management software.

- **HirePoint Software - P22**

BSS will introduce the FDS-355 Omnidrive Compact, a low-cost, more flexible unit; a brand new addition to the Opal range to join the DPR-422 and the DPR-522; the new AR-133 active DI box/line balancer; and Soundbench, the PC platform control for Omnidrive and Varicurve.

- **BSS Audio - S34**

## Turbo Impact at Trocadero



Marquee Audio have carried out a sound system upgrade at the Pepsi Trocadero in London's Piccadilly Circus using 40 of the new Turbosound Impact 50Ts.

According to Jeremy Dowding, audio visual & presentations manager for theme attraction owners, Trocadero plc, the move was in line with the changing requirements of their growing number of tenants. By reconfiguring the pre-existing Turbosound wide dispersion TCS-530s and adding some TCS-618 bass bins, they have not only managed to eliminate previously noticeable dead spots in all public areas throughout the seven-storey entertainment environment, but provided some feature 'show' areas and a bass rumble. Some of the TCS-530s have been flown, along with the bass bins, under the 'launchpad' platform where visitors congregate to watch the large screen video, whilst other TCS-530s have been reused in the atrium basement. Two Impact 120s, removed from the South Mall, have also been resited at the bottom of the Sega escalator.

The audio architecture of the Pepsi Trocadero is now a 15-zone audio design, EQ'd and controlled from a Marquee-supplied Peavey MediaMatrix system, specified and commissioned by Marquee Audio's special projects man, Andy Baker. Also 'linked' via the Impact 50Ts is the adjacent Trocadero plc-owned London Pavilion.

Jeremy Dowding is delighted with the results and believes that the Pepsi Trocadero's tenants will share his enthusiasm for the new system. "In particular," he says, "our requirements are that we intersperse internal advertising from our tenants among the pop videos on the video screens, and it was important that everyone could hear what was going on. The sound is now omnipresent, which is what we needed from a public point of view, while making sure we didn't interfere with the trading of what is now a wide variety of retail tenants, with sound that was too intrusive. After all, this is an indoor theme park. There are a lot of hi-tech leisure activities going on throughout the complex - like virtual reality games - and we've taken care in the way we have split the sound into 15 zones (with one spare on the MediaMatrix)."

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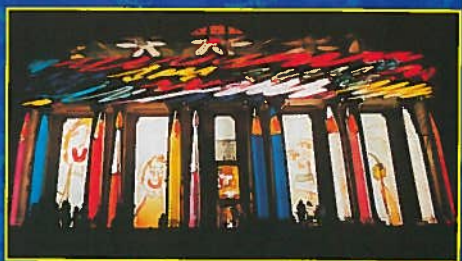
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## Positive Response to PLASA 97 AGM and Dinner

The 1997 Annual General Meeting of PLASA was held at the Marriott Forest of Arden Hotel & Country Club in Warwickshire on the 20th of June - an attractive setting for an informative and very rewarding day.

Paul Adams, PLASA Chairman, stated that the aim of the 1997 AGM was to focus on achievements and goals, and reflect on the enormous changes and ongoing success at PLASA.

This was illustrated by the progress made over the last 10 years, taking in areas such as membership, the development of the Association's Publishing division and the phenomenal growth of the PLASA Show.

The AGM was followed by an open forum which gave PLASA members the opportunity to participate in a questions and answers session with the executive committee, and take a pro-active role in the future of the Association.

For the first time ever there was a PLASA industry dinner on the evening before the AGM which was very well attended and provided the perfect precursor to the AGM the following day.





Chairman Paul Adams addresses the PLASA AGM in Warwickshire.

PLASA members met with the executive committee and PLASA staff and were able to participate in an informal exchange of ideas in a convivial setting. The after-dinner speaker for the evening was David Vaughan who kept everyone entertained with industry stories intertwined with personal anecdotes.


Feedback from PLASA members has been very positive on the event and, as a result, PLASA will return to the Forest of Arden for the 1998 AGM. The industry dinner will again be held on the evening before and is set to become an important occasion in the PLASA calendar.







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*Fiona Lewry  
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*Jim Hanharan  
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*Alan Paulus  
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“ Very Good for Gobo Projection and ease of focus and unmatched coverage. Unfortunately I have only 8 ”

*Sebastian Petit  
Brewhouse Arts Centre, Taunton*

“ I have 2 on loan and I am loathe to return them, they are so good ”

*Slev Williams  
Dylan Thomas Theatre, Swansea*

“ Freedom distributive dimming saved me considerable set up time and cabling ”

*Uli Speckemeier  
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## Royal Opera House Bids Farewell



There can't have been a dry eye in the house when London's Royal Opera House staged its Farewell Gala in mid July to mark its passage from old to new as it prepared to close for a £214million redevelopment. The evening brought together some of the ROH's biggest stars of recent years: Plácido Domingo and Darcy Bussell were amongst those who took to the stage in front of a specially invited audience, whilst millions more watched on television. However, the most enthusiastic audience was outside in the Covent Garden Piazza where thousands jostled for position to watch a live relay of the evening on a giant Sony JTS17 JumboTron screen.

The live relay is becoming an established feature of ROH performances and they commissioned Susanna Little to production manage the screening. For the past few years Screenco have provided the screen for the Piazza. In the past this has always been a truck-mounted system, but for the Farewell performance, they provided the JumboTron stacked on a plinth using their own stacking system. The aluminium system incorporates an 'I' beam on which each column sits, whilst a frame behind the screen braces each module, enabling the screen to be installed free-standing. To give the crowd a clear view, the 34sq.m screen was built onto a two metre high platform with extra height provided by installing a row of blank modules at the bottom.

In order to enhance the Piazza setting, Sony, through A-Vision, commissioned Lightspeed Productions, a company formed only 14 months ago by Jorge Lourenco, Julie Garton and Ian Myers, to light the surrounding buildings. Because nothing could be floor-mounted near the audience, they hung a rig of High End Cyberlights and Studio Colors from the front facade of the Covent Garden market, with further Cyberlights on trussing towers fenced off to the left of the crowd and positioned either side of the screen. With these, they projected onto the buildings opposite using a range of custom-designed gobos. On the balcony of the famous Punch & Judy pub which overlooks the Piazza, the Lightspeed team, who had pooled a freelance crew of seven for the event, were hard at work running the show on a Wholehog II desk. Bobbing above the Piazza were two French-designed Solarc balloons from Airstar, also supplied by Lightspeed, which recently featured on Tomorrow's World and were originally designed as site markers for motorway crashes.

RG Jones provided the Renkus-Heinz led sound system which featured a pair of CE3Ts and a pair of CE3 subs either side of the screen, together with a pair of delays with one CE3T on each delay. Control was via a Yamaha PM3500 desk.

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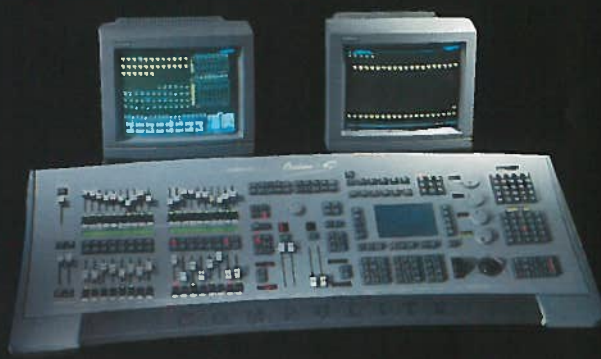
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## Auckland Skies

Harras Sky City complex is the latest adornment to the Auckland skyline in New Zealand. In fact, the 364 metre high structure completely dominates the Auckland skyline, and lays claim to being the sixth tallest building in the world. Incorporated within this monster structure is a vast entertainment complex containing an hotel, a massive casino floor, shopping atrium, numerous bars and restaurants and the 700-seat Sky Theatre. The latter itself is not the largest in Auckland, but it is the first new theatre to be built in the city since the mid 1980s and consequently is the most technically up-to-date venue in this regional capital city.

Lighting Supply Company of Auckland supplied and installed the Harras Sky Theatre with all of their lighting equipment and more, including a complete flying system, all of the theatre's drapes, including a 1600 end fibre optic star cloth, over



Pictured are Michael Jones, lighting supervisor at the Harras Sky Theatre with one of his lighting operators at the new Wholehog II lighting control console.

400 luminaires and dimmer channels and six Clay Paky Super Scan Zooms. For control of the stage lighting system, a Flying Pig Systems Wholehog II lighting control console was supplied. Lighting Supply Company also supplied the complete house lighting control and dimming system for the theatre which consisted of a Colortran Viewpoint control system, along with Colortran dimmers.

## PMC Take to Stage

A new company offering a full range of stage services has been set up by David Collier, a former director of ASG.

PMC (Project Management & Consultancy) - offers consultancy/advice and design, combined with the supply of theatre equipment for a range of venues, covering the installation of stage engineering, lighting, audio, seating and associated product, through to commissioning and demonstration with technical back-up and documentation.

PMC can be contacted in Lancashire, tel (01942) 272516 or fax (01942) 272228.

## ABTT North

The ABTT North committee will be hosting a two-day conference at the Georgian Theatre Royal, Richmond, North Yorkshire on 11th-12th October 1997. A host of speakers have been assembled and the event is expected to be of interest to historians, technicians, architects and theatre practitioners from many disciplines.

The North Region Committee of the ABTT are also looking at the possibility of repeating the successful 'shootout' of 1kW Profile spots, this time using the 575W HPL or HX600 lamp. Anyone interested in either event should contact Phil Windsor on 01204 304479.

**PLASA**  
LIVE AT EARLS COURT  
7-10 SEPTEMBER 1997

C Audio's new Multi Function Crossover will make its debut at the PLASA Show. Based on a 1U rack-mounting module, it provides two-channel outputs for bi-amplified loudspeakers, plus a mono sub bass output.

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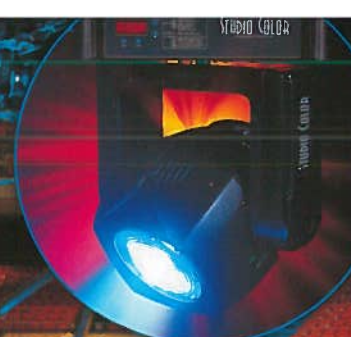
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# PLASA

LIVE AT EARLS COURT  
7-10 SEPTEMBER 1997

Wybron, Artistic Licence, Theatre Projects and TMB Associates are jointly sponsoring some pre-show fun in the WATTS first annual fly-fishing competition which will take place on Friday 5th September at Syon Park in Brentford. The competition kicks off at 2.00pm with the final weigh-in taking place at 6.30pm. The entry fee is £35.00 and transport will be available from Earls Court in London. Contact Mark Thompson at TMB on 0181-560 9652 for further details.

Trantec will introduce their ground-breaking new series of VHF and UHF radio mics, the S3000 and S3500 VHF and S4000 UHF which include a dynamic means of simple local reconfiguration - the first time this has been done with a VHF system. All three models feature the latest PLL (Phased Lock Loop) Synthesised Tuning Technology.

• **Trantec - D20**

## Wall to Wall Videos



Electrosonic is actively involved in two major projects in Scandinavia. For Post Danmark (Danish Post) they are installing a series of videowalls in post offices throughout the country as part of a general upgrade. The intention is to allow post office information and services to be advertised to waiting queues using the videowalls. The contract is being co-ordinated through Electrosonic's Danish distributors, Comtech. At the heart of the installation is the Electrosonic ImageMAG, a multiple-output videowall splitter which accepts a single input and displays the output onto a monitor wall of up to 36 screens, with optional show effects.

Meanwhile, in Norway, Electrosonic have been working closely with Scala on a major airport project. Scala have produced a software package allowing MPEG video, colour transparencies and other images to be transmitted via telephone link onto the Electrosonic 2xVIEW videowall at Trondheim Airport. The project was managed by Audio Grafisk, Electrosonic's Norwegian distributors.

## BASH Joins PRG

BASH Theatrical Lighting, the major US supplier of entertainment lighting, has announced that it is to join the Production Resources Group (PRG), the specialist entertainment systems consultants. BASH's branches throughout the United States, including Baltimore, Orlando and Las Vegas, as well as the North Bergen headquarters, will be included in the new deal. BASH president Don Stern has been appointed president and chief operations officer of the newly-formed PRG Lighting Division. The headquarters for the expanded division of PRG will be in North Bergen, New Jersey.

## Small Firms Face £6billion Crime Bill

A new report from the Forum of Private Business reveals that small firms are facing a £6billion annual crime bill. In its second report on Crime and Small Business the FPB showed that 55% of the 2,6000 owner managers questioned had been victims of crime in the previous 12 months. Almost half of those who had been victims had been burgled, with a quarter having been burgled more than once. The figures, when extrapolated across the economy, suggest a £6.3billion crime bill to small firms. The FPB study was validated by Dr Martin Gill of the Scarman Centre for Study of Public Order, University of Leicester, who is to incorporate the findings into a wider report 'Crime at Work' to be published shortly.

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## PLASA LIVE AT EARLS COURT 7-10 SEPTEMBER 1997

Electrosonic, and their live entertainment division, Celco, will join forces for the first time at PLASA in a purpose-designed, themed presentation. Based on a sports bar concept, Electrosonic will use the medium to launch their new aluminium-based Framewall, a modular projection videowall. They will also field their new flicker-free Imagestar 31K videowall processor. Celco will again be showing the new Ventura 1000, which is enjoying high-profile usage around the world.

• **Celco/Electrosonic - F46**

Marquee Audio will present a state-of-the-art information stand, featuring computer-driven logos, processed through Kaleidolight graphics software and projected onto an Owl videowall. Displayed product will be restricted to a 19" rack, including the FDS-355 Omnidrive Compact, the new Trantec UHV and VHF synthesised radio mic receivers, Yamaha effects (including the 03D), Soundcraft K range of mixing desks and other products from Denon and Tascam.

• **Marquee Audio - J31**

## Lite Glorious Lite

Vari-Lite automated lighting featured on the recent launch of comedian Eddie Izzard's upcoming 'Glorious' tour at The Union Chapel in Islington, London. The equipment, supplied by Vari-Lite Europe and Theatre Projects, included 18 VL5Arc wash luminaires, 12 VL6 luminaires with custom gobos, an Artisan console and a Mini Artisan 2 as back-up. The lighting designer on the launch was Amanda Garrett with Patrick Murray operating the Vari\*Lites, joined by technicians Ed Jackson, Alex Moscrop and Mark England.



## Arts For Everyone

The Arts Council of England recently announced over 2,000 awards worth more than £8 million, to small groups throughout the country in the first round of the Lottery-funded Arts for Everyone Express scheme.

The variety of projects helped by A4E Express ranges from those run by young people, community groups and schools to groups of professional artists working together. Successful projects include teenage rock bands, long-standing amateur musical and dramatic societies, local festivals and contemporary dance groups. These one-off grants, which range from £500 to £5,000, are being awarded to small groups which are developing new work and young people's talent, encouraging participation in the arts and new audiences, emphasising training and professional development in the arts. A4E Express, which was launched in November 1996, is specifically for small groups, which may never have received any kind of funding at all and have plans for new creative arts projects.

For further information contact the Arts Council of England in London, telephone 0171-973 6459.

## R-H at Pink Pop Fest

There was a lot riding on this year's Pink Pop Festival in the Dutch village of Landgraaf. A council decision on whether to permit the event to run annually was to be taken, so keeping noise at an acceptable level was a priority.

Ampco Pro Rent, sound contractor for the event, were well aware of the importance of localising the sound as far as possible. To help determine the best system, they modelled the venue using Ease software, which confirmed that by using columns of Renkus-Heinz CE-3T CoEntrant mid/high and low cabinets they would produce an effective line array, thereby maximising the SPL to the audience area and minimising overspill. The concert attracted over 60,000 people over three days, and the Renkus-Heinz systems (two 120kW systems, one on each of the venue's two music stages) fitted the bill to everyone's satisfaction.

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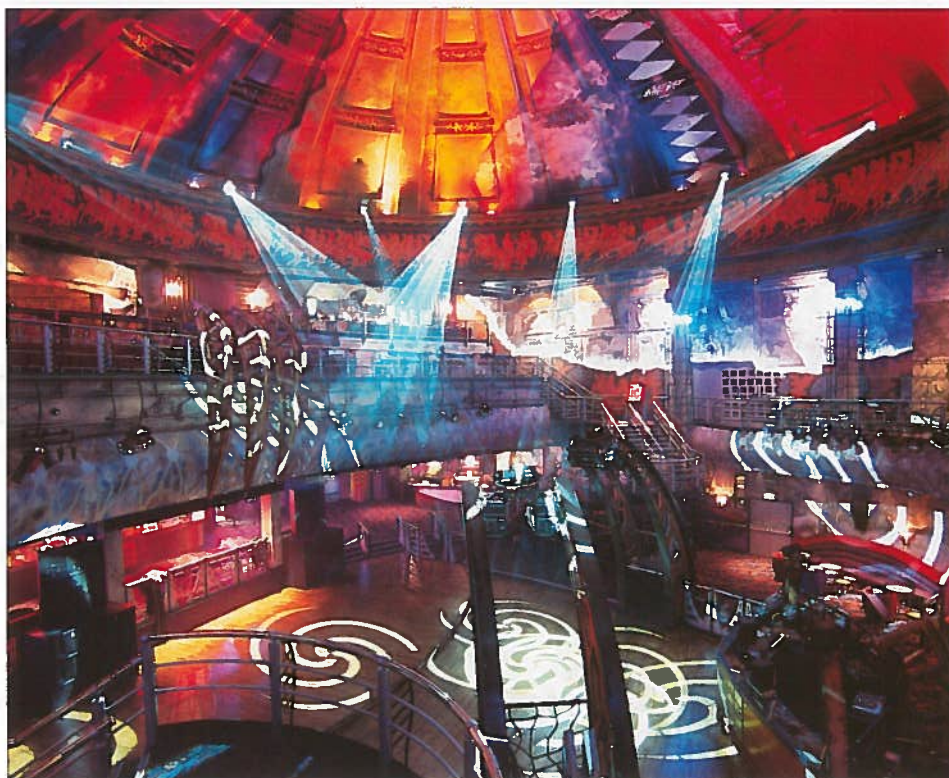
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## Majestyk Success at BEDA Awards



The 1997 Molson BEDA Awards brought success for Rank Entertainment's Majestyk in Leeds (pictured above), voted Discotheque of the Year. Creative Technical Systems (CTS) installed the lighting and sound systems. The spectacular ShowCAD-controlled lighting rig includes 16 Clay Paky Golden Scan 3s, 12 Mini Ultra Scans and seven Comets, all from Coemar. Laser images are projected onto the domed ceiling from a Tarm Vario 2 laser system, with two fibre optic scanning heads. The sound system is based around a JBL-loaded system in cabinets custom-made for CTS, positioned around the underside of the balcony to keep the sound localised at lower levels, avoiding the effects of the cavernous domed ceiling. A Cloud CXM mixer is used along with Cloud limiting and crossovers, while amplification is from JBL.

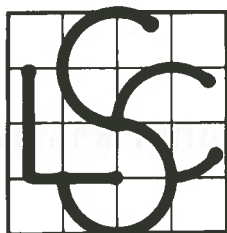
The Majestyk also earned the Interior Design of the Year award for Tibbatts Associates and CTS were Runners Up in the Installation of the Year Award, which was won by CVA for various installations including The Canal (Wolverhampton), Café de Paris (London), Essance (Nottingham) and NATO (Leeds). The Nightclub of the Year award went to The Canal, while Denon picked up the Best New Product Award for the DN-2500F twin CD player.

### Unusual Manage Countryside Rally

*Unusual Services recently project managed the politically high-profile Countryside Rally in Hyde Park, staged in support of field sports.*

*For this major event, Unusual implemented an infrastructure of the type more commonly used for an outdoor concert, including staging, light and sound towers and rigging, plus all of the site services and management, security and logistics. The company constructed a main stage with satellite stages built off it, providing meeting points for the various groups.*

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## A&H at Rock 'n' Roll Cafe



A 32-channel Allen & Heath GL3000 has been installed at the heart of Paris' 287 Rock 'n' Roll Cafe. The venue hosts a wide variety of live performers, from local bands to international celebrities and the choice of house console reflects this diversity of acts. The 8-group GL3000 is generally used in dual mode, providing both front-of-house and monitor systems from a single point. Gaylord Entertainment and The Nashville Network are to build over 100 'Nascar Thunder' stores in larger malls across the States. Each installation will have an Allen & Heath GR1 professional zone mixer at its heart.

## Adam Hall Take On Hz

Adam Hall has been appointed official UK distributor for the Hz International range of professional sound products, including loudspeakers, amplifiers and signal processing equipment.

Hz International, who have been manufacturing pro audio systems in the UK for the past 11 years, will continue to service their existing clients, while all new business will be filtered through to Adam Hall, who will be aiming to increase the market share in the MI, installation and discotheque markets. The company are offering on-site demonstrations to dealers and specifiers.

## Pulsar with Footlights

This year's tour by the Cambridge Footlights, called 'Emotional Baggage', will play at 14 venues across the UK and includes a light and sound spectacle thanks to the sponsorship of Pulsar Light of Cambridge. Technical director Simon Roe will use two Golden Scan HPEs, two Mini Scan 300s, Pulsar Par cans and a Masterpiece 108 controller to add effects to many of the sketches. Roe told L+S: "The advantage of having the Scans is that we don't have to rig several lanterns for comedy spots, all with different colours and backlights."

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## PLASA LIVE AT EARLS COURT 7-10 SEPTEMBER 1997

Cue Pro Audio Services will launch a new division of the company, Cue Pro Audio Sales, at PLASA 97. It will be headed by the newly-appointed Paul Godfrey and will be the exclusive UK importer and distributor of the Apogee Sounds Inc range of equipment. PLASA will be the first chance to see the new ACS-Point 5 and Point5 Pro speakers from Apogee.

• Cue Pro Audio - S30

One of the main features of the Peavey display will be the new range of MaxSys PA enclosures, a new systems-based approach to performance. These will be joined by the re-designed EuroSys 1M and 1PM monitors, the new HiSys 6XT, 6XTF and 112XT subs and the DeltaFex twin processors.

• Peavey - D28

Lighting equipment and software specialist Starlite Systems Technology will be launching Stardraw Professional, the latest programme in its Stardraw CAD software series. The packages has been produced for the professional designer, enabling them to create 3D drawings generated in real time with full texture support.

• Starlite - H32

Lamba plc will give the first UK showing of a new range of audio mixers from GMR in Italy and a new series of Cerwin Vega! speakers aimed at the portable MI market. PLASA will also be the first major UK showing of the KAM KGA series amplifiers and two new KAM audio mixers aimed at the home producer/club installation market.

• Lamba - F54

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# PLASA

LIVE AT EARLS COURT  
7-10 SEPTEMBER 1997

The Lightfactor stand at PLASA will be the launch-pad for the Technobeam from High End Systems. This new lamp is something of a hybrid, combining the projection capabilities of the Cyberlight, the latest technical enhancements of the Studio Color and the functionality of the Trackspot. Lightfactor will also unveil QExtender, an additional wing for the QCommander which is also available as an add-on.

• Lightfactor - E7/9

The world famous Hippodrome in London's Leicester Square will play host to the very first World Light Jockey Final on Tuesday 9th September. National LJ champions will be arriving from France, Germany, Spain, Italy and the UK to compete for the title. The event is co-hosted by Disco International, Big Bang, Clay Paky, Pulsar, PLASA and European Leisure.

## Barco Extends Range with RE Acquisition

The Barco Group is strengthening its position in the broadcast arena with the acquisition of the RE Group, a Danish electronics company specialising in the manufacture of digital video and audio signal transmission products for the worldwide television, radio and communications markets.

The RE Group will be integrated into the core activity of the broadcast specialist, Barco Communications Systems, as a separate division. Barco paid DKK 128.5 million (£11.6 million) for the company which has 235 employees, including 59 working in research and development.

## PSL's Wiggly Projections

David Bowie began a 12-week European tour at London's Hanover Grand recently with 10 CRV/Betacam-controlled LCD projectors, provided by the Concert Division of PSL, going through three Panasonic MX50 video mixers.

The system design has been conceived by lighting designer Gary Westcott, who is also acting as video director for the tour. Working closely with Gary is Richard Shipman, who is operating the CRVs, tapes and vision mixer. What makes the event unique is that four of the projectors have been front-end fitted with special DMX-controlled moving mirrors, custom-made by PSL's sister company Special Projects. Because they support the DMX control protocol, the video effects can be pan, tilt, zoom and focus-controlled from the LSD Icon lighting desk.

## CVA Stock Up



Paul Ward of Fuzion with CVA's Craig Varty.

Surrey-based contractors CVA have bought their first five BSS Audio FDS-388 Omnidrives.

One of the clubs that will benefit initially will be Club Nato in Leeds who, like CVA themselves, picked up a coveted BEDA award at the recent gala dinner in Birmingham. Another Omnidrive recipient will be Crazy Larry's in Chelsea, while the other three units will go into stock for future projects. The systems will be used to control the company's own CVA PA rigs, which have been installed in a number of dance venues across the country. CVA have also recently taken delivery of their 100th MA-5000 VZ Crown power amplifier from Fuzion.

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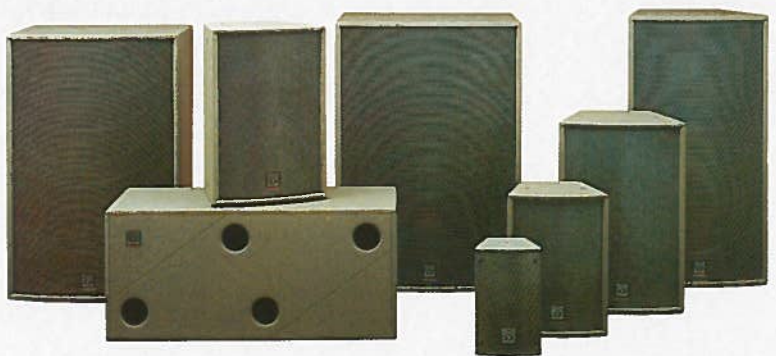
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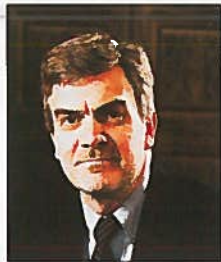
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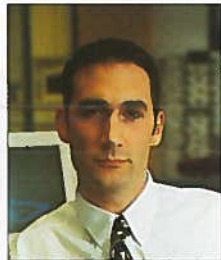
## People on the Move

**Bill Woods**, former sales manager at Shuttlesound, has left the company and taken up a post at Turbosound, where his primary role will be to boost the company's retail business. Woods told L+SI that his immediate priorities will be: "to oversee UK trade, where my experience of working with dealers and contractors will be vital, and also managing our European business."



Bill Woods.

**Robin Nash** has joined the concert division of PSL to assist Chris Mounsor and Des Fallon with the increasingly busy area of event operations. He has worked in the industry for a number of years and, most recently, project managed the video content on Oasis's dates last summer.



Robin Nash.

Martin Audio have taken on **Simon Bull** as national sales executive. Bull previously worked for Luton Sound & Lighting and then for five years with Leisurtec, before moving on to work in the telecommunications industry.



Simon Bull.

Theatre Projects has appointed a new member to its rental team. **Keith Duncan**, previously with Northern Light after studying sound and video at the North Glasgow College, has joined the company.

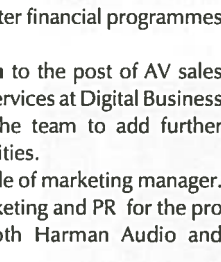
The Association of Professional Recording Services (APRS) has appointed **Mark Broad** as its new chief executive. Mark joins the APRS from Barnes Music, a production company focusing on music publishing, which he co-founded in 1986. He is succeeding **Philip Vaughan**, the APRS chief executive of some 10 years standing, who retired this year.



Mark Broad.

In a move designed to enable increased technical support services, M&M has taken on **Pete Floyd** as technical services manager. Previously a control supervisor with White Light, Floyd will handle the commissioning of ETC equipment and provide 24-hour after-sales technical support for all M&M products.

High End Systems of Austin, Texas, have appointed **Alan Garretson** as vice-president in charge of marketing and operations, to head up the newly-formed High End Financial Services.



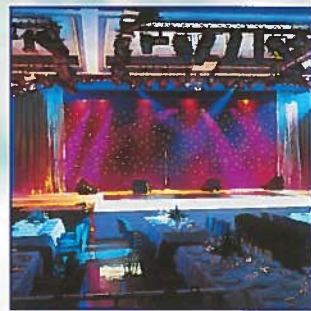
Alan Garretson.

The new service will develop, market and administer financial programmes for the US and international marketplace.

Northern Light has appointed **Richard Wathen** to the post of AV sales engineer. Having worked as director of technical services at Digital Business Communications Ltd, he will now be joining the team to add further expansion in the fields of AV and conference facilities.

Fuzion have appointed **Kiera Leeming** to the role of marketing manager. Leeming has spent three years freelancing in marketing and PR for the pro audio industry and previously worked for both Harman Audio and Touchdown Studios in Germany.

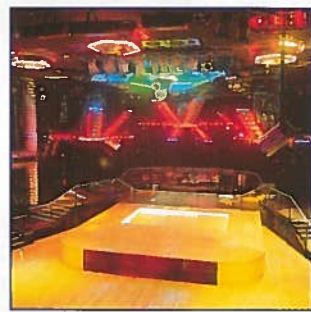
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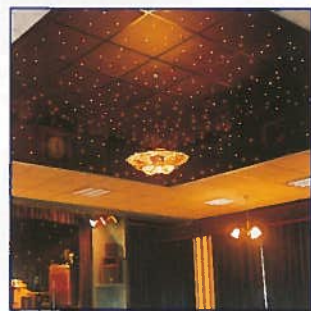
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## PALA 97: Singapore

Held over three days at the World Trade Centre in Singapore, PALA '97 was busy without ever really seeming to bustle. Yet all of the exhibitors seemed quite happy, reporting that the visitors they did have were all of a very high quality. And certainly the geographic area represented was enormous, with visitors from Hong Kong, Pakistan, India, Australia and Malaysia, as well as Singapore itself. Most came from the trade show/product launch area of the market - perhaps a reflection of Singapore's carefully established work ethic that has left little room for 'the arts'. However, that is changing, with several new theatres and a whole new 'entertainment area' of the city currently being planned - theatre suppliers take note!

Once again, PLASA led a DTI-supported group of UK exhibitors to the show, the majority of these taking stands in a 'UK' area prominently positioned by the entrance to the show's quiet hall. **Total Fabrications** built a two-storey stand from their new, lightweight-alloy XO truss and also showed their new Arena Deck modular staging system. **Penn Fabrication** reported continuing interest in their products, as did **James Thomas Engineering**, sharing a stand with German moving light manufacturer **Amptown**. **Tomcat**, using the show to tie up a number of deals, were attracting attention with their new stacking truss and ladder roof systems.

On the lighting front, **DHA Lighting's** metal, glass and coloured-glass gobo work drew the crowds, with many visitors amazed to hear that DHA can create custom gobos in just three days rather than the six-weeks - which seems to be the norm in the region! **AC Lighting** had the first of the production-model Starlite Mark 5s, along with the WholeHog II/MYSIWYG control combination. **Futurist** were thrusting their catalogue at passers-by, as well as talking about recent design and installation projects. The remaining UK-group stands housed **British Harlequin** flooring, **MTR** showing their amplifier ranges, **Deco Leisure** with their DARE club loudspeakers, **BSS**, **Fane**, **Re'an Products**, **VW Marketing**, **FayreWood**, **Audio Toyshop**, **MGC Lamps**, **HHB Communications** and **Soundscape Digital Technology**.

Other British exhibitors scattered throughout the show's halls included **Doughty**, **Avolites** with Singapore distributor **Hawko** (who were also playing host to **Clay Paky** and **Pulsar**), **Celco**, **DKT Group**, **Focusrite**, **Mad Lighting**, **Laser Creations**, **Laser Innovations**, **Slick Systems**, **Zero 88** (showing the first production version of their very promising Sirius 250 moving light desk) and **Woodchester Piano Co** - the latter part of the Music Asia '97 exhibition that ran as an integrated part of PALA. This combination seemed to work very well, though it did require extra effort from manufacturers such as **Celestion**, who chose to run separate stands in each area of the exhibition.

International PLASA members could also be found at the show, including **High End Systems**, **Martin Professional** (previewing the MAC 500 hard-edge moving head light) and **Electronic Theatre Controls**, whose Source 4 lantern was attracting enormous attention from visitors still more familiar with older ellipsoids.

So, calmly confident and quietly successful, the PALA show once again satisfied its visitors. The show returns to Singapore once again next year, running from July 15th-17th.

Rob Halliday



Above and below, general shots from around the show.



PLASA's Anna Pillow and Matthew Griffiths (right) with Singapore's Deputy High Commissioner, Tony Gooch (left).



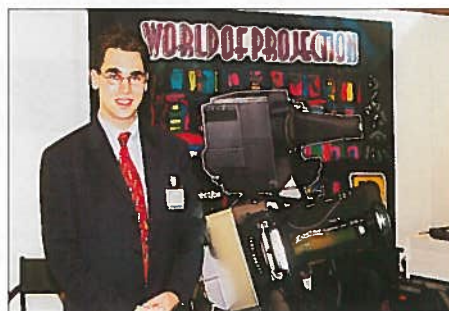
Mike Lowe of Teatro (right) meets with Stephen Lee, chairman of the Singapore Trade Development Board.



Chris Cronin of Total Fabrications shows off their new lightweight-alloy XO truss.



Colin Whittaker of Celco with Javier Tan of Singapore distributor Audio-Visual Land Pte Ltd.



Rainer Staub of Ludwig Pani.

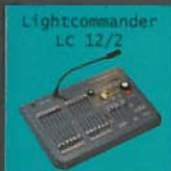


Anthony Chan of IIR Exhibitions opens the show.





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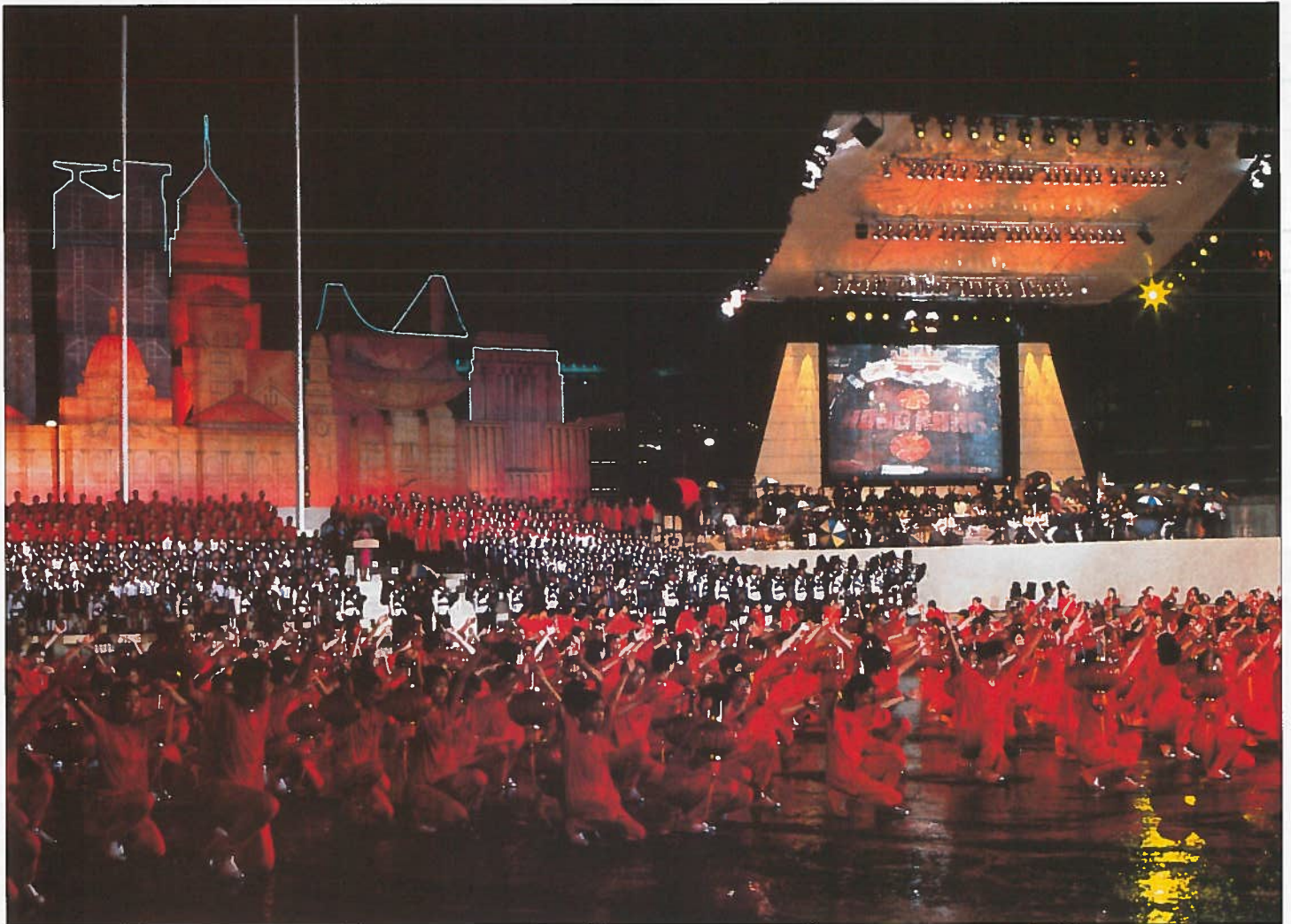
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# SUNSET IN THE COLONY

*Celebrations and Ceremonials at the Hong Kong Handover.*

*Ruth Rossington and Lee Baldock follow the Countdown to Midnight*



The British goodbye to the colony held on the former site of the British Naval Base, HMS Tamar, in front of an audience of 10,000.

The celebrations and ceremonials surrounding the handover of Hong Kong at the end of June were extensive, to put it mildly. Before the People's Liberation Army marched into the territory under orders to 'love the people of Hong Kong', there was a spectacular British final goodbye to the colony, with the outgoing governor Chris Patten and the Prince of Wales in attendance.

Caribiner International was engaged by the Hong Kong government to produce the 'Ceremony at Sunset' and executive producer Maureen Earls led an international production team drawn from Caribiner companies Spectrum in London and Caribiner Asia in Hong Kong, working alongside a small army of freelancers. Richard Collison and David Zolkwer, both of Spectrum, were event producer and creative producer respectively, with Adam Wildi as production manager and Mark Fogwill of Caribiner Hong Kong as technical manager. Set designer Paul Staples provided the vision, lighting designer Durham Marengi was there to make sure it all looked suitably momentous and John Scandrett of Melbourne-based System Sound looked after the sound reinforcement.

In keeping with the significance of the occasion, the event itself needed to combine the celebratory elements of the handover with the more formal ceremonial aspects culminating with the final lowering of the British and Hong Kong flags at midnight. The 90-minute show therefore was to be held on the former site of the British Naval Base, HMS Tamar, in front of an audience of 10,000 whilst some 80 television stations from around the globe (the BBC acted as host broadcaster) fed the performance live to an audience of 130 million. The spectacle featured a cast of 2,000 (including narrators Brian Blessed and Francis Yip and opera singers Dame Gwyneth Jones and Warren Mok), not to mention a children's choir of 350 and both the Hong Kong Philharmonic and the Hong Kong Chinese Orchestra. There was also a grand showing from British military forces who marched across the arena - possibly the last time British military forces will be assembled on foreign soil on such a grand scale in peace time.

Chinese legend has it, somewhat ambivalently, that rain represents the sorrowful tears of the Dragon crying over a lost soul or land, or it represents a cleansing and a new

beginning. Either way, on the evening of the British occupation coming to its emotional finale, the heavens opened and both the happy and sad Dragons joined forces to drench the technical team's efforts with their mystical and very British downpour.

However, the spirit of the event was such that everybody, with the exception at first of the Chinese orchestra who had real concerns about their instruments, was of the opinion that the event should go ahead as planned. Maureen Earls and David Atherton, the conductor of the Hong Kong Philharmonic, made the brave decision to proceed and the show started with the ubiquitous Dragons splashing through the puddles and the orchestra at the edges of their stage protected by volunteers with umbrellas.

## STAGING/LIGHTING

As expected, the show was high on spectacle and the design concept involved a giant 30-metre wide terraced stage, two canopied orchestra stages, a huge scenic reveal and inevitably, two giant 20 metre flag poles.

The site at HMS Tamar, like so much of the Hong Kong waterfront, had been reclaimed from the bay and in preparation for the event,





had been flattened to provide an 85m x 75m parade ground with seating blocks on three sides and a stage area in front of the harbour. Two orchestra stages were provided with a low profile stage in between to allow a view through to the backdrop of the event, the Royal yacht Britannia.

Paul Staples specified two large, curved roof structures from ESS over the orchestras which supported the only lighting positions at the stage end of the arena. In order not to spoil the roof 'line', luminaire positions were kept at the edges of the structures. Each roof held 72 silver Pars, frosted and colour corrected to daylight as orchestra fill lights, four 4kW HMI Fresnels with dowsers for orchestra and choir keylights, and six further 4k HMI Fresnels with dowsers and scrollers for coloured backlight. Finally, each roof had 36 VL2Cs to cross-light the performers' positions between the orchestras and provide effects and backlight for the arena, with four VL2Cs on the arena floor either side to uplight the roof canopies.

One of the key components of the staging was a hydraulic sky-line of Hong Kong which was raised as a backdrop to the stage area, in front of Britannia. The skyline, produced by British company Stage One Creative Services, was painted to resemble a colossal architectural sketch in pen, ink and watercolour, tinted to reflect the drama of the setting sun. It rose slowly, as if from the sea, in stages, to show firstly Hong Kong's Victorian splendour, then the more adventurous architecture of the thirties and finally the gigantic towers of modern Hong Kong. Painted on more than 800sq.m of plywood, the profiled backdrop was divided into individual buildings, each one being mounted on telescopic steel flats. These were then raised and lowered using giant lifting platforms, each controlled by Stage One's own Q Motion control system. The skyline was lit with Molefays and Pars from below in uncorrected tungsten to provide a yellowish streetlamp uplight on camera, while a further 10 VL2Cs were employed to sweep across the skyline as it rose up behind the stage. The edges of some of the skyline buildings were highlighted with side-emitting fibre optic tube from Philips Focus sources, which could only be fixed to the top segments of the buildings because of the telescopic nature of the reveal mechanism. The final lighting element at the stage end was a dozen Pars positioned at the very top of the roof structures to light the British and Hong Kong flags atop their 25m poles.

The show started in daylight and finished just after dusk, with the sun setting behind the set, thus backlighting most of the camera views. Initially, the arena was to be lit by static stadium floodlighting provided by a local contractor, however, the military and artistic producers were looking for greater control of the lighting and hopefully a degree of colour as the sun set, so Marengi and his team were set their main challenge. "We had to come up with a system that would provide dimmed lighting over an 80 to 100m throw from the five, 30m tall lighting towers behind the seating blocks. Furthermore, each area of the arena had to be lit from at least three directions, brightly enough to cope with a setting sun, provide colour washes for the pageantry and be able to be brought to a complete blackout for the flag-lowering



ceremony followed by a snap full-up as the military fired off their salute," explained Marengi.

"I wanted to provide at least 500 lux from both sides and front, as evenly as possible over nearly 7,000sq.m. With the throws involved, a discharge source system was clearly called for. Historically, I have used six and 12kW HMI Fresnels with dowers and scrollers for stadium 'washes' but the fact that the amount of sources needed were only available from the USA or the UK made the freight cost prohibitive (a 12kW lantern with its ballast and attachments weighs over a quarter of a ton), so the search was on for a lighter light. After lengthy discussions with Andy Martin at AFM in London, we came up with a system that used 4kW MSR Pars with scrollers from the four side towers and 6kW MSR Pars with dowers as keylight from the centre tower."

The heat from these compact sources with narrow beams was intense and so the team added a heat proof filter to each source, but even so the colour would last for no longer than 10 minutes and the louvre shutter blades just buckled after too short a period. The solution to the dimming of the four kW units, as Marengi quickly discovered, was to place black wrap as one of the frames in the scroller, with each ballast having a remotely switched 'half power' modification. The sources were hung within the tower structures, causing a few clashes with the tower bracing struts which the team were forbidden to remove by the safety officers, but affording some protection from the rain, and boy did it rain! Virtually every day saw either drizzle or a solid downpour. Vari-Lite Hong Kong came up with some very effective rain covers for the bodies of the VL2Cs and it speaks volumes for all the lighting crews under the direction of production electrician Nick Jones that less than 1% of the system tripped out during the deluge that accompanied the actual show.

One of the advantages of outdoor events is that, as the focusing and programming time is confined to overnight sessions, very few other departments are deafening the crew with white



**Preparations underway: above the roofs on the deck for the pre-wire and below, the first roof is lifted into position.**

noise or rebuilding the bits of set that the lighting team is trying to focus on. "We spent a couple of nights on the Vari\*Lite focus with John Sinden on the Artisan and then Chris, Will and Max from AFM kept themselves superfit by clambering up and down the main towers focusing the arena Pars or swinging about in cherry pickers to access the HMI Fresnels on the stage, whose dowers and scrollers had to be removed every night, just as nearly 100 Vari\*Lites had to be bagged after each session." All the HMI and MSR dowers, scrollers and ballast switching were DMX-controlled by Steve Nield on an Avolites Diamond II, with the tungsten sources run by Marengi on a 90-way Celco Gold.

The final element of the rig was eight 3kW Gladiator followspots, from Bytcraft Australia, atop the towers and operated by local drama students under the guidance of Becky, a West End theatre LX that Nick Jones found wandering the streets of Hong Kong on a round-the-world holiday trip, who had agreed to help out. "So

we had all the elements in place," explained Marengi. "The only missing link on the illumination side were the hundreds of batteries and bulbs which were supposed to illuminate the children's lanterns in the finale, but, having been sourced from China, these were stuck at the border." Marengi wonders if they would have arrived on time had they been needed for the Chinese fireworks extravaganza the following night, rather than for the British farewell? Possibly the hardest job on site was performed by Ying and Yang, aka Adam Wildi and Mark Fogwill, the two production managers who worked miracles in a very difficult environment, and David Rule, who performed sterling work with the major power requirements.

As much of the elaborate bowing out ceremony took place on the harbour's edge, there was a need to relay some of the key events to the wider audience. Paul Staples approached ESS to provide not only support for the screens, but also graceful arched canopies to protect the orchestras playing beneath. Built from a combination of Tower System stock elements and custom fabrication, the canopies were cantilevered out 16m from the towers, like giant eyelids above the Screenco-supplied JumboTron JTS35 screens installed either side of the impressive stage.

After the Farewell Ceremony the 4,000 VIP guests were ushered to the banquet hall at the new extension of the Convention and Exhibition Centre, while the remainder of the guests enjoyed a 20-minute fireworks display. A second technical team was at work here, again led by Maureen Earls, but this time having Tom Janus as production manager, Donato Moreno as set designer and Jim Tetlow handling the lighting design.

At 11.30pm the guests entered the Grand Hall for the official Handover Ceremony. In order that the Hall could accommodate the audience and stage, the doors had been removed. This allowed for the stage to be designed in such a way that it straddled the immense steel doors and in effect, nestled into the 'nose' of the building. It also meant that the door frame doubled as the main proscenium arch.

The purpose of the lighting (supplied by Tom Lee Music of Hong Kong who also provided the trussing and dimmers) was to provide a well-balanced level of illumination for the ceremony. Before things could progress, rigging points had to be installed and holes cut in the recently-finished ceiling for all the onstage lighting trusses. The FOH trusses were then hung predominantly from rigging points designed for temporary lighting. With over 30 camera positions in the hall, it was hard for Jim Tetlow to find an angle which did not require lighting. To keep the lux levels high, silk panels behind the stage were lit with Cyberlights from below using a combination of pale colour and out of focus gobos. The building architecture in the background consisted of a space frame supporting the floor to ceiling windows and a number of columns so Tetlow illuminated this area with Par 64s and ETC Source 4 Pars from below and side lit the columns in the same way. The column fronts he then lit with Par 64s dimmed to 40% for contrasting warm glow. The audience areas were primarily illuminated from





side galleries whilst a VIP section in front of the audience was augmented with lighting coming from the onstage trusses to accommodate for the reverse camera angles.

Just as China agreed to have two systems of government for united territory of China, Tetlow chose to have two lighting control systems for the Handover, namely a pair of Strand 530 consoles running the newly released version 2 Lightpalette software. One was configured as the main console and the second as the fully synchronised tracking back-up. The two consoles were linked with Ethernet and using Strand's Shownet software connected to an SN1000 DMX node. In the event, the back-up was never needed, but Tetlow's decision was totally justified given what rested on this defining moment in Hong Kong's history.

One of the unexpected challenges that emerged from this part of the Handover was the flying of the official flags indoors so that they could be seen throughout the ceremony. In order to create a realistic impression of the flags waving in the breeze, Caribiner entered into detailed discussions with the US-based flagpole manufacturers, first trialling and then dismissing compressed air as an option and eventually arriving at a system of air blowers courtesy of a special effects company from New York. Tom Janus and production carpenter Bruce Farnworth worked 12 hours a day for over a week to get it working smoothly and consistently enough to be used in the ceremony. The investment paid off and the flags flapped their way through the entire proceedings before being formally lowered at midnight and replaced with the Chinese and SAR flags.

Following the signing over ceremony at the convention centre, Chris Patten and the Prince of Wales returned to the main site for the departure of Britannia and back into the domain of the Durham Marengi-led technical crew.

"The security team dockside wouldn't allow any lighting towers near Britannia," explained Marengi, "so what light we could throw onto her departure came from HMIs on cherry pickers on the other side of the street and from four Airstar Solarc illuminated balloons."

## SOUND

All sound, for both the official handover at the Hong Kong Convention and Exhibition Centre and at the subsequent open-air concert, came from Australian PA company System Sound. Having worked extensively in the Asia-Pacific region on large-scale events, the company had all the experience necessary to cope with the handover, an event which would have the eyes - and the ears - of almost the entire world upon it. System's managing director, John Scandrett, regularly acts as sound designer for artists such as Kiri Te Kanawa, Jose Carreras and Placido Domingo. As the concert involved two orchestras, two opera singers and a large choir, such experience was to prove invaluable.

The size and layout of the venue meant that a unique approach to sound design was required. Flown speaker clusters were rejected as being too unsightly, so the company resorted to a ring of 20 Meyer MSL-4 and PSW-4 powered speakers surrounding the parade ground, firing up at the stands from the ground



The stage is set.

and focused on a centre-stage position. These speakers performed brilliantly for 10 days in the wettest, most foul conditions, with only one amplifier failure when a cabinet was blown from its 1m high stand by a 30mph gust of wind. A quick re-seat of internal connectors had it up and running in short order. An additional three Meyer CQ type powered speakers were hung from the front of each of the orchestra roof structures, providing outfill, ground foldback, and foldback to the choir steps on each side. Unlike the MSL-4s on the ground, these were never weather covered, and survived a continuous waterfall of roof run-off for the 12 days they were rigged, without a single fault.

The lectern to be used by Prince Charles and Chris Patten was located at the opposite end of the site from the stage, and the orchestras separated by some 80 metres. Other performers, including MCs Brian Blessed and Frances Yip, were located centre stage between the orchestras. This required instantaneous re-setting of the delay times to each speaker cabinet to match the location of the four sound sources. This was achieved with MIDI control of Brooke Sirens TCS804 units utilising a total of 23 delay taps. Mark Benson mixed the house sound from a cramped and wet control position perched at the top of one of the side stands. A Yamaha PM3500/56 console and four racks of processing, playback and delay devices to drive the system were positioned by crane on the platform.

Control for this event was greatly complicated by the fact that System Sound was responsible for providing not only the house sound, but also the full orchestra sub-mixes for the BBC coverage, all soloist and lectern mics and a feed to the other 56 media organisations covering the event. Nick Reich of System Sound takes up the story: "In a relatively dry (and air-conditioned) site hut behind the stage, I produced orchestra and choir sub-mixes for the house sound, a similar set of sub mixes for the BBC's host broadcaster coverage and a complete stereo and mono audio feed for all the other media organisations, mixing on 48-channel and 32-channel PM4000 consoles, along with various smaller sub-mixers. Monitoring was from a pair of Meyer HD-1

nearfield monitors via a matrix that enabled me to hear the sub-mixes, the stereo mix, or a return of the audio monitor feed, after compression and media splitting."

A rack of 32 BSS 602II active mic splitters then distributed the soloist, lectern and MC mics, along with the sub-mixes, to the house mixer, the BBC and the Media mix. This area was linked to the stages by 112 channels of Whirlwind multicore, picking up the 114 mics used on the show. The mics for the orchestra were a combination of Schoeps, Sennheiser and AKG and system technician Greg Blades and two local crew from the Hong Kong Academy of Performing Arts looked after the stage mic'ing. Blades also mixed the feed for the stand-alone sound system servicing the VIP stand, which seated the most important dignitaries, separately balancing the show programme and their local lectern during the speeches. This system comprised two Meyer UPA-1Cs and two UM-1Cs covering the front couple of rows.

The large quantity of rain which fell during the show did little to dampen the spirits of the performers and guests. The sound system struggled on valiantly, with only a few orchestra mics becoming unusable as their windshields became completely waterlogged. "The main problem we experienced was the sound of water dripping from Prince Charles' cap and the umbrellas of the two MCs onto their microphones, making an alarmingly loud 'pop' each time," explained Reich. "Several cans of aerosol water-displacer had been used on all the mic lead and multicore connectors, protecting even those that spent most of the show under water."

Naturally, given the scale of the event with thousands of cast, a couple of orchestras and a number of VIP speakers, a large communication system was required. System Sound provided an extensive system of Clearcom wired comms, linked to a multi-channel radio comms system that built up to over 52 Motorola portables at one point. The Motorolas were supplied by Delta Sound in the UK, as the frequency allocations could not be programmed into System's Australian-band units. The whole comms





The official Handover Ceremony in the Grand Hall of Hong Kong's new Convention Centre.

system was then run on an uninterruptable power supply system to protect against power failures. The company's comms technician, Cameron Herbert, spent hours drying out waterlogged walkie-talkies and getting them back into service in time for the next rehearsal.

The main event over, the System Sound crew had just an hour-and-a-half to reset for another concert at the same venue. The 'Hong Kong Our Home' concert was organised by RTHK, the local public broadcaster. Unlike the farewell ceremony, it was open to the general public,

and as it was performed in Cantonese and featured many of the local pop stars, was another sell-out. They had only one three-hour rehearsal on the site a week before, and though the show was mostly mimed to a pre-recorded soundtrack, they still pulled off a minor miracle getting it to run so smoothly - still in the pouring rain.

And it wasn't over yet: System Sound then had to keep the system set up until the afternoon of Wednesday July 2nd, for a third event. This was the opening ceremony of a

huge street parade, which was to feature one of the first public speeches by the new political leader of Hong Kong, but was unfortunately cancelled an hour before the scheduled start due to the continuing rain. "As we struck the system," explained Reich, "a nearby weather station recorded a record eight inches of rain in four hours. With no chance to dry the cables and equipment before packing it into its cases, it was little surprise that the load weighed almost one tonne more on the return trip!"

And there you have it, an historic occasion the like of which may never be witnessed again. The technology is there merely to enhance the event, but it can, on occasion make the headlines itself as Durham Marengi was to discover. Flying back a couple of days later he read a report of the occasion in a British newspaper. "There was a moment in the evening's proceedings where Chris Patten had finished a very emotional farewell speech and sat down with his thoughts stirred by Elgar's Nimrod. I called the spots to fade to leave him in darkness for this very private moment, but noticed on the monitor that Geoff Wilson of the BBC was trying to catch his reaction on camera, so I asked the spots to slowly come back on. The newspaper reporter referred to this moment as 'a cruel spotlight lighting up Chris Patten in this most private of moments', whilst alongside was a picture taken at that precise time of Patten lit by said cruel spot and appearing on the front page only because of it. Moments of privacy are rarely available under the collective eye of 130 million people, but Chris, we did try!"

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*20 to 27 November 1997  
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The aims of the seminar are to look at and discuss technical management and organisational structures, managing change within an organisation, discussion of working practices and the introduction of technical training programmes within the work place.

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- Co-ordination of Production Managers and Technical Directors
- Planning and implementation of new working arrangements
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The programme will be of particular interest to experienced technical directors and managers, as well as experienced production managers.

**THEATRE LIGHTING: DESIGN AND  
TECHNOLOGY (98028)**

*1 to 9 September 1998  
London  
Directed by Francis Reid*

**Fee: to be announced**

The seminar will examine the role of lighting in current stage practice. It will explore the technological and organisational means by which concepts can be developed and realised in the finely balanced mixture of art and technology.

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- Lighting and design: large and small scale
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- Education and training for lighting personnel
- Backstage and performance visits

The programme will be of particular interest to all those who are involved in the provision of lighting for performance. In addition it is hoped that participants will include those concerned with the design and manufacture of lighting equipment, advising on its installation and educating its users.

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# REP RETURNS TO OLD VIC

*Under the direction of Sir Peter Hall, the Old Vic has entered into a dizzying whirl of 13 first nights this season. Robert Halliday joins the technical crew*

It's remarkable to reflect that the London theatre now thought of as the natural home of high-quality performances in Shakespeare and other dramas was originally a 'blood tub' - a theatre staging crude melodramas at low prices for the entertainment of the South London population. Opened in 1818, re-christened the Royal Victoria in 1833 and with the auditorium re-modelled to its present form in 1871, the fortunes of the theatre didn't change until 1880 when it was bought by social reformer Emma Cons and renamed the Royal Victoria Hall and Coffee Tavern - though its audiences always referred to it by the name we know today: the Old Vic.

Cons was succeeded by her niece Lilian Baylis in 1912, and between then and her death in 1937, Baylis firmly established the Vic as the home of quality drama at popular prices, most notably between 1914 and 1923 when the theatre became the first in the world to present a complete cycle of Shakespeare's plays, in productions starring such notable youths as John Gielgud, Laurence Olivier, Ralph Richardson, Peggy Ashcroft, Sybil Thorndike, Alec Guinness and Anthony Quayle.

Even after Baylis' death the theatre followed her policy until bomb damage forced its closure in 1941; even then the Old Vic Company continued to perform at the New (now Albery) Theatre, returning home in 1950 and only disbanding in 1963. Their place was immediately taken by the then-new National Theatre Company, who made the Old Vic their home during what would eventually stretch to a 13 year wait for the completion of their purpose-built Thames-side complex.

After the National finally moved out, the Old Vic seemed to lose much of its focus, playing host to a mish-mash of good and average dramas and drifting into the world of musicals that its 1000 plus seating capacity made it a natural target for. None of the shows ever really prospered - the Vic's location means it misses out on the passing trade that new musicals require - but the theatre itself did, thanks to an unlikely benefactor. Canadian entrepreneur Ed Mirvish bought it in 1982 and spent over £2million beautifully restoring the building inside and out.

Now the spirit of Baylis' work - high quality productions performed by high quality actors persuaded to work for less than their usual wage (Baylis is attributed with the prayer "Lord God, please send me a good actor, but send him cheap") - has returned to the Old Vic: a nine-month season of Shakespeare (*King Lear*), classic plays (*Waste*, *Waiting for Godot*, *The Seagull*) and new drama presented in a seven day a week repertory by a company including the likes of Felicity Kendal, Michael Pennington, Ben Kingsley, Alan Howard, Denis Quilley, Anna Carteret, Alison Steadman, Geraldine McEwan and, continuing a family tradition, Jenny Quayle.

Baylis' spiritual successor is Sir Peter Hall,



**Ben Kingsley as Estragon and Alan Howard as Vladimir in Beckett's *Waiting for Godot*.**

first artistic director of the Royal Shakespeare Company and then artistic director of the National Theatre until the late eighties. Since then he has been homeless, his commercial Peter Hall Company producing shows that used big names to draw non-theatre crowds to high quality productions of classic shows - like the recent *Streetcar Named Desire* with Jessica Lange - in whatever theatre happened to be available.

But Hall has clearly felt he had unfinished business with the Old Vic: his early days at the National were spent concentrating on the much-delayed move out of the Vic, rather than the virtues of the Vic itself. Now, thanks to producer David Mirvish, he has the opportunity to enjoy making the most of one of the best drama theatres in London.

## **THE SEASON**

Of course, presenting a season of 12 or more plays in a constantly changing repertory isn't

the easiest of tasks, especially in a theatre with very limited storage space. But the Old Vic team, led by production manager Martin Hazlewood and chief electrician Paul Franklin, have chosen to look at everything as a challenge rather than a problem, with the result that the season has found its feet with very few problems at all.

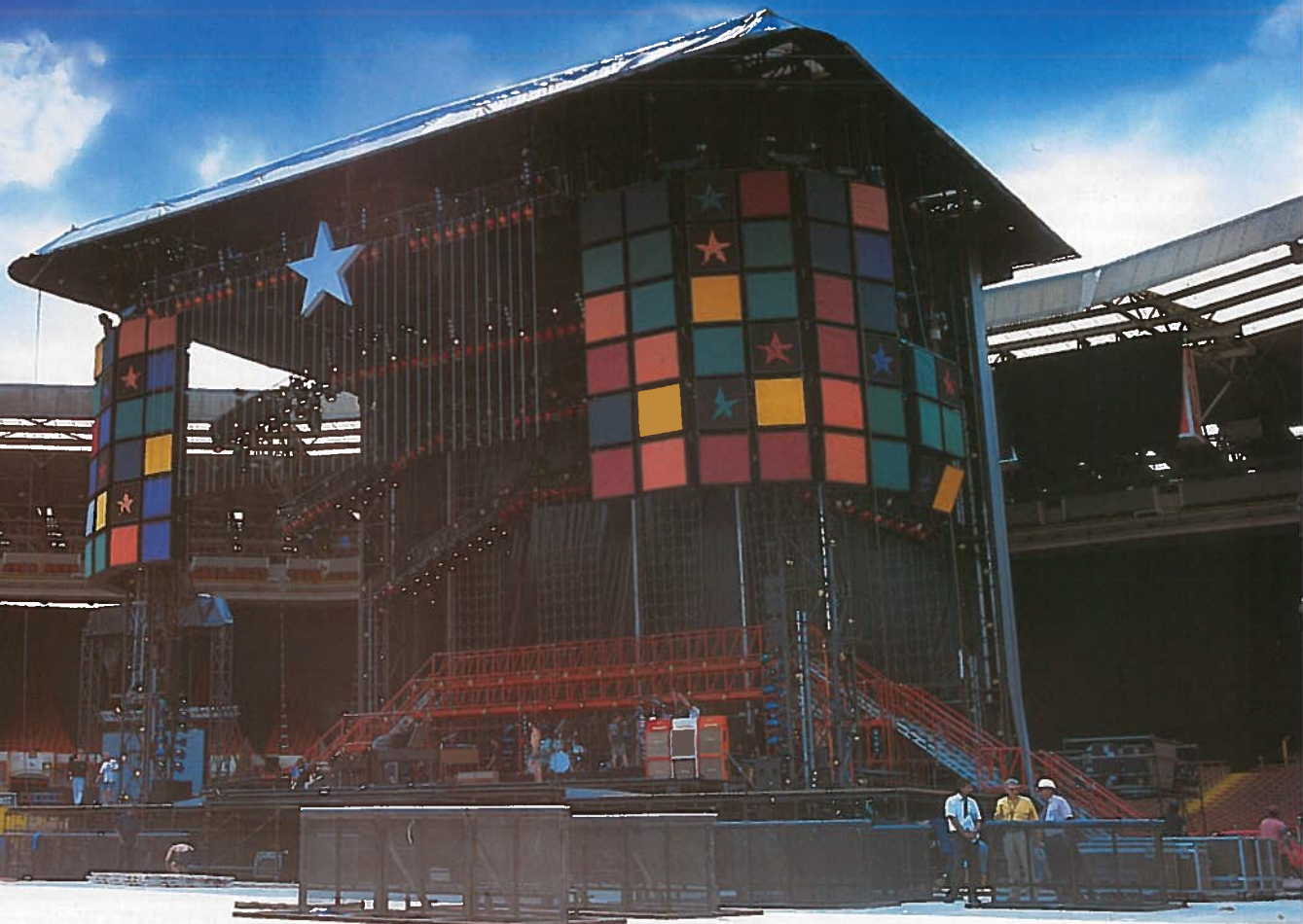
Hazlewood's first task was to organise a fixed framework for the season. When the National Theatre ran the Old Vic, they played shows in rep and set designers were allowed a free-reign to put what they wanted on stage. But with the more limited time and, more importantly, budget available for the new productions - the entire season is privately funded by the Mirvishes - there needed to be a kind of base set that directors and designers could work from.

John Gunter thus designed what the theatre crew now know as the basic 'blue box' - solid side and upstage walls covered in a mid-blue



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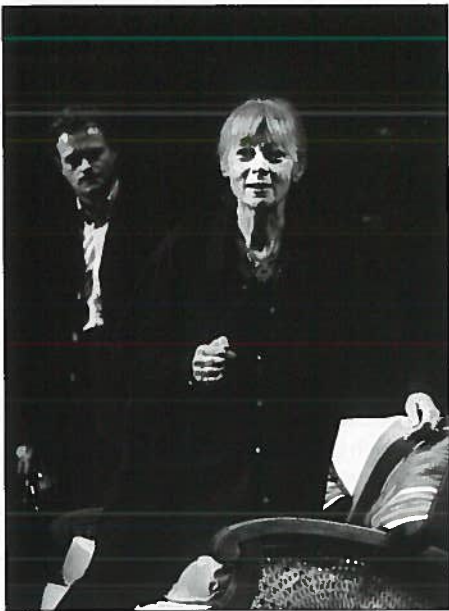
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Geraldine McEwan as Grace in *Grace Note* by Samuel Adamson.

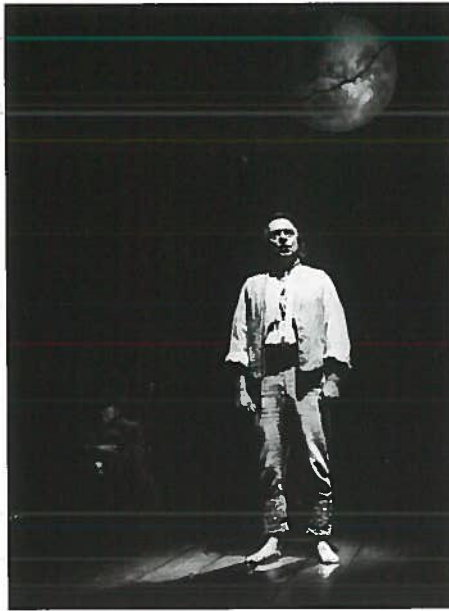
material, built by Cardiff Theatrical Services. The upstage wall is divided into vertical sections that can be flown independently of each other to form windows or entrances of different sizes, or the wall as a whole can be flown out to reveal cycloramas, projection screens or even, for *King Lear*, the whole scene dock area, while the side walls contain a variety of hinged openings and the downstage-most door sections can also track on-and-off to provide further variation to the shape of the performing area.

The stage surface is covered with a pale wooden floor that can do double-duty as the interior of country homes in shows like *Waste* or barren ground in *Waiting for Godot* - or can be covered over if that's what a designer's whim demands and budget allows. Similarly, extra standing or flown elements (a huge staircase for *Waste*, flown pieces for *Cloud Nine*, the tree in *Godot*) can be added if required.

The main achievement of the blue box is that it allows one show to be changed into another in just over an hour, without any of the scenery having to be stored away from the theatre. This means that the company can rehearse one show until 5pm and yet perform a different one at 7.30pm, with the crew even getting some semblance of a meal break.

This routine is rarely broken: unlike the National and RSC, the repertoire is not interrupted when introducing new shows! Hazlewood has been very careful to set up a system of show chiefs, each responsible for a particular show, as well as to ensure that every aspect of a show is carefully documented - and his crew have responded well to the challenge of the season, enjoying it as a change from the dull tedium of a long-running show.

The system was established after conversations with Jason Barnes, long-serving production manager in the National's Cottesloe Theatre, and a lot of thought - but has met with praise from a variety of sources, including representatives from the technicians union BECTU. They arrived expecting problems because of the long hours and Sunday working, but left happy that the Old Vic's crew were being very well looked after!



Sebastian Barry's *Prayers of Sherkin* with Ron Cook as Matt Purdey.

#### LIGHTING

With less scenic variation available than is the case with 'bigger' rep companies like the National and the RSC, more emphasis was immediately placed on the lighting for the setting of location and mood. Yet Paul Franklin's lighting team faced the same time, budget and crewing restrictions as Hazlewood's stage crew in having to change from one show to another at breathtaking speed.

And they have opted for a similar solution: a largely fixed rig that attempts to cover for every eventuality, yet which has enough flexibility to cope with the problems that will inevitably arise in a constantly evolving season. Designed by Mark Henderson, along with his assistant for the season, Neil Austin, the rig spans several generations of lantern design: the advance bridge (built by Vertigo Rigging and installed for the season to provide walk-on access to this important FOH lighting position) has Strand Patt 264s from the theatre's stock (along with two extras hired to make up the number required!) nestling alongside CCT Silhouette 30s and ETC Source 4s. 264s also fill the box boom positions, while the gallery and circle positions are predominantly filled with the theatre's stock of Axial Sil 15s.

A big cluster of Source 4s fill the circle front bar, these projecting custom glass gobos of newspaper reports from *Waste* - DHA's gobos and the Source 4's optics mean the lamps achieve something that would have required more expensive and troublesome projectors just a few years ago.

On-stage, six side booms per side hold a mixture of Sil 30s, Par cans and 2K Fresnels. The overhead rig has eight lighting bars inside the blue box and two upstage of it, all of which can drop to stage level during changeovers; these contain 1K Fresnels providing mid- and up-stage front-light, Par can back- and side-lights (the sidelights topped with Rainbow scrollers) and Source 4s doing gobo work. Access to some of the overhead rig for focusing is provided by focus bridges, flown on their sides when not required to free more flying space for scenery. The extra lighting equipment was supplied by White Light, who Franklin



Alison Steadman as Lady Fancyfull in Vanbrugh's *The Provok'd Wife*.

praises for their flexibility in supporting the changing requirements of the different shows in the season.

The aim of the rig was to give fixed-focus, re-colourable coverage to every part of the stage. But to provide quicker set-up and then re-setting of washes or specials, Henderson and Franklin brought in newer technology from The Moving Light Company: eight High End Studio Color washlights rigged overhead to provide backlights or specials in any colour, and then 13 Strand Pirouette PCs, five overhead, three on the advance bridge, two per side on the FOH box booms and one upstage of the blue box, to give movable acting area lighting or tighter specials. Both types of moving lights, as well as the scrollers, were chosen for their low noise levels as much as their features, since Peter Hall is renowned for demanding that no background noises distract from his performers.

The whole rig is controlled from the theatre's own ETC Expression 2X system, which has a main console plus a second console running as a tracking back-up. ETC's graphics tablet is put to good use for selecting and controlling the moving lights, and the whole set-up has given the season's lighting designers a great deal of flexibility - Henderson's initial prediction was that the lights would be set in one position for a show with the movement proving most useful when resetting between shows, but, in fact, he soon found himself shuffling them around between scenes to give precise area lighting without having to wait for someone to get to the light and focus them manually.

There have been a few minor problems: the Studio Colors, for example, have a bizarre optical effect that causes mid-blue colour mixes used at low levels to break up into stripes (thus rendering them useless for dim blue scene-change washes!), and also have rather too much flare when used close to the side walls of the blue box. But work-arounds have been found for both problems: a custom blue dichroic that nicely complements the blue of the set has been placed in the colour wheel, and the lights do look rather fetching with their long black-wrap tophats!

Like Hazlewood, Paul Franklin has chosen to



give members of his electrics team responsibility for particular shows while he and deputy Deano McCulloch oversee the season as a whole and the ongoing electrical maintenance of the building. Thus Ros Evans or Andrew Murrell are responsible for plotting a show with the lighting designer, then documenting it and supervising the recolouring, replugging, re-focusing (though the rig was designed as 'semi-permanent', both Henderson and Howard Harrison, who has lit a couple of shows in the season, note that the set-up works because Franklin and his team are prepared to be as flexible as possible to get an LD what he needs) during a changeover.

The result of this work is that the lighting designers who have lit shows in the season - Mark Henderson himself has lit most of the 'classic' plays, while Howard Harrison and Martin Hazlewood have lit the new shows that balance out the season - have been able to produce interesting and varied work. Having a semi-permanent set throws the actor's performances into much greater focus as you'd expect.

But you quickly realise how much more prominence and importance it has also given to the lighting, because this also has to manipulate the blue box to give it different looks: done very effectively by Henderson in *Waste* by throwing sharp sidelights through the side panels onto the back wall to suggest the sunlight of the world outside, for example. The technology - old and new - works seamlessly to give the desired result, leaving the audiences free to concentrate on the magnificent performances.

#### SOUND

Resetting between shows was also an area of great concern to Matt McKenzie, head of sound for the season. As he says, with most sound desks there are "277 little knobs that you have to reset - and you're always going to get one wrong!" Fortunately, a solution to that problem is now available at an affordable price: McKenzie specified Yamaha's O2R computerised desk as the mixer for the season. This stores all of its settings electronically, and can thus be set-up for any show in the season in a matter of moments simply by loading the appropriate disk. The system has worked very



Michael Pennington with Felicity Kendall in *Waste* by Harley Granville Barker.

well so far - though McKenzie found a piece of wood to grasp before saying that - allowing McKenzie, assistant Ian Stephenson, Simon Whitehorn (sound designer for most of the new plays), senior sound engineer Sue Aylif (who also designed the sound for *Waiting for Godot*) and sound engineers Gary Giles and Angela McLuney all of the flexibility they need for the season.

The sound demands so far have been predominantly for subtle effects rather than reinforcement - indeed, there has only been one live musician used in the season so far - but the scheduling, especially in the early part of the season didn't allow any time for having to leave the theatre to work on effects.

McKenzie and his team thus set up a mini effects studio in the theatre, equipped with a second Yamaha O2R, as well as samplers and a stock of effects. The computers in the studio and the main mixer position at the back of the stalls are networked, allowing information to be shuffled between them easily - though the actual sound effects still have to be transported by carrying a disk from one location to the other! The studio facility also means that there are duplicates of all of the key components in the system on-site, in case any of them should fail.

Effects are replayed from a combination of sampler and mini-disk players into the O2R, with all of the effects being triggered by MIDI from a PC running the latest version of McKenzie's MIDI control program, now updated to run under Windows '95. The effects are then fed out to a Meyer loudspeaker rig, predominantly composed of UPAs and USWs

and, like the lighting rig, left fixed as far as possible to reduce the changeover times between shows. The entire sound rig is rented from Autograph, Hazlewood having no interest in investing huge amounts of money in equipment that will probably be outdated before the end of the season.

The sound department have also followed the others in the way they have divided responsibility for the shows, with one of the three operators taking a show through rehearsals and up to the press night, with others learning it so that everyone is covered in case they are ill. And they run the shows with skill, the equipment allowing them to underscore the action with the greatest of subtlety. If they yearn for a greater challenge, that may well arrive in mid-August when Peter Hall's production of *King Lear* takes to the stage. Hazlewood is planning for 'atmospherics days', for playing with fans and other effects to get the effects the director desires, and it seems inevitable that the sound team will have their part to play with the most 'epic' of the season's show.

#### THE RESULT

The critics are, for once, united in their view that the season is a triumph: it is "the greatest achievement in the London theatre of the late nineties", to quote an extreme of the views. That judgement is equally true of the skill and organisation that has gone into making the season work technically as for the performances that have appeared on the Old Vic's stage.

And fortunately, it is a judgement that the public seems to be supporting. The season got off to a slow start - the usual cinema-culture of deciding what to see on the spur of the moment rather than in advance, and the Vic's distance from the 'heart' of London's theatreland perhaps being to blame - but, especially with the arrival of *Waiting for Godot*, has picked up enormously. There was always talk of repeating the season next year - with slight changes and lessons learnt, but building on the strengths of version one - but now that the Mirvishes are having their money as well as their faith repaid it seems certain to go ahead.

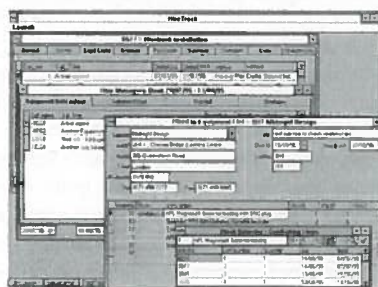
Theatre-goers who want more than musicals and frothy light comedies should be very grateful for their financial commitment, and the emotional commitment of all those who've made this demanding season of shows work so well.

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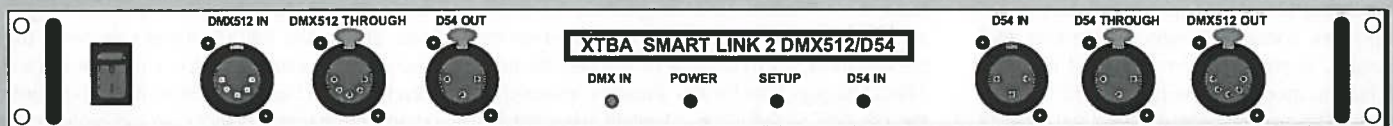
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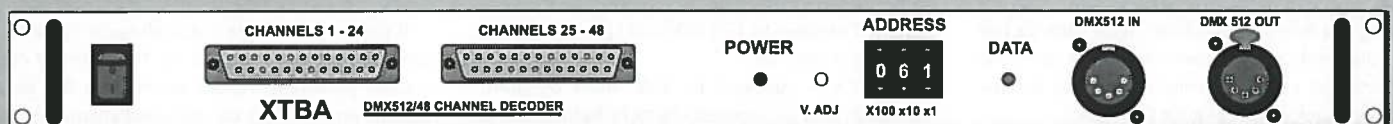
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### INXS

Sheffield Arena

LD: Sean Hackett

SD: Stuart Kerrison

'Elegantly wasted' used to be the phrase commonly applied to Keith Richards, as in 'the world's most elegantly wasted man', and in truth it still seems apt. So how dare the likes of Aussie rockers INXS steal such a world-worn mantle for the title of their latest album? More to the point, are they worthy? Well, that's debatable, but in one aspect at least, their current tour is offering something worth talking about.

### SOUND

This is the first ever touring appearance of JBL's new HLA (Horn Loaded Array) system in the UK. Although the packaging might look familiar (physically identical as it is to Audio Analysts' Aalto system which came over last year for Springsteen's sparse smattering of shows), it is fundamentally different in its content. Despite Albert Lecesse at AA being heavily involved in the development, JBL themselves have taken a less hurried route and come out with a different component combination.

In essence, whilst AA went for a redesign of the box, horns and packaging, JBL started with a totally blank sheet and looked at every aspect of a concert system, as well as some new speaker ideas. Having only heard the AA system once over a year ago at the Brixton Academy with Springsteen and his guitar (no band), it's neither right nor proper to attempt comparisons.

It is, however, fair to say that both share the same logistical benefits. Chris Hey, no stranger to these pages in his role as audio consultant to many productions under the aegis of Spencer, Hey Associates, is production manager for the INXS tour. He was quick to praise the system: "It's very fast to rig. We can, for example, keep two cabinets stacked together and roll them straight into the truck. It's light, easy to manage and great for rigging, not only being relatively light - box for box - but also with a good power-to-weight ratio. The tube-framed cabinets weigh just 95kg for the mid-high pack and 105kg for the subs."

This was just the fifth show of the tour, one of which had been an outdoor multi-band event in Cardiff, but already other benefits were beginning to emerge. "Outdoors it's very coherent," said Hey, something readily agreed with by Stuart Kerrison, INXS's FOH engineer: "Every engineer remarked on this at Cardiff. Another factor was its ability to continue to perform in windy conditions and there was no sudden disappearance of the high end."



The JBL Horn Loaded Array system rigged for its first tour with INXS.

This is Kerrison's first tour mixing for INXS and thus quite a step, using an as-yet-untried PA: "The spec' looked great. I liked the idea that they were trying to do something new and that it could put out twice the level. Of course, I went to JBL and heard it there, but it wasn't until the opening UK show at Aberdeen that I actually got to use it."

One of the claims that caught Kerrison's attention was the power output benefits of the DCD (Dual Cone Drive) technology employed in the system. However, not being one to risk all, he started by putting a sizeable rig into Aberdeen for the first show, but by the time he reached Sheffield Arena four gigs later he was already convinced of the veracity of the claim: "I might have put 20 mid-highs per side in here last week, but I've been cutting down on my perceived requirements every day, so I'm down to 15 a side and I probably don't even need them all."

The PA is supplied by EML from Belgium. Although they've serviced UK tours before, this is a high profile Arena tour for them and shows similar faith to Kerrison's in that they were prepared to try HLA out on such a well-established act. Xavier Theys is the system engineer from EML; in truth, he has as much experience with HLA as Kerrison in terms of actual touring, although he underwent familiarisation prior to the tour. "We're still learning how to make the best use of the equipment," said Theys in confirmation.

"The horn assembly in the mid-high can be tilted 15 degrees within its tubular aluminium frame. So by inverting the top cabinet in a stack, you can get a 30 degree spread

*"In essence, JBL started with a totally blank sheet and looked at every aspect of a concert system, as well as some new speaker ideas."*

in the vertical. But we asked JBL to add another 7.5 degree adjustment and I'm already experimenting with different ways of using the system for different coverages."

Two rigging factors emerged at the Sheffield show. One already gleaned is that the wrap of the flying system affects performance: "If you put two cabinets side by side with their fronts in line or close to it, you get power coupling, effectively giving a much longer throw," said Kerrison. "We wouldn't have put a delay hang in here if it had been fully sold."

The other is the uniformity of coverage. Although Kerrison's mix for this band is very mid-low heavy, in keeping with the band's musical style, it was possible to walk within three (maybe three and a half) metres of the front of the flown stack before you could discern you'd moved out of

the full spectrum coverage of the system and started to hear more from the EML self-built near-fills positioned across the front of stage. The main system was relatively high too - the bottom edge trimmed somewhere around five metres.

What was really nice though, and perhaps the more important factor in terms of rigging, was the approach Theys had taken to covering the near-stage bleachers. Here the wrap was much tighter and availing himself of the horn tilt mechanism he had kelped the two outer edge top cabinets up the full 15 degrees to cover these seats. What makes this nice is that the stack is a dead hang - all helping is done in the box, not by straps and hanging devices, so a complex variety of kelps can easily be arrayed to cover any room shape.

If you find the degree of angling on the horn is too much, it's a simple job for the rigger or even a crew person to rappel down onto the flying system and re-align the tilt mechanism without the lengthy procedure this would entail with a more conventional hanging system. These are aspects that owe a great deal to AA's touring input to the design process. Even if this were a crap-sounding system (which it certainly isn't), the lessons of usability and functionality could well be applied by other manufacturers.

The system itself comprises twin 18's in the sub, the mid-highs containing a 14", 10" and a 1.5".



All speakers are dual cone, the business end being extremely lightweight (on the 10", for example, the chassis weight is just 3.1kgs). "They do generate some heat," said Kerrison, "as I discovered when I visited JBL and saw them on soak test. There is a bloody great heat sink on the back which obviously copes, as there's none of that sluggishness you normally associate with heat in the driver."

EML are powering the whole system with Crest amps (9001 on the subs, 8001 for the 14" and 10", with a 7001 on the high), something Kerrison was initially cautious about. "I was apprehensive about Crest, but I have to say that with this system they sound much more natural. In fact, this PA is easier to tune than any other system I've ever worked with. I can hear everything - even at high level I can drop something just half a dB and hear the difference."

Kerrison's enthusiasm for the PA is palpable and certainly for a typical 'rock band mix' the power and coverage was there. As mentioned, he leans on the low end and low-mids which give that physically exciting sensation of listening to a loud band, something INXS needs, without any unpleasant, damaging top end. Vocals apart, he plucks the higher frequencies of guitars and saxophone and lays them into the mix with great care, a method that keeps him extremely busy throughout most of the show. Watching him operate (Midas XL4 with full flying faders) it was certainly the case that minutely finessing the fader on a sax solo, for example, would bring a discernible difference to the presence of the sax in the mix.

I walked the room during the show from nose-bleeds to front row floor and the uniformity of the coverage appeared to be everything it was claimed to be, although with Kerrison's 'put and take' approach to the high end, it was difficult to judge what was happening in that upper range. Often it could appear you were passing through a hot spot and then, upon reflection perhaps all you'd heard was just a passing flourish of guitar that had been brought to the fore. But there's no denying the clarity of the system.

#### LIGHTING

Sean 'Motley' Hackett has designed for INXS before, but as it is around four years since his last outing for them, some changes have occurred. "For this tour, Jon Farriss the drummer has designed the set and I was basically presented with a 'this is how it will be' scenario. But the band are cool - despite what the British press might say they're just regular blokes, so I was able to apply a basic straight ahead rock and roll approach to lighting on top."

In fact, Motley has imposed a four truss grid above the so-called 'Science Lab' set, on which he's spread a fair assortment of lamps: "I just put a bunch of lamps in the tumble drier and threw them up in the air," he said with characteristic aplomb. Wash predominates in quantity: 5kWs with colour changers, four- and eight-lamp Moles and every bulb type of Par 64, while LSD Washlights and Icons (LSD are the lighting



Above, the INXS light show - with LSD Icons and Washlights providing the effects and below, flamboyant lead singer Michael Hutchence.



contractor) provide the effects. Two truss spots and a bunch of four-cell ground rows complete the rig. "This is my first tour using Icons - I actually used them in South Africa for the first shows. We didn't have this rig there, but the band were still pleased." And with true Australian bravado, only then did Motley admit to the band he'd never used the lamps before. In this respect he owes a debt of thanks to Mark Coleman at LSD Los Angeles who organised the training.

Motley claims Davidian, Cohen and Bennett as major lighting influences, although on this occasion it was his early days working with Smeeton on George Michael back in the late eighties that has coloured his approach. "I've tried to make everything look as big as I can. The symmetry of the set is slightly frustrating, but I've managed to get round this by putting some

darkness between the lamps that helps break it up."

He's also used his Washlights very effectively, placing them across the back of the set on Manfrottos and also in the four gauze tubes that frame the stage. An obvious use with the tubes, but the back position lamps are a departure from convention, used as they are to shine into the audience from what is a low level position. "I want to make it look different for every song. They're an eighties rock band and that's how I light it."

And that's exactly what they are, which somehow justifies the Elegantly Wasted title, though not in the way they intended. What is most apparent about this show is how stuck in time the band are: the material from their new album could just as easily have been from their first. Wasted certainly.

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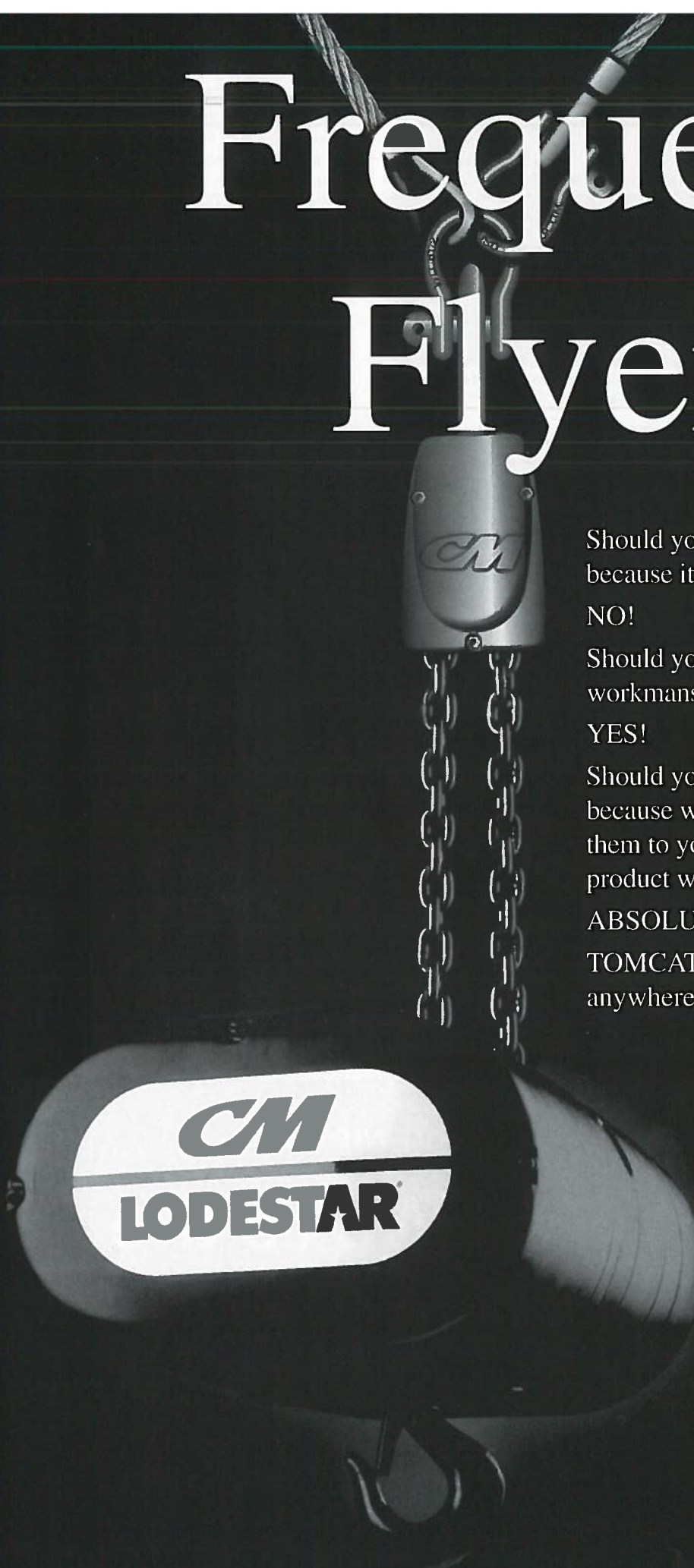
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# Second Take . . . John Watt's view from beside the camera

The problem with this column is its tendency to tread on the very toes of those that employ me. Happily, some that think they have identified themselves in my heavily disguised references are philosophical or even tickled (one stage less than being flattered). Interestingly, some think they have identified themselves and haven't, but somehow the cap seems to fit and they wear it. Anyhow, it has turned into a dangerous game; this month I have attracted comment from chief executives and sparks alike and lost a job which may be attributed to someone's over-sensitivity. I have been considering my position.

One solution is to give up lighting design and stick to the pen - I would then be free to adopt a Private Eye style, telling all. This, in some ways, would be a real service to lighting designers, a sort of early warning system listing the things you really want to know about studios. The other is to shut up (difficult, I confess) and stick to lighting. If the column disappears, you'll know why.

In TV we are very lucky in being able to indulge in the ancient pastime of people watching. I seem to have had a lot of a particular variety recently, viz the Executive Studio Tour. Typically it goes like this: you are in the middle of a tight set and light day, you only have four sparks - not the six you wanted and these include one who suffers from vertigo, one who is colour blind, one with partner problems (never off the phone) and one who runs a TV repair shop down the road and is really too busy to be here. Enter party of Armani suits, plus at least one obligatory power-dressed woman who distracts the sparks so much that they hang three lamps without safety bonds and, more to the point, forget they haven't had a smoke break for at least 20 minutes.

The tour, who have entered quietly in an effort to be inconspicuous, keep close to 'the wall'. Unfortunately, in this case it's the cyc and they are upstage of the ground row, thus graphically demonstrating the art of subtractive colour mixing with their 12ft shadows. At the same time, they're pretty well blinded by what to you and I is only a few kilowatts of low angle light. God knows how they cope with night driving. Briefcases are used as French Flags in order to restore vision enough to navigate. The scenic ground row is, in fact, a ramp and more than a stride deep, so the manoeuvre over it can be rewarding to watch, especially as the power-dresser's skirt doesn't allow her legs - well, you get my drift. Now they form a group positioned with uncanny accuracy exactly where you are focusing. Try to identify the team leader: he is the sort that comes to the fore on those Chay Blyth type leadership courses, the sort where you are

thrown out of a helicopter over the Cairngorms armed only with a two bob bit (10p) and a pilchard and have to find your way back to Soho, and this qualifies him to be a Commissioning Editor, drive a 5 Series BMW and describe this inadequate, ill-equipped, probably rat-infested and (worst of all) low cellar you are unfortunate enough to be working in as 'a state-of-the-art facility'.

Now, to add insult to injury, he goes on to describe your job to his enraptured audience: listen - you may learn a thing or two. It doesn't cross his mind to introduce you, or ask you to describe what you are up to. "This man," he says pointing at you with his Porsche sunglasses, "makes sure the lighting is completely shadowless and flat. He checks that the right colours are used as it's a well known fact that the wrong colour can cause an effect called strobing which makes steam locomotive wheels go backwards and we don't want that. He also does trick effects using ultra violet light which can cause underwear washed in detergent powder to glow in the dark." (Power-dresser moves briefcase higher to cover her chest.) "The whole thing," he enthuses, "is computer-designed and controlled, making this man's job," another point with the glasses, "much simpler than previously." I guess that's why we get paid less, for doing it quicker than previously.

"These lights move along the ceiling, and up and down, and point in any direction and change colour, according to the computer's instructions," he explains. Since the rig consists entirely of 2Ks and pups clamped to cement-encrusted pipes, I'd be a bit surprised if this was the case, though I suppose the 'point in any direction' bit has a grain of truth.

Anyway, at this point, having exhausted the attention span of his party, he gives a dismissive, "so it's all become very straightforward and we can now use schoolboys as multi-skilled operatives to carry out all functions unless, of course, they are good with horses, in which case they are better suited to working for United Dairies where the hours are less arduous and they get out in the daylight from time to time, don't you know, tee-hee."

While all this goes on, the unequal battle between me and the equipment continues. Regular readers will know of my hate relationship with spring pantographs (another example, by the way, of over-sensitivity when I mentioned them in a 'central London studios' and 'they' assumed it was them - I can name at least five studios within a mile of Tottenham Court Road Station that have them) and current jobs prove I have been over-generous towards them in the past. The current bunch have no socket at the bottom,

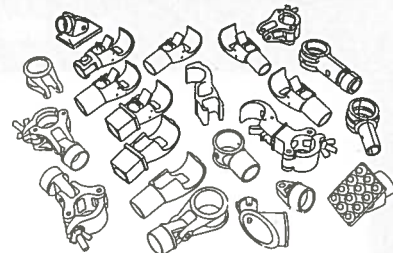
so one can only assume that the manufacturers think that a given lamp lives on that particular pantograph all the time, since re-plugging at the top is a pain and clipping the cable on and off the scissors just isn't on. It is true that the lethal, finger-severing spring does dissuade you from changing heads if you can possibly avoid it, but there are still times where a 2.5K soft is no substitute for a Source 4.

Years behind the rest of the world, I'm currently using a row of Birdies, a useful tool, but don't the M16 bubble characteristics vary? I thought the hire company had supplied a job lot of different beam angles, but no, they're just manufactured to sloppy tolerances I suspect. OK for downlighters over the tables at Pizza Express, but for true LDs they have their limitations. The previously mentioned Source 4s are rapidly becoming as indispensable as Magic Arms and Black Wrap in my armoury. I have even gaffered a gobo into the gate (I forgot to order the holder) and it's cool enough in there not to melt the tape. You can no longer impress visitors by whipping out a red-hot, glowing gobo, but you can't have everything.

Lastly, I should report that, against all the odds, I have found a production company that not only employ me, but have a number of very clever and pleasant producers who make it fun like it used to be. Their boss has an unnerving ability to spot what you have missed and has been known to mention it. No, I'm not going to commit commercial suicide by giving the company's name - you will have to get out the chart and do your own navigation, like the rest of us, along some well-buoyed channel in the shark-infested oceans of ITV Limited, as it's rapidly becoming.

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# ALL THE QUEEN'S HORSES

## L+SI Special Report on the Royal Tournament

The Royal Tournament is one of those rare events that has become embroidered into the fabric of British life. Alongside Wimbledon and the Grand National, it is viewed as a quintessential part of the UK summer schedule. Its appeal partly stems from its longevity - it has been staged every year since 1880, except during the two World Wars, and has become increasingly theatrical with each new decade.

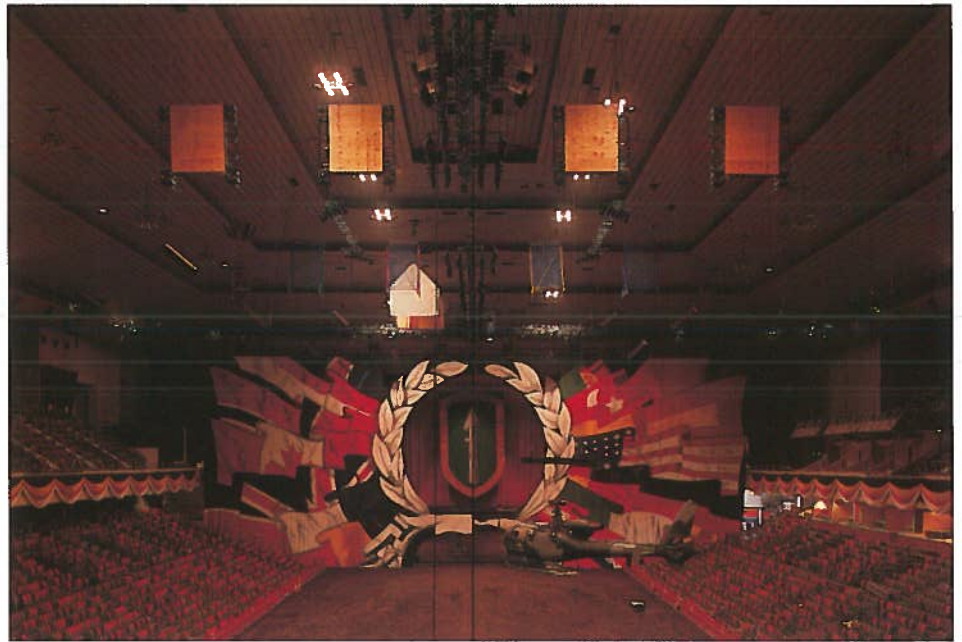
The Tournament, as it was first called, originally consisted entirely of competitions designed to encourage skill at arms for regular and volunteer members of the Army. The modern day show is designed to provide that mythical creature 'good family entertainment' whilst at the same time display the pageantry, skill and courage of the armed forces and in so doing raise money for the service charities. Given this, it is essential that the production operates smoothly in character with the military discipline surrounding it.

Unusual Rigging has worked on the production of The Royal Tournament for several years now and sister organisation Unusual Services has become increasingly involved, with the event management and staging of the new-look Royal Tournament. The company's Alan Jacobi has worked extensively with the Producer, Major Michael Parker, frequently collaborating with him on numerous high profile events, including the VE Day and VJ Day celebrations.

If the 1996 show had been an extraordinary production, featuring a wide range of automated props and visual tricks from lasers to an inflatable submarine, 100 tons of water and a flotilla of small boats, then the 1997 Tournament, the 107th in the series, provided a return to the spirit of the 1880 Tournament focusing on the skills, strength and discipline of the armed forces.

This is not to say that this year's show lacked any production finesse, simply that the production techniques were used more to highlight the participants than feature as stars themselves! It opened with flare and high drama as the Royal Artillery archers shot flaming arrows the length of the main arena in to the backcloth which erupted in to an amazing pyrotechnic display. Down beat it was not, spectacular it most certainly was.

For those not familiar with the scope of the Royal Tournament, a few facts may be in order at this point: it includes a cast in excess of 2,000 people plus the crew and management. It has also been reported to feature the biggest and most complicated lighting rig in Europe with some 1,300 lights almost entirely supplied by Theatre Projects, the main lighting contractor. Over 15 miles of cable is used in the production and the electricity bill for the duration of the show is about £70,000. Unusual is producing the show on what is reported to be the largest stage in the world which, in turn, boasts the biggest backdrop in the world; provided and painted by Victor Mara, it covers 57,000sq.ft and took two people a month to paint. The event is a lesson in grand scale productions



with 1,000 tons of top-soil specially imported into the arena at Earls Court just for the show. The same soil has been used for the last 20 years and is transported by a convoy of lorries.

With scale being the major issue, Unusual collected around them a team well versed in the complexities of such productions: to Charlie Russell fell the task of production manager, whilst Malcolm Burkett was brought in as design co-ordinator. The lighting design went to another event stalwart, Robert Orno, whilst

John Del Nero once again took on the challenges of sound designer. Finally, James Lee was brought in as production rigger.

"Dealing with the scale is without doubt the most challenging aspect from a production point of view," explains Charlie Russell. "Once the show begins, it rumbles on under its own momentum - it really is practically impossible to stop. We have riggers who stay in the roof structure for anything up to four hours at a time because there is nowhere for them to go; they can't come down as the floor space is occupied. It is unique in that respect and I think that this is partly because it is a military event and partly because there are so many things happening over such a wide area."

Work began on the production in April and the first challenge followed soon after. The opening sequence - the parry of flaming arrows shot across the arena - was clearly going to attract the

attention of health and safety inspectors: the challenge was how to achieve the effect in a controlled manner without causing danger to the cast, the crew or, indeed, the audience. Amusement, or perhaps amazed disbelief, rippled amongst the civilian crew on hearing the army's suggestion that the effect could be achieved by attaching paraffin-soaked rags to arrows and firing them across the arena, into the back cloth, which could, perhaps, be made of asbestos!



Charlie Russell thanked them for their ingenuity, then set about the problem with Millennium, the pyrotechnic experts contracted to address just such tricky requirements. The eventual, safer, solution was for each of the arrows to be coated in a theatrical ignition fluid and, while appearing to be dipped in to a live brazier by the archers, they were, in reality, electronically lit by remote control.

There were other challenges too as Russell explains: "It's not a stage show and can't be compared to one in terms of sheer complexity. Everything is larger than life: the backdrop was painted, twice, in an old airship hangar because it was the only place large enough to accommodate it. The hangar, however, had not been used or repaired since the last airship left it and the roof was full of holes! You remember how wet June was? The wettest in 150 years! Hence the backdrop was painted twice after the rain had resulted in the fireproofing leaking through the first paint finish; it was later moved to Earl's Court to dry off."

One factor which features high in the lives of the production team, rigging crew and participants involved in The Royal Tournament is security. Irritatingly, but understandably, it slows up absolutely everything, which is inconvenient when efficiency - in terms of time and, consequently, money - is paramount. Security protocol occasionally means that work methods have to change. It is fairly characteristic of production life, particularly in a temporary installation, that additional supplies are ordered, delivered to the site and left at the door - but not in this case. A package without a person is deemed 'A Security Alert' and evacuation follows - a technical nightmare. Though often rigid in its application, the crew do understand the reasons and are prepared to work round them.

Lighting designer Robert Ornbo has worked on the Tournament for 20 years and talks about the show with the familiarity of an old friend:



effect to back-light a troop of 70 Maori warriors. Theatre Projects has also provided the lighting crew for the event, including a lighting operator, six followspot operators and a technician who are on site for the duration of the event.

The equipment is often used to stunning effect in this year's Tournament, but Robert Ornbo prefers the subtle approach: "The bits I like best, in terms of the lighting, are usually the unobtrusive bits, such as the Finale this year, which is all reds and greens on a blue base. The best moment show-wise is the entry of the massed bands through backlit smoke - the audience cheers every time!"

"Some of the challenges remain the same - making sure the design is capable of being rigged in the time available and that it is possible to focus 1,600 units in 12 hours. Flexibility is keynote and, of course, the whole thing has to come in under budget."

"Having said that, different challenges do come up year on year, including how to create novelty in a traditional show, how to ensure safety in a dangerous show and how to cater for the needs of television in an unobtrusive way, dealing with the military mind (which can be quite a challenge!) and trying to get each item lit during the very short rehearsal time."

"The lighting seems to work because of its flexibility and its relative simplicity - red, white and blue colour washes, gobos, blobs of coloured texture, Vari\*Lite, smoke, strobes and followspots. Combine all this well and it certainly shouldn't get boring, provided you follow the mood and use a little imagination."

Theatre Projects have provided over 1200 Par cans, 36 Vari\*Lite VL2Cs, four VL5As, 116 Silhouette lights, a pair of Sky-Art search lights and six colour arc followspots, all controlled by an Arri Imagine 500 way desk and nine Avolites dimmer racks.

The aerial lighting was used to highlight the Gladiators, who challenged the armed forces to a duel, while the Sky-Arts were used to dramatic

"The worst moment this year was in the dress rehearsal, when Earl's Court had not turned on the extractor fans and the smoke from the opening stayed thick and heavy for the entrance of the Kings troop. Horses pulling gins with no brakes suddenly found themselves in thick fog and naturally stopped dead, with the teams behind them piling up like the worst M25 nightmare. Miraculously, neither man nor beast was hurt and the special rehearsal next morning proved that the fans, when switched on, did the trick and there was no danger after all."

Wigwam Acoustics Ltd was the main sound contractor for the show supplying a wide range of equipment including Meyer and d&b loudspeakers, a range of microphones from Shure and Sennheiser, control equipment by BSS and XTA and Tascam playback kit, all of which was mixed and controlled by a Yamaha PM3500 mixing console.

The greatest hurdle for the sound designer and engineer was trying to install what needed to be an outstanding sound system, around the rather mediocre cluster already installed at Earl's Court. The press shy sound designer, John Del Nero, did a remarkable job using an extraordinarily powerful combination of bass cabs which, while visibly moving the audience emotionally, succeeded in physically moving the audience as well!

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# EQUIPMENT NEWS

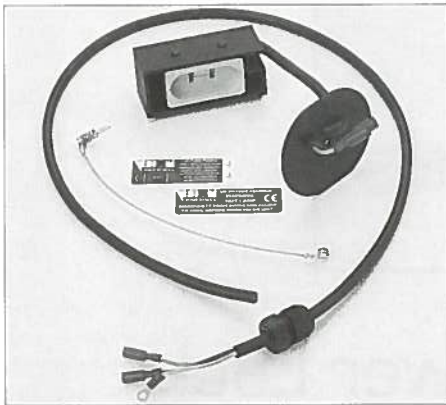
## Jem Techno-Fog

Jem Smoke Machines have introduced the Techno-Fog. Incorporating all the technology traditionally associated with Jem's range of larger club and touring smoke machines - the new unit is aimed at smaller applications, and in particular, the mobile DJ.

The Techno-Fog features a Direct Thermal Protection (DTP) device that prevents overheating. A compact, hand-held remote control offers the DJ an auto-timer facility as well as the ability to alter the smoke density level.

For further information contact Jem in Spilsby, telephone (01790) 754050.

## Vision Parshell



An inexpensive solution is now available to the problem of safety and CE compliance with Par lanterns. The new Vision Parshell from AC Lighting is retro-upgradeable into the majority of existing Par lanterns and allows their safe adjustment without causing the overheating problems often associated with lamp adjusters.

The double insulation technique used within the Vision Parshell also ensures that, when correctly fitted, both the lantern body and cap are fully earthed, reducing the risk of electric shock and making the fixture much safer to work with. The Vision Parshell ensures the lantern is fully earthed and all electrical components are double-insulated to the touch. The Vision Parshell is designed for use with all sealed-beam Par lamps running at 115/230V.

For details contact AC Lighting in High Wycombe on (01494) 461024.

## Skylites Highlights

Skylites International are busy on a number of fronts. The company has recently re-built its workshop and offices to create a better working environment and are also constructing a completely new range of Xenon Searchlights for their hire fleet. DMX512 has been added to the list of operational facilities and the first batch of 2kW units will be ready in a few weeks' time with 4kW units following later. For further details contact Skylites on (01376) 584799.

## Soundtracs RX-8



Soundtracs have introduced the new RX-8 which, the company claim, is the only stereo mixer in its class with four stereo sub groups, aimed at both recording and sound reinforcement applications.

The desk is available in 24- and 34-input versions, with each mono input providing a three-band swept-mid EQ, supplemented by an 80Hz HPF. The mic inputs use an SSM2017 and include selectable phantom power switches for maximum flexibility in a live environment. The six auxiliary sends from each channel can be instantly configured pre or post by global master section switches, allowing the user to cope with a wide variety of effects, monitor and foldback configurations.

For further information, contact Soundtracs in Epsom, telephone 0181-388 5000.

## Decoupe MDG

Decoupe have recently been appointed sole UK agent for the MDG range of smoke and fog generators. The range includes the low-output MiniMax, through the 3000 series up to the high output two- and four-head 5000 and 25000 series.

Also included in the range is the Atmosphere haze generator (currently in use on 10 Broadway productions) which uses CO2 pressure from a small tank. Other features include varied output, accurate heating process, lower fluid consumption and self-cleaning system.

For details contact DeCoupe in London, telephone 0181-340 8048.

## D.A.S. Introduce New Benchmark Model

D.A.S. Audio, the Spanish loudspeaker manufacturer distributed in the UK by Sennheiser, has introduced the Dynamics Series DS-15 - the largest moulded enclosure yet produced.

The DS-15, featuring a D.A.S. 15" low frequency transducer with a 77mm voice coil and high efficiency, low distortion M-5 compression driver and CD horn assembly, is the largest moulded enclosure currently available and represents the latest achievement of D.A.S. engineers, having been designed with the aid of proprietary advanced computer modelling software to demonstrate directionally symmetric and precise projection characteristics. The DS-15 is intended for both sound contractors and the MI market.

For further information, contact Sennheiser in High Wycombe, telephone (01494) 551531.



## Denon Mini-Disc & CD

Denon have introduced their new high-end Mini-Disc and CD combination, the DN-M1050R and the DN-C680, aimed at the radio, theatre, TV and post-production markets.

Key features of the DN-M1050R mini-disc recorder/player include a PS2-type front panel keyboard socket and Jog/Shuttle wheel which searches to one-frame precision.

The DN-C680 is based on the same design as its mini-disc counterpart, and has all the standard features of Denon CD players, as well as optional plug-in boards of a 32/44.1/48kHz sample rate converter and SMPTE time code, Sony protocol and word sync control options, both of which are also available for the DN-M1050R.

For further information contact Denon in Chalfont St Peter, telephone (01753) 888447.

## Pulsar Live

Pulsar have recently released their latest brochure accompanied by a CD-Rom. The brochure is a guide to the wide range of Pulsar products. Each section contains a brief descriptions of the products together with technical specifications. The CD-Rom is divided into four major areas and includes an 'interactive showroom'.

Both can be obtained free from Pulsar. Contact (01223) 366798.

## More Sabine Power!

Sabine have launched their latest box of digital signal processing in the form of the Power-Q ADF-4000 workstation. The new system combines the functions of seven digital products in one 2U package. 24-bit digital processing and Analogue Devices' new SHARC floating-point processor ensure audio quality and flexibility.

The Power-Q' integrated features effectively replace a full rack of equipment and offer two channels of up to 12-band parametric equalisation, a 31-band graphic equaliser, up to 12-band FBX feedback exterminator, real-time analyser, compressor/limiter, digital delay and noise gate.

For further details contact distributors Fuzion on (01932) 882222.



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# THE CREAM TICKET

*Steve Moles finds himself to be a big fan of the minimalist approach to lighting at the 'Best Club in Europe', Liverpool's dance Mecca, Cream*

Barely a spit from Central Station and just a short walk up Wood Street to Woolstonholme Square and you're in another world. A few yards away is the futuristic plastic façade of Liverpool city centre; Boots and Woollies rub shoulders with the Palladian splendour of the city's main Post Office - it could be downtown shopping anywhere UK plc. The square, meanwhile presents a very different face to the world: on the other side of the Atlantic, this area would be called 'Bo Ho' district.

A narrow three-block zone of run-down and derelict Victorian industrial buildings, the area is now a clash of bright modern investment - flash bars and pavement cafes with trendy names and stainless steel façades - nestling amongst the broken buildings. Every so often you come across the doorway to a club, like weeds growing from cracks in the brickwork. They look cheap and filthy outside in the cold light of day, their investment having been reserved for the interior decor. It's a happy marriage between club, crud and café

- the residual dereliction gives the whole zone a slightly dangerous edge and the area hasn't quite received that over development, so typical in the US, that turns such lively and vigorous places into mere theme parks with beer. You won't see Elmer and Martha Goldsteen in their plaid golfing slacks here of an evening, but it's just bright enough to humanise what would otherwise be a run-down slum. Sure, there are drunks unconscious on the pavement at noon, but there's an easy atmosphere here; a passing Scouse ruffian, all body piercing and loud mouth, stops to enquire after the drunk's health and then caringly shades the old man's head from the sun with an empty beer carton.

Laying in the midst of all this is the Cream club. Reputedly an ammunition store during the Second World War, the building is heavy and muscular from the outside, its walls pierced by enormous RSJs, too large for its relatively small proportions, that betray its original task. By popular consent this is the nineties replacement for the Cavern Club, though in this instance that notoriety is borne not so much from its reputation for breaking live acts, more from the contemporary and trend-setting reputation it has established and sustained.

That's not to say live acts don't break here: just the week before my visit, Echo and the Bunnymen played Cream as a precursor to their much publicised re-launch, and early Cream-goers knew Heather Small had one of the most spectacular modern pop voices long before the rest of Britain came to love M People.



**One of the most noticeable aspects of the club is simplicity of design: this is not a multi-million dollar lighting and sound extravaganza. Below, the menagerie of weird and wonderful 3D figures in The Annexe.**



But it is as a dance venue that Cream excels. It is, for example, the residential venue for Paul Oakenfold, a DJ unequivocally in the superstar league. However, delving deeper into the success and ethos of Cream it soon becomes apparent that Icon-building isn't the cause of the club's fame.

"Cream started in the Annexe, a small room off the side of the Nation," explained Andy Kayll, technical manager for the venue. "The Nation's owner, Stuart Davenport, quickly noticed that Cream was establishing something of a special reputation and within a few months he turned the whole club over to Cream. Five years later it's now run and owned by a happy association between James Barton and Darren Hughes, who instigated Cream, and Stuart (Davenport)."

One of the most noticeable aspects of the club is simplicity of design: this is not a multi-million dollar lighting and sound extravaganza. Its style stems from Darren

Hughes, who is credited with being the man with his finger on the pulse. "In the beginning we had just two six-lamp bars of Pars and a single Kodak Carousel," said Stuart Woods of Mr Phantasy Lighting, the company that has provided all the lighting and operators for Cream since its inception. "If you look around today you'll find that hasn't changed much. There are no lights in here just for the sake of it."

It's a stripped-back approach that places a tremendous burden upon the operators - not a system with which to build hundreds of scenes and then spend the night switching and chasing between them. Having little to play with, subtlety and nuance are of the essence. These are shows that often last from 10.00pm until 6.00am the following morning, so operators have to make damn sure they don't give it all away in the first few hours. "We follow the DJs," explained Woods, "they might spend an hour crafting and building a really heightened mood with the music, and then gently bring things down. But this is not about slow steady changes, what you do at any one time needs to be tightly synch'd to the sounds."

It's one of the areas where Darren Hughes' style regime is adamant: no sound-to-light units, no chases, no automated lighting operation. "His ideas dictate that this is a performance art and we have to be in sympathy with exactly what is happening at any given moment." Ironically, it's the more recent technology that gives Woods his main problem. "The biggest frustration I have is finding a desk





Reputedly an ammunition store during the World War II, the building is heavy and muscular.

that can respond with the same speed as analogue control. The best I've found so far is the Jands Event Plus. We've done a couple of live comparisons with other boards - even had manufacturers and others down here to look at the problem, but I think we're stuck with it."

The problem does seem to reside in the desk: digital dimmers have been suggested, but Mr Phantasy has tried this too. What they have established to their own satisfaction is that it isn't a failure of rise time at the dimmer, merely a delay on output from the desks. The digital refresh, the scan up and down the multi-channel outputs, is enough to delay pick-up by the milli-seconds that Woods is seeking. The real cause is the inability to read the mind of the DJ - when you are trying to follow somebody who is working intuitively, it's unrealistic to expect to be in-tune with them to the second. The delay must be marginal and is probably only really noticed by the operator, but you have to admire Woods' application to Darren Hughes' ethos.

I don't say that lightly - the more you look at why Cream was voted Best Club in Europe last year by Musik magazine, the more you realise it's the constant striving for this kind of subtle perfection that sets it apart. Of course, in this instance, using an analogue desk would be the obvious answer, but even Woods' minimalist lighting designs (at Hughes' coercion) do contain the odd digitally-controlled lamp. There is enough lighting of both genres to warrant trying to use two boards, analogue and digital, but with the link between lighting and DJ already fragile, adding a second operator to the chain would not only be expensive, but also unwieldy. It looks like Woods will have to live with it until 'mind links' becomes a reality.

Although the lighting is definitely the key to the club, it would be remiss not to mention the upgrade to the venue-wide audio system. Philadelphia-based PDS were the company called in by Cream Productions to create the new sound system. Most of the equipment in the £500,000 audio package, destined for distribution between the three main dance areas and two spin off bars, was to be purpose-designed and built. PDS thus

reconfigured old favourite mixers, adding crossfades, re-loaded the existing JBL enclosures and built their own three-way crossovers and programme EQ. They also specified a BSS Audio FDS-388 Omnidrive management system to set and lock their Phazon Digital PA System.

To give some idea of the club, it's worth a quick look at exactly what the technology has to work with. Cream, which has a licence for just over 3,000 people, is divided into three main areas: Main Room, Annexe and Courtyard, with two further areas, the Sawmill Bar (alongside the Courtyard) and the Zoo, a long, thin galleried room which, according to Kayll, functions as a sort of chill-out area.

The Main Room is, despite its dominating position, about the most low-key in terms of lighting. True to its roots, its main components are Par 64s - about 30 of them - and a recent addition, four Studio Colors from High End. The room has a low ceiling at two levels, around 15 and 12 feet, which pretty much precludes moving mirror lamps. "The music in here is more about mood and breaks," said Kayll. "Mirror lamps would be more of an irritant than a subtle effect at such short range." Thus the tone is set by broad, fat beams and soft edges, but there are two strings of Par 36 ACLs dotted about, four Club Strobe Flowers, a couple of Megastar strobes and two Mole 8-Lites, so it's not just a one-dimensional environment. Nonetheless, it's the kind of lighting rig that gets you going - if you wanted to establish a workshop for teaching expression using nuance, subtlety and restraint with limited lighting, this would be it.

Fortunately, the lighting operators rotate on an hourly basis, otherwise I'm sure the strain would become intense. The room also has small screens which break the rectangular box into more intimate areas. The screens are used to project mainly abstract images from both 35mm slides (Kodak Carousels) and film loops from old Bell and Howell 16mm projectors. Independent of lighting control, these projectors are a feature to be found all over the club, filling the dark holes of its mainly black interior and, in many ways, giving some

coherence to what is otherwise a loose assembly of different venues.

The Courtyard is where live bands play. Once upon a time it was an open space (hence the name) with a marquee pitched over it, but these days the Courtyard sports a purpose-built roof that gives it the appearance of a former Nissen hut. The lighting to be found here is a wee bit more high tech: four Golden Scan 3s from Clay Paky nestle in amongst a very dispersed system of Par 64s and Megastar strobes, but the general ethic holds. It does, however, have a trussing system at one end and when the temporary stage is installed for live shows a much more (dare I say it) conventional rig can be put in. Control in this room is from an MA Light Commander.

The Annexe, where the original club was spawned, is now home to top DJ Paul Oakenfold's regular slot and shows a slight divergence of tone from the other rooms. Relatively small, no more than 20 by 35 feet, the ceiling space is filled with a menagerie of weird and wonderful 3D figures. All painted in the most vivid UV sensitive paints, the fantasy creatures are generally quirky morphs, like cats with wings (no horror figures here to set off a bad vibe) produced by a friend of Oakenfold's, Spencer Billes. A battery of five Black Guns and four 4ft UV strips make sure the figures can achieve maximum impact, but again these often don't get used until well into the night and even then are gently teased in.

The lighting here is also slightly more diverse, four Martin 518s (soon to be swapped out for Miniscan HPEs), four Strand Patt 243 2kW, four Megastars and the obligatory Par 64s, but only the odd single lamp dotted about. This is the only room where lighting operator and DJ get to work side by side, the Jands Event 24 and decks situated on a purpose-built concrete podium (vibration proof) overlooking the dance space. "A room like this goes through several stages of development throughout the night," explained Pete McDevitt, another Mr Phantasy operator who also just happens to run a performing arts lighting course at the local college. "Being this close to the audience is really helpful because they (the DJs) take real pride in what they're doing and so do we."

And that's probably about the best explanation of the club's success. It might have been voted 'Best Club in Europe' by Musik mag, but it also had the distinction of being voted 'Worst Bogs', and yet it still survives. (The distinguished bogs, meanwhile, have been totally revamped during a refurbishment in January). Pride and application in what they do seems to sustain the whole place. How many 3,000 capacity clubs do you know that only open on Fridays and Saturdays, get packed out both nights by coach loads of punters who come from all over the UK to be there and yet, antithetically, don't have 12 tons of high-tech flashing lights barking away all night?

This might be just the new formula that Michael Grade at First Leisure is looking for, because judging by the amount of space devoted to the various bars around the dance areas, you can be damn sure Cream has similar 'wet sales' to any other club in the UK on a Saturday night.



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*Cast in concert incorporating Chroma-Q. Courtesy of Paul Normandale, Lighting Designer, and Rob Hayward, Photographer.*

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# SEEING RED

## L+SI Special Report on the latest Lee Filters Colour

Lee Filters' name has become synonymous with the production of filters for the film, television, theatre and stills photographic markets. As many will know, David Holmes, who died recently, started the company in 1967; seven years later it had developed enough to produce its own range of filters and by 1974 occupied a small industrial unit on the outskirts of Andover.

By the early eighties things were going so well that an extra coating machine was needed to cope with the level of demand. The new machine meant that additional floor space was also needed and so Lee took the option on a second unit nearby and moved all their warehouse and conversion facilities across the road. The filter range began to grow and other products were added to it, not least the range of gobos, together with a custom gobo service, now offered by the company.

Lee Filters has not looked back since and under the present guidance of managing director Eddie Ruffell, sales director Ralph Young and sales manager Paul Topliss, the company has grown to become one of the world's leading manufacturers of lighting and camera filters for a wide range of applications.

Much money has been spent ensuring that the plant at Andover is one of the leading facilities dedicated to the development and manufacture of the range of products: the production lines are constantly updated, the product range expands every year (as do the swatch-books) and quality control is a rigorous part of the production process.

The result is that the Filters division has a team of just under 80, including full-time development staff, and there are a further 15 working at the Camera Bellows division in Birmingham.

The company celebrates its 30th anniversary this year and to mark this milestone in their history, decided to add a rather special colour filter to their already extensive portfolio. In search of an unusual angle, they approached PLASA and asked if they could name the new filter after the Association. Flattered by the compliment, PLASA naturally agreed and PLASA Red was born. The colour will receive its official launch at the PLASA Show in September and will no doubt rapidly find favour with those lighting designers seeking to create an atmospheric setting for their performances.

But that's not the end of the story. Lee being Lee and arch marketers, felt that the new filter deserved a fitting start in life and so invited a representative from the PLASA office down to their Andover facilities to lend a hand with the first run of PLASA Red.

L+SI editor Ruth Rossington was duly dispatched west at some ridiculously early hour to wreak her own particular brand of havoc . . . the rest is nearly history.



Many stringent colour checks take place before the filter makes it to the production line. The company has developed sophisticated quality control systems based on purpose-designed spectrophotometers which are run through a PC on an in-house programme and every filter is accurately checked against a scientifically generated set of parameters. However, the most incredible of all optical instruments is the human eye and so the first test is a visual one with the sample placed on a tungsten light box and checked through a tube (which reduces extraneous light) so that the technician can assess colour and density. Further tests are undertaken to ensure the lacquer adheres to the substrate (polyester or polycarbonate).



Once the R&D team are satisfied that the sample batch meets the specified criteria, the production part of the process kicks in on one of the company's two 12 metre coating machines. Colour is applied to the rolls of polymer material at the coating head where Meyer bars are used to control the consistency of the colour. The material then passes through a massive oven chamber, some 10 metres in length, which rapidly dries the lacquer. Rather than coating just one side, the polymer material is coated both sides to achieve colour density. Once the first length has been completed, a sample is then returned to the lab for further analysis and colour referencing, before the OK is given for the full production run.

Lee have made a major investment in research and development: they are constantly assessing developments in polymeric materials which are the basis of their lighting filters and also monitor the availability and performance of chemicals used in colourants. The process starts in the lab where the main mix of the new colour is undertaken - the company mixes its own dye to ensure reliability. Once the dye is mixed it is then sieved to remove impurities and a small sample is prepared for the R&D team to check for colour consistency and density. Once all the tests are complete and the colour is given the go-ahead, the production lacquer will be mixed for the first batch of coating to cover several hundred metres of polymer base material.



Once the comparison tests have been conducted (sadly, the Rossington Red was a little dark, scoring 3% bluer than the original mix) Lee's full time R&D team move on to another series of tests to ensure that the filter can fulfil its specific function. In this industry that means keeping its cool so one of the key checks is that of flame retardancy to satisfy British Standard regulations. The sample is placed in a fume cabinet and a measure of Ethanol is used to set fire to the sample. The flame-retardant components in the dye prevent the spread of the fire which puts itself out extremely quickly. Further samples of the gel are placed on a Parcan for a minimum of eight hours and then tested for loss of colour.







With the production run complete, the 1500 metre roll of PLASA Red is dispatched to the warehouse to be cut down into more manageable rolls ready for delivery to the customer.



In addition to rolls of filter, Lee also makes the colour filter available in sheets. L+SI shuffling skills are monitored by Lee Filter's sales director Ralph Young.



L+SI's Ruth Rossington, pictured with Paul Topliss and Ralph Young outside Lee's Andover premises. Ruth liked the product so much, she bought the company.

## Out-Takes!

And the bits you weren't supposed to see . . .

Left: Oops, the carefully balanced and scientifically devised secret recipe of powders and solvents are joined by other microscopic particles as part of the PLASA Red hits the deck. Some undignified dusting and scraping followed to set the experiment back on course. Right: More tragedy. A small teaspoonful of the dye, once mixed, should be delicately applied to a clean surface so that it can be rolled and dried into a sample sheet ready for testing. Unfortunately, three attempts later the cheap labour just can't quite get it right . . .



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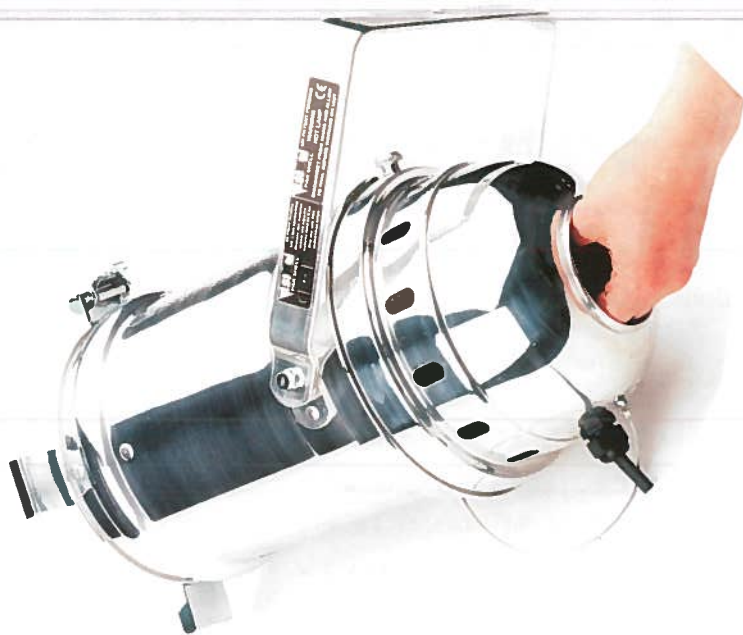
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# LIVE SOUND

*Ruth Rossington talks to Tony Rossell, managing director of Acoustic Sound Systems, to find out the history behind the company's new Reflekta range*

Like many successful companies, ASS is one of those discrete entities that doesn't present a high profile exterior and yet in the realms of sound technology is one of the biggest providers of speaker cabinets in the UK. Based in Southend, ASS has quietly built itself from a provider of bespoke backline cabinets at the dawning of the seventies, to become not only a widely known speaker cabinet maker, but also one of the true innovators in the manufacture of horns for high quality compression drivers. To fully appreciate how this came about, and to understand the fundamental skills and experiences that have put ASS in this position, it's necessary to return to the company's roots, a time when founder Tony Rossell was yet another aspiring rock star in the Essex firmament.

In 1973 this young tool maker (yes, not a cabinet maker, or even a jobbing carpenter) went to see Wishbone Ash at the Southend Kursaal and noticed an unusual horn flare in the old ElectroSound PA they were using: "I knew it had to be fibre glass of some sort," said Tony. "I could see right through it. In those days, as a musician, I was already used to lugging around bloody great horns, and they weighed a ton because they were made of metal. A fibre glass horn was a revelation to me, and it sounded just as good, if not better, than a metal one. Because of my love of the rock business I was already turning my hand to building backline cabinets and hand-made guitars. As a tool maker it didn't take me long to figure out how to produce a fibre-glass horn."

This last is one of the more revealing comments from Rossell - he has many - and gives a clue to a man who frequently ignores the fact that he's confronting a complete unknown and just works it out for himself. But good fortune also played its part, something that's happened a couple of times in the history of ASS, a fact which Rossell fully acknowledges. "At the time, making cabinets and guitars was just a hobby; I was a skilled amateur making professional quality products in my garage,



**ASS's Tony Rossell with the largest single-room system in Europe used at Adrenalin Village for a New Year's eve event.**

standing in the pit and using the floor as a bench. I was actually earning my living at Lesney Products - the Matchbox Toy people - and by coincidence a couple guys in the pattern shop with me had just joined from Lotus where they'd been working on ready-mix gel coats for body-work. Between us we quickly figured out how to make the right moulds for the horns."

That his initial crude attempts were eventually successful is borne out by the clients he quickly acquired: "At the time it was commonplace for someone like Robbie Williams (then supremo at Pink Floyd's fledgling PA and lighting company, Britannia Row) to pop down and see me at the weekend. He'd fill the boot of his Granada with horns and be off." Thus in late '73, momentum built to such a level that Tony Rossell took the big step and started ASS with partner Jim Murphy. As with many a fledgling enterprise, things were a

little erratic at first and within a year Murphy had decided that the life of an entrepreneur was not for him and left. "I panicked at first," said Rossell, recalling the moment. "I'd never done some of the things before. I quickly learned, not only on the product front, but the operational one too - the most important thing it taught me was that nobody is irreplaceable and I've done everything on my own ever since."

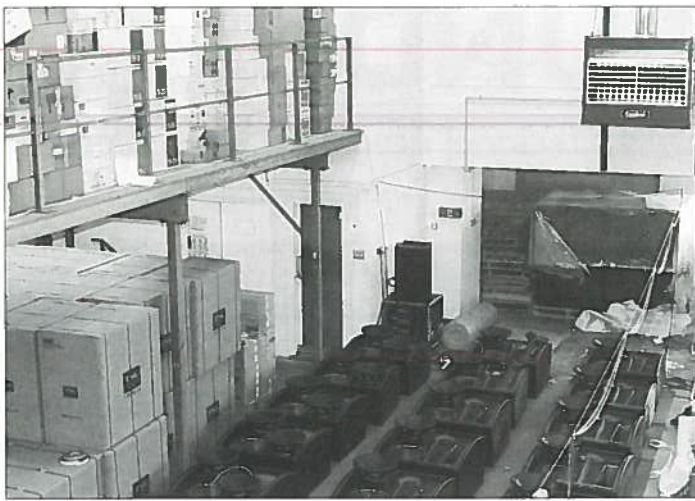
Advertising in *Melody Maker* and general word of mouth brought in enough regular work for him to move into more professional premises. By 1978 he had a 1500sq.ft workshop and was supplying parts and finished products to many of the emerging PA manufacturers that blossomed as the live music business began to really make its presence felt.

The fact that ASS was producing glass fibre horn flares was of particular significance. Rossell maintains that, at the time, he was the



**Above left, the complete Reflekta line-up and right, Tony Rossell with the latest batch which will shortly depart their Southend warehouse.**





Above left, an order in preparation for shipping to China and right, Tony Mahn, on of the ASS team working on cabinet assembly.

only person in England making them to professional specification. There was also an important secondary implication: "It didn't escape my attention that beneath the pile of horns in a regular PA stack there was an even greater number of boxes. I was, in effect, supplying just the top of the pyramid, so when a local company - Heathpoint - who made just about everybody's backline gear (except Marshall and Carlsboro), got into difficulties I went and had a look."

It was ASS's second pivotal moment. Rossell had literally just stepped off a plane from the US where he'd been visiting Acoustic, in Van Nuys, Los Angeles, when he received a call. Bob Wates, head of the ailing Heathpoint, had heard from the receivers that Rossell was interested and rang him. "We had a meeting that day, I had the money from the bank the following day (my manager found the pyramid argument compelling, I was selling 50 horns a week at the time) and on Friday 13th October 1978 we signed the papers and I took over."

This might not be quite as cavalier as it sounds, as Rossell was already building cabinets for Tasco and had made a complete PA system for Emerson, Lake and Palmer, so he already knew the basics of 'the empty box business' as he calls it. Several other businesses had done the same sums over Heathpoint and its potential, but lacking Rossell's confidence and, more importantly, his prior experience of PA cabinet construction, they'd held back hoping the price would drop.

What no-one can factor into such a purchase is the value of the intangible assets and Rossell certainly acquired one with Heathpoint that proved priceless on two counts. Bob Wates was a jig and pattern maker like Rossell who had been with Heathpoint from the very beginning and ran the workshop with great efficiency, something he continued to do until he retired in 1987. But his greatest talent lay in the knowledge he had acquired over the years, for Wates was a pioneer in the field of box construction, indeed he had built the original Vox system for the Beatles back in the early sixties.

With the added resources of Heathpoint, ASS quickly acquired a reputation for strong, well made speaker cabinets. As his reference bible Rossell used 'Loudspeakers' a book published in the fifties by GA Briggs of Wharfedale fame: "The only book on the subject I've ever needed

*"Between Briggs' 'Loudspeakers' guide and Bob Wates' inherent knowledge, I rapidly learned the formulas for making horn loaded enclosures and how to tune boxes for a better sound."*

- the principles outlined still hold good today. Between that guide and Bob Wates' inherent knowledge I rapidly learned the formulas for making horn loaded enclosures and especially how to tune boxes for a better sound."

In fact, this naturalistic viewpoint underlies Rossell's craftsman approach to PA development, as he went on to point out: "I produced my first self developed concert PA in 1980. As with the development of horn flares, I quickly discovered what worked and what didn't. Once I understood defraction, I could visualise it all, dispersion patterns, how it would perform - everything. I could look at a phase bung and pretty much predict its character. Fundamentally, it's a relationship between targeted wave-lengths, which part of the spectrum you want a particular component to cover and the length of the horn you build for it. The physical laws are sacrosanct and there's really no point in trying to make it more complex or appear more difficult than that. The only factor about the whole equation that really disappoints me is that if you want a truly big bass sound you really need a box the size of a truck for those low end frequencies."

This all might sound an over simplification, but, in truth, Rossell spends several months experimenting with cabinet design and component performance before launching each new product. And, in keeping with his own mores, he develops PAs for very specific purposes, including systems for the dance culture of the nineties - probably the most hostile environment in which to put a PA system through its paces. As an assault course for weeding out poor design, inefficiencies and general component flaws, there's nothing to beat it and it's a route Rossell has applied to developing his latest PA for the concert market.

The Reflekta is a system that has all the pedigree of long term construction techniques

behind it, a set of clear performance goals, and the added application of being designed to perform in the most severe of environments. "As an experimental engineer I already had a feel where to go with the Reflekta," said Tony. "Everybody wanted a small trapezoidal box system and certain solutions were obvious, making the horn flare the same width as the mid to avoid tunnelling, for example. But it's designing for coherent dispersion where problems occur. The Americans seem to me to rely too much on their computer models as a design route. If the computer says no, then it's back to the drawing board. I'm a firm believer in a more British approach - if the computer says no, but we believe the idea is good, let's ignore the machine and work our way through it rather than discard that particular option. The development of a trapezoidal box is about size limitations and inevitably that produces compromise somewhere, but I've produced a two by 15" folded horn bass cabinet that really works."

Hearing the system is everything. It offers remarkably uniform dispersion across the mids and high end, and with 60 degree horizontal spread, relatively few cabinets are able to achieve its warmth and power in the low end. Despite having a low, low 1x21" folded sub available, it's probably only the really big rooms that would warrant their inclusion.

Visiting engineers to the Astoria in London, where a system is installed, have already asked if the system is available for hire and the short answer is yes. More importantly, ASS has already built a stock 50kW system that it will hold as system support to other rental companies when the inevitable over-stretch comes around.

There's no single element of this system where ASS's experience has not been exploited to the full. With cabinet size, racks and cable trunks taken into consideration this is a low volume pack (truck wise) with high volume output. And, with extensive testing already complete, this is, like its dance system predecessors, a system with plenty of headroom that just will not fall down.

The surprising thing about ASS is that people think its systems are not already widely used in the concert touring market. But, of course they are, it's just that generally there's someone else's badge on the box. The Reflekta is set to change all that. Listen out!



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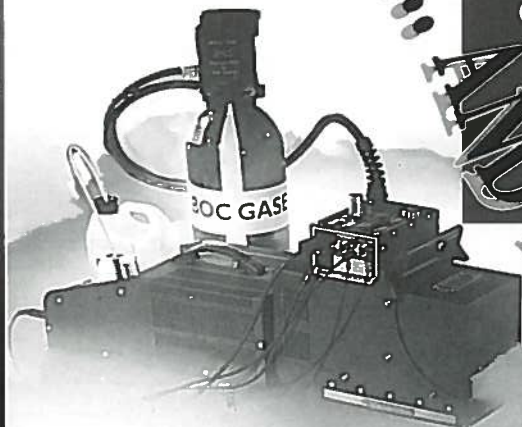
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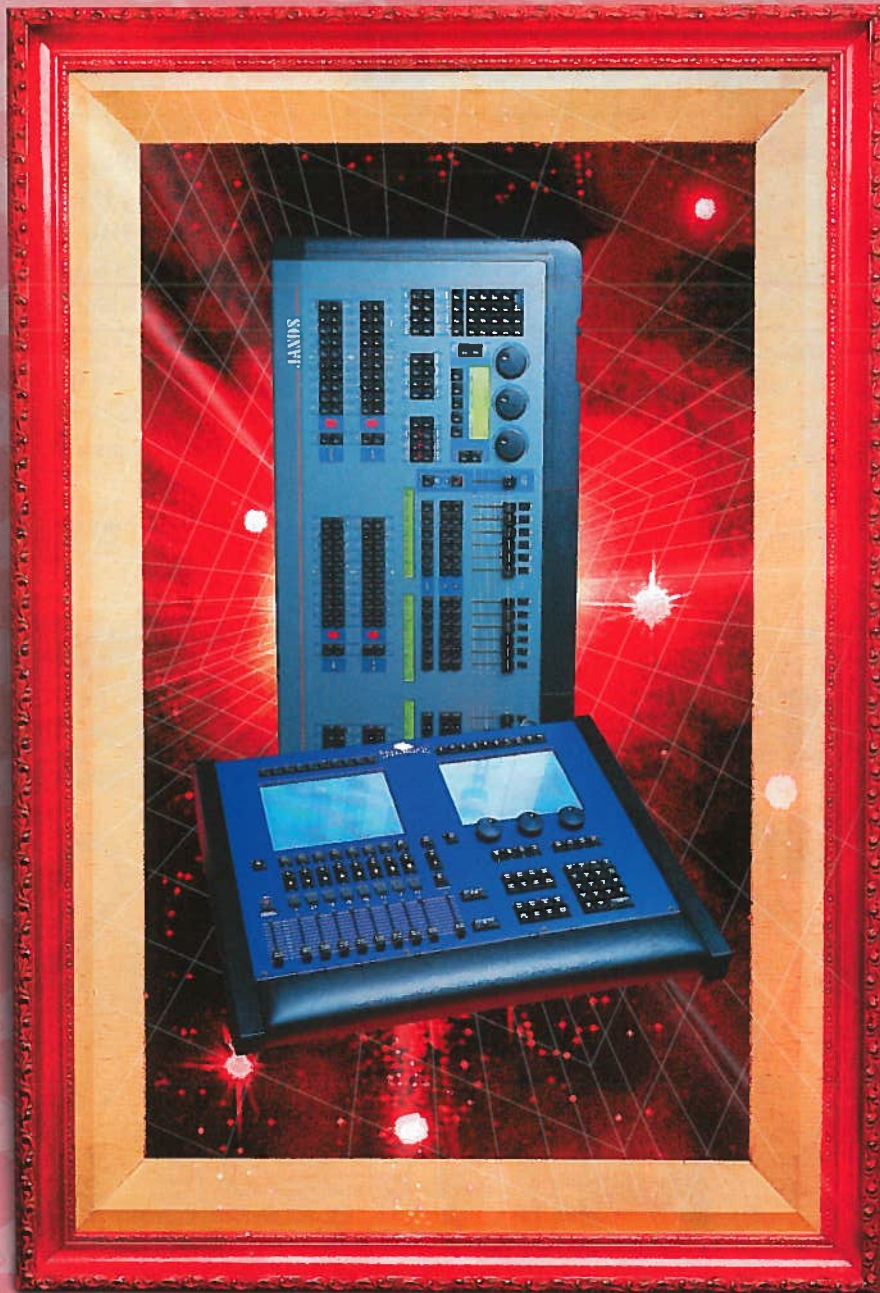
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# At Ease in the Stalls . . . Ian Herbert

Summer is here and with it the crowd-pleaser shows. There are several different crowds you can set out to please, but they have in common the relaxed atmosphere of undemanding folk who are expecting to have a good time, which makes the task of the performers and their technical support that much easier. At Hammersmith the crowd is the Cliff Richard appreciation society and the rather more recent Darren Day fan club, whose combined might amounts to a mass outbreak of Essex Girls and their Mums. They're there for *Summer Holiday*, down from Blackpool and vastly enjoying itself in outer London.

Labatt's Apollo isn't the easiest place for stage musicals - and I suspect the Royal Ballet will find it rather different from Covent Garden too. Its cinema origin means that it's a bit of a barn, with too wide a stage and some pretty unhelpful acoustics. Even *Riverdance* didn't really overcome its size problem, and the less said about *Heathcliff* there the better. So it's good to report that designer-director Ultz has come a lot nearer a solution than some other illustrious predecessors. His simplest and most useful stroke has been to narrow the stage with a false proscenium, surrounded by some impressive trussing for Nick Richings' lighting rig. The opening is still big enough for the London bus that is the show's scenic centre-piece, both in 3D and in cutaway section. (One carping critic thought it wobbled - I reckon it's a very accurate reproduction of one of the great AEC RTs of the time, and I'd be prepared to bet that the tyres and chassis at least are the real thing.) Other transport highlights are the arrival of an open-top Morris Minor and a passing Vespa, definitely real and very much in period for this adaptation of a 1962 'yoof' movie.

The original got a lot of its effect from outdoor location shots as the action moved from London to Athens via Paris and the Alps. Sensibly, Ultz hasn't tried to copy this with slides or film, instead emphasising the innocent, panto-like quality of the show with op-art cloths and plenty of use of the drop curtain to whisk the simple plot along. On it a miniature bus crawls along the show's route-map at appropriate moments. It's left to the costumes (help here from Jenny Tiramani) to do most of the visual work - this is the beginning of the Biba and Mary Quant sixties, after all, with tons of colour about in the street. When the frontcloth is up, there's a big flat stage to fill with a rather skimpy troupe of dancers, whose energy just about disguises the shortage of personnel.

The structural transition from film to stage achieved by Michael Gyngell and Mark Haddingham's adaptation is very professional and very successful. They've brought in other Cliff favourites to supplement the Myers/Cass filmscore (there are now over 20 numbers), and positioned Quinny Sacks' well-choreographed set-pieces for maximum



Summer Holiday at Labatt's Apollo.

effect - the first-half closer of 'Dancing Shoes' followed by 'We Say Yeah' is calculated to send you out with your feet tapping. (Insider's interval tip - avoid the crowded Apollo bars and nip round the corner to one of the local caffs - there's even a fantastic chippy).

Usually, then, the show is fine. Nick Richings has put in an expensive rock rig which is absolutely right for the show, with acrobatic Par cans raking the audience at the right moments and compensating for the less intentional spill of some of the side floods. The followspots, right at the back of the circle, have to throw quite a distance. Some very high-class gobos, more like projections, are able to create real stage-floor effects, which is a godsend on a stage that size. After a deliberately grey opening, with umbrella-toting London crowds, more and more colour is infused on to the stage, with some unashamed variety gels beamed from the front perches in act two amid the hard-working modern lanterns. And in the finale, the bus, true star of the show, gets its own neon outline - the equivalent of those chase-lit staircases that trundle out for so many musical closers.

Sound-wise, there's far too much to niggle about. In the front row of the circle (in Hammersmith I get respect) you'd expect to get your rightful earful, but for the first half hour the balance between band and vocalists was dire, with the latter inaudible a lot of the time. The absence of a pit in the Apollo means that the band has to hide off-stage, but that's no reason for its sound to be muffled. (The appearance from time to time of four rather portly band members on stage as the Shadows brought some good, if unintended, laughs - though I must say they made a good stab at the Shads' famous precision goose-stepping.)

And why are the singers afflicted with those dreadful, old-fashioned telephone-operator mics? Surely a show this size can afford the most modern versions? A larger and starrier cast in Chichester has the latest in-ye-wig mics for a short-run show with a much smaller box-office take.

The affluent elderlies of West Sussex are a rather different proposition as an audience to the mums and daughters of Essex, and although Duncan Weldon's Chichester choice of musical, Sandy Wilson's

*Divorce Me Darling*, is actually three years younger than *Summer Holiday*, it harks further back to a quieter period many of them can still remember (rather more accurately than 70-something Mr Wilson does) - the 1930s. Curiously, the style of the songs in the two shows is not dissimilar, since basically they're both undemanding vehicles for a drawerful of light music which, in spite of the difference in period, belongs firmly to the era of the two and a half minute 78rpm record - and neither exactly goes for the heights of sophistication.

Again, Chichester is something of a problem theatre for musicals. True, Peter James and others at Sheffield have shown that a thrust stage has potential for the form, and it was probably Chichester's own *Little Night Music* that gave the NT guys the idea that it could be done in the Olivier. All the same, you haven't got a proper band position (here they are hidden on a platform upstage, with the MD visible to the singers on two TVs in the auditorium's vomitories) and mass chorus entrances aren't easy with no wings.

And, of course, there's a serious problem about balancing even this show's light, unidirectional band sound with a range of solos and choruses which are going to be delivered singly and together in random directions around the stage's 180-degree audience arc. I don't think of John Leonard as a musicals man, but he did very well with both *Company* and *Passion* last year and here again his hallmark is restraint, to the pleasant extent that there are times when you don't think the performers are mic'd at all - except that you can hear them just as well when they have their backs turned. I don't know how well he achieved his balancing trick throughout the auditorium, but from the penultimate row, well to the side (Chichester don't give away their best seats to small-time critics), he won my vote. Jenny Cane's lighting, like Hugh Durrant's single set with its two hand-operated revolve staircases, was - appropriately enough - conventionally functional rather than a high-tech stand-out, though with rather too many snap-on, snap-off cues for my liking. But it showed the Durrant costumes, always an elegant pleasure, to their best advantage. I loved the makeshift followspot positions - two hammocks slung in the theatre roof, under the inspection walkway, in which the operators could recline like Roman emperors.

Which one to see? Although *Divorce Me Darling* features some of the best song and dance performers in the country, it's all so terribly, terribly bland, dahling - give me a rollicking *Summer Holiday* knees-up with the Essex brigade any day. And don't forget the chips.


Ian Herbert

Ian Herbert is the editor and publisher of the critical journal, *Theatre Record*.



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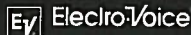

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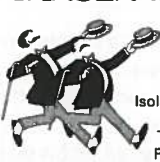
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## Robert Halliday talks to lighting designer Ken Billington

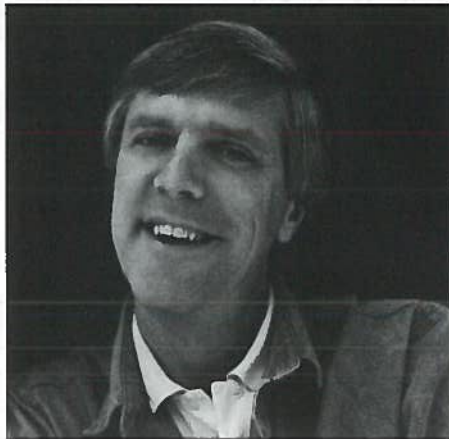
"It was thrilling. You really find out when you're sitting in the audience and they read your name. I loved hearing 'the nominees are . . .' and the cheers when they read my name. The Tony ceremony was at the Radio City Music Hall where I've designed the Christmas and Easter shows for 18 years, so that crew was really pulling for me - and as I walked off stage left they were all cheering. That part was fun."

That's how New York-based lighting designer Ken Billington describes winning the 1997 Tony Award for best lighting, his first win after five nominations and over 65 Broadway shows. That Billington should win the Broadway award - and win it for a production of a 'classic' Broadway musical, *Chicago*, is fitting, since he started lighting near New York and the city has nurtured his long, successful career. Indeed, the biggest surprise is that he hasn't won the award before, especially since he received his first nomination for his very first Broadway show way back in 1974.

By then, Billington had already worked on a lot of shows, always concentrating on lighting. "I'm actually doing exactly what I wanted to do in the fourth grade of school," he notes, recalling the fun he had running the lighting for the school play. "The only difference between then and now is that now they pay me. And my mother doesn't yell at me!"

As with so many others who find success in this business, Billington benefited from meeting the right people at the right time. "I didn't go to college, but I worked at a community theatre run by Broadway professionals - the guy directing was Phil Mathias, who had been Rodgers and Hammerstein's production stage manager on shows like *South Pacific*, and was married to Alice Hammerstein, Oscar's daughter. He didn't know how to work in community theatre, he only knew how to work on Broadway and in professional theatre. So here I was at 14 years of age being treated like a Broadway designer, sitting at a table in the middle of a high school auditorium lighting shows!"

Billington then worked in summer stock and, after leaving high school, took a lighting course taught by Thomas Skelton, Peggy Clark and Chuck Levy. Throughout this time he "used to go watch all the Broadway shows load in, hanging out to see how it was done." He finally wrote to legendary lighting designer Tharon Musser, who hired him as an assistant. "I was 20 years old, working for £65 a week. I assisted



her for a number of years and we did a lot of shows." He then branched out and "worked for everyone else in the business - I was like 'the good lighting assistant'," before deciding to strike out on his own. "I starved for a year or so because everyone was thinking of me as an assistant. Then I got my first show, a play called *The Visit* directed by Harold Prince. And I got a Tony Award nomination for it. And I honestly haven't been out of work one day since."

His work has spanned the whole field of entertainment - musicals, plays ("though when I do plays I usually do the big plays with 35 sets!"), spectaculars such as the Christmas and Easter shows at Radio City Music Hall, off-Broadway shows ("and when you're doing both at the same time, going from a 100ft proscenium down to a 12ft proscenium!), concert lighting ("Shirley Maclaine, Ann-Margret, Liberace - the celebrity, old-fashioned Vegas-type acts which don't exist any more") opera, television, industrial shows and architectural lighting. This last evolved out of theatre when the owners of a theatre restaurant asked for some help with the lighting; Billington then moved into nightclub design, "getting rid of UV lights and all those Saturday Night Fever specials and doing it theatrically with projections and colour and the place never being dark - people go to a club to be seen."

What Billington does insist on is never doubling up, employing separate assistants for any projects that overlap. As well as helping him, he is also giving them the benefit of the kind of apprenticeship he enjoyed, though he feels it is harder for assistants to start out on their own as designers now. "A low-end Broadway musical is now \$6 million dollars, the

high end can be up to \$14 million. If you're going to spend those numbers are you going to go with an unknown - who may be very talented, but isn't proven - or with someone where you know what you're going to get."

This, and some unfortunate scheduling, led to him doing three musicals back to back in nine weeks on Broadway this year, with him running between theatres working on two shows simultaneously at one point - something he describes as insanity, though it actually reflects his commitment to the quality of his work.

Billington has also become a proponent of new technology: he was the second designer to use a computerised lighting desk on Broadway, and was heavily involved with the ETC Obsession console. "We were doing *Annie Warbucks* in California, and this board - Obsession number 1 - turned up. We would plot, they would take notes and send them back to ETC who would program, then in our breaks we'd plug the Obsession into the phone and download new software from ETC. It was a fabulous week, and that's why things are how they now are on the board - because we were actually doing it, it was reality. And I haven't used anything else since."

Billington won't become directly involved with creating a product, though, preferring to suggest ideas that will make his work better or easier to manufacturers and letting them get on with turning them into products.

But though new technology can improve his work, he remains convinced that the lighting "can only add maybe 20% to a show. It can turn something good into a hit. But if what comes out of the rehearsal room isn't any good, we can't really do anything about that."

Modest words from someone who gives his all to every show he works on regardless, and still gets excited by "turning on my lights". And who, above all, enjoys his work because "it's fun!" - which is what showbusiness should be all about.

*A review of Chicago appears in the next issue.*

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ADVERTISER'S INDEX									
AC Lighting	38/54/58/62	City Theatrical	60	Lee Filters	4	Production Arts	23/25	The Effects Company	65
Adastra	6	Compulite	15	Leisuretec	IBC	Pulsar	7	Tomcat	48
Alistage	49/52	E\T\C	11	Light Opera	74	PW Enterprises	6	Trantec	13
Amptown	19	Flying Pig Systems	50	Lightpower	33	RB Lighting	60	Universal	27
Ancienne Belgique	16	Hand Held Audio	47	Lighting Technology	8	Recruitment	61	Vari-Lite	5/OBC
Bose	18	Harkness Hall	11	LSC UK	24	Robert Juliat	10/20	Wilkes	60
British Council	40	Henry Butcher	65	Martin Professional	3	Selecon UK	19	Wybron	27
CCT	12	High End	17	Navigator	44	Slick Systems	31		
CEEP	28	IEL	22	Pfaff	65	Soundcraft	9/21		
		Jands-Hog	66	PLASA Show	IFC	Strand	29		
		JBL	39	Playlight	31	Technotronics	15		



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