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IN

RUNNING

CONVENTION FILMS

RECONNAISSANCE PUBLICATIONS
PROUDLY PRESENTS 'RUNNING CONVENTION FILMS' WRITTEN AND STARRING
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Running Convention Films

by Andy Morris

Andy, with Tim Broadribb, has run convention films at all the major British SF conventions of recent years. Eastercon, Unicon, Star Trek cons, you name them, they've stayed-up-all-night-staring-at-a-flickering-screen at them. In a series of articles written for Reconnaissance, *he sets out his and his colleague's accumulated knowledge on running a convention film programme. The complete text of these articles is presented here.*

Obtaining the Films

First you need to decide what films you want to show. This can be an enlightening experience for any convention committee! You can produce a list of suggestions, vote on them, and take the most popular; or avoid the question and hand the whole thing over to one person (who therefore takes the blame leaving the rest of the committee free to pass it). You can pick titles at random, or fit them to a theme. Whichever method you use, the result is an initial list.

Now you have to find the films on the list. Where you look depends on how you propose to show them. If you are putting them in a handy cinema then you generally require 35 mm or 70 mm prints (though some cinemas have 16mm facilities if this is the only gauge on which the film is available). These come direct from the distributors and the cinema itself can organise the transport with its regular films. You have to book the prints, haggle the price with the distributor, and pay them. Normal cinema practice is that a percentage of the box office take goes to the distributor, but with a convention you need to settle on a fixed price since films are not charged individually. This is usually the most expensive method of presentation, unless the distributor has a reason to want to put his film in your convention (they get very friendly at this point!).

The quickest way to find a particular 35 mm distributor is to ring or visit the BFI information centre. They will tell you who is the distributor for a particular film and their address. After that it's up to you.

If you are putting the films into the convention hotel you can present them on 16mm, 8mm or video. 8mm is really only useful for a small convention, though you would be surprised how many full-length SF feature films are available for rent/purchase in this gauge (and in Cinemascope!). It is cheaper than 16 mm and commercial video hire, though the quality is better than video on a large screen.

16mm is the best method for portable large screen presentation, particularly since many films made in Scope can be obtained in that ratio. The most useful reference is *Films on Offer* which is published every two years by the Film Society Unit of the British Film Institute. This lists all feature films available on 16 mm or video for non-theatrical hire in the UK. The latest issue includes everything up to November 1989 plus a few released last spring; updates have also been issued. It lists title, country, director, running time, version (Standard/Scope/colour/B&W/subtitles), renter and price. There is a list of the active 16mm renters and a directors cross-reference. In addition to this, the catalogues of the three primary 16 mm distributors are useful. They are Filmbank, Glenbuck, and the BFI itself. Filmbank generally handles US product, Glenbuck and the BFI the European product, though this is not a hard and fast rule. These companies also tend to handle the non-theatrical hire of video as well (for approximately two thirds the cost of 16 mm film hire).

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Video, whether shown on TV or a large screen, is technically the easiest method of showing films. However, large screen video projectors are expensive to hire (from £300 per week for self-contained units to £600-£1,200 per week for units to project onto a separate screen) and are really only justified if your material is only available on video or your convention site has awkward facilities for film. Renting feature films from the local store for presentation at a convention is not a wise idea as they are legally limited to home use for audiences up to seven people. Videos you buy yourself have the same limit in the purchase licence. You cannot show such a video to anyone who has paid for the privilege (that includes convention membership). There are now random unannounced checks of venues by inspectors from the Performing Rights Society, and the fines are steep. If you are showing product that is on video only, make sure you have permission in writing from the copyright owners. This is easier to organise (and cheaper) than you may think.

Non-theatrical hire is basically for audiences in clubs and societies (technically up to 100 adults, children count as half), which is the category SF conventions come under. You are not allowed to advertise times and dates of showings to the public or admit public at the door for a fee. Day memberships of conventions scrape under this rule as the film is only part of the content of the convention. You can tell people what films you intend to show, but not the precise date and time until they are members.

Older films are cheaper, newer films are more expensive. Your choice of titles may be influenced by budget constraints as well as demand. Take a good look at the older stuff, your audience may never have seen it on a big screen and may appreciate the chance to do so. If a film was made in Scope, see if the 16mm version is available in a Scope print and show it. This is not difficult, it just requires forethought.

Having identified who rents out the film you want in 16mm, you then have to book them. Filmbank will take bookings over the phone straight into their computer for up to 9 months in advance of playdate (that's all the computer can handle). Anything in advance of that needs a letter. If you have never rented from them before, you may get checked out that you are genuine; once you have rented from them, just quote your reference number. A few days later you will get a **Confirmation of Booking**, for each film, which shows the cost. On top of the rental (which is legally a fee for a licence to show the film) there will be an 80p insurance charge, £12 minimum fee for carriage by Securicor, and VAT. If you collect the films yourself, the Securicor charge is replaced by a £7 handling fee as all Filmbank's prints are handled by FMS at North Feltham Trading Estate (near Heathrow - ask me for directions). Glenbuck will reserve over the phone, but this must be followed up with a booking form. This form has a space on it for a bankers reference if you are a new renter (that's most

conventions). A few days later a single **Confirmation of Booking**, for all the films ordered, will arrive, showing the rental fees only. There is a £1 insurance charge added to the invoice for each film, plus Securicor charges, plus VAT. The BFI operate the same system as Glenbuck. (Glenbuck is effectively an independent company backed by the BFI at arms length). Your initial list may have to be amended at this point to account for anything not available on the dates required. To avoid the Securicor charges adding substantially to your bill, arrange to collect (and return) the prints yourself. Glenbuck are behind Surbiton railway station, the BFI library is in the BFI building which is off Tottenham Court Road.

If you wish to show a film more than once, subsequent showings are usually charged at 50% of the rental fee. Discounts can sometimes be had for booking several films from one renter – particularly the BFI.

The insurance charges added to the film hire charge by the distributor cover damage to a maximum of 350ft of a print when in your care. After that, you pay. Since this is 8 minutes of film, even the dumbest projectionist should have noticed something was wrong. Total loss or destruction of the film is not covered. Get insured, particularly if you are transporting the prints yourself. Allow £2000 per print, including short films.

Presentation

The requirements for any film are simple - picture and sound. This applies to silent films, which have never been 'silent' as such. A 'sound' film merely has synchronised sound, either stored on the print with the picture (optically or magnetically), or in a separate storage medium that is run on equipment locked in sync with the picture equipment. A 'silent' film has unsynchronised sound, which generally means a pianist playing mood music, but is often something a lot more complicated.

This means that if you are going to show a silent film in its original form, go and get the sheet music that accompanied the film and organise a pianist, duo, quartet or whatever to play with it. Anything less is cheating the audience. Please remember that your friend who can play a piano may not be up to doing so for 90-120 minutes without a break. A film is considerably longer than a conventional 'set' and there are few pauses. Playing from memory whilst watching a screen above and off-centre to you is not easy. Professionals may be needed for their endurance alone, even if you can con them to do it for bugger-all.

35/70 mm Film

If you have been fortunate and secured the use of a facility to show 35 mm and/or 70 mm film (cinema or suitably equipped conference centre), you actually have a life a little easier as far as organisation is concerned. Because of little things like industry standards, fire and safety laws, and union agreements: the presentation of the films is done either by, or under the supervision of, a trained professional operator (projectionist to you and me). The film prints will probably have been delivered direct from the distributor, made up by the staff on site, and more or less put on screen on time and without a hassle. All you will have had to do is stump up the money and make whatever comments you wish about the presentation.

You may possibly have elected to arrange transportation of the prints yourself. Be warned, 35/70 mm films take up a lot of room (10-12 reels per film) and are heavy. One print could be shifted in an estate car. Two, and you need a transit van. Six and up will take you into the realm of a 3 ton truck.

The benefit is in the quality of sound and vision, which should be the best possible (unless, like me, you are seriously into Imax).

16 mm Film

The simplest set-up for 16 mm projection requires a projector, a projector stand, a screen, a lot of reasonably comfortable chairs, several people to put it all together and make it work and (most important) a room in which to put it. If you are showing sound films (which is probably most of the time), then your projector must be capable of using the type of sound-track with your film and you need some sound equipment on which to play it.

Room shape matters, but you may not have a choice. Longish rectangular rooms are better than square or round ones, though if the corners are rounded or chamfered it will improve both live and recorded sound a lot. So will carpet and wall-hangings, which deaden the room. A 'live' room will produce random echos and render the sound-track unintelligible, particularly if it is loud. Room height is a serious problem. The projector beam should be completely over the heads of seated people and preferably standing ones as well. The bottom of the screen should be 3 to 4 feet off the floor. If your screen is 6 feet high you need 10 feet clear to below the light fittings. Low ceiling rooms make life difficult.

The main picture requirement is complete blackout. The smallest amount of outside light destroys the contrast on the screen, washing out the image. Even if the light is not on the screen, it is likely to be in someone's eyes and a distraction to others. If there are windows, you need totally opaque curtains, not just pretty dark ones. Direct sunlight behind even fairly dark curtains will wreck your plans (ask anyone who went to *Con2bile*). A reel or two of gaffer tape is useful in getting rid of the odd weave in the edge of curtains against the walls. The room should be laid out so that any doors, when opened, do not spill light onto the screen. Do not lock or bar doors that do not fit this rule. Put a notice on the outside promising dire penalties on anyone who enters and directing them to a door which can be used. Locked doors stop you getting out in a hurry (you may need to do so) and you get very unpopular with fire officers.

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Chair layout depends on the room. As a rough guide, the first row of chairs should be two picture heights back from the screen and the last row of chairs should be 6 picture heights back from the screen. Then there should be an access corridor, followed by the projection equipment space. In practice this principle gets badly mauled, with audience far too close to the screen, suffering from grainy and soft-focused vision.

A centre aisle can be a disadvantage as it means more heads in the beam as late-comers and early leavers wreck the film for the rest. People sat in the middle of a row tend to stay put at the end of a film because of the relative perceived difficulty of getting out. Early leavers like to populate the ends of the rows so they can leave during the credits. Putting the ends of the rows out of the projector beam is a way of improving your presentation by limiting the visual interference during the film. My rule is no more than 14 seats between aisles in any row. If the width of the room is such that side aisles restricts the number of seats too much, then a centre aisle may be necessary. However, if the room is wide enough you could have two aisles and three blocks of seats (which is the preferred layout of cinemas). The rule is based on experience in

getting people out. There is also a statutory limit to the number of loose chairs between aisles in a public room, but I have been unable to find out what it is at the moment. Offset (stagger) alternate rows of chairs by half a chair width. This will put the sight-line for each member of the audience between the people in the row in front and not into the back of someone's head (at least not until the 2nd row in front). This makes it unbelievably easier to see the screen.

Projector position is governed by the length of the room (and therefore the throw to the screen), the size of the picture you want (usually the same as your screen, but you cannot always be lucky), and the lenses you have available. The first get-out is to use a zoom lens, which is the projectionists friend. With this you pay your money and make your choice. Cheap lens = poor performance = dimmer picture with more distortion. I use a 35 mm-65 mm zoom lens instead of the standard 50 mm prime (fixed focal length) lens. The only times I have not achieved the right size of picture are in a 120 ft long hall and my living room. Prime lenses can have a better performance than zoom lenses, but the operative word is 'can' not 'do'.

With front projection, the basic idea is to get the screen at one end of the room and the projector at the other, pointing at the screen. (People have tried pointing it elsewhere, but it just doesn't seem to be popular with the audience). The alternative is back projection which uses a translucent screen, the projector behind the screen pointing sideways, and a 45° mirror in front of the projector lens to reverse the image and throw it at the back of the screen. You also need a special short focal length lens to keep the projector to screen distance to a minimum. For film this is inherently less effective as the mirror has to be perfectly flat (?) to avoid distorting the image. It also produces a bright spot in the centre of the screen which can be unpleasant to watch over long periods. However, if your room has a low ceiling, you may have no other choice.

If you are lucky you can put the projector in a separate room with a window between it and the screen. This cuts the projector noise down considerably, which is useful as the noise is always intrusive. However, the window must be clean - and by that I mean spotless and smear free - or you will lose more light on the glass than you put on the screen.

Screen size depends partly on the size of the room, but also on what film ratio you intend to show. Standard ratio (width:height) is 4:3 (also given as 1.33:1) so a 6 ft high screen needs to be 8 ft wide. If your film was made to be shown in widescreen you could have a problem. In a commercial cinema such films are cropped to size by the projector gate (which is easily changed). The film makers may have just used a grid in the camera eyepiece to show them what will appear on the screen. The area outside this grid has been photographed and is present on the print. The result can be seen on 16 mm and TV showings. Tops of scenery, microphones, and other out of shot items appear without warning and distract from the film. A 16 mm projector will not usually have a variable size gate, so unless your projector is inside a projection box and you have a window on which to stick some masking to crop the screen image, tough. Occasionally the film has been cropped in camera or at the final print stage. This means that you either tolerate a slot picture across your screen or you change the lens to increase the picture size to bring the height up. Then you need a wider screen. The ratio here is 37:20 (1.85:1), so your 6 ft high screen now needs to be 11 ft wide.

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If you want to show cinemascope films you need two things: a wider screen and an anamorphic lens. This latter is an adaptor lens that mounts in front of your normal projection lens (so you need a mount for your type of projector as well). It expands the picture by a factor of two horizontally, but leaves the vertical unchanged giving a ratio of 8:3 (2.66:1). (This is unless you get the lens alignment wrong, in which case the audience will let you know - loudly). The lens also diminishes your wallet. Your 6 ft screen now needs to be 16 ft wide. One answer is to have the larger screen and use the bit you need for the individual film. If you want to stop the unused area of screen being a distraction, fit black cloth to mask the visible area of the screen to the size you are using. (I wonder where that idea came from ...).

Picture size affects and is affected by several things. Too small and your audience will suffer eye-strain, and a tendency to rude comments in the business meeting; too large and the picture is dim and grainy. The light power of a 16 mm projector is a limit. As a rule, a 250 w halogen lamp through an f1.2 lens will produce an acceptable standard ratio picture up to 8 ft high (didn't you just want to know that ...). This happens to be the normal configuration of most portable 16 mm projectors. Higher f-number lenses (=more light absorption in the lens) or lower lamp power will produce a dimmer picture. Reducing the size of the picture will correct this. Showing wide-screen films (which use less picture area and therefore less of the available light) or cinemascope films (which use the same picture area spread over twice the width of the screen) makes life more difficult. The result is always a trade-off. More light means more powerful lamps and you are then into the realms of expensive arc-lamp machines. The best height for your picture can be obtained by back calculating form the length of the room and the chair position requirements given above. About one-eighth the length of the room is a reasonable starting point, but the normal situation is to use what screen you have been supplied, and bluff it out.

If you want a copy of a table showing picture size versus projection throw for various lens sizes, I can supply one for both metric and imperial measurements in A4 or FiloFax size. Find me at a convention.

Position the projector on the centre-line of the screen, both horizontally and vertically, otherwise the picture will suffer from 'key-stone' distortion. This means that either the bottom/top picture edges will be different lengths to each other (if the projector is at the wrong height), or the picture sides will be different lengths to each other (if the projector is to one side). A small amount of such distortion is tolerable. When two projectors are used for continuous running it is inevitable. However, an excess will, amongst other things, make it impossible to focus the whole screen. Sideways focus error can be corrected by a small adjustment to the lens position relative to the film gate. Few bother to use it, which is a pity.

The projector stand should put the projector at about chest/shoulder height (so the projectionist can actually use it). If this is not high enough for the screen, put the whole lot on a platform or dais. If you are in a projection box you may well have custom built stands or tables, but this is not guaranteed (ask Tim Broadribb or myself about worldcon - and be prepared to duck).

If you are showing 'sound' film you require a projector to suit. Optical sound-tracks combined on the print (ComOpt) are the standard and most 16 mm units are fitted for these. Magnetic sound-tracks give better quality sound and come in two forms: combined on the print (ComMag) with magnetic material deposited where the optical sound-track usually resides, and on a separate film with a magnetic coating (SepMag). The first of these requires a normal projector with a magnetic head fitted for play-back. The second requires a 'double-

band' projector which has a second set of spools mounted on the back, running locked in sync with the picture, with magnetic sound heads instead of the lamp and lens. This is an expensive machine. However, do not assume you will never need it. Much TV film material comes only in this form. Get your committee to check before they book the film. Either that or learn this phrase by heart: 'Sorry guys, but you have dropped a clanger. It's a bank holiday, the hire shops are closed, and I haven't got a magic wand.'

The majority of portable projectors have built-in amplifiers of variable quality. They also sometimes have speakers built into the lid. Do not use. Get a separate speaker –a large one. Do not use your hi-fi speakers. They are fine in your home, but unless you have spent a lot of money they will not cope with a film room. If you have spent a lot of money you won't want to risk them in a convention. Disco and PA speakers are fine. Film sound-tracks have very little information above 8 kHz (optical) or 12 kHz (magnetic) and generally go in for lots of bass on the effects. The projector amplifier may only deliver 25 watts but into a 25 watt speaker it will sound strained. 25 watts into a 100 watt speaker sounds effective because the larger unit can deliver the bass information without a problem. Anything more than that and life gets complicated because you need a separate amplifier.

Separate amplification requires a line level signal output from the projector which is not always present. In this case you have to know what you are doing when matching the projector to the amplifier safely (usually with an isolating transformer). I do know, which is why I do it. If you do not, either find someone who does to tell you or delegate them the job. Not getting it right can be very expensive. Getting it right can seriously improve the quality of your show. Convention audiences are becoming less tolerant of poor quality presentation. My own opinion is the job is not worth doing if it cannot be done well.

A word here about insurance. Films and film equipment are expensive. Replacement 16 mm projectors start around £2000. Arc-lamp machines start around £6000. Screens come at around £400+. The replacement cost of a 16 mm film print is between £1000 and £4000. A couple of projectors, stands, amplification, screen and a few films can easily have an insurance value of £25,000 to £50,000. Get it covered. This can easily double the cost of your convention insurance, be prepared for that. This value is why the film room techies get upset when convention members start using equipment to sit on or spilling drinks into it. The abuse that is returned to a polite request to not sit on the projection dais, because it flexes the floor and the picture bounces all over the screen, can be very trying (particularly at the end of an eighty hour stint).

At this point there should be a screen at the 'front' of the room, projection equipment at the 'back' of the room, a lot of chairs in the middle of the room and a film to be shown. The loudspeaker should not be positioned underneath the screen but at one side of it, about 6 to 8 ft off the floor. That way the sound comes from roughly where the picture is for most of the audience. If the speaker is underneath the screen, the front row audience get their ears blown and the back row hear a muffled something that may or may not relate to the screen action. If there are two speakers, put one either side of the screen. Your brain will then do a fairly good job of centreing sound to vision. Additional speakers down the room are useful, particularly where the room acoustics are really bad, but should be set at a lower output level than the screen speakers. Nothing is more disorientating than watching the picture in front of you with the sound source somewhere behind your left shoulder. (In a commercial cinema the speakers are behind the screen, but that's because they have a perforated screen with lots of little holes in it to let the sound through. You don't.) If there are multiple speakers you should be using a separate amplifier as the built-in amplifier in a projector will not drive more than two.

As a precaution, all cabling in the film room should be run such that the audience do not cross it in normal course of moving in, around, and out of the room. If this means long cables right around the other side of the room, so be it. Gaffer tape the things to the floor at regular intervals. Accidents are your responsibility and could cost you.

The time approaches to let in the audience. Do you know where the light switches are? Can the projectionist reach them from the projector? If not, then a second person, who is responsible for operating the lights, must be in the film room at all times. They need a torch. The projectionist should have a low-power mains lamp illuminating the projector area and another, fairly powerful, torch. Have some spare batteries. If the light switches are in another room, make sure all the tech staff know about it. Put a notice next to the switches detailing what they control (the hotel never has one), and issue a suitable threat to anyone who operates them without prior approval from the film room. If possible, arrange a light or two pointing at the screen, controlled by the projectionist with a dimmer. Bringing these lights down slowly just before starting the show will allow your eyes to adjust. Checking focus is then a lot easier. When focusing use a pair of low-power binoculars if the screen is more than 40 ft away.

Test run the beginning of the first reel to set focus and sound level. The film should then be rewound such that a point on the leader, about two seconds before the picture appears, is in the projector gate (if two projectors are in use, set them both). Mark the position where the sound control needs to be, then turn it down. Switch on the room lights. Now you can open the doors and admit the audience.

If you have screen lights, then turn the main lights off about 30 seconds before you start. This settles the audience and gives the door staff a signal to close the doors. When you are ready to start, make sure the doors are closed, turn off the room lights (or dim the screen lights out) and start the projector. Count to two, turn on the projector lamp and wind the sound up to the level you have marked. Check the focus. Unless something goes wrong, you now have very little to do until the reel change.

This is where the low-power projectionists lamp comes in. Threading the projector is difficult in the dark and torches hurt if you hold them with your teeth. If you only have one projector the procedure is as follows: have the next reel ready on a table or chair near the projector. Watch the screen and as the picture disappears turn the projector lamp off and the sound down (this stops the audience getting their ears blasted as the leader runs through). Stop the projector after the leader has run through. Take the full take-up reel off and put it on the floor. Swap the empty reel from the supply arm to the take-up arm. Put the next reel on the supply arm, thread the film and start up. When you see picture appear on the film as it comes off the supply reel, count two, turn the projector lamp on and bring the sound up again. Check the focus. Have a drink. The fastest I have ever done that is 17 seconds, with an assistant (the audience were counting). My average is 60 seconds: it can take 10 minutes (long fingernails are awkward, especially false ones). Put the used reel back in the box and get the next one out ready for the next reel change.

... 'cue dots' in the top right hand corner of the screen ... are missing on most 16 mm prints, or are in the wrong place. Ignore them ...

When using two machines for continuous projection, the procedure is a little different. Firstly, set up the projectors so that the picture areas overlap on screen as neatly as possible. Position them as far apart as is necessary to allow the projectionist to get between them to load and unload reels. This should be close enough for the controls to be operated by one person. Secondly, there is a professional change-over process using the 'cue dots' in the top right hand corner of the screen. Unfortunately these are missing on most 16 mm prints, or are in the wrong place. Ignore them. Instead, have the next reel set up on the incoming projector at the two second point before picture appears. Watch the film coming off the supply reel on the outgoing projector until you see the leader. Start the incoming projector, count to two, turn the outgoing machine's lamp off and the incoming machine's lamp on simultaneously, then turn the sound down on the outgoing machine and up on the incoming machine together. The sound-track is about one second displaced from the picture on 16 mm prints and the first second of sound for the incoming reel is on the end of the outgoing reel. Your delay between operating the lamp controls and the sound controls should compensate for this (unless the film leaders have been chopped around by a previous hirer, but you just have to live with that). Stop the outgoing projector as the leader runs out of the machine. Give it 5 minutes to cool down a little and meanwhile check the focus on the running machine. Have a drink. Mount and thread the next reel onto the static projector and repeat the above process for the next change-over.

The two second period has two functions. It is roughly the time taken for the film to travel from the point where you see it coming off the supply reel to the projector gate. It is also the minimum time necessary for a projector to run up to stable speed. This should eliminate sound 'wow' as the speed settles.

If you miss the end of the reel and the screen goes dark as the leader runs through, turn the outgoing machine's lamp off, start the incoming machine, turn down the outgoing sound while you count to two, then turn the incoming machine's lamp on and bring up the incoming sound. The rest as before. A couple of seconds of dark silence is all the audience should experience. You will experience a sudden increase in heart rate, and a desire to swear. Panic ye not. Have a drink. Please do not kick the gopher, he/she might not get you another drink.

Clean the projector gate and any magnetic play-back heads after each film and the rest of the film path each day. Follow the same rules for projector lens cleaning as you would for an expensive camera lens. They cost about the same (£200+). Try not to run the projector with the lamp on and no film in the gate for any great length of time when setting up, most especially if you are using an arc-lamp machine. The film acts as a heat filter. Without it the lamp will etch the rear element of the projection lens and render it scrap.

When using *Bell and Howell* projectors for feature films, two machines are always necessary. Recent models (TQ2 and later) suffer from the projector gate overheating after an hour. The tension disappears from the gate pressure pad springs and the film starts jumping in the gate. The picture thus jumps up and down the screen. The machine must be allowed to cool (for about 25 minutes) to stop this. Changover from one machine to another solves the problem. Using another manufacturer's equipment does likewise. *Bell and Howell* advantages include a line level output for separate amplification and built-in wiring for a custom change-over switching device. You pay your money, you make your choice ...

... Panic ye not. Have a drink ...

Do not rewind the reels unless showing the film again. If so, rewind during the break between shows and not during the show. The noise disturbs the audience. Film hire companies check the print whilst rewinding it and will impose a surcharge, if you have rewound it first, to pay for their time. Each projector will need a spare 1600 ft reel, because this is on what most films will be supplied. This will disappear into the system at your first convention and you will end up with an empty reel from the last film you show. 1600 ft of 16 mm film lasts 40 minutes. In practice up to 1750 ft (44 minutes) can be crammed on the reel by the distributor. Short films are often on smaller reels. These can be rewound, but remember to put an explanatory note of apology in the box saying you do not have small spare reels.

A spare 2000 ft reel for each machine is also useful, mainly for showing TV film material. This comes on 2000 ft reels and they hold 50 to 55 minutes of 16 mm film (e.g. a one hour TV program). In a few cases, a feature film will be supplied on 2000 ft reels, which can be frustrating. If you do not have, or cannot borrow, suitable spare reels, cancel the show. You cannot get 2000 ft of film on a 1600 ft reel and the film gets very scratched if you try running it onto a table or the floor. Also be careful that your projector can cope with the weight of film on a 2000 ft reel; some early 16 mm projectors do not have long enough reel arms or strong enough reel clutch mechanisms.

If your sound system has a microphone facility put out an announcement, as the titles appear at the end of the film, asking the audience to take their glasses and rubbish with them. About half will do so, making the clean-up easier. Gophers are useful for this, but if not available do a clean-up yourself. It should be done at the end of each film. The bar likes the glasses back and the incoming audience like the absence of garbage and broken glass under their feet.

Safety is a paramount concern in a convention film room since you can have a large number of people in a darkened room, many of whom will be variously drunk. The projectionist, being in control of the light source, is effectively in charge of the room. If possible, persuade the hotel to provide a fire extinguisher to the projection area. Find out the hotel fire evacuation procedure and routes from the film room to the assembly point. If the fire alarm sounds, or a member of the hotel staff arrives and tells you there is an alert, take the film off the screen and bring up the room lights (this is a cue for the door staff to open all doors out of the room - make sure they are aware of it before you start a show). In a firm but calm voice, tell the audience to leave the room, via the nearest signposted exit, and to go to the assembly point. If the mains power fails (or is cut off) use the projectionists torch and point it at the screen. The reflected light will give the audience something by which to see. Turn off all equipment, even if the supply has been cut. Do not leave anything to start up unattended when the power is restored. Be last out of the film room and go to the assembly point and inform the hotel fire officer that the film room is clear and the equipment made safe. Do not re-enter until he/she gives you clearance to do so. Find the convention duty committee member and tell him/her the film room is clear.

All film room staff should be discretely aware if a disabled person is in the film room at any time. Pass this information on when a duty change occurs. A disabled person in a film room will usually have someone accompanying them who is responsible for their safety. That person should know what to do for their charge if an evacuation is necessary. Help them, don't hinder. If the film room has an awkward entrance and a special route is necess-

ary for wheelchair access, get it signposted (if necessary, do it yourself). When laying out the chairs, don't forget a space for wheelchairs with a good sight-line to the screen and rapid access to the exit.

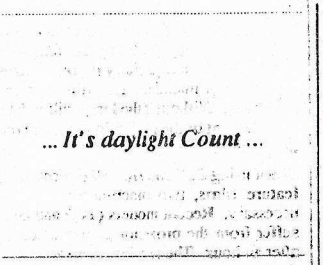
The convention should sign-post the film room. If it has not been done, do it yourself. have a sign by the door with the show times and another on the outside of the door with 'Now on' and 'Next' listed. Show time signs should be by the registration desk, in the hotel foyer, and the main hall entrance (if this is different to the film room). The most regular complaint I get at conventions is from members who missed the one film they wanted to see, because there were no signs giving show times. Any changes since the programme booklet went to press should be highlighted, particularly for shows early in the day.

When the convention has finished, you have dismantled and packed the last of your equipment, cleaned-up the room and opened the curtains (*'It's daylight, Count ...'*), remember to reclaim all the bits that have been borrowed by other parts of the convention.

Super 8 mm Film

The procedures for showing 8 mm film are the same as for 16 mm film with a few detail changes. The maximum picture height that a super 8 mm projector can handle is 4 ft from a 150 watt halogen lamp. If you want a larger picture you must have an arc-lamp projector, but even this will not go above a 6 ft high picture without serious loss of brightness. They also cost about the same as a 16 mm arc-lamp unit (£5000 to £6000) and are almost impossible to hire. The rule about the first row of chairs being two picture heights back from the screen should not be broken. The small size of the film means a grainy picture is inevitable. Watching from too close a distance will give you a headache. The maximum room length is 25 to 30 ft.

Like 16 mm, super 8 mm prints can also come in standard ratio, widescreen and cinemascope formats. 8 mm projectors are usually fitted with zoom lenses as standard. The normal reel size is 400 ft, which will last 20 minutes so there will be more change-overs in a feature film than with 16 mm (i.e. the full length 'scope version of *2001 – A Space Odyssey* comes on eight 400 ft reels, instead of the 4 reels for 16 mm). Sound-tracks are usually magnetic but can be optical. This is because many 8 mm full-length features were made to show on aircraft fitted with 8 mm optical sound projectors. Many of these are still in use today, which is why the prints still



appear. Portable projectors are available for both optical and magnetic sound-tracks.

Clean the projector gate and magnetic playback heads after every reel. 8 mm sound-tracks are physically very small and the film speed is quite slow so sound quality is easily lost with dirty heads. The small size of the projector gate means that crud in the gate is intrusive on the screen. Hired 8 mm prints should be rewound onto their original reels and most rental firms specify this. Replacement cost of an 8 mm film print is about £350. The advantage of 8 mm is that there are two physically separate tracks on a magnetic sound-track print and increasingly this is being used to provide stereo. This gives roughly the same sort of sound quality as a 16 mm optical sound-track.

Video

As with 8 mm, the basic procedures for showing video derive from 16 mm presentation, but the scale may be different. At the simplest level a video player connected to a TV in a small room will suffice, probably with only one person to look after it. The room size is limited as the comfortable viewing distance for a TV set is quite short. The door should be wide enough to admit a wheelchair.

The next level is to use a floor-standing single unit projection TV (with a built-in screen) which can have a picture up to 5 ft high. These use three separate colour tubes and give as good a resolution as a TV, but on a bigger picture. A TV uses a matrix of three colours of dots and at any given point only 30% of the information transmitted is presented on the screen. On a projection unit the three separate tubes present all the information. The problem is alignment of the three colours to present a good picture. There is usually a mirror to reflect the picture onto the screen and this mirror often folds out in front of the set. Any slight movement of the mirror wrecks the display. This includes convention members using it as a hand-hold in the dark to reach the front-row seats. Not all projection TVs have built in speakers, so a separate sound system fed from the video player may be necessary.

The next level is to use video projector onto a separate screen. This provides picture only and a sound system is required. You can use front or rear projection as the machine can be set to reverse horizontal scan and therefore does not need a mirror. It needs to be placed quite close to the screen (about 1.5 times picture height) at the height of the bottom of the screen. The keystone distortion created by this is automatically compensated in the machine. Problems with alignment of the three colours still remain and it can take some time to set a unit up. The maximum size of picture depends on the brightness the tubes can achieve. This is reflected in the cost of purchase and hire. A machine capable of an 8 ft high picture costs about £10,000 and can be hired for £150 to £300 per day. Cheaper machines are beginning to appear, using liquid-crystal technology, that remove the alignment problem and are the size of a 35 mm slide projector. The resolution of current models is not so good, and the manufacturers are having teething problems with the brightness of the lamp causing degradation of the liquid-crystal displays. I hope this will not inhibit the future use of the technology as it would bring large-screen video costs down considerably. Present purchase price of one of these machines is about £3,500.

The main problem with video on a large screen is the apparent smearing of colour. All TV systems work by transmitting a high-resolution black and white picture with lower resolution colour information superimposed. The larger the picture, the more difficult it is for your brain to fuse the two together to create a composite result. The two-picture height rule for the first row of chairs is as equally important for video as 8 mm film, to lessen this effect.

That's all for now folks ...

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