The Newsletter of the Association of Motion Picture Sound

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AMPS

THE CINEMA PROJECTOR OF THE FUTURE ?

Electronic Cinematography and Projection Special Features

Christie DigiPro

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Visit the AMPS website www.amps.net

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AMPS SUSTAINING MEMBERS

AKAI PROFESSIONAL
www.akaipro.com

AMS NEVE
www.ams-neve.com

ANVIL POST PRODUCTION
www.anvil-post.com

AUDIO DEVELOPMENTS
www.audio.co.uk

AUDIO Ltd
www.audioltd.com

DB POST
www.dbpost.com

DE LANE LEA SOUND CENTRE
www.delanelea.com

DOLBY
www.dolby.com

DSP Ltd
www.teddington.co.uk

DTS
www.dtsonline.com

FELTECH ELECTRONICS
www.feltech.co.uk

FUTURE POST
www.futurefilmgroup.com

GEARBOX
www.gearbox.com

NAGRA
www.nagra.com

PINEWOOD STUDIOS
www.pinewood-studios.co.uk

RG MEDIA
www.rgml.co.uk

RICHMOND FILM SERVICES

RPS DATA PRODUCTS (UK)
www.rpsdataproducts.co.uk

RYCOTE
www.rycote.com

SENNHEISER
www.sennheiser.co.uk

SHEPPERTON STUDIOS
www.shepperton studios.co.uk

SOLID STATE LOGIC
www.solid-state-logic.com

SONY BROADCAST & PROFESSIONAL UK
www.pro.sony-europe.com

SONY CINEMA PRODUCTS
www.sdds.com

TECHNICOLOR
www.technicolor.com

TELEFILM VIDEO SERVICES
www.telefilm.co.uk

TWICKENHAM FILM STUDIOS
www.twickenhamfilmstudios.com

NEW AMPS MEMBERS

JOINING AFTER SEPTEMBER 2000

Howard	BARGROFF	Rerecording Mixer	Associate
David	BRABANTS	Production Mixer	Full
Matthew	BRACE	Student	Student
Paul	CRIDLIN	Boom Operator	Full
Giancarlo	DELLAPINA	Production Mixer	Full
Gary	DESMOND	Production Mixer	Full
James	FAIR	Student	Student
Catherine	HODGSON	Sound Editor	Full
Matthew	HOLT	Student	Student
Richard	JAY	Boom Operator	Associate
Richard	LEWIS	Rerecording Mixer	Supplementary
Kamala	MANIAM	Sound Assistant	Supplementary
David	McMILLAN	Boom Operator	Associate
Sean	MILLAR	Production Mixer	Full
Brian	MILLIKEN	Production Mixer	Full
Darko	MOCILNIKAR	Sound Assistant	Supplementary
Simon	OKIN	Production Mixer	Full
Steven	PHILLIPS	Production Mixer	Full
Vaughan	ROBERTS	Production Mixer	Full
Keith	SHERRY	Systems Supplier	Full
Gary	STADDEN	Senior Technical Instructor	Affiliate
Alex	THOMPSON	Production Mixer	Full
Jon	THORNTON	Sound Assistant	Supplementary
Roger	WALKER	Sound Editor	Associate
Hilary	WYATT	Sound Editor	Full

RADIO MICROPHONE USAGE
PRODUCTION SOUND CREWS

Production mixers will recently have received a letter from AMPS' Radio Microphone sub-committee warning of the dangers of working in the vicinity of venues that present live stage shows. It explained that in such locations it is unwise to assume that the venue will only be using fixed site Channel 69 frequencies. Licences for the shared frequency blocks used by film and TV programme makers can also be granted to fixed site holders to supplement their needs.

So as the letter suggests, if you are aware of working in the area of an entertainment venue, listen in to your frequencies before you transmit. By contacting the venue you may be able to come to an amicable agreement to avoid clashing.

More important, is to have a proper licence for you equipment. If *someone with* a licence crashes in on *you without* a licence - no argument, you're breaking the law; you've had it.

Remember the penalties for being caught with your 'licence pants down' are severe.

FELLOWS & HONS
- A word from the Secretary

From time to time the Council considers making awards such as Honorary Members and Follows of the Association. If members would like to put forward any names for consideration, from AMPS or the Industry in general, please contact Brian Hickin and he will forward your suggestions to Council

PETER HODGES

A CLARIFICATION

A reader has pointed out that, while not wishing to belittle the late Ken Weston's achievements as both Boom Operator and Production Mixer, the text of Lionel Strutt's excellent tribute is is slightly ambiguous regarding Ken's position on *Bugsy Malone*, *Midnight Express*, *The Web*, and *The Commitments*. Ken was Boom Operator on these pictures while Clive Winter was the Production Mixer.

GEARBOX JOINS AMPS

AMPS would like to welcome Gearbox (Sound & Vision) Ltd as a new Sustaining Member. Gearbox are a sales and rental company with strong industry connections. We thank them for their support and will carry further details in our next issue.

AMPS NEWS

SOUND FOR HI DEF PRODUCTION
- AMPS organises Joint Working Party

The hot subject in the Industry at present is 24P and Hi Def. AMPS Council decided to approach the APPS and IBS to help organise a joint Technical Seminar on Hi Def Sound Production. The first joint meeting took place on Monday 3rd September, attended by:

Sandy MacRae AMPS, Lionel Strutt AMPS, Brian Simmons AMPS, Anthony Faust AMPS, Jim Betteridge AMPS, Dennis Weinreich APPS (and AMPS), Peter Hodges AMPS (and APPS), Andy Hewitt IBS, Dave Humphries AMPS (and APPS).

It quickly became evident that a Technical Seminar was not going to be possible in the short term because of the lack of technical information on, and experts in, sound for this medium. Instead, a joint working party was set up to investigate Hi Def Sound Production and Post Production, with a view to holding a seminar sometime in the future. We are currently talking to manufacturers of HD systems and editing equipment and much useful information is being produced. Hopefully, we will shortly be in a position to make recommendations on how to shoot and post 24P and Hi Def and eventually organise the Seminar. We also wish to influence future design of equipment.

What we need now is feedback and information from members with experience shooting and post-producing Hi Def, be it 23.98P, 24P or 25P! Please share it with us and we will collate and distribute the information. Emails to info@amps.net are the best way but feel free to use paper and pen to the AMPS office.

SANDY MACRAE

WHERE ARE THEY ?

Ken Osborne would like to regain contact with his old Boom Operator friend **David Pearson**, last heard of in South Africa. Would anyone who can help please email Ken on kenosborne99@hotmail.com or fax him on +66 38 710 732.

John Wolstenholme is still a paid up member of AMPS but he forgot to notify us of his change of address back in 1999. So far efforts to trace him have failed. Would any members knowing his present whereabouts please contact AMPS Membership Secretary, Patrick Heigham, c/o the AMPS Office, 28 Knox Street, London W1H 1FS. Tel: 0207 723 6727. Email: ampsoffice@tinyonline.co.uk

AES31 - The Return Of Universal Compatibility ?

"Standards groups can only do so much. It's up to the manufacturers to implement it." Cautionary words from Universal Studio's Jay Palmer, and part of his closing comments at the Audio Engineering Society's much anticipated launch event for the AES31 standard.

That was fourteen months ago, on the eve of the Los Angeles AES 2000 Convention. The audience had come to witness, in the words of SSL's Mark Yonge. "that not only can we standardise (audio) file interchange but we can show it working". Yonge was chairman of SC-06-01, more fully known as the AES Standards Committee Working Group on Audio File Transfer and Exchange, and this was the first public demonstration of over three years work on AES31.

The demonstration was straightforward but convincing. A spoken numerical sequence was recorded onto a Zaxcom Deva portable hard disk recorder. This was then transferred via a Jaz disk to a SADiE workstation where it was edited, before being replayed on a DAR OMR-8 digital editor/dubber, concluding with audio material and edit lists being freely interchanged between the SADiE and DAR systems.

It worked. There had never been any doubt about it - all the companies taking part in the demonstration had been championing the cause of audio file interchange for several years and were open to standardisation. It was however indicative of a will to make this work, a new standard which users could point to, and beat recalcitrant equipment manufacturers with.

The arrival of digital audio workstations began fifteen years ago, and with them came a host of proprietary formats that gradually replaced decades of near-universal standards in magnetic tape and sprocketed mag film. The accepted ability to move projects easily disappeared.

Manufacturers of early digital workstations recognised a need for interchange but with no practical removable media, and the need to divulge proprietary format details to competitors for it to work, little happened.

The arrival of non-linear picture editing in the early 90s brought this situation to a head. Suddenly there was a need to move projects to a far greater extent. Audio files and EDLs would arrive from multiple sources and the use of linear copies on tape as a transfer medium was no longer acceptable - shorter schedules didn't allow for up- and download of large amounts of audio material.

The Avid-developed Open Media Framework (OMF) was introduced as a standard for interchange but in audio terms it was never going to be a universal solution. With the audio often originating from the video editor, the sound people were on the end of a chain, frequently unsure of precisely what they had received and whether they would be able to open the OMFI data.

Many digital audio workstation and dubber manufacturers made agreements to share their format details so that simple audio file interchange was possible and this capability became a selling point. The speed with which the industry accepted Broadcast WAV files helped programme exchange but there were still wider problems. The cries for some form of universal standardisation were becoming unavoidable.

Among the many roles that the Audio Engineering Society has cultivated in its 50-odd years of existence, is that of developing technical standards. In 1997, responding to the industry's concerns, it reorganised the relevant standards groups to look more closely at software interchange in professional audio. The result was a four-part standards project, AES31, whose parts were inter-related but would be introduced independently.

The first part of the standard, AES31-3, was published in December 1999 and dealt with 'simple file exchange'. At it's heart is a 'super EDL' referred to as an Audio Decision List (ADL). This is a text-based file that can carry edit timing and timecode plus crossfade information to sample accuracy, and run on different computer platforms. It further supports multi channel files in excess of 99 channels, as well as interchange between PAL and NTSC formats. Being a text file it is 'human readable' and, as such, corrupted files can be repaired. DAR's Mike Parker, added that the ADL "contains a list of segment start and stop times, with track numbers and a reference to the WAV file from which the audio is taken, which track it is replayed on, and segment names".

The most recent addition is AES31-1, which defines a disk format to 'facilitate audio file transfer and exchange', and was published in May 2001. To quote the standard 'it doesn't describe a complete disk format' but gives enough information to select a proprietary system that will maintain compatibility. The Microsoft-developed FAT32 has been selected as the most practical disk file system. Andrew Bell of Fairlight ESP stated that "FAT32 is the way forward as it offers so many benefits, including compatibility with the majority of operating systems, resistance to corruption and availability of maintenance tools, easy adaptation to meet the needs of high transfer rates, support of long file names and very large capacity disks."

Other manufacturers have expressed approval of the use of FAT32 due to the relative simplicity of implementation on any platform, its workability on both PC and Mac-based systems, and equally important, it's robustness.

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These are the only parts of the standard that have been published so far but following the pragmatic approach adopted by those working groups, the likely form of the remaining parts is well known. AES31-2 suggests that audio data is to be held as multiple mono Broadcast WAV files (BWF) that are compatible with all PC and Mac WAV applications. BWF is an EBU-developed standard built on the existing WAV file format and is widely accepted.

The final section of the standard is AES31-4 : Object Oriented Project Interchange and current thinking appears to be considering some combination of OMF and the Advanced Authoring Format (AAF). However these are proprietary formats and part of what some parties see as competing interchange formats. For this and other reasons is likely that this final part of the AES31 standard may take some time to be ratified. The necessary scope of a sophisticated yet practical level of interchange is still under discussion. Attitudes vary about the needs to move the higher levels of signal processing and automation with a project when they may have no relevance to the new situation. To an outside it may appear that all these 'difficult' decisions have been left to last, enabling swifter agreement on the more important other parts of the standard.

With the bulk of the standard in place, a number of manufacturers have been swift to implement AES31, at least in part. SADiE and DAR have already done that, and around ten other major companies have announced 'AES31 support with the intention of implementation'. So far there seems to have been little response from the video workstation suppliers but that may be largely dependent upon the attitude of Avid who have so far been publicly quoted as not understanding the need for AES31 while there is OMFI.

So that is AES31. If it was fully implemented by every equipment manufacture we'd be close to the universal compatibility the audio industry once knew. It could also introduce facilities for new levels of information exchange - faster network transfers, direct compatibility with the Internet, and be usable for realtime recording and digital archiving. But perhaps more importantly it would save both precious time and money in post production.

For the manufacturers, AES31 will be relatively simple to implement. Users benefit from an open standard belonging neither to any one manufacturer nor any trade association. A major obstacle to efficient audio post production may be about to be removed.

KEITH SPENCER-ALLEN

Full specifications of published parts of AES31 may be found and downloaded via the AES website - www.aes.org.

SOUND EFFECTS LIBRARIES

Our older Sound Editor Members will remember that the first good independent stock library in the UK was Soundefex, based largely on tracks shot by our Hon. Member Peter Handford. This was followed by Magnetic Effects, founded by Member Peter Musgrave with the late John Hales: among its strengths were holding all the noises from Columbia Pictures' British productions and buying Pinewood's stock; then Cinesound was formed, and eventually bought out both the above companies. However, after a long, flourishing period at Borehamwood, it was gradually seriously affected by the coming of stereo, the purchase of good quality CD libraries by Sound Editors and the need for very fast acquisition, on TV programmes in particular.

It is therefore good news that the Tape Gallery Group has bought this important archive and is gradually making it available again, together with their own existing stock and other unique commercial libraries, over the Web. They can be found at

www.sound-effects-library.com The procedure is to click the 'Search now' button, type in a keyword, click 'Search' and a list will be offered. Highlight your fancies and you can audition immediately using Shockwave - a temporary hiss is added to prevent piracy, but of course is not on your final choices, which are placed into a 'shopping cart'. At checkout you can pay by subscription, credit card or mail order, and download in 16-bit 44.1kHz WAV or AIFF, or on hard media if using mail order.

Single effects cost from £1.40 to £6.50, but the smart idea for most users would be to subscribe £399 per annum for unlimited access. Frankly, it solves the problem library owners (like me) had under the old 'royalty' system of obtaining a true declaration of usage, then getting the payment! Tape Gallery's MD Lloyd Billings told me that they may also be interested in co-publishing other collections on a 50-50 basis.

CONTACT: Ms. Ruth Offer, The Sound Effects Library Ltd, 28 Lexington Street, London W1F 0LF. Tel: 020 7439 3325 E-mail: info@sound-effects-library.com

PETER MUSGRAVE

24P DIGITAL CINEMATOGRAPHY

At the last AGM, I promised from the platform, some future guidance to AMPS members about the Council's progress investigating this important topic. Here is an account of the latest developments.

The creation of 24P Digital Cinematography is aimed at replacing conventional film on feature movies. There is no doubt that the huge investments made in the research and development of 24P technology have been made with this factor very much in mind. However, as is often the case, the film industry's general attitude, having encountered much 'computer style wizardry' in the last few years, is a little cautious. This may not necessarily be a bad thing! After all, 35mm film has reigned for around a hundred years, still remains upon the throne and is unlikely to abdicate just yet!

Inevitably there are a few teething troubles with 24P. Questions are being raised about changes in floor procedure when using 24P on a feature shoot. Exaggerated sales claims aimed particularly at Producers, about potentially reduced crewing of feature productions shooting 24P, are being criticised. This line of sales patter from the manufacturers hasn't gone down well with technicians. In general both camera and sound crews will need to adjust to a new way of working with 24P on features

Indications point to an increase in technical personnel on set. With the laboratories no longer involved day to day, important responsibilities for quality control will have to be taken by somebody....not only image control but keeping track of picture and sound tapes and masters, taking precautions against inconsistent image and sound quality and loss of synchronisation, checking and confirming frame speed and time code adjustments. Let's face it...there's not much point in shouting "That's a print!" At this stage there will be no prints!....just a bunch of digits all jumbled up on frail tapes and all very vulnerable to 'cock ups'.....

Unfortunately, in 24P technology, sound in particular has suffered. Whilst the manufacturers concentrated carefully on getting the last pixel of definition on the image they failed to consult fully with Production Mixers. Presumably they misguidedly felt that on a so called 'cinema format', specifically designed for feature movies the sound department would be content to record sound on picture tape with all its inherent problems. For example... bringing back awkward cabling links between sound and camera....reduced flexibility of individual movement for both sound and camera crews....sound monitoring problems...sound transfer difficulties leading to inconsistency in delivering to post production houses etc. Although sound on picture tape is OK for some TV programmes and most ENG and Documentary shoots, for many reasons sep-sound is still the only satisfactory method for recording on features.

Luckily, there is still time to address these issues and AMPS is now making big strides in this direction. A recent and most important development for us is the Council's proposal to stage a High Def seminar and this is currently being set up under AMPS guidance with the co-operation of other technical Associations and the 24P Manufacturers.

A further interesting development for us is the formation of a 24P E-mail group linked between AMPS, APPS and IBS enabling us to discuss the latest technical issues more widely around the industry. Information is now coming in via this E-group helping AMPS to communicate directly with a wide range of international experts from various equipment manufacturers closely involved with 24P cinematography.

However, we are keen to hear from you, the AMPS membership...either by letter or E-mail. Please give AMPS your views or experiences in connection with 24P. If you have already been involved on a 24P shoot then let us know how it went, any information regarding the new technology would be very welcome. In the forthcoming issues of the Newsletter we plan to raise this topic regularly and encourage a forum amongst Council and Members. Digital Cinema is an important development in movie making and AMPS will make every effort to help set the highest possible standards.

To be fair to the manufacturers.....with 24P Digital Cinema they have cleverly developed a completely new concept that does have a great potential for the future. There are many excellent technical advantages to the process and it is now relatively easy and cost effective to copy the images back onto film for standard cinema projection and subsequent archiving.

These are a few quotes from Directors.....

George Lucas: *"I think I can safely say I'll never shoot another film on film"*

James Cameron: *"I am not saying that digital is going to replace film...but the new storytelling possibilities cannot be ignored"*

Mike Figgis: *"It's beyond imagination what digital tools are about to do to film making"*

Wim Wenders: *"24P has really created a realm of it's own, with a look and aesthetic of it's own"*

In conclusion, we now have several key manufacturers developing various versions of the 24P camera. In addition to the Sony CineAlta cameras, Panasonic have joined the competition, with an interesting alternative Digital HD Cinema Camera offering many new and enhanced features. Also the highly regarded film camera manufacturer Panavision has adapted the Sony Digital Cinema Camera with

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special high quality lenses and kits specifically designed to suit feature movie making.

Technically shooting and post producing with Digital 24P Cinematography presents a new challenge. Complicated by the similarity with television HD media formats and Digital Video, coupled with the standards conversion between PAL and NTSC it is all too easy to create confusion, particularly with the number of different frame rates in use. Obviously the designated name 24P was intended to identify this digital format to compare only with cinema film. However, in reality at the touch of a button it can change speed...this is nothing new providing everyone is absolutely clear when and why it is necessary.

AMPS can help to clarify some of these anomalies. We intend to address such matters with other Associations supported by the Manufacturers, by group discussion and with the help of these columns. We hope that AMPS membership will join in.

LIONEL STRUTT

What Is CineAlta ? What is 24P ?

CineAlta high definition is a growing family of products that will enable you to make a 2k production digitally and in realtime. The main CineAlta camera is the HDW-F900 HDCAM. For the first time, digital cameras are able to deliver picture quality comparable with 35mm film, offering extremely high image quality and a choice of frame rates at which to acquire those images. CineAlta also has the advantages of cost benefits, convenience and high speed working, as well as extremely high picture resolution and the ability to manipulate the image in a similar way to film.

The CineAlta recorded 2k x 1k image is made up of precisely 1920 pixels horizontally by 1080 pixels vertically - over four times as many pixels as in current standard definition images and more than twice that of American 720P DTV. This 1920 x 1080 pixels is known as the Common Image Format and is endorsed by the international standards body, the ITU, and many manufacturers,

The CineAlta camera can operate at a number of different frame rates, usually described by a number to tell you how many pictures per second, and a letter to tell you whether the pictures are interlaced (i), or progressive (P) scanned. For example, in 24P mode the camera will generate 24 progressively scanned images per second. Different frame rates are appropriate for particular applications. 24P is particularly useful as a worldwide interchange standard, as PAL and NTSC versions can be easily created for European and US/Japanese television standards, in a similar way to film.

A FEW HI DEFINITIONS

HDCAM - Half-inch format developed by Sony for recording high definition signals. Allows realtime recording of 2k x 1k progressive (P) or Interlaced (i) images at various frame rates.

1080/24P - The high definition signal with 1080 vertical active scanning lines and 1920 horizontal active pixels at 24 progressive frames per second.

1080/25P - As above but producing 25 frames per second

24P - Short for 1080/24P, the digital equivalent to 24 frames per second film.

Interlace / Progressive - Manner in which images are captures. Film is progressive, the entire picture frame content is captured at the same time. Video is interlaced, each frame consisting of two fields (odd and even lines) with different time content. The 24P camera captures pictures in the same manner as film, the progressive signal has the same motion artifacts as film due to temporal aliasing whereas interlace appears smoother motion portrayal due to the image being captured at twice the rate of progressive image.

The preceding information is taken from Sony's Digital Cinematography Production Guide. Copies of the booklet may be obtained free by phoning 01932 816380.

FILM FINALE ?

Star Wars' creator George Lucas committed himself and all his future film-making to digital cinematography at the NAB2001 Convention in Las Vegas.

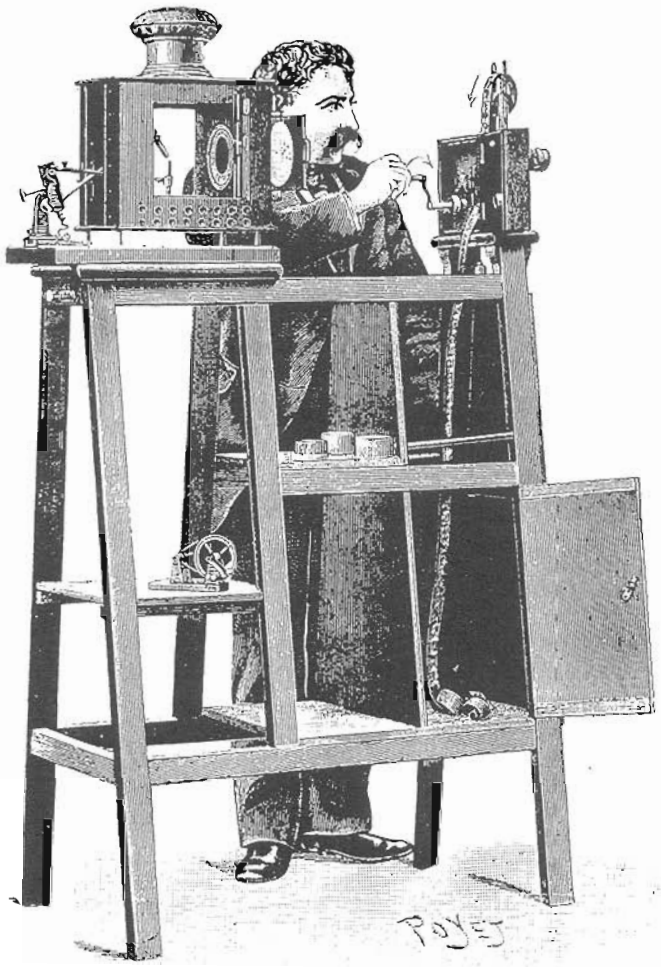
He was a 'surprise' visitor to the Sony press conference, where he talked of his experiences with the Sony CineAlta system while shooting *Star Wars: Episode II*. He talked of the way the film world was trying to catch up with the broadcast world when shooting HD 24P, and when asked if he would ever use film again, he said unequivocally: "I will never shoot another film on film."

"The Sony system has caused us no problems when filming in five countries in all kinds of temperatures."

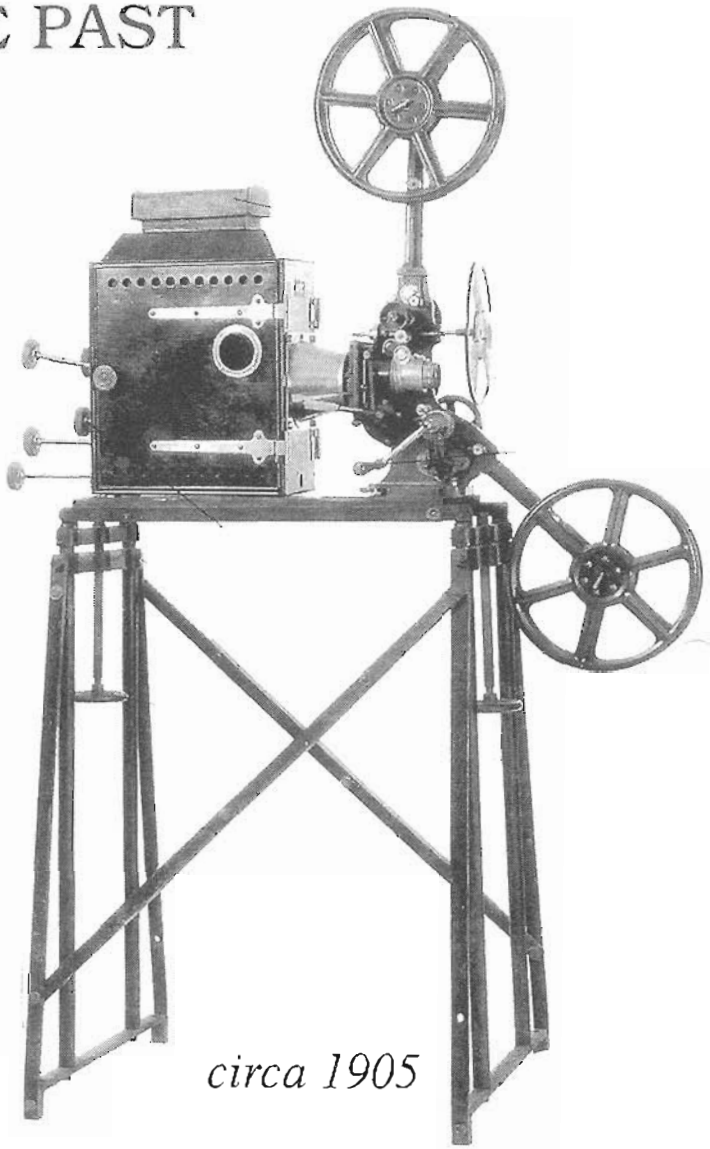
This will be seen as a great boost for the new Sony system, and Sony itself sees HDCAM as the future mainstay, not for films especially, but for episodic TV. Sony Electronics' Deputy President (US), Ed Grebow, predicted that, a year from now, nearly half of all US episodic TV will be shot on HDCAM.

From a Sony press release

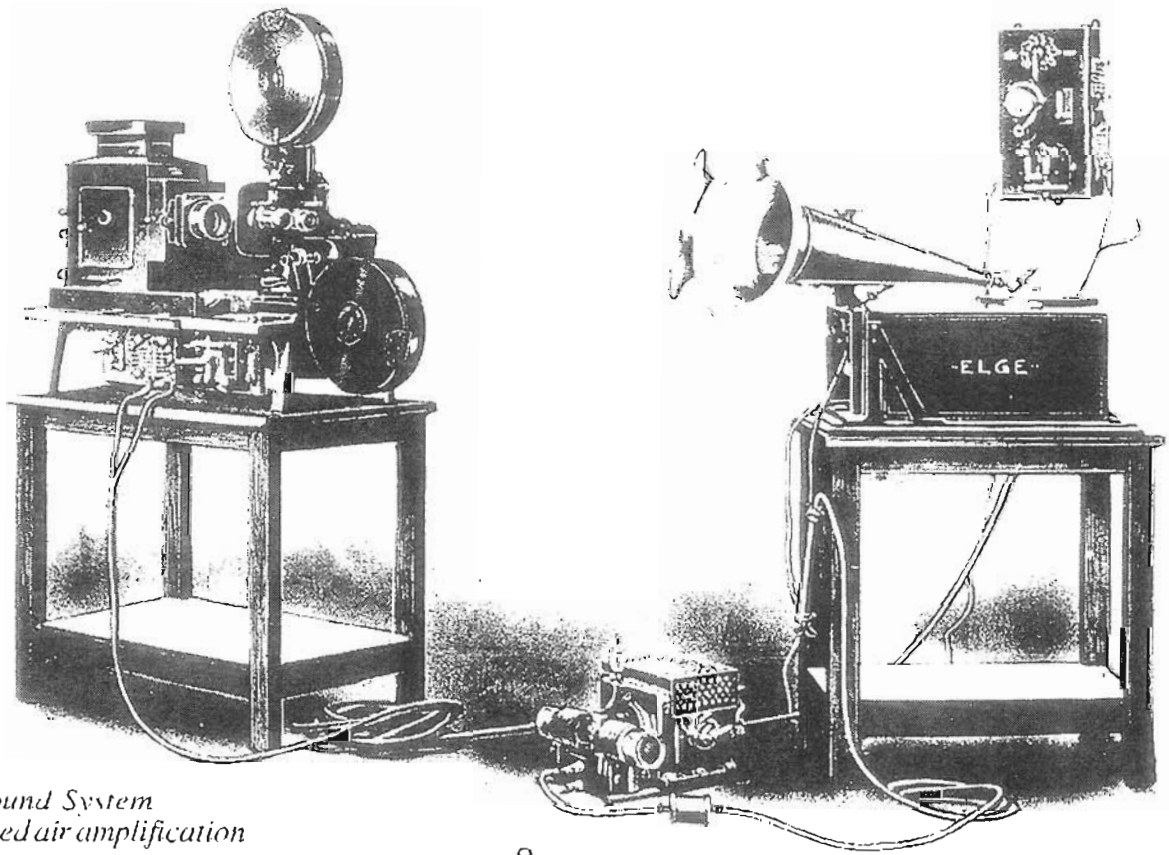
PROJECTORS OF THE PAST



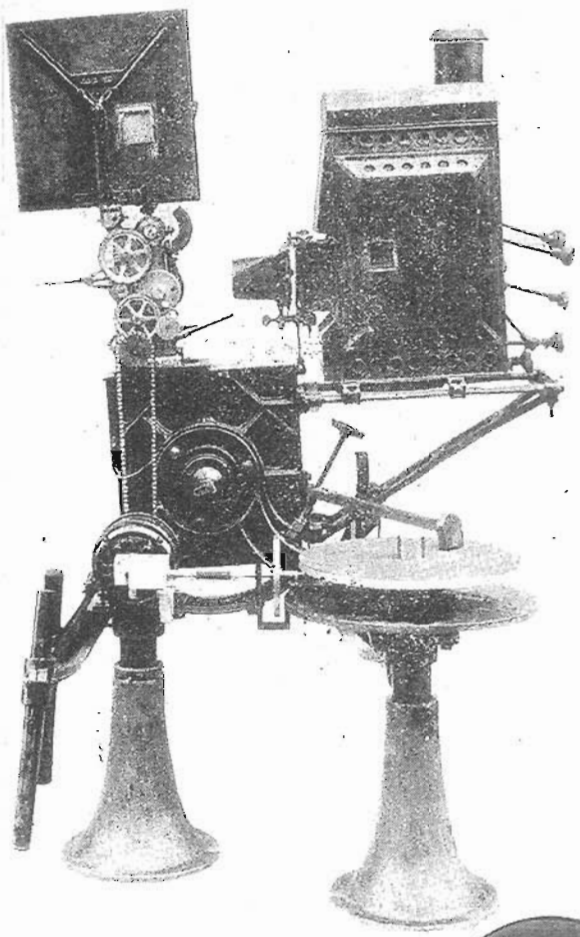
1895



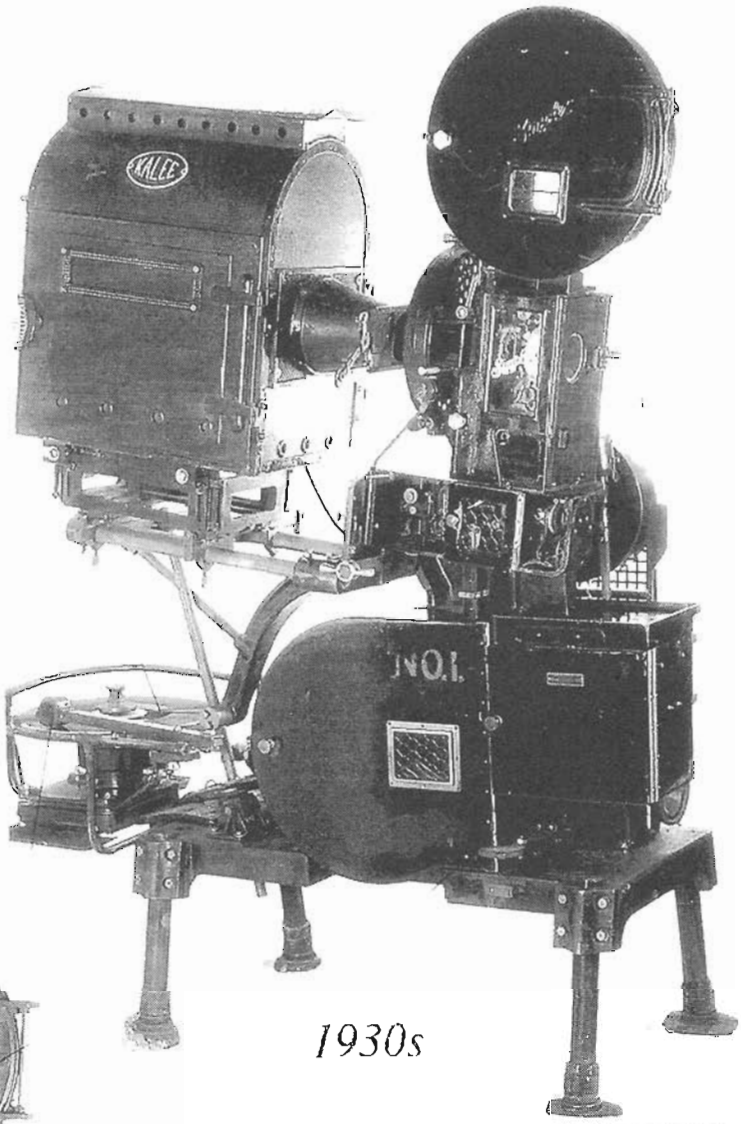
circa 1905



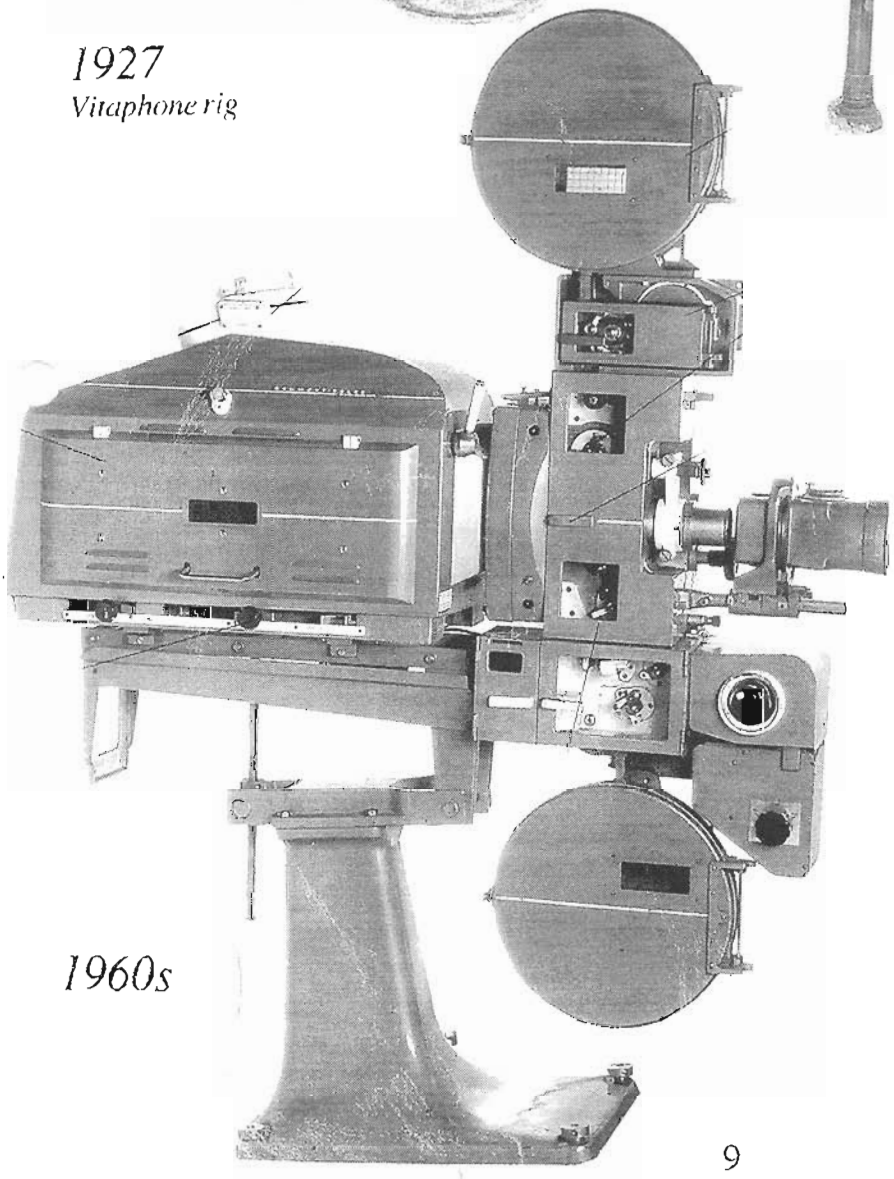
1910
Gaumont's Sound System
with compressed air amplification



1927
Vitaphone rig



1930s



1960s

THE DIGITAL PROJECTOR

At the heart of the Texas Instruments 'digital light processing' (DLP) projector is a rectangular array of 1.3m tiny aluminium mirrors, each of them 16 millionths of a metre wide. Behind the mirrors is a memory chip, each cell of which corresponds to one mirror. The operation of electrostatic forces between the mirror and its cell means that loading the electrical equivalent of a '1' in to the cell causes the mirror to tilt 10 degrees in one direction; a '0' causes it to tilt 10 degrees in the other.

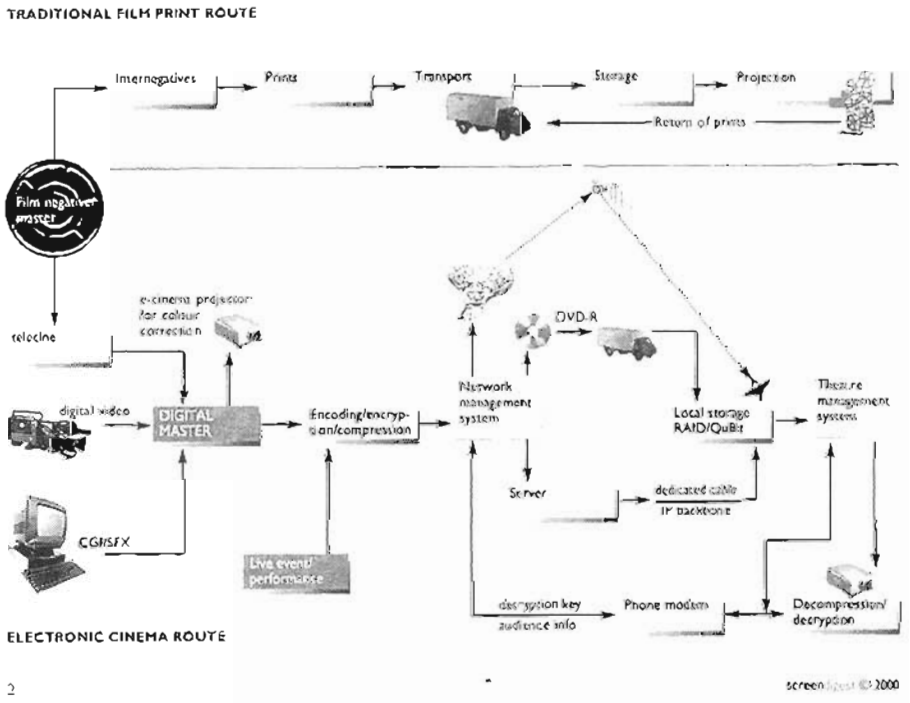
When combined with a suitable light source and projection optics, the array of mirrors can project an image. Each mirror acts as a beam-steering device, controlling whether a single picture element (pixel) in the image is light or dark. Shades of grey are created by tilting the mirror backwards and forwards thousands of times a second to vary the brightness of the pixel it is projecting. Colour is added by using three separate arrays, each fitted with a filter for one of the primaries - red, green and blue - that, in combination, produce a full-colour image.

SET TO TRANSFORM THE MOVIE BUSINESS....

ELECTRONIC CINEMA

The emergence of electronic cinema heralds a revolution in cinema technology - with major business, financial, advertising, creative and social implications. According to a new report by media analysts, *Screen Digest*, there is likely to be an estimated 10,000 digital screens worldwide by 2005 and a complete transition within 20 years. It also predicts that almost 100 per cent of the major Hollywood studios' films will be available in digital and conventional (35mm) format by end of 2004.

Electronic cinema is a means of projecting a moving image without the physical limitations of using a reel of film. The 'film' data file is stored digitally and sent via satellite, DVD or cable to cinemas that screen it using special cinema-quality high-definition electronic projectors.



Screen Digest, the international media business news and research journal, was recently appointed by the Department of Culture Media and Sports (UK) to carry out a major research project to examine the implications of digital technology for the film industry, underlining the company's expertise and recognition as an authority on the subject of digital film and cinema. Screen Digest also co-organised and chaired a one-day seminar on the subject at the International Broadcasting Convention 2000 in Amsterdam.

The findings of *Screen Digest's* report *Electronic cinema : the big screen goes digital*, include:

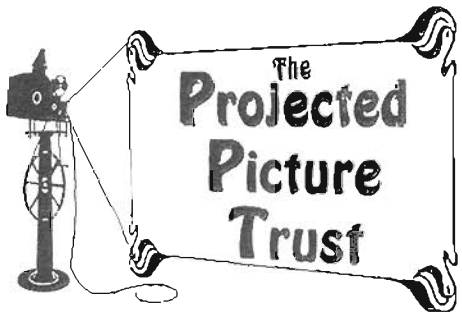
- savings of over 90% on the film print production and distribution process - an industry currently worth almost $5 billion annually - with the introduction of electronic cinema;
- intense competition between new rival projection technologies by Texas Instruments, JVC, Sony and laser projector manufacturers in the early e-cinema phase (2000-2003);
- the transformation of traditional, film-only cinemas into general entertainment centres, with new non-film revenue streams from live events, music, theatre and games content;
- the existence of over 400 e-cinema screens and a dozen commercial operators today, with live sports more prevalent than film on the big e-screens in the pioneering phase;
- the potential for rift between the US and European (and Asian) film industry, each of whom see different benefits to electronic cinema.

A major conclusion of the report is that current, traditional business models will need to be drastically rewritten in order to anticipate the increased opportunities and the extra costs associated with electronic cinema. *Screen Digest* points out that companies like Technicolor Digital Cinema and Kodak are already in pole-position to provide end-to-end digital solutions, with telephone companies and investment banks the likely partners in such ventures.

Patrick von Sychowski, author of the report into digital cinema, comments: "Electronic cinema is an entirely new medium and as yet the industry hasn't had the opportunity to grasp its full impact. Pioneering demonstrations such as *Toy Story 2* notwithstanding, the current deadlock over how to share the huge costs, savings and new revenue opportunities fairly has not been resolved yet. We do expect new players, 'third party middlemen', to emerge, working with distributors and exhibitors to provide finance and generate new revenue streams, primarily from advertising, big screen sports, games, concerts and corporate use."

For further info visit:

www.celluloid-silicon.com
www.screendigest.com



A Short History - and why you should join

More and more picture palaces were being boarded-up, turned into bingo halls, split into multi-screen complexes or razed to the ground for further redevelopment. More and more projection equipment was being thrown into skips or sold for scrap. It was those developments that led, in November 1979, to the foundation of The Projected Picture Trust.

The initiative began with Charles Beddow, then the British Film Institute's Technical Officer. He had become acutely aware of the situation while setting up the Institute's network of film centres. What he saw on his travels convinced him that unless something was done much of the Nation's rich cinema heritage would be lost forever.

Beddow's fears were shared by the handful of enthusiasts who responded to a circular letter and agreed to form a steering committee. They included the Curator of the National Film Archive; a specialist designer and consultant; a representative of a screen manufacturer; a member of a regional arts association, and the editor of an amateur movie maker's magazine. An inaugural meeting in March 1979 produced 37 subscribers from both inside and outside of the film industry. That number rose to 63 when the first membership meeting was held in the following November.

The new organisation's objectives were encapsulated in an 18-word statement: "To locate, renovate, preserve and exhibit the equipment and data, past and present, of still and moving images". This remains an accurate description of its current and planned activities. The Trust was registered as an educational charity (No 288,239) in the autumn of 1983. A small but regular income is derived from member's subscriptions, which began at a modest £5 in 1979, and in real terms, are an even better buy today at £15.

CO-OPERATION WITH OTHER BODIES

A voluntary organisation with big ideas but small resources cannot afford to go it alone. Over the years the Trust has undertaken joint ventures with organisations ranging from the National Film Archive to the Magic Lantern Society of Great Britain. Notable examples of this have included a PPT display at an open day at Pinewood Studios: a demonstration of four-channel sound at the National Film Theatre, London; an exhibition of vintage projectors at the Museum of London; the presentation of public film shows in the old Royal Air Force camp cinema at the Imperial War Museum, Duxford and the present National Cinema Technology exhibition at Bletchley Park Buckinghamshire.

1994 saw the inauguration of what is set to become the Trust's most prestigious permanent exhibition of cinema equipment. This is Bletchley Park, near Milton Keynes, where a multi-interest complex is being established on the historic site where vital code-breaking was done during World War II.

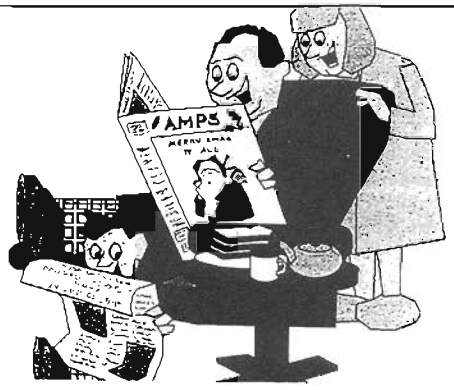
RESTORATION WORK

Much of the equipment tracked down by the Trust has been in need of restoration. This has been undertaken by teams of enthusiasts with appropriate knowledge and skills. The bulk of the restoration work has been done on 'work-days' regularly held at some of the Trust's regional centres. Other jobs have been tackled by individual members in the their own homes or workshops. Restoration is an ongoing process. There are always opportunities for both old and new members to play a part in it. They do not have to have engineering skills - the most valued contributions are enthusiasm and commitment! Teach-ins are held to give young members a grounding in the restoration of apparatus withdrawn from service before they were born.

PUBLICATIONS

At first a PPT newsletter reporting management meetings, notable acquisitions and other activities, and also containing specially written articles on various aspects of cinema history and technology was produced. The newsletter soon became a bi-monthly publication. It has now been 'upgraded' into a fully fledged magazine, published quarterly. It is supported from time to time by information sheets on specific items of equipment or film-making processes.

For further information contact the Projected Picture Trust Membership Secretary, Nick Fyffe on 01189 342273.



NEXT ISSUE
AMPS XMAS SPECIAL
Something for everyone

KEN WESTON

A personal tribute from Ivan Sharrock

In 1977, Ken and I first teamed up on a film called the *The Medusa Touch* for which I needed a Fisher boom operator, and Ken was excellent. This was a fairly low-budget movie but starred Richard Burton. Come the last day of shooting a four page courtroom scene, the producer came over to us to say that "if we have to get Richard back for any looping it's going to cost a million dollars" (in 1977 !). Ken just turned to him and said "So, ...we'll save you half a million if you give Ivan and I the other half to get the sound right.....".!

His unique brand of humorous cynicism was always present and made working with Ken an immensely enjoyable experience, especially during the arduous and often traumatic experience dealing with Stanley Kubrick on *The Shining*. Over the next ten years we worked together on such films as *Flash Gordon*, *An American Werewolf in London*, *The Dogs of War*, *The French Lieutenant's Woman* and *Greystoke* sharing the vagaries and discomforts that life on the road inevitably brings. In Belize on *Dogs of War*, Ken's bedroom was above a disco. One evening a fight broke out and someone fired gunshots into the ceiling! Many years later he covered for my other boom op over a Xmas break in Tunisia and a war broke out and a curfew imposed. He thought he was going on holiday !

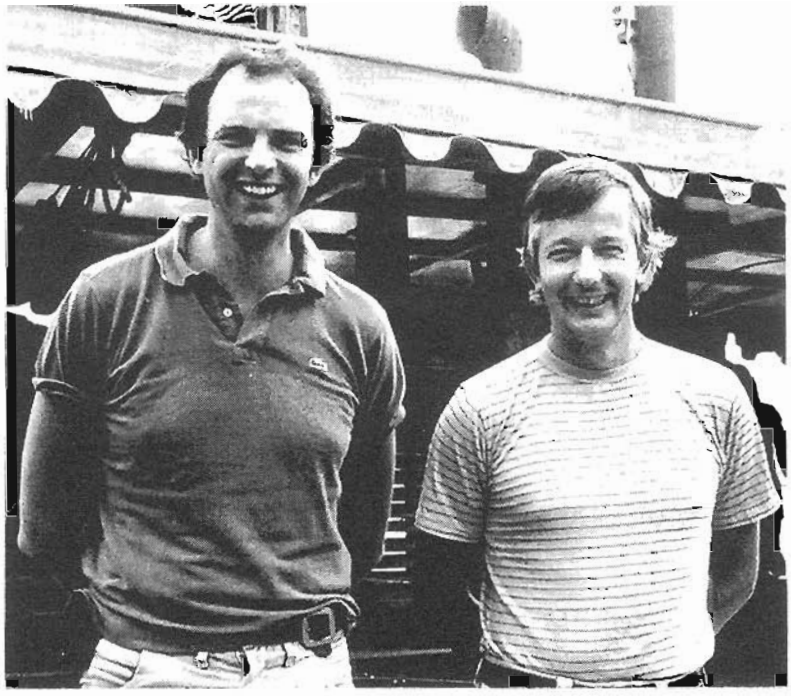
With only one day off after 4 months in Belize, much to our wives consternation, we had to be in Dorset ready to shoot *The French Lieutenant's Woman* (with lovely Karel Reisz). By then both families were good friends; the kids got on and the wives 'got together'! Ken's youngest, Lizzie, and my son Sky, being the same age were just young enough to be taken out of school for a stint on location with the 'Dads', so the wives found us a divine cottage to stay for the duration.

It was a blissful Summer, lovely film and great crack, plus the missus' were happy to be by the sea with the kids. Good days ! It happened that it was Ken's birthday, and the wives had cooked up a storm of a celebration dinner. Of course we were late but bonhomie prevailed and bottles opened, and cards and kids were all on tap. He had received a 'Dear Son' card from his Dad - you know, the kind with a car on front - none of us could believe our eyes, when we looked closely. Proudly standing outside some glorious mansion was my old AC Ace, long gone to pay a tax bill! ! Ken was sure I had cooked it up somehow. We laughed, sang, drank, and were merry, and I'm glad to say we spent many such like happy times together since then.

I think one reason we both enjoyed working together was that Ken shared my belief that we were film makers first and soundmen second, and the one thing we would not allow, was the production be able to say "Waiting for sound" !! As I opened my mouth to suggest something, Ken was already on the trot to do it! It was a rare and valuable working relationship. And did we have good moaning sessions!

As we were nearing the end of *Greystoke* - I had a call from the American mixer, Chris Newman who was looking for a good boom-man from the UK for *Amadeus* - I told him I had the best and he would have to wait - until I found out that Ken was being offered more than I was being paid ..... It was not long after that when he asked my advice about going mixing, I told him to go for it, but he'd have trouble in finding as good a boom operator as himself.

He went on to build up a fine reputation on the high profile movies that we all know and deservedly won his Oscar and his CAS award from his US peers, of which he was most proud. Quite often we would bump into each other- on neighbouring sets, as we did in Malta whilst I was shooting *U-571* and he was finishing *Gladiator* - 20th century gunfire was often bouncing from the tank into the BC set behind. By this time he was hoping he'd beaten his illness and was in good form. We dined together a lot and invited each other onto our respective sets,though I was more eager to see his than he mine. Off I went one hot Saturday armed with my pass, past the guards and into the huge Coliseum set. There was Ken, head down under a brolly in the middle of the arena in the blistering sunshine - the usual chaos twice over - with two tables of gear spilling all over the place. "Glad you've come - now we can turn over and I can go home!"



Ken Weston with Ivan Sharrock

He was due to join us in LA for the Oscar Bash but just couldn't make the journey in the end; and whilst both my wife and I were rooting for him to win, despite all the LA post team on *U-571* - who were anticipating a win. Peter Glossop deserves a huge pat on the back as he made Ken's Oscar night for him, arranging a party at his house with a hook up to the Satellite telecast and an invitation list of Ken's mates, with red carpet, champagne and all. We had primed the US *Gladiator* post-prod team to be ready to give Ken his due praise on fear of retribution untold, which I'm pleased to say they did with charm and grace, whilst we sat there and cheered for him amongst askance glances from my own film team!

I miss him greatly, and at risk of sounding like an 'old fart' I miss the good film times we had together - they were indeed a different era of movie making and Ken helped to make that good in his unique way - I miss his friendship and camaraderie - he left the set too early..... but he left an impressive list of memories on the way.

GEORGE STEPHENSON Hon AMPS

My father, George (Steve) Stephenson, passed away peacefully on the 5th June of this year. He was such a great film maker working on so many films over the years. I'm sure many of our colleagues who worked with him gained so much knowledge observing his talent. This is certainly true of myself. I remember as a teenager my father bringing home what I believe was the first Nagra in England. It was loaned to him by Yul Brynner, who he was working with at the time. He showed this machine to my brother and I, saying this will change the whole concept of location sound recording. How true this was.

Having left Pinewood in the late sixties, I had the pleasure of working with him as his third man. Not only was he a creative sound mixer but a master of communication with actors and directors alike. He took me to Spain to work on the film *Shalako* with director Eddie Dmytryk. He fell in love with the country and remained working there on many movies that were shot in the area at that time. I was fortunate to be with him on many and gained invaluable experience and knowledge for which I am eternally grateful. I am also proud of the fact that later in my career, we were able to work together as sound mixers on the same movie, gaining a shared credit.

George has many credits to his name, too numerous to mention, but his favourites were always with the all time greats, *African Queen*, Polanski's *Cul-de-sac* and *The Vampire Killers* and notably *The Guns of Navarone* for which he was nominated for the 'Oscar'.

George also leaves a wonderful wife Frances and cherished daughter Rebecca. We will all miss him dearly.

DAVID STEPHENSON

I first met George, or rather Steve as I always called him, soon after I joined the sound department at Pinewood in September 1945 having just left school, and in spite of our age difference, he befriended me. Steve, having been RAF aircrew during the war, had for his exploits early on in France, been awarded the DFM for assisting his wounded pilot to return their damaged aircraft back to safety.

After leaving Pinewood, he joined Shepperton as a mixer and it was not until 1952 when the industry was starting to recover from a deep recession that we teamed up again. Afterwards, although not working together, we remained firm friends. Steve was always very popular and sought after, working on several films for the Boulting Brothers as well as many other prestigious productions, including *The Guns of Navarone*. He then had a successful period working in Spain as well as on other worldwide location pictures until he was cruelly struck down by a dreadful stroke. During this time I visited him and hopefully made his day a little brighter.

For me, Steve was one of the nicest people that anybody could ever possibly wish to meet and I shall always remember him with great fondness.

DAVID BOWEN

ERIC PALMER Hon AMPS

Eric Palmer, for many years Projectionist at Audley Square Preview and ADR Theatre, died on August 4th.

Lionel Strutt has written an excellent tribute to Eric which includes an interesting insight into the Audley Square Theatre. Unfortunately due to lack of space, it will be held over until the next issue.

Dear Bob

Thank you for the latest edition of AMPS, just received. I find your items interest me more than, as a former cameraman, I would have expected! Reading AMPS has changed my sound perspective - certainly as far as my attitude to on-set techies is concerned, particularly those who created boom shadows which I then had to eliminate.

Now that cinema presentation is getting into state-of-the-art sound using DVD and other disc systems, is there yet another example of 'what goes around, comes around?' I mean, there are folk still walking around who have experience of using old-time disc cinema equipment... and I am one of them. Although the original disc sound reproduction system was discarded ten years before I started rewinding the reels at my local cinema, later on I did work in several old ABC circuit fleapits where the playing equipment was still in place. The famous Western Electric *Universal* Base was designed to be used to present sound-on-disc, sound-on-film, and even silent films.

Sound-on-disc had a short working life and was long gone when I first worked up in the box, but it did intrigue me to hear from older projies that, as a join in the film lost a minimum of two frames, and as one cannot extract 'frames' of sound from a disc, in order to keep the two in sync after a repair, it was necessary to add frames of black spacing to the film each time a join was made. It is therefore not difficult to understand why the disc system died a death so soon after its birth. Just think of it, if there was a jam in the projector mechanism and the repair of the film lost, say, ten frames, then ten black frames had to be inserted in the middle of the action no matter how dramatic or passionate the scene might be.

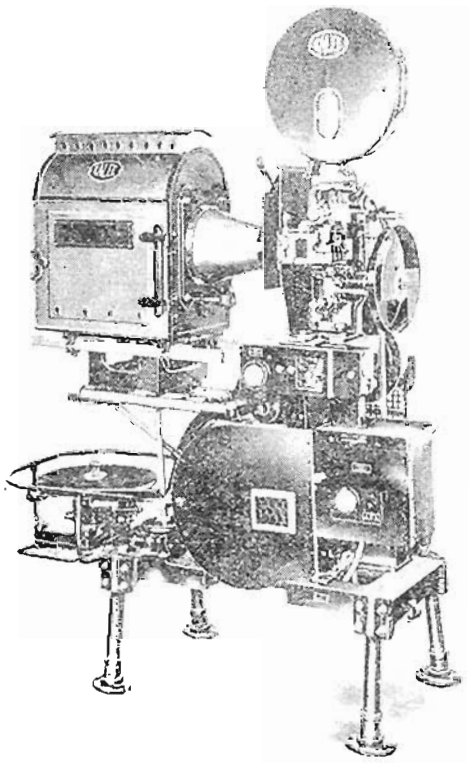
I can claim experience of a bizarre use of the old Western Electric equipment, a use both hilarious and, for me, agonising. It was at a dirty old ABC house in 1941, the Walsall Imperial, where two of these machines were in place (supporting Simplex heads - with uncovered shutter blades dangerously rotating in front, and Kalee low intensity arcs behind). To cope with the different speeds required for sound and silent movies the projectors had variable speed controls fitted. The chief at the Imperial, and his son (who was the second projectionist) lived a bus ride away from Walsall and, as their last bus departed before 10pm (wartime restrictions, I suppose), if there happened to be a programme with a feature and/or a second feature each a touch on the long side, there was a risk of them not being able to close down the the box in time to catch their bus. The problem was solved by racking up the speed of the projectors when the main feature was having its final showing of the evening.

Although a mere 15-year old at that time, I already had 'standards' which had been impressed upon my soul by my previous chief, a bit of a tyrant, but a tyrant who was meticulous in his demands for perfect projection. I was appalled by what the Walsall procedure did to the sound, but how could a timid young lad complain? Furthermore, nobody seemed to mind, least of all those sitting in double seats (known as 'courting' seats) at the back of the circle.

If I remember correctly, cutting ten minutes out of the running time of a two hour feature meant upping 24 to 26 or so frames per second. The visuals did not seem to be too badly affected but as your members will certainly know, the sound became somewhat excruciating.

Yours sincerely

Sir SYDNEY SAMUELSON CBE
London



Almost the projector Sir Sydney describes but it's a Kalee, not a Simplex head. However it has the W.E. base with a sound-on-disc attachment and the dreaded front shutter. Front shutters were also hard on film. The heat from the arc, falling directly on the film as it passed through the gate, often caused it to buckle. Rear shutters reduced the heat.

Ed

Dear Editor

During a brief visit to Worthing on the South coast I had the pleasure of coming across a wonderful little cinema. It is called The Dome and is situated opposite Worthing pier. I went with my wife and daughter to see *Shrek* and was a bit dubious that I would see a good presentation of the film, as the front of the building is mostly boarded up.

As we entered the interior it was like stepping back in time. There was a wonderful octagonal ticket box with an old-fashioned brass ticket machine. We were offered balcony or stalls but were advised to take the stalls as the balcony seats were along the sides as in old stage theatres not at the back and above the stalls. The lobby has a large panelled bar and an old cinema projector on show. I think I may have used one back at Movietonews! (I'm getting old)

We had come along to the 4.30pm showing and as the day was hot and sunny we were about the only people there. No sooner had we found our seats the curtains opened up and the film started. The projection was great and so was the sound reproduction. I was pleased as punch that I was sitting in what seemed to be my own private Edwardian viewing theatre!

Built in 1911 the cinema is a Grade II listed building and is a unique example of an Edwardian leisure complex. An extraordinary building spanning three floors topped by a wonderful dome.

Unfortunately the building has been neglected for over 30 years and is in need of some major repairs. The cost will be £2.5 million and The Heritage Lottery Fund has allocated 75% of the cost if half a million pounds can be raised elsewhere. A trust has been set up to try and raise this sum. The whole success of the project depends on raising that £500k before funds are released.

If any AMPS members would like to send a small donation to help, the address is listed below. There is also a web site for further information about the history of the theatre.

It could become a living museum, cinema, restaurant, meeting hall with a Dome tower bar which can't be bad.

The Dome Cinema
Marine Parade
Worthing
BN11 3PT

www.worthingdome.com

KEVIN BRAZIER
dB Post, London

2001 PRIMETIME EMMY NOMINATIONS

British sound names including many AMPS members are nominated in various sound categories for this year's US Academy of Television Arts & Sciences 53rd Annual Emmy Awards. The awards ceremony was due to be held on 16th September but cancelled following recent events. It was rescheduled for 7th October but again cancelled with no further date set at present.

The following were nominated productions and their categories, that included British names:

OUTSTANDING SOUND EDITING FOR A MINI SERIES, MOVIE OR A SPECIAL

CONSPIRACY (HBO Films)
Supervising Sound Editor: Christopher Ackland AMPS; Dialogue Editors: Alan Paley AMPS, Gillian Dodders; Foley Artists: Felicity Cottrell, Jason Swanscott

OUTSTANDING SINGLE CAMERA SOUND MIXING FOR A MINI SERIES OR MOVIE

CONSPIRACY (HBO Films)
Production Mixer: Peter Glossop AMPS; Rerecording Mixers: John Hayward AMPS, Richard Pryke, Kevin Tayler

HORATIO HORNBLOWER - MUTINY (A&E)
Production Mixer: Rudi Buckle AMPS; Rerecording Mixer: Colin Martin AMPS

BECTU BREAKTHROUGH

13 Week Rule Nullified

Due to the efforts of BECTU on behalf of 30,000 members, the British Government will have to change laws on workers holiday entitlements to comply with the European Union Working Time Directive, which sets out a minimum of four weeks annual leave across the EU.

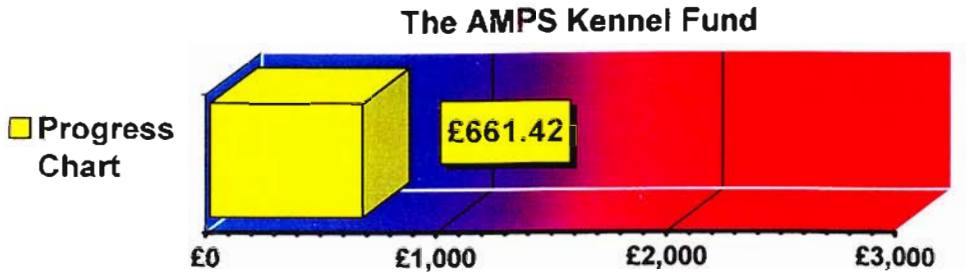
BECTU challenged the UK law that gave right to paid holidays only after 13 weeks continuous employment with the same employer. Freelance film and TV workers, whose short-term contracts rarely exceed 13 weeks, were thus under law, denied paid holidays.

Retained by BECTU, Thompsons the trade union law firm took the case to the High Court, arguing that the 13 week rule breached EU Community law. The High Court in turn sought a ruling from the Luxembourg judges.

The Luxembourg judges said that entitlement to paid leave is a social right conferred directly on all workers by Community law and ruled that the UK regulations were contrary to that.

The judgment will force the UK Government to change the laws on workers holiday entitlements and thus rescind the 13 week rule.

HEARING DOGS for DEAF PEOPLE



KENNEL FUND UPDATE

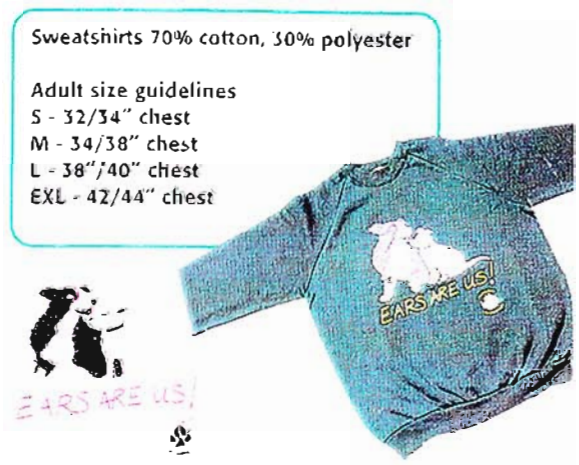
Our aim to raise £3000 over the next three years to sponsor a kennel at the new training headquarters has started well. As a result of the announcement in the last newsletter, we received an extremely generous cheque for £50 from Sir Sydney Samuelson. We have also opened the doggy boxes and carried out a first count including Sir Sydney's contribution, the Kennel fund now stands at £661.42

The Charity has supplied us with some individual collecting boxes, in the shape of cardboard kennels, designed to accept 20p pieces. Expect to receive one, in flatpack form with a future mailing, and do your best to fill it for us!

If you would like more information, look in at their very good website:

www.hearing-dogs.co.uk

PATRICK HEIGHAM



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