ISSUE #66

the JOURNAL

A Publication of the Association of Motion Picture Sound

NEWS
WHO'S AT WHAT
THE CANTAR STORY

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We thank all our Sustaining Members for their continuing support

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the JOURNAL

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The pages following this are the GBFTE publication FirstFrame.
Please turn to the back, rotate the publication and enjoy.

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A nightmare vison of a ransacked workshop.

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CALL FOR NOMINATIONS TO AMPS COUNCIL

Under AMPS' Constitution one third of the AMPS Council, six members, are required to stand down at the AGM having served for three consecutive years. Under these rules, the following Council members are due to stand down at the 2011 AGM.

Pat Heigham **Chris Munro**
Chris Roberts **Alan Sallabank**
Tim White

All are eligible for re-election.

The sixth Council Member would have been **Colin Chapman** who stood down during the year owing to pressure of work.

Co-opted members, Graham Hartstone and Jonathan Mitchell, are required to retire at this next AGM following their co-option, but may be co-opted again if Council sees fit.

All Full or Associate Members of AMPS, whether retired or not, may nominate suitable Full Members to serve on the Council to run the Association.

You may also nominate yourself!

Please send in your nominations to Brian Hickin in the AMPS office, either by e-mail:

admin@amps.net

or phone: 020 7723 6727

Brian Hickin will then contact the nominees to ascertain their willingness to stand for election to AMPS Council.

The AMPS Council election will begin in early January with ballot papers being mailed out to Full Members one month prior to the 2011 AGM and closing just before its start. Election results will be announced at the end of the AGM.

AMPS Annual General Meeting and the associated Sustaining Members Show will be held on Sunday, 13th February 2011, at the National Film & Television School, Beaconsfield. The AGM is scheduled to start at 11am with coffee and biscuits available from 10.30am, with the Sustaining Members Show commencing following the end of AGM business.

AMPS has always encouraged Full Members to use the suffix 'AMPS' after their name, when appropriate, to identify themselves as members of the Association and all that this signifies. Chairman Chris Roberts outlines several reasons why this is also of real benefit to the Association in his Chairman's column in this issue. Because of this it is worth mentioning the recommended style that this should appear in.

The AMPS suffix should appear in capital letters (not 'amps') with no full stops between the letters. The typeface used should match that used for the member's name but possibly set one or two point sizes smaller as appropriate. Following this style will increase the recognisability of the AMPS suffix which is beneficial to all.

AMPS APPEALS : We need help in representing AMPS members' interests as a new technology is rolled out that may compete with use of our allocated RF spectrum.

Ofcom have published a Consultation Document on their proposals for White Space Devices (WSD), originally called Cognitive Devices, a new generation of mobile personal computing/communication devices. For more information go to

http://stakeholders.ofcom.org.uk/consultations/geolocation/

Briefly, what is being proposed is that these WSD, mainly intended for wide area computer data access, will operate unlicensed in the so-called White Spaces in the UHF Band, interleaving with Television and other licensed services. PMSE uses exactly those frequencies. Ofcom suggest that this may be achieved by these devices sending their GPS co-ordinates to a master database, organised by Ofcom, containing all licensed station information for the location and this database would issue 'safe' operating frequencies and power instructions to the WSD. It all sounds reasonably simple but the devil is in the detail! Ofcom have not ruled out the Cognitive part where the WSD will listen before transmitting and make a decision that a particular frequency is free if the WSD cannot access the master database. This would almost certainly miss low-powered users like PMSE and they could be swamped by these much higher powered transmissions. Because WSD are intended to be used worldwide, it is important that we have an International agreement. Without that, not even Channel 38 will be safe!

These proposals will affect us and it is essential that we have a say. AMPS needs a volunteer to take on the task of liaising through BEIRG and with Ofcom on this subject. It will be a fairly long term process and it requires a modicum of technical understanding. But it is your future that might be affected so please, don't just leave it to someone else.

Please contact Sandy MacRae AMPS (sandymacrae@amps.net) if you can help.

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the JOURNAL

The AMPS Journal ('The Journal') is published quarterly by the Association of Motion Picture Sound

It is distributed to all members and associated organisations. The Journal is a forum for discussion and it should not be assumed that all opinions expressed are necessarily those of AMPS
A version of the Journal is also available via the AMPS website (www.amps.net).

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Edited by **Keith Spencer-Allen** AMPS

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MEMBERSHIP ENQUIRIES

Should be addressed to the Membership Secretary at the AMPS office address as above or direct to:

membership@amps.net

...from AMPS' Chairman

Although being a somewhat more 'low key' affair, this year's UK Screen Sound Awards was another great opportunity to see so many friends and colleagues from the industry come together. On behalf of AMPS, I would like to take this opportunity to congratulate all the nominees and winners.

The Conch awards may not be as widely known as the BAFTAs, the Oscars or the Emmys, but it is important that our industry is able to recognise and celebrate its own talent. It is an essential part of promoting excellence in the craft skills to other bodies in this country, and to the wider world. If the craft departments, and particularly the sound department, don't do anything to recognise and reward their own, how can anyone else be expected to?

The wider issue is not just about promoting UK talent - AMPS has members based overseas - but more about promoting local talent, about convincing producers that it is possible to find skilled, reliable, flexible 'locally sourced' crew, wherever they may be working, nationally or regionally. This is where AMPS has a really important role to play.

The Association's stated Constitutional Aims and Objectives are *to promote the science, technology and creative application of all aspects of sound and image recording, reproduction and associated processes for motion pictures, television and allied media, and to enhance the status and recognition of the contribution of those therein engaged.*

It is hoped that reaching out to and working with other organisations is enhancing the status of both the Association and its individual members. AMPS remains in contact with Skillset about training and funding issues, and has recently opened a dialogue with the JAMES (Joint Audio Media Education Services) organisation. Membership of BEIRG continues to ensure that AMPS is involved in discussions relating to the changes in use of the radio microphone spectrum at the very highest levels. Through the Association's involvement with UK Screen, AMPS members were amongst those making presentations as part of the recent *Efficiencies in Audio* event, which was aimed at producers in all sectors of film and television production.

As individuals, perhaps the simplest thing that Full Members can do to promote AMPS and its objectives is to use the letters A-M-P-S after our names. I know from personal experience that it is nigh on impossible, certainly in the world of television, to get the AMPS suffix on a credit roller - these days we're often made to feel lucky if we get a credit at all, certainly one that is visible! However, if the suffix can't be used on your credit, use it on business cards, e-mail signatures, websites and letterheads. Feel free to publish the AMPS website address, or link to it from your own sites. If our clients and contacts see that the people they trust and are happy to work with are part of an organisation they are proud to be associated with, the promotion of the Association's aims and members can only benefit.

Chris Roberts
chrisroberts@amps.net

from the membership secretary

membership@amps.net

Although the increase in subscriptions for 2010 led to a small drop in membership numbers, there were new members joining which has kept the overall figures roughly the same. Some members, in spite of repeated advice both by e-mail and regular post, did not adjust their standing orders for 2010, thus we received only the old rate. Council decided that a pro-rata element of membership would be appropriate, therefore those involved were informed that their membership was suspended as from the end of August. Come next year, if the bank instruction is still not amended, then another shortened period of membership could be allowed.

On-Line CVs

Thanks are due to member Jodie Campbell, who instigated the idea of using Dropbox* to automatically update one's CV on the AMPS Website, without having to contact the AMPS secretaries or the Webmaster - this is a facility easily put into practice. Sandy MacRae and I were already using Dropbox to swap files between us *(as does the AMPS Journal. Ed)*.

▶ All that is needed is a Dropbox account, which is free. If you want to try it, contact sandymacrae@amps.net and he will send you an 'official' invitation. If you accept this, AMPS gains a further free chunk of Dropbox storage!

▶ Follow the instructions in the invitation and run the Dropbox software. This will create a Folder or Directory called 'My Dropbox' on your computer. It also executes a small background program that constantly monitors changes to your Dropbox. It is worth reading the short Instructions installed by the software.

▶ Make a PDF of your CV and drop it (copy it) into the PUBLIC folder of 'My Dropbox' on your computer.

▶ Give it a few minutes to upload (automatically) to the Dropbox server. You must be online for this to happen and a Broadband Internet connection is recommended.

▶ Go to your PUBLIC Folder on the Dropbox Website (NOT the one on your computer!), right click on the CV file, select 'Copy Public Link' and a box will appear with a link to that file in Dropbox.

▶ But don't stop there! Just above and to the right of the text box containing the link (which can be rather long) there is a command to 'Shorten Link'. This produces something like http://db.tt/XxXxXx where the X's are a series of letters and numbers.

▶ Copy this link to the clipboard and paste it into an e-mail to webmaster@amps.net and/or membership@amps.net

▶ Once the link has been included in the AMPS website, you can change your CV as much as you like, with no need for further e-mails. You can just make tweaks here and there, the updates are nearly instant. And it all works as long as you keep saving any changes to your CV in the same folder with exactly the same file name, as the link to the file does not change. If you do need to change the file name, generate a new link as above and send it to AMPS.

▶ It is worth clarifying that, although the Folder is called 'PUBLIC', it isn't really. Only someone with access to the specific link to your file can read it and only from the Dropbox website, not your computer. All other files are 'invisible' and security is very good.

Two points to watch, however:

▶ Render your CV as a PDF file - this then is readable across most computer platforms.

▶ There are two ways of generating a link from your CV file in the PUBLIC Folder, one from your local Dropbox PUBLIC Folder and the other from the same folder in your account on the Dropbox Website. Use the latter since only this method generates the shorter form of the link. This shorter form is better for my Membership Secretary's database and it would be appreciated.

Patrick Heigham AMPS Membership Secretary

Dropbox (www.dropbox.com) is a website that enables 'signed-up' computers to keep the content of identified files in sync, on-line and across computers. After opening a free account, Dropbox places a dedicated Dropbox folder on your computer and allocates a chunk of on-line storage to your account. Using the contents of this folder you can have automatic on-line back-up of your computer files, or more relevant to matters here, the ability to keep files (e.g. your CV) on different computers in sync, tracking changes made. Dropbox runs on Windows, Mac, Linux, and some mobile platforms, and is very easy to use. Ed

AMPS welcomes the following **New Members** :

NAME			CATEGORY	PROFESSION	JOINING DATE
Mr	Jules	**WOODS**	Associate	Sound Engineer	Jun-10
Mr	John	**YORK** AMPS	Full	Re-Recording Mixer	Jun-10
Miss	Sarah	**COLLIS**	Student		Jul-10
Mr	Luis Fernández	**GARCÍA**	Student		Jul-10
Mr	David	**GILES**	Student		Jul-10
Mr	Jonathan	**OSBORNE** AMPS	Full	Production Mixer / Fisher Boom Operator	Jul-10
Mr	Peter	**SHAW**	Supplementary	Sound Editor	Jul-10
Mr	Matthew	**DAVIES**	Supplementary	Sound Editor	Aug-10
Mr	Maurício	**d'OREY**	Student		Aug-10
Ms	Sandra	**PORTMAN** AMPS	Full	Sound Editor / Sound Designer	Aug-10
Mr	David	**RATCLIFFE** AMPS	Full	Production Mixer	Aug-10
Mr	Henry	**DYER**	Student		Oct-10
Mr	Lee	**SHARP**	Supplementary		Oct-10
Mr	Mark	**KENNA** AMPS	Full	Re-Recording Mixer / Dolby Consultant	Oct-10
Mr	Alex	**HUDD** AMPS	Full	Sound Designer / Sound Editor	Nov-10
Mr	Xoan Marquez	**LANEDA**	Student		Nov-10
Mr	Daniel	**HAWKEN**	Student		Nov-10

ODDMENTS ...

US artist, Christopher Conte has made a reputation creating working 'robotic' art pieces many of which carry a 'bio-mechanical' description. He recently completed a commission for a mic stand based on a bio-mechanical arm design of his, that gave the right 'gothic' overtone the rock singer commissioner wished for.

While the robotic movement of this stand may be limited it did give us some thought about a future boom design.

For a fuller idea of Conte's arte see www.microbotic.org

Who's At What ....

- a listing of members' activities, based entirely on information provided by yourselves.

The productions listed are in no particular order. **AMPS members** *are in coloured bold type.*

If you would like to let everyone know what you're doing, send a short e-mail with the relevant details to :

whois@amps.net

and you'll be in the next issue.

We'd also be pleased to hear any additional technical information such as what key equipment, recording format etc, you were using.

Many thanks to those who've sent pictures - more are encouraged.

Looking forward to hearing from you.

Dave Humphries AMPS

NB: For anyone without ready access to e-mail, send details by post or fax to the usual AMPS office address.

.... Sound Editor **Simon Price** AMPS writes "I am currently Supervising ADR Editor on ***Anonymous***, a terrific film directed by Roland Emmerich, and starring Rhys Ifans, Vanessa Redgrave, David Thewlis, Sir Derek Jacobi and many more. The film is a controversial subject - the Shakespeare 'Authorship' question. Strangely for such an 'English' subject - I am one of only a handful of Brits on the crew (No others in Post!) as it is a German produced picture. I do predict great things for it - a real change of mood for Mr Emmerich."

.... Supervising Sound Editor **Colin Chapman** AMPS is again on ***Waking The Dead*** with Ross Adams as Sound Effects Editor. **Alan Snelling** AMPS is mixing the series. He says "We are using my Sonic Trax PPS studio at Denham for premixing and deliveries, and Up 4 Loud London in Soho Square for ADR and final mixing. Pietro Dalmasso is shooting the ADR. Foley recording at Up 4 Loud Productions."

.... Production Sound Mixer **Richard Manton** AMPS is with Boom Operator **Steve Fish** AMPS and Assistant **Sarah Howe** shooting ***Lewis Series 5*** for ITV Studios July to December 2010.
Earlier in the year Richard shot ***Midsomer Murders***' : ***Not in my Back Yard*** for Bentley Productions with Boom Operator Liam Ryan.

.... Sound Editor **Nick Lowe** AMPS is currently editing dialogue, ADR and crowd on ***Devil's Double*** at Studio l'equipe in Brussels with Stefan Henrix supervising and Martin Jensen as lead mixer.

.... ADR Director **Louis Elman** AMPS says, "We have been quite busy voice casting on the following productions : Roland Emmerich's ***Anonymous***, ***Jane Eyre*** for Phaze, ***Gnomeo and Juliet*** for **Glenn Freemantle** AMPS, Devil's Double for Stefan Henrix, ***Women In Love*** for Company Pictures, ***Foster, Kidnap and Ransom*** and ***The Nativity***; together with additional work on Michael Apted 's ***The Chronicles of Narnia: The Voyage of the Dawn Treader*** with Nigel Stone."

.... Production Sound Mixer **Stuart Wilson** AMPS has been on a very busy 12-week shoot, all on location in England, shooting ***Warhorse*** with Director Steven Spielberg. Orin Beaton was the Boom Op and **Mitch Low** AMPS on Sound Maintenance. **Thomas Fennell** has been the Sound Trainee

.... Production Sound Mixer **David Stephenson** AMPS says, "We are now into our 9th week shooting on ***Frostbite*** (***Captain America***), but this only takes us to the half way point! I have with me my trusted crew, **Gary Dodkin** AMPS on boom and Lloyd Dudley assisting. We also have **John Mooney AMPS** on 2nd unit. We have been shooting at Shepperton Studios and London locations and we are now heading north to Manchester."

.... Production Sound Mixer **Johan Maertens** AMPS reveals, "It's been a pretty varied year so far... involving a lot of travelling. I had a fabulous two weeks at the Cannes film festival for NBC, providing sound for their celebrity show ***Access Hollywood*** and ***The Today Show***, working with the cast of ***Wall Street*** and ***Robin Hood***. Also worked on a tourism program for Belgian national broadcaster VRT in Scotland travelling around in old VW camper vans... a historic documentary about the wartime events surrounding the ship 'Leopoldville' and a documentary about AIDS victims, both shot in Belgium... a documentary about the life and suicide of Dutch artist Herman Brood, shot in Amsterdam... a children's series called ***Team Kwistenbiebel*** for VRT in Belgium... and a short feature in Leeds together with boom operator Phil Killingsworth called ***Love Like Hers*** for debuting director Danny Lacey.

It was the perfect opportunity for me to use my portable rack mounted setup based around a Sound Devices 788T/CL8 and leave my sound trolley at home. The shoot involved a lot of quick setups, with a small crew and lots of scenes on a low-loader spread out across a three-day shoot, so I ended up alternating between the rack and a bag setup based on a SD 744T. As always I've been using my Lectrosonic wireless sets with DPA lavs and Neumann mics, the old trusty Sennheiser MKH416 only coming out of the box during spells of wet weather as the Neumanns tend to throw in the towel when faced with damp Yorkshire weather conditions.

In the next couple of weeks I will be shooting another wartime documentary in Belgium."

.... Production Sound Mixer **Malcolm Davies** AMPS says, "The feature ***Gridiron*** which was due to start at the end of September has been put off till January because of contractual difficulties with the leading lady so I was able to accept another film called ***Resistance*** being shot in South Wales. Principal photography starts on October 18th for five weeks. My usual boom swinger Ed Brookes will be with me on both productions."

.... Production Sound Mixer **Clive Copland** AMPS writes, " Just to let you know that I am working on a film called ***7 Lives*** at the moment. My Boom Operator is **Henry Dyer** and our sound assistant is Esther Asiedu-Ofei."

.... Re-recording Mixer **Dave Humphries** AMPS has been out recording Location ADR on ***Jane Eyre*** for Dialogue Editor **Jennie Evans** AMPS and Director Cary Fukunaga; and also ***The Flying Machine***, a mix of live action and stop-frame animation based on the Chopin Preludes for Sound Editor **Sandra Portman** AMPS.

He has also been using his mixing skills at Run VT working on various TV shows with Sound Assistant **Ricky Martin**.

.... **Henry Dyer**, recent NFTS Sound Diploma course graduate and new AMPS member, gets his feet wet in the Underwater tank at Pinewood Studios. Additional shooting for ***Dark Tide***, starring Halle Berry, gave Production Mixer **Brian Simmons** AMPS, the opportunity to introduce Henry to the trials of booming for guide tracks in competition with wind-machines, wave-makers and water! "Inevitably, a narrow victory to Special Effects. However, Henry's enthusiasm remains undampened!"

Please send any contributions for the Who's At What column to whois@amps.net or by post through the AMPS office. A reminder e-mail is sent out about three weeks before the deadline but there's no need to wait for that. Material can be sent in by e-mail or post at any time and will be included in the following issue of the AMPS Journal.

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QUIZ TIME !

NO PRIZES JUST FOR FUN

Twenty four questions based on our industry with a few 'outsiders' thrown in. Answers on page 19.

1. Who gave his name to the unit of Inductance?
2. What was actor Cary Grant's real name?
3. What letter is needed to turn a warehouse into a tyrant?
4. In which year did Britain change over to decimal currency?
5. Who directed Gone With The Wind?
6. What was Fantasound?
7. What is the address of the British Board of Film Classification ('the censors')?
8. What is a common term for a microphone that is a Prepolarised Condenser?
9. In the 1994 remake of *Miracle On 34th Street*, who played Santa Claus?
10. What naval film won the Oscar for Best Sound Editing in 2003?
11. What do DTS and SDDS stand for?
12. What were Foxholes?
13. When did the London Eye open to the public?
14. VHS and Betamax were the main rival VCR systems for the home markets. What was the third one that debuted too late to succeed?
15. Technicolor's British dye-transfer plant closed in 1978; which country bought it?
16. What is the forename of the inventor of the Dolby process?
17. What word did the famous Hollywood sign originally show when first erected?
18. Most microphones with a cardioid polar pattern have increased sensitivity at low frequencies when close to the sound source. What is this known as?
19. In television what does the term 'phase alternating line' refer to?
20. The forename of US film sound effects pioneer Foley was?
21. Which country made what is accepted as the first feature film?
22. What film was the first to have a Dolby-encoded stereo optical soundtrack?
23. If your headphone use is Dichotic what are you doing?
24. What year was AMPS formed?

(Answers on page 19)

Tim White AMPS interviews

JP Beauviala: "Mr Aaton"

It is seventeen years since I visited Jean-Pierre Beauviala at Aaton. As a sound recordist I was always a fan of Aaton cameras and, filming near Grenoble, it was a good opportunity to drop by. I had watched the transition from the likes of the Arri BL to the new generation of low-profile cameras, and the quietness of the Aaton was a joy to anyone wearing headphones. Ten years later in 2003, I met Jean-Pierre again at the Production Show at Olympia where he was proudly demonstrating a working version of his new Cantar recorder. But the question asked by so many was, how did a camera manufacturer come to make a recorder?

"In 1966 I was an Assistant Professor of Electronics at the University of Grenoble. I decided to make a film to explain that the planned Grenoble Villeneuve (new town) was a ridiculous project because the 'tree' structure of the whole town was missing. There were few branches and leaves (streets and squares), and no trunk as found in old towns. Making a film was the only way I could make my point. Urban architecture is my real passion in life, in fact much more than cameras. But I'm not an architect (and wasn't then); writing pamphlets or a book would have been totally useless; who would have read them? My vantage point was to be that of a pedestrian or a cyclist with a single camera and several audio recorders dispersed here and there. I wanted to record 'concomitant sound events' including lip sync, ie things happening at the very same instant in the different locations along my trip: backyards, bistros, bakeries, apartments, etc."

"I bought an Arri 16Std and, since the Kudelski factory in Lausanne was not too far from Grenoble, went there to buy a Nagra 3. Then I discovered that neither the camera nor the recorder were the right instruments for my project. The only means known at that time to sync a camera and recorder(s) was to link them by wires conveying a sine wave image of the unstable speed of the camera to the Pilotone track of the tape machine. Imagine the picture : me walking or cycling through the streets with so many strings attached, so to speak..."

"To circumvent this, I decided I would try to control the camera motor speed from a highly stable crystal oscillator, providing half a frame accuracy per magazine while recording a Pilotone signal on the tape, drawn from another crystal as if it was coming from the camera, a system later known as 'crystal sync'. And since clap sticks were out of the question in this project, I decided to time stamp all the images and sounds so as to reconstruct their synchronicity later. My life as future professor and would-be architect ended on this very day: I was trapped by the devil of filmmaking-instrument-design."

J-P first modified the camera motor and the film gate of the Arri Std; he rebuilt his Nagra 3 to make it record two audio tracks (this was less expensive than buying Nagras in pairs...) and to generate a low frequency FSK modulated Pilotone carrying the time stamps (to some extent, an ancestor of SMPTE LTC). This was in 1967, long before the Nagra 4S-TC, which would arrive eight years later.

"The Nagra two-track modification was more difficult than I expected, but thank God, it led me to numerous visits and discussions with Stefan Kudelski. It was a privilege learning from this man who had invented so many advanced mechanical and electronic solutions - a real genius. I got to know his current-driven amplifiers, smart limiters, reverse distortion, and so forth. It took me two years, spending all my spare time and vacations, to modify the Nagra and the Arri for time recording. Éclair in Paris heard about my work around that time, and asked me to leave my university lab and work for them."

Following this offer, J-P left academia to join the Éclair camera company in Paris, as an R&D consultant engineer for their electronics department. His first project was to

develop a motor for the Éclair NPR camera, the first crystal motor for a film camera, ever.

"Then came another challenge. The Éclair Corporation of America, desperately wanted 'single system' audio recording in the NPR instant magazine (the sound was to be recorded on a tiny magnetic track laid outside the perforations). Éclair France had already spent a fortune trying to smooth out NPR's jittery film movement with counter-spinning flywheels and dampeners à la Bach-Auricon CineVoice, but that gave birth to a lumbering monster with very poor results."

J-P's invention, based upon digital processing between the mic and the magnetic recording head, achieved wow & flutter specs on a par with Nagra 3 figures.

"I remember when the BBC invited me over in June 1970 to test my prototype (a tiny idle roller tacho, constant in-sampling, variable out-delivery, a magnetic head) installed in a standard magazine, all the engineers at Ealing Studios were scratching their heads trying to reverse-engineer the trick, but nobody ever mentioned my 33kHz, 16-bit digital treatment probability... remember that we were all living in an analogue audio world at that time!"

This was Jean-Pierre's second incursion into the audio recording domain. When Éclair was transferred to London, J-P, a Frenchman through and through, decided to leave the firm and form his own camera company, Aaton, in Grenoble. That was in 1971.

"During the ensuing 25 years of camera manufacturing, we were never very far from sound engineers, because of our 'clear time marking' which was one of the most advanced features of the early Aaton cameras. To support this new process, we had to build piggyback TC generators for the Nagra 3 & 4 and Stellavox, still widely used at that time. Even worse, we had to design a daisy-wheel printer (that we called 'Adage') to imprint clear time figures onto the full coat 16mm magnetic tape used on film editing tables."

"In 1982, when Cintel introduced the first telecine for direct transfer from film negative originals to video, it became obvious that all films would be edited on video and that audio timecode would become easier to handle. By 1984 we had added a dot matrix to the clear time markings - we called it AatonCode. This allowed the Aaton Linker telecine reader to insert the camera timecode onto the video tape sent to the syncing/editing rooms."

"The only quarter-inch tape machine that could achieve a high speed search and then follow-sync the videotape audio timecode was the Nagra-T (definitely the best analogue audio tape recorder ever designed), but it was physically incapable of instantly jumping to the next take while syncing video rushes on the fly. Only digital hard drives can perform such wide jumps. So we designed InDaw to convert the quarter-inch analogue Nagra tapes and DAT tapes to audio files. An historical note in passing: to record an audio file on a disk you must embed it into a file format. At that time, all the DAW manufacturers were using their own proprietary formats, incompatible amongst themselves and unavailable to us. The only open audio file format was Microsoft WAV, considered as an amateur format. Our idea was to adapt it by adding a data chunk carrying the three parameters essential to the AatonCode system: the recording machine ID, the date, and the time (plus some other paraphernalia). We called it FilmWav and proposed it to all the DAW manufacturers... No one answered

above: Single system audio recording in the Éclair NPR instant magazine - the sound was to be recorded on a tiny magnetic track laid outside the perforations

below: Aaton HQ, Rue de la Paix, Grenoble; "As you can see Aaton works totally open to the streets of the town, the central thesis of my never done film... no film but Aaton is a living example."

except SADIE. Interestingly enough, one year later the EBU introduced the Broadcast Wav for the very same purpose. Thought we felt betrayed because we had not been invited to the adhoc committees (What? Aaton a camera manufacturer in OUR sound business?), we were actually happy to get what we were looking for and immediately adopted this 'good idea'... (and as an aside, we still insert our old 'FilmWav' ancestor data chunk in our parsers for earlier InDaw recordings). Now all audio recorders, all DAWs, all editing machines are BWF compatible."

"Indaw was the only machine offering-on-the fly instant sync with about two-frame seek time, and post-production operators were very impressed. Imagine it: whatever the Nagra or DAT timecode, whatever the film speed, whatever the video standard, they could shuttle their video rushes, forward or backward, and the sound was always there immediately, and in perfect sync. InDaw was not an on-location recorder per se, but it brought us back into the sciences of audio recording."

At that time (1997) sound mixers really only had three portable digital machines to choose from: either the Fostex PD2/4 and HHB Portadat (both recording only two tracks with 16-bit audio on DAT cassettes) and the Nagra-D (four tracks, 24-bit audio, and virtual mixing metadata storage). But with its VTR helicoidal drum and open reels, the Nagra-D was much too heavy for over-the-shoulder work, and was restricted to cart use.

AatonCorder mock-up, December 2001

AatonCorder working model, September 2002

Cantar X, November 2007

Cantar X, side view

"The success of our four-track, 24-bit, hard drive InDaw made sound engineers ask us why we didn't develop a light, battery-powered version that would be the 'real' successor of the analogue Nagra. Zaxcom heard that request, and squeezed it into a shoe-box featuring questionable preamps... not at all in the Nagra tradition. Even under that pressure I kept saying 'No, no, we will never ever build a recorder in competition with Kudelski, that would be unfriendly'."

"So, why did we finally decided to jump into the fray? After Stefan left the helm, his successors developed the Nagra V which, though it was a mechanical jewel à la Kudelski, was not up to the sound recordists' expectations... you know all about it. First, they chose to record the audio files on an Orb drive, a removable magnetic disk in an open cartridge (sort of a floppy disk on steroids). I told them many times to abandon this trouble maker; we had had nothing but problems using it in our early InDaws (and that was in dust-free air-conditioned facilities!). How on earth can you claim such a media will run flawlessly in the Gobi desert or in snow storms? Second, they were offering only two tracks at a time sound engineers were all asking for four! Not to mention the reduced dynamic range of the mic potentiometers, one of the claims to fame of the Nagra 3. That day (I think it was June 2000), I felt free to break the promise I had made to myself not to compete with Kudelski, and set about designing a sound recorder which would be an honourable heir to the Nagra 3 & 4."

"From InDaw, we borrowed its proven audio file management and its agility in the jungle of timecode standards. Starting off with a knowledge of mic preamps - 'the heart of an audio recorder' - acquired with Stefan in the 60s, I told the Aaton engineers that we could meet the challenge of making a sturdy recorder that would sound as good as a Nagra 4. And since we had the mechanical know-how acquired building thousands of Aaton cameras, it took us from January 2001 to July 2003 to bring out a working product. Pretty fast for a totally new design concept."

The version of the Cantar that I saw at that 2003 Production Show was much as we see it today. It was very close to the production model which was about to go out to Taipeh in July 2003. In fact J-P offered me a Cantar to use on an Imax film that we were about to start, following the Tour de France. However, I needed two recorders. I had been a Deva user for nearly four years and I opted to go with what I knew. J-P said that there were requests for more tracks, and recalled that I had written on IBSnet that I could not see the point of the two-track Nagra V for film and TV when we already had the Deva II with four tracks. Having used the Deva II for some time, what I thought we needed was an increase to six tracks.

"When I read your September 2001 post to the IBS, our prototype, then called the AatonCorder, had four iso tracks only (plus two for the mix); we immediately decided to increase it to six iso tracks!"

For those of us who use the Cantar (and I am a relative latecomer), the rest is history. J-P housed his recorder in a sculptured waterproof and dustproof monocoque that was nothing like a traditional recorder housing. He was able to incorporate his excellent pre-amplifiers ("mic preamps that Stéphane K. would be proud of") and a linear fader mixer, tiny but incredibly usable, even with the size of my hands. As Aaton has been producing cameras for a long time, efficient electronics and a pair of familiar camera batteries

provide over 20 hours' use. I hope I don't have to use all those 20 hours too often, but pre-Cantar I was used to changing an NP1 every 1.5 hours and having to watch my batteries like a hawk, which is no fun. Not surprisingly, the timecode is rock solid and they have a range of PC and Mac programs to edit and organise the sound rushes and metadata. While there are now recorders out there with more tracks, Aaton has created a recorder that has proved itself to be a solid performer with analogue-esque reliability.

Some say Cantar is more difficult to learn than other recorders, and it might be, but once familiar, it is totally intuitive. It has in many ways taken over the qualities that those of us who used Nagra 3's and Nagra 4's took for granted. It clearly helped that Aaton already made portable electronic equipment in the shape of cameras, since making the body of the recorder in a thin cast aluminium shell did not faze them at all; the result is clearly the most rugged recorder available. But as with all digital recorders, the evolution continues long after you commission your new recorder, as different versions of firmware are released; these firmware updates are just as rugged as the physical design. Requests from users are incorporated as different projects bring the need for different facilities. There has been one major hardware upgrade as it moved from X1 to X2, but every Cantar is updatable to the current specification, and I predict Cantars having a working life of 10 years and more, justifying a higher purchase price.

And nothing stands still:

"Quite soon we will offer to all Cantars from day-one, an SDHC/CF drawer that is instantly swappable with the current DVD-RAM drive which is still popular with many users. The primary recording will stay on the internal drive (an SSD which offers very sophisticated wear-levelling technology), and the backups for rushes will be go onto flash cards. This way we keep the product fresh".

J-P is cautious about spelling out a future new Cantar, but ideas are clearly spinning around: *"For the future we will take advantage of what we have learnt developing and producing Penelope Delta"*. This is hardly surprising: Penelope Delta is Aaton's new digital cinema camera, so in the same way as the Cantar can trace its ancestry through Aaton film cameras and the InDaw syncing system to the recorder we use today, Penelope Delta's digital recorder and its main rotary selector demonstrate just how much one film product borrows ideas and technology from another, showing a clear lineage not just back to earlier Aaton cameras but also to Cantar.

Cantar's design engineers at Aaton HQ

Aaton Penelope-Delta digital cinema camera

Laurent Lafran with the AatonCorder

Author Tim White's Cantar off the cart

Ofcom Replacement Funding for Channel 69

Ofcom published their plans for Funding in a Statement on the 5th August 2010. The basic outcome is, if you qualify with their eligibility criteria, you will receive a grant of at least 55% of the cost of replacing your existing Channel 69 kit with equivalent Channel 38 kit, based on a Rate Card which they have published. We started with nothing, since all they really had to do was give us sufficient notice to quit the frequencies with no compensation, and we went for 'broke' claiming 100% replacement cost, so 55% grant can be seen as a small victory. OK, it appears that you still have to find that extra 45% but in reality, the Rate Card is based on the Manufacturers' RRP and not necessarily what you will pay with professional discounts. It is also possible to obtain an extra percentage if you surrender your Channel 69 gear early. You must surrender your existing Channel 69 kit in working order to receive the Funding. But I will say more on that later. Also bear in mind that you end up with brand new kit with many years of expected service. What follows is my interpretation of the current situation.

Eligibility.

The Funding Statement in Section 3.3 lays out the eligibility criteria. It says:

3.3: We have concluded that in order to be considered for funding, claimants must:

- ***Either** have held a Channel 69 licence between 2 February 2008 and 2 February 2009;*
- ***Or** be able to produce verifiable evidence that their business is based on hiring out Channel 69 equipment rather than using it and therefore doesn't require a licence.*
- *Eligible claimants will only receive funding in respect of equipment which:*
- *belongs to them;*
- *is in working order;*
- *tunes to Channel 69 but not Channel 38 (without modification);*
- ***And** was purchased before 30 June 2009 (when we confirmed Channel 38 as the replacement for Channel 69).*

Those who have held a Channel 69 license between 2nd February 2008 and 2nd February 2009 will have already received a letter from the PMSE Funding Scheme Administrator, Equiniti, with an all important Reference Number. Follow the instructions in that letter. Do not worry if your piece of kit is not already on the Rate Card or is no longer manufactured. If informed of any missing kit, Equiniti will forward details to Ofcom for their consideration and, if approved, the item or a suitable replacement will eventually appear on the Rate Card. Make sure that you list aerials and distribution amplifiers, receiver racks, in fact, everything associated with your Channel 69 setup that will have to be changed to work with the replacement Channel 38 equipment. Sometime before 31st December 2010, you must register your full claim with the Administrator, listing everything you wish to replace and the proposed Surrender Date for your old kit, even if this is not to take place before the very last date in 2012. Equiniti will appoint an Accounts Manager to look after your claim so then you will be dealing with just one person. It should be understood that the Administrator, Equiniti, have no power to make any decisions other than to tick boxes if your claim fits into the initial criteria as laid down by Ofcom. Any boxes they cannot tick or any queries you make to them will be referred to Ofcom. They have been appointed for of their expertise in handling financial claims and not for any technical ability.

There is an online claims registrations service but it is proving a little unsatisfactory, particularly if you wish to claim for kit not already on the Rate Card. If you cannot find the equipment you wish to claim for in the pull-down boxes, continue with your entries, noting which pieces are missing, then save what you have done thus far. There is no provision in this process to add unlisted equipment. I am informed by Ofcom that even if you submit your online claim, you have the opportunity to recall and modify it up to the closing date of the Claims Registration process. You must contact Equiniti about the missing equipment and they will refer it to Ofcom and, if approved, it will eventually appear on the Rate Card and thus in the pull-down boxes and you will be able to add it to your claim. The Rate Card correction process is still a work in progress and will remain that way for some time yet. Equiniti also produce a paper claim pack and you can make your claim in writing rather than online if you prefer.

Exceptional Claims.

If you haven't received the Administrator's letter, all is not lost! Later Sections in the Ofcom Statement, particularly Section 3.7, make exceptions to the main criteria, as below:

3.7: We concluded in the 800 MHz statement that there were some additional categories of users who may be eligible for funding, subject to further consultation, namely:

- *users who held channel 69 licences before 2 February 2009 but had legitimate reasons for allowing those licences to lapse for a period prior to this date;*
- *Users who needed to purchase channel 69 equipment between 2 February and 30 June 2009 for demonstrable and compelling reasons. This recognised that we did not confirm channel 38 as the replacement for channel 69 until we published the 800 MHz statement. Before this, users might have reasonably continued to purchase channel 69 equipment if necessary; and/or*
- *Users who needed to purchase channel 69 equipment between 30 June 2009 and 1 January 2012 because their existing equipment is demonstrably in need of replacement and channel 38 equipment will demonstrably fail to meet compelling operational requirements. This recognised that some PMSE users requiring UK coverage might have operational needs that channel 38 could not meet before becoming fully available for PMSE use.*

Thus you can still make an application for the funding if you think you have a case and there is a clear Ofcom Appeals process in place. Equiniti do not 'advertise' these exceptions, but do not be put off by this, make the claim if you feel that it is justified. Originally, I was told that ***all*** exceptional claims made via Equinity would be passed on to Ofcom. I have been subsequently informed that this is not the case and Equiniti are screening claims before they are passed on, to reduce the administration burden at Ofcom. These decisions are being made on the basis of previous decisions made by Ofcom on similar claims. Thus it is very important that you make a detailed and well argued claim to Equiniti. However, if you still feel that Equiniti are not making due consideration of your claim, you can insist

that they escalate the issue to Ofcom. Ofcom are obliged to examine the detail of every claim and this will take time.

In terms of license requirements, if you previously held a license but you didn't hold one during the qualifying period and you had a good reason for this, like illness, unemployment, or if your Employer held a valid license, or you had a change of career where you were not using your equipment, or retirement, or you were working out of the UK, make a claim via the Administrator, explaining exactly your circumstances and providing relevant proof. This will be passed on to an Appeals Committee at Ofcom for consideration. Note that these exceptions are my suggestions and not 'official' and there may be others, so apply some logic when you make a claim. It has been made clear that in the UK, you do not need a license to own the equipment but only to operate it. The burden of proof that you were not operating the equipment in the UK without a valid license must be on you.

Similarly, if you had to buy Channel 69 kit ***after*** the cut-off date of 30th June 2009 for good operation reasons, you may still have a claim. The circumstances could be replacing lost or stolen gear, or even increasing personal inventory if your production required more than your usual complement of radiomics. It has been argued that hiring is not always a realistic option because hire companies usually charge more than you can recover from a production on 'all-in' deals and it may also be logistically difficult to hire. Also buying into Channel 38 is not a realistic option for our section yet because of the very restricted outdoor coverage until September 2011. I would also argue that those starting in business after the cut-off date have no choice but to purchase Channel 69 kit for the same reasons. Again, these are just my suggestions and there may be other scenarios so it is up to you to apply some logic. The Appeals Committee at Ofcom will consider this on a case by case basis and the correct route is via Equiniti, the Administrator, not directly to Ofcom.

There is the option to have your kit converted to Channel 38 if it is desirable and technically possible, and in this case the Funding will pay 100% of the cost of doing this on presenting the receipt, provided it does not exceed the amount you would receive if you replaced the equipment. The funding specifically does not provide for any additional rental or other costs incurred whilst waiting for conversion and the choice whether to convert or renew is yours.

In recent conversations with Ofcom, they are aware that the initial contact with potential Claimants excluded any who fell into the 'grey' area of License qualifications. My suggestion was to look into the historic License Database at JFMG Ltd and inform anyone who ever held a Channel 69 license of the possibility of making a claim. I am not sure that this advice will be followed since it will involve time and cost, although they did say that they wanted to offer funding to everyone eligible. Similarly, they are aware of the potential confusion about the closing date of the Claims process at the end of this year, even though you will be able to use Channel 69 well into 2012 before you need to change. Work is also being done to address this problem.

Proof of Ownership.

The Ofcom Statement says that you must have purchased the kit before 30th June 2009 (but see the possible exceptions above) and lists any of the following as proof:

- *Receipts*
- *Asset Registers or inventories (applies more to large commercial operations but you might have this documentation)*
- *Detailed Insurance Records*
- *Evidence of a Warranty Scheme enrolment*

We have agreed with Ofcom that this list is not exhaustive and I have offered the following:

- *Customs or Carnet Lists*
- *Lists of Equipment supplied to Productions for their Insurance purposes but the transient nature of Production Companies may make this difficult to verify.*
- *Repair Bills for the equipment (try the manufacturers or repairers for copies if you no longer have them)*

Some of our Manufacturers have offered to provide original Proof of Purchase from their historic Database, based on serial numbers, obviously with an eye on the sale of replacement kit. If your kit was bought second-hand and you have no obvious proof of purchase, it may also be useful to have this information to trace the subsequent sale to you. One further idea is to ask your accountant, if you have one, to examine your Capital Account for evidence of date of purchase of the equipment and produce a covering letter. I think that Ofcom may ask to see these accounts for themselves so be prepared. I believe that this issue will roll on for some time since Ofcom are aware that receipts do not have to be kept for tax purposes for more than 6 years after purchase and therefore any other Proof might be a little sparse. But it is clear that they will demand verifiable evidence and make the point that they are handling public money and have a duty of care for this.

At the Claims Registration stage, you will not be asked to offer proof of ownership, so my advice is to enter ***everything*** you have and you consider qualifies, even if you have no immediate evidence. Sometime early next year, you will be asked for this proof. In the meantime, do some legwork to come up with possible and acceptable paperwork. Ofcom and Equiniti will have to deal with this in some reasonable fashion.

There is provision in the Statement for funding ***without*** any proof of ownership as below:

1.12 Users who make a claim will need to prove to us that they own the equipment for which they want funding unless the total replacement value of their claim falls below £6000. This takes into account the circumstances of smaller (particularly non-professional) users who may not have records of when they bought their equipment. Users who are not VAT-registered will receive an extra 20% funding to reflect the fact that they will not be able to reclaim or offset VAT on items they buy.

This is an either/or choice and you cannot combine equipment claims ***with*** receipts and equipment ***without*** receipts and Ofcom talk about a ***Total*** Claim Value in the Statement. Note also that the £6000 threshold is calculated from the estimated replacement costs shown on the Rate Card. An additional 20% is to be paid in lieu of VAT if you are not VAT Registered.

As things progress or change, I will constantly update my online Blog with the information best I can.

Sandy MacRae AMPS

This article is an edited extract from:

http://www.amps.net/Radiomics/Blog.htm

UK SCREEN SOUND AWARDS :

THE CONCH 2010

The Winners and Nominees of the 2010 Conch Awards for sound on Film, Television and Commercials, as made on 13th October, are:

INDIVIDUAL CATEGORIES

FELLOWSHIP AWARD

Ted Scott

FILM RE-RECORDING MIXER

Chris Burdon – De Lane Lea
Mike Dowson – Pinewood Studios Group
Scott Jones – Molinare
Stuart Hilliker AMPS – Boom

FILM SOUND EDITOR

Niv Adiri – Sound 24
James Boyle - Independent
James Mather - Independent

TV DUBBING MIXER

Paul Hamblin AMPS – Boom
Adam Severs – De Lane Lea (previously Yorkshire TV)
Billy Mahoney – Molinare
Howard Bargroff AMPS – Pepper

TV SOUND EDITOR (Sponsored by SADiE)

Lisa-Marie McStay – Molinare
Chris Roberts AMPS – Ascent 142
Ian Wilkinson AMPS - Independent
John Rogerson – Halo

MOST PROMISING NEWCOMER (Sponsored by The Bridge)

Adam Davidson – Ascent 142
Steven Lane – Grand Central
Dan Piggot - Sumners
Gerrit Swanepoel - Halo

UNSUNG HERO

Joe Maher - De Lane Lea

AUDIO WORK CATEGORIES

TV DRAMA

Wallander - Boom
Luther - Pepper
Spooks - Hackenbacker

TV ENTERTAINMENT

Trawlermen - Molinare
Outnumbered - Keith Nixon (Mute Productions)
Top Gear - Evolutions

TV FILM/DOCUMENTARY

Mugabe and the White African - Molinare
Richard Hammond's Invisible Worlds - Halo
Wonders of the Solar System - Molinare

COMMERCIAL/ PROMO

Nike: *Write the Future* - Grand Central Studios
BBC Formula 1 Promo - The Jungle Group
Guinness: *Bring it to Life* - Grand Central Studios

FILM SOUNDTRACK OVER £10 MILLION
(Sponsored by Hireworks)

Kick Ass
Nanny McPhee and the Big Bang
Harry Potter and the Half-Blood Prince

FILM SOUNDTRACK UNDER £10 MILLION

Nowhere Boy
Moon
The Boys Are Back

FACILITIES CATEGORIES

FILM MIX FACILITY (Sponsored by MediaPros)

The Pinewood Studios Group
Anvil Post Production
Goldcrest

SOUND DESIGN/ EDITORIAL FACILITY

Phaze
Boom
Sound 24

TV MIX FACILITY (Sponsored by Scrub)

Boom
Molinare
Pepper

COMMERCIAL/ PROMO FACILITY

Wave Studios
Angell Sound
Grand Central Studios
The Jungle Group

Unfortunately. the results of BAFTA's Television Craft Awards, made on 23rd May, were omitted from the last edition of the AMPS Journal. Here are the sound-related awards in full:

BAFTA Television Craft Awards 2010 - Sound

SOUND FACTUAL

Nature's Great Events (The Great Feast) - BBC One/BBC Productions, Bristol
Paul Cowgill, **Kate Hopkins AMPS**, **Andrew Wilson AMPS**, Graham Wild

Life (Insects) - BBC One/ BBC Productions/Discovery/SKAI/Open University/RTI Spa
Chris Domaille, Graham Wild, Tim Owens, **Kate Hopkins AMPS**

Trawlermen - BBC One/BBC Productions, Birmingham
Dafydd Baines, Kiff McManus, **George Foulgham AMPS**, Lisa Marie McStay

9/11: Phone Calls From The Towers - Channel 4/Darlow Smithson
Ben Baird AMPS, Adam Wilks, Ben Lester, Merce Williams

SOUND FICTION

Red Riding 1974 - Channel 4/Revolution Films
Paul Cotterell AMPS, Danny Hambrook, Kallis Shamaris

Cranford - BBC One/BBC Productions/WGBH Boston in association with Chestermead
Paul Hamblin AMPS, Peter Brill, Iain Eyre, Lee Walpole

Wallander - BBC One/A Left Bank Pictures/Yellowbird/TKBC Production with ARD Degeto/WGBH Boston/TV4/Film i Skane
Paul Hamblin AMPS, André Schmidt, **Catherine Hodgson AMPS**, Bosse Persson

Spooks - BBC One/Kudos Film & Television
Nigel Heath, Darren Banks, **Laura Lovejoy AMPS**, **Rudi Buckle AMPS**

OBITUARIES

Claude Hitchcock AMPS Hon,
Retired production mixer died aged 91. We hope to carry a full tribute in the following issue.

Freddie Slade
Sound Recordist at Denham and Pinewood; Principal film dubbing mixer with Associated-Rediffusion and Thames Television from beginning of ITV in 1955 until 1984.

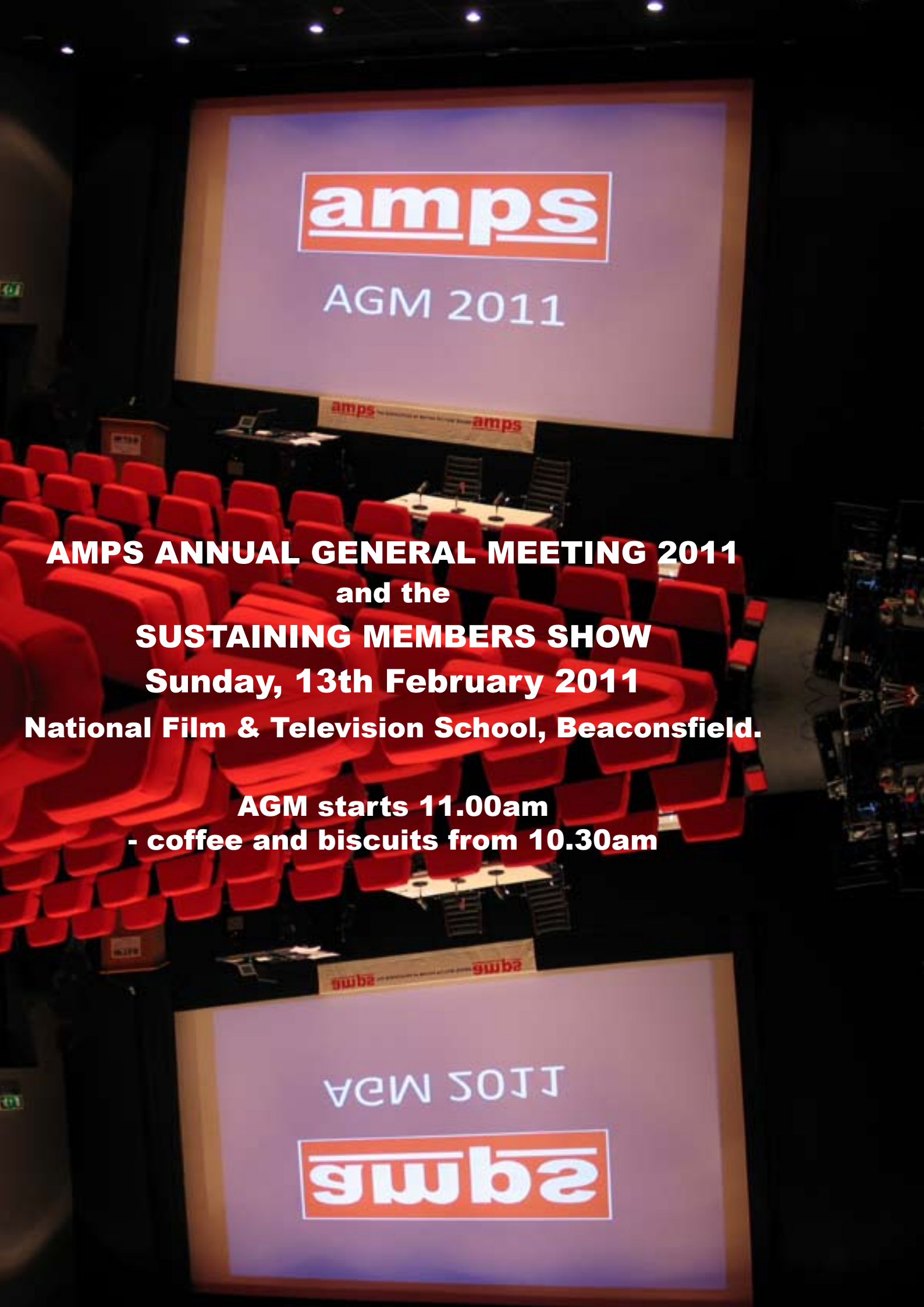
Jerome O'Donohoe
Dubbing mixer, Lip Sync and then own facility.

Alan Hume BSC
Cinematographer.

QUIZ ANSWERS:

1. Joseph Henry (1797-1878), US physicist, gave his name to the Henry
2. Archibald Leach
3. Adding 'S'; DEPOT becomes DESPOT
4. 1971
5. Victor Fleming
6. The first commercially released film stereo sound system, developed in 1939 for Disney's *Fantasia*
7. 3 Soho Square, London W.1.
8. An Electret microphone
9. Richard Attenborough
10. *Master & Commander* (Richard King)
11. Digital Theater Systems and Sony Dynamic Digital Sound
12. The smaller, almost square, perforations used on release prints of early CinemaScope films to allow space for 4 mag stripes
13. 9 March 2000
14. Philips VIDEO 2000, jointly developed with Grundig, but ceased production in 1985
15. China (but they closed it in 1993)
16. Ray
17. Hollywoodland in 1923. It was an advert for a real estate project
18. The Proximity Effect
19. The PAL colour Television broadcast standard developed by Telefunken
20. Jack
21. Australia with *The Story Of The Kelly Gang* (70 mins, 1906). 'Distributed' internationally but no print survives.
22. Ken Russell's *Lisztomania* (1975)
23. A term for hearing different signals in either ear. This would include stereo signals so the only Diotic use (non-Dichotic) is mono listening
24. 1989

If you scored over 18 correct answers, how about compiling your own quiz for the Journal?



AMPS ANNUAL GENERAL MEETING 2011

and the

SUSTAINING MEMBERS SHOW

Sunday, 13th February 2011

National Film & Television School, Beaconsfield.

AGM starts 11.00am
- coffee and biscuits from 10.30am