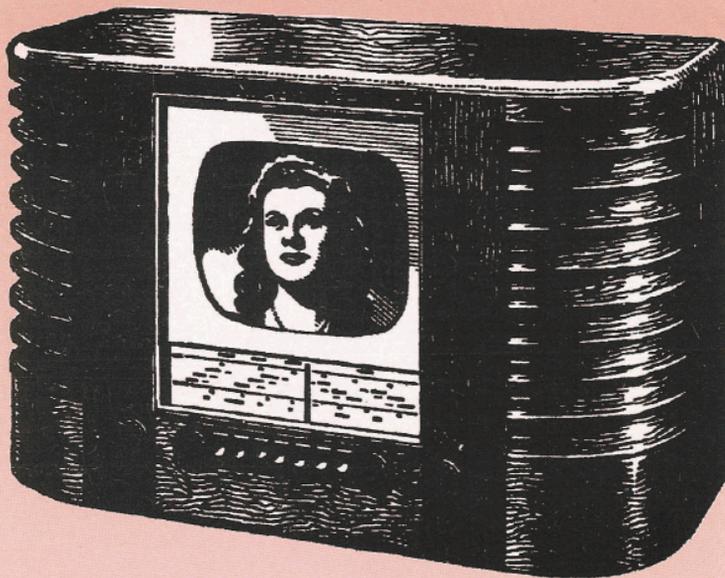


405 ALIVE

Recalling the Golden Years of Black & White Television



Issue 29 First issue of 1996
(actually published Summer 1996)

ISSN 0969-8884

IN THIS 'NEW LOOK' ISSUE

Meet our new Patron

Amazing find: Baird's camera discovered in garage!

Beware the Fiend with the Kitchen Scissors!

High Definitions Films Ltd and the Highbury connection

Comprehensive 405 Transmitter/Channels List

More old programmes recalled

405 ALIVE

Issue 29, First Quarter 1996 (delayed)

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TECHNICAL NOTE: This magazine is produced on the 405-line system. Please make allowances for occasional reduced definition in illustrations.

LEGAL WARNING, particularly for New Readers

By reading this magazine you are entering a Temporary Autonomous Zone (TAZ), where normal values, logic and timescales do not apply. At the least you may feel unable to put the magazine down until you have read it through to the very end. As you read it, you may also feel strangely mellow and entirely unable to consider doing anything else useful for 24 hours. Alternatively you may feel a sudden urge to have money extracted painlessly by one of our advertisers. Anything may happen and at the very worst you may enter a Permanent Autonomous Zone (PAZ) of your own creation.

We describe 405 Alive as *Your Escape from Ordinary Literature*, but be warned that unwary neophytes have been known to degenerate into hopeless wrecks gibbering meaningless phrases such as 'modulator', 'open reel', 'image orthicon', 'telerecording' and '10 kilocycle line whistle'. Sadly there is no cure, only deeper addiction.

DO NOT PROCEED FURTHER if you are unsure of your ability to handle hard-core old technology. You have been warned. This magazine should not be left out where children or people of an unsympathetic disposition may find it.



FROM THE EDITOR ...

Are you still with us? I hope so!

A few reckless souls managed to miss the message in the last issue about sending their subscriptions from now on to the Staffordshire address. From the kindness of my heart I returned their cheques, even though I was sorely tempted to cash them regardless!

But enough of this trivia – my main message this time round is to introduce our new patron... step forward Mr Roy Hudd and take a bow!

As an entertainer Roy needs no introduction from me but I'm sure his presence in our midst will add a certain *cachet* – I almost wrote weight or dignity – to these proceedings but this magazine has never been dignified nor does it wish to become formalised. We're a happy band of people who are not afraid to admit they enjoy the trivial and eccentric issues of past television as well as more serious matters.

Roy writes: "I will be delighted to be a patron of your circle" and we are delighted to include him amongst us.

More from Roy and the man who made the connection between Roy and *405 Alive* over the page.

Andy Emmerson.

OUR NEW PATRON



Just to let you know what I'm up to...

TELEVISION

I'm in Dennis Potter's last four part series KARAOKE (I play Albert Finney's literary agent!) shown on BBC1 and repeated on CHANNEL 4.

Five months of this year I'll be spending filming a new series of COMMON AS MUCK between April and August for transmission early 1997. BBC/TV.

RADIO

The Autumn series of THE NEWS HUDDLINES runs ten weeks from September the 5th. Applications for tickets to see a recording at the Radio Theatre Broadcasting House (Thursdays at 1.00pm) should be

sent to TICKET UNIT, BBC RADIO, BROADCASTING HOUSE, LONDON W1A 1AA with SAE.

RECORDINGS

Purcell's opera DON QUIXOTE (I play Sancho to Paul Schofield's "Don Quixote") is out on CD. I play Smee in PETER PAN, a double cassette from the BBC Radio Collection. I'm also on the CD *The Prince's Choice* – Prince Charles's choice of scenes from Shakespeare.

MUSIC HALL

Alas no live music hall shows during the filming of *Common As Muck* – April to August – but I hope to be taking my one-man show, *Roy Hudd's very own Music Hall*, on the road again in the Autumn.

I will, as usual, be hosting the British Music Hall Society Birthday Show (subject to professional commitments) we have, so far, Ron Moody, Elizabeth Mansfield – the Olivier Award nominee for her Marie Lloyd show – and Johnny Maxim. The venue is the Central Conference Centre Theatre, 90 Central Street, London EC1 on Tuesday, 3rd of September and tickets are from the BMHS Box Office on 0181-841 5242.

WRITING

My column appears at the beginning of each month in *Yours* magazine and my anecdote book is still available.

If you'd like a list of sheet music, autographs, programmes, photographs, memorabilia, etc. I have for sale (all monies to THE BRITISH MUSIC HALL SOCIETY) just send a SAE to:

Roy Hudd Enterprises, P.O Box 8923, London, SW4 OZD.



Pulleth not the chain when the *405 Alive* is standing in the station – 2LO of course!

Bernard King, who made the initial introduction, writes:

Glad “the lad ‘imself” has given the OK! (or should that be ‘Blessing’? – see picture). Knowing him as Jean and I do, it would not be surprising if he put in his ‘2-cents worth’ in the form of a short written piece now and again – but we’ll have to see what happens.

The pictures were taken in October 1984 when Roy declared ‘open’ the Wilson, Keppel & Betty bar at Brinsworth House, Twickenham. Jean and I were very closely involved with Brinsworth at that time; Jean made the little velvet curtains (just visible in the pictures) and I did the ‘title’ sign-work. Roy was EABF Chairman at that time and this was one of his routine duties.

LETTERS, WE GET LETTERS...

From Bernard King, 195 Hanworth Road, Hampton, Middx., TW12 3ED:

At the bottom of page 13 of your Special Issue there is a mention of Lost Programmes. During the late 1980s I gathered unto myself thereof a collection of 16mm films intended for possible use on our free pensioner-group film shows. One b&w reel of about 20 mins was of no interest or potential in the context of the pensioner shows. It is one of the films shot for/by the BBC for the Open University but, although *not* a telerecording, its leader strip strangely carries not the standard footage numbers but the old darkroom clock and chalked blackboard!! (Funny people the BBC!) There is a full 35 seconds of this ident preceding the titles. The film itself – I've only seen it once(!) – is called The Cell. It is ridden with science and professors! The film is up for grabs to anyone who wants it and I think there is only one splice in its whole length. I cannot find a date.

Somewhere around 1960, when I made up my home-made 16mm camera – from a 9.5mm mechanism – so that I could make full use of the very cheap G45 ex-Government cine film. I pointed it at the TV screen and myself – a very short telerecording! It's still around somewhere among my 16mm bits but its really too short to be of any significance. I'll dig it out some time; I just wanted to see if it could be done. In fact I did the same thing in the summer of 1952 on 9.5 film. I wanted to cover a Children's Newsreel event of 90 seconds and the camera only took 60 seconds. By slowing down the camera it was just possible to cover the item. A D/D acetate was made of the sound track. I still have the track on the disc but I'm not sure if the 9.5mm film still exists among my bits and pieces.

Just a couple of comments on the Emitron camera pictures in your Issue 25. Fig 2 on page 40 struck a chord of nostalgia. I had that picture of Mr Birkinshaw in my scrapbook around 1936-7. And Fig 3a, page 44, also took me back! When I left school at 14 in May 1937, my very first employer was... Fox Photos Ltd, 6 Tudor Street.

From Vaughan Stanger, Wealdstone:

As readers of issue 23 may remember, during the last year or two I have been trying to obtain 16mm films containing elements of the BBC's broadcasts of the Apollo 11 moon-landing. Brian Hemingway's letter on the subject in issue 26 was actually printed some months after I obtained two such films from him, one of which is presumably the film he referred to his letter. I offered both films to Steve Bryant at the BFI; they have since been transferred to D3 videotape, in which format they are now held in the permanent collection of the NFTVA at Berkhamsted.

The contents of the films may be of interest to some readers. The first film is a B+W positive mute print of roughly 16 minutes duration. It contains four sequences: James Burke demonstrating NASA's moon-walking simulator (1m 24s); footage from inside the Lunar Module while en-route to the moon, including a BBC caption (11 m 34s); a clip of James Burke talking to camera in the Apollo 11 studio (22s), and shots apparently taken from the Lunar Module after landing but before Neil Armstrong's descent to the surface (2m 27s)

The second film is a negative with an optical soundtrack – the latter not noticed by me during my initial inspection of the film! This 12-minute film contains several sequences of Armstrong and Aldrin on the lunar surface, although regrettably it starts just after Armstrong has uttered his historic speech. Several BBC captions are visible and the audio track includes commentary from James Burke and Patrick Moore. There is also a short clip of the splashdown at the end of the mission. Unlike the first film, which contains two sequences unique to the BBC broadcasts, all of the visual material in the second films derives from the NASA live feeds, with the exception of the captions.

Both films give the appearance of having been very hastily assembled from a master tape, as is indicated by the presence of several clumsily executed edits. I would not be surprised if the films were produced illegally. There is certainly no evidence of official BBC identification anywhere on the films or cans. The picture quality throughout is quite poor, with noticeable line structure particularly on the second film. However, staff at the NFTVA did manage to improve the picture quality somewhat compared to an initial video transfer performed by Andrew Emmerson. I should record my thanks to Andrew; his assistance was invaluable. That first video transfer enabled me to accurately research the films' content, which helped considerably in stimulating Steve Bryant's interest.

While the absence of the first film's soundtrack and the lack of any coverage of Armstrong's first steps on the moon in the second is disappointing, Steve Bryant was very pleased to receive the films at all and regarded them as a worthwhile find. It is the BBC's captions, commentary and the short studio sequence which are important, since they provide a local and subjective context which the unadorned NASA footage (all of which exists) obviously cannot.

Nevertheless it is these omissions which provide one of the principal reasons why I have written this piece. Some months before I obtained the two films from him, Brian Hemingway sold another Apollo 11 film to a collector, the details of whom he did not retain. Needless to say, I am very keen to learn of the contents of that film, and in particular to determine whether it fills any of the gaps noted above. If the person concerned, or indeed anyone else who has recordings derived from the BBC's Apollo 11 transmissions, could get in contact

with me, I would be most grateful (write to 87 Archery Close, Wealdstone, Middx., HA3 7RX).

I appreciate that many people have genuine concerns about returning missing television recordings to official archives, but I can assure any interested readers that in this instance the BFI are very keen to obtain copies of what is, after all, possibly unique footage of one of this century's defining events.

From Martyn Victor, Port Talbot:

Congratulations on your *405 Alive* magazine. Every time I pick it up there is always something of interest. Some clubs I have belonged to don't send out in a year what you manage to fit into one issue. Well done!

From Keith Rann, Loughton:

I've enjoyed reading issue 27. On page 6, regarding ITA views, Croydon channel 9 also had Tower Bridge, the Sphinx on the Embankment, and a view of The Thames with a barge. Chillerton Down channel 11 had a view of Corfe castle; I saw this one in a television shop in Salisbury in 1963.

We used to have a magnifier like the one on page 45 for the Bush TV22 but it didn't come from the Co-Op. The stand was of perspex, not wood, and the feet curved in at the base, then there were two long strips of perspex (one each end) that slid underneath the cabinet. The height-adjusting knob was in the diagram. We didn't have any problems with this magnifier.

On page 48 my favourite film *Beauty In Trust* was the best article I've ever seen on this. very well written and no mistakes at all.

Some time we'll have to compile a master list of these ITA still picture slides; let's have some contributions and suggestions please! And one of those perspex magnifiers turned up here recently, exactly as Keith describes. [Editor]

From Paul Murton, Manchester:

Days Of Vision - 405 Alive Readers' Offer.

Many thanks to all the people who wrote in. The first four postcards were received from:

- Michael Coxon, Derby
- Jim Whiting, Middlesex
- Roger Godden, Sheerness
- Tim Alcock, Birmingham.

They each received a free copy of Don Taylor's superb book *Days Of Vision*.

From John P. Hamilton, London:

Many thanks for the latest edition and congratulations on reaching your sixth year. I know it's hard for you, but please don't stop. What would I read ?

My next piece is about *Cool for Cats*. The ITV 40th Anniversary Party was quite a mini-reunion for names associated with the show including David Boisseau, who directed the very first one in 1955, Joan Kemp-Welch, who really turned it into a hit show and won a producer/Directors' Guild award (the forerunner of BAFTA) for Best L.E. show with *Cool*, her husband Peter Moffatt who worked as S.M. on the prog before he became a director. Also present was Brian Taylor, the director who took the show out to the streets of London by doing them as OBs, Daphne Shadwell, my wife, who had a long stint on it, and from whom I inherited it in July 1959 until the final programme in Feb 1961. And, of course, the man who presented it, Kent Walton. Not to mention the former PAs of Joan, Daphne and myself and several technicians who also did their bit.

From Tony Currie, Glasgow:

Richard Bell asks about the original Thames ident. When they took over from Rediffusion in 1968, the logo was about as simple as you can get – the word THAMES in white on a black background. No animation. No music. No frills. It was some months before the London skyline with Tower Bridge and the dome of St Paul's first appeared and initially it was in monochrome. Likewise when LWT started, their ident was the words **London Weekend Television** in white on black, again mute. The first animated version – with a revolving stylised laurel wreath in white on orange – was used for the start of colour in November 1969.

Mark Jurkiewicz is evidently on the receiving end of some of a handful of instrumental tracks which the original owners – Pye Records – have flogged to death on countless compilation albums ever since. The Z-Cars recording by Johnny Keating was never used on air in the BBC police series. This version was the 'hit single'. The transmitted version was arranged and recorded by Bridget Fry and Fritz Spiegel and was based on the traditional folk tune *Johnny Todd*. The theme for *Top Secret* on the other hand was indeed the Laurie Johnson version of Sucu Sucu (rather than the Johnny Gregory one), and it accompanied the Associated Rediffusion series that starred William Franklyn as Peter Dallas, Patrick Cargill as Miguel Garetta, and Sam Kydd as Orlando.

Nice to see so many memories sparked by the excellent piece on *Monday's Newcomers* in issue 23. I recall first coming across the programme in 1961 and being hooked thereafter for exactly the same reasons as Michael Coxon. Knowing that I wasn't supposed to be watching made it all the more interesting

Is the Arthur Bliss *Signature with Interlude Tune for ABC TV* the over-grandiose thirty-second symphonic arrangement of the notes A, B,

C that used to come after the 'Picasso card' music, (latterly *And so on, and so on*)...? I think it probably is.

And Larry Coalston's recollections of the BBC removing colour burst to 'mono' pictures prior to the colour launch reminds me of the ITV 'colour strike' in late 1970 when members of ACTT refused to handle colour signals unless they were paid extra. The result was that the burst was suppressed before transmission and ITV went back to monochrome again for several weeks, including Christmas. But with a bit of ingenuity and a 4.43MHz generator, all sorts of strange colour effects could be achieved with the resulting transmitted signal...

Keep those continuity announcers coming! I can tell you from experience that however complete a list we produce, there will always be another name to add, since freelance announcers would often do 'the odd shift' on a neighbouring ITV station not always with the knowledge or consent of their main employers! For example, I remember doing illicit voice-overs for Channel Television in Jersey when a strike had paralysed the rest of the ITV Network.

I look forward to reliving the Autumn of 1995 some time around July, by the way....

From Tony Clayden, Southgate:

When I was working in the radio trade thirty years ago there was a range of community antenna accessories sold under the Teleng-Jerrold name. I know Jerrold is a big manufacturer of these items in the USA but were the items sold over here in those days imported from Jerrold or made in the UK under licence?

From Julian Levene, freelance rock & roll researcher, 105 Halsbury Road West, Northolt, Middx., UB5 4PP (tel: 0181-933 8364):

I was most interested to learn, via the BFI, of your *405 Alive* initiative and especially that a 'lost' 1955 edition of BBC's *Off The Record* had been found as recently as last year. I have been seeking the 27th March 1958 edition for many, many years and within the last decade a sighting of a VHS copy with all but the opening titles was reported from south Yorkshire purportedly emanating from an unknown (to me) source in Norwood. Apparently the anonymous mid-1980s owner died in 1994 and his widow sold her then late husband's entire audio-visual collection at a West Midlands record fair last year.

My reason for this interest is to find missing footage of the singer Buddy Holly on British television. Potential programmes would be BBC-TV television news or *Tonight*, unconfirmed AR-TV *Cool For Cats*, ATV *Sunday Night At The London Palladium*, ATV (?) Jack Hylton's *See You In Soho* - unconfirmed, BBC-TV trailer announcement for and performance in *Off The Record*. The tragic BBC destruction card for the specially (14th March 1958) telerecorded 550ft of combined sound 35mm Holly/Crickets negative and separate 460ft show copy print is

dated March 1960. Hopefully this does not mean that the can(s) were not subsequently saved from the skip in St Mary's Road, Ealing or that a separate print of the entire programme did not survive. One lives in hope, though as you probably know, silversmiths were/are the prime scavengers for such 'junk', burning the celluloid to extract the nitrate.

Anyone able to help Mr Levene, please get in touch direct.

From Malcolm Baird, Canada:

Let me add to the undoubted chorus of thanks which will arise for your work with *405 Alive*.

Earlier this month I was in Scotland and while there I talked to some of the Baird historians at the University of Strathclyde, who are doing excellent work, continuing with their researches on the Baird Company and its offshoots. When this work is eventually published it will put paid to the stereotype of Baird as being stubbornly wedded to mechanical TV and making no contribution to modern systems.

The BBC will be doing a special programme TV 60 celebrating the 60th anniv. of the first regular high-definition programmes (2nd November 1936) on 405 lines. I think I can understand the BBC interest in the 'social' as opposed to technical aspects. But let's hope the latter does not entirely get swept under the carpet. Developing TV was a long and laborious business, full of 'human interest' too. I have just finished a short article on Baird's eventful trip to the USA in 1931, it will appear in the Bulletin of the N. American section of the Royal Television Society.

IT MAKES YOU THINK

The reason why some people don't recognise opportunity is because it often comes disguised as hard work.

The great thing about America is the freedom to be offensive.

– Mike Trimble.

We do not see things the way they are but as we are. *– Jewish proverb.*

I've read so much about the bad effects of smoking, drinking and sex that I've decided to give up reading!

– Laura Lee.



BVWS event: important correction

The date of the British Vintage Wireless Society's vintage television display is Saturday 21st September, not the Sunday following. The venue is unchanged.

Plug is pulled at television shop

One of Oxfordshire's oldest established radio, television and electrical shops is closing down. Joint directors John and Philip Lay of John E. Lay of Didcot, are retiring and the premises in Broadway will be taken over by Clothes for Children. For some years the brothers have continued to run one of a shrinking number of local shops in an industry now dominated by national chains.

John E Lay was started as a 'hobby business' by their late father in farm buildings at West Hagbourne in 1927. The history of the business, which moved to Didcot in 1935, spans the history of television. In 1938 the firm was advertising "the first effective television demonstrations" in the district. John, 74, and Philip, 67, whose backgrounds include working with radar in the services, recalled that just before the Second World War television sets cost between £60 and £100 retail. Customers crowded into the upstairs workshops to witness the first 'commercial' television pictures in the town in 1955.

The brothers say they have mixed feelings about their retirement, but say it is a job to keep up with rapid changes in the industry. Their staff of four are going on to other jobs or retiring.

[From the *Oxford Mail*, December 1995; contributed by Tony Statham.]

Lost series rediscovered

Seven 15-minute episodes of the lost 1952 crime anthology TV series, "Meet the Victim," have been released on home video by producer John Potter. The gritty series, filmed on urban streets, was syndicated nation-wide during the early years of the Golden Age of Television. The home video is made from the original 16mm prints, carefully restored and transferred to video. The two-hour collection may be purchased for \$19.95 plus \$4.50 shipping inside USA.

Contact:

John Potter Productions
35 McKinley Ave., Apt. 1E
Hawthorne, N.J. 07506
USA.

EMERGENCY WARD 5!

As the launch of new UK terrestrial broadcaster Channel 5 approaches, programme commissions are already underway. Excelsior Productions, fronted by Richard Bates and previously responsible for such successes as *A Touch Of Frost* and *The Darling Buds of May*, have secured a deal to re-make *The Larkins* and *Emergency Ward 10*. These two early ATV series still have a high name-profile and Richard Bates believes that *The Larkins* can be a new cost-effective sitcom.

The British Film Institute have also been approached to provide considerable access to the early years of Channel 4's own programming from the eighties, which Channel 5 hopes to repeat. They hold the master material on behalf of Channel 4, which has no formal programmes archive of its own. [Chris Perry, Kaleidoscope News]

TILL DEATH US DO PART RE-DISCOVERY

Industry sources have confirmed that a private collector has contacted the BBC to discuss the return of a previously-missing episode of *Till Death Us Do Part*. Believed to be called "Two Toilets...That's Posh" from the first season; the 16mm monochrome telerecording is in perfect condition with a sharp printed image.

The episode begins with Alf Garnett being desperate for the toilet, but his loo has broken. Next door refuses to let him inside their house, so he jumps in a taxi and goes in search of a toilet.

Christine Slattery, from the BBC Archives, has subsequently revealed that the episode is actually 'Alf's Dilemma'. With no on-screen titles for the series, the BBC had to consult original scripts to identify the episode. It is 21 minutes long which means that about 4 minutes has been cut from the print. The print was destined for overseas use and most of the cut material is of a racist nature, which would have offended many potential viewers. The print will be returned in February, alongside three other items: a 1962 *Benny Hill Show*, *Nightcap* (an edition from the early 1960s late-night music series) and a 1955 appearance of Max Bygraves and Archie Andrews. [Chris Perry, Kaleidoscope News]

ANOTHER FRENCH FIRM ACQUIRES LUMIERE

Industry sources finally confirmed in late February that ECG, another French multi-media conglomerate, has purchased Lumiere Films. Lumiere are the current copyright holders of the ABC Television Archive and rumours have persisted for some months that if the company were sold, the archive would move to France. After a six-day financial study, sources have confirmed that the Archive is likely to remain at Pinewood Studios, because the Archive is heavily in profit. Lumiere Video is expected to close, since only the Avengers pre-recordeds have shown a profitable stance. [Chris Perry, Kaleidoscope News]

405 IS ON THE 'NET!

Thanks to our friends at Kaleidoscope, *405 Alive* now has a presence on the Internet. You can see our page at

<http://www.serve.com/lapetford/kaleidos/405aliv.htm>

and there is plenty of other fascinating information on old television there as well. If you have access to the Internet do take a look!

DISNEY BACK AT ALLY PALLY

Disney came to Alexandra Palace on 1 October 1995. Not the man himself, but the satellite channel that bears his name. The Palace was used to launch the new television channel due to the fact that the two have a long association going back to the days of pre-war television. Through the British distributor Levy, the Walt Disney company supplied the fledgling service with Mickey Mouse films. It was one of these, *Mickey's Gala Premiere*, that was the last item to be seen on pre-war screens. Thoughtfully it was also one of the first items to be seen post-war.

The event was very well attended, being invitation-only. The whole of the West Hall had the feel of Disneyworld about it. There were dancers, Disney characters, larger-than-life television sets, where you could stand inside and have your photograph taken with a Disney character. Food and drink were constantly available; at one point I was approached by two young ladies both carrying trays of champagne, what more could one ask for!

Everything was gearing up for the big 'switch-on' at 6.30pm, when the Disney Channel would beam into homes capable of receiving satellite television. A family won the competition to help Mickey & Minnie Mouse pull the big, brightly coloured switch to the 'on' position. A big countdown ensued, with all those present shouting at the tops of their voices. As everyone got to 'zero' those present on the stage threw the switch to the 'on' position, and that was it, yet another satellite channel took to the airwaves.

[Simon Vaughan, Alexandra Palace Television Society]

TV MONEY FOUND!

After many years of being in existence, but not really achieving anything, the Alexandra Palace Television Trust has now received a grant from the Foundation for the Arts and for Sport of £11,000 to carry out a feasibility study on the South-east wing, with a view to setting up a 'living museum' within the old studios.

During 1995 a group of volunteers cleared the studios of the junk that had been dumped in them, and Studio A was used to display the various pieces of television equipment that had been stored around the Palace, mostly in the old Telerecording room in the basement.

The Alexandra Palace Management then decided that the ground floor was 'unsafe' and have prevented any member of the public to enter the old transmitter halls, preview theatre, etc.

The Television Trust has as its Trustees people who have a strong interest in preserving the television history of this country. John Trenouth, the Curator of Television, from the National Museum of Photography, Film &

Television, in Bradford, Simon Vaughan, Archivist of A.P.T.S., Clive Wolfe, Dr Roger Driscoll, to name but a few. Both Tony Bridgewater and Dallas Bower are consultants to the Trust.

Plans for the television museum were drawn up after the 1980 fire, which destroyed most of the Palace, with the exception of the South-east wing and the old Victorian theatre.

Once the feasibility study has been carried out, during the next 12 months, a bid will be made to the Millennium Commission, for a grant from the National Lottery. It is planned to recreate Studio A as it was during the period 1936-1939, while Studio B will be called the Baird Memorial Studio, and will have the original Baird Intermediate Film Camera, positioned, as it was, in the bay-window that jutted out into the studio.

Both the museum at Bradford and the Museum of Moving Image have agreed to lend, on a permanent basis, exhibits they have stored in warehouses. Part of the museum will include an Archive section, where researchers will be able to study the history of television, it is planned that the A.P.T.S. Archive holdings will form the basis for this archive collection – where better for the A.P.T.S. memorabilia to go, than back to the building where it originated, all those years ago! [Simon Vaughan, Alexandra Palace Television Society]

And now, more good news with an Alexandra Palace connection...

Exclusive:

Baird's Camera Found!

Dicky Howett reports on an historic discovery

The camera that John Logie Baird used in his Intermediate Film System at Alexandra Palace in 1936 has been discovered in Manchester.

The story begins when Gordon Sharpley (one time Granada Television engineer) indicated to me in March of 1995 that a late friend's widow had for disposal a collection of movie camera 'bits and pieces'. Gordon wondered whether any of it would be of interest to me. I said that I only really collected ex-television equipment, but Gordon replied that his old friend had worked for many years as head of telecine (and also for a while in the maintenance department) at Granada TV and some of

the camera equipment had a television connection. How very true that statement turned out to be...

Later, Gordon inspected the movie camera equipment and mentioned that one of the cameras (albeit dismantled) was a 16mm Vinten Model 'H' circa 1935 with a four-lens turret and a 1,000ft film magazine. This sounded unusual, but intriguingly like something I had heard of.

Research proved that the Vinten Model H camera as a type was **only** made as a **35mm** professional studio machine with a **three**-lens turret and the usual 400ft film magazine. So what on earth was this Model H doing with the wrong number of lenses, the wrong sized magazine and indeed the wrong film gauge? In fact the only four-lens turret 1,000ft magazine camera that I could think of was the famous Baird Intermediate Film camera (made in 1936 by Vintens) but that was 17.5mm gauge and not 16mm.

To check further I rang Bill Vinten (son of the company founder) and put to him the facts as known. He expressed some doubt as to whether this camera was the **actual** Baird machine. However, he then recounted the tale of how his father, William Vinten, had in 1937 reclaimed the 17.5mm Intermediate camera from Baird (William Vinten visited Alexandra Palace and made an excuse about the camera needing an 'urgent' overhaul) once it became apparent that Baird had lost the television race. Also the Baird company was rumoured to be heading for bankruptcy and it appears that the camera hadn't actually been paid for! (This story is recalled also in the recent book *Images of Success*, the history of the Vinten company). Bill Vinten added that his father subsequently had re-converted the 17.5mm camera to **16mm!**

It was now looking more likely that this particular Vinten Model H modified camera was indeed the actual Baird machine. What an exciting discovery if it was! This very camera would have been used in Studio B at Alexandra Palace filming programmes from a fixed position and then transmitting 54 seconds later via 'flying spot' telecine an almost instant 'television' image. Also, this particular Model H camera would have needed an outlet slot somewhere at the rear to enable the film, once exposed, to enter the developing tanks.

A week or two later Gordon Sharpley skilfully assembled the Model H camera and gave it a thorough inspection. He confirmed that this camera (which is in very good condition, albeit now painted black) had indeed a special 'outlet' slot (rear base), now covered by a removable plate, fitted when the 17.5mm camera had been re-converted to 16mm. Another clue was the inscribed serial number 54

(Vintens had sold at least 50 Model H cameras by 1935) and a prefix B.T. (for Baird Television?).

Bill Vinten has since confirmed that there can be little doubt that this camera is indeed the actual Baird machine, given the facts and also the unique manufacture. It is highly unlikely that there would have been two (or more) of these Model H cameras with apertures in the bottom, four-lens turrets and 1,000 ft magazines.

The subsequent history (post 1937) of the camera has yet to be fully ascertained. Bill Vinten says that he used the very same Baird Vinten H camera in its 16mm incarnation post-war at Elstree. Bill was, at the time, working as a cameraman for Gaumont-British making low-cost films for children. Other indications concerning the use of this camera are slowly emerging but these, it must be said, are mostly informed guesses. One idea is that the camera was used latterly by Mancunian Films of Manchester in their Dickenson Road studios (subsequently bought by the BBC in 1954). But as I say, the post-Baird history of this camera is still mostly speculation.

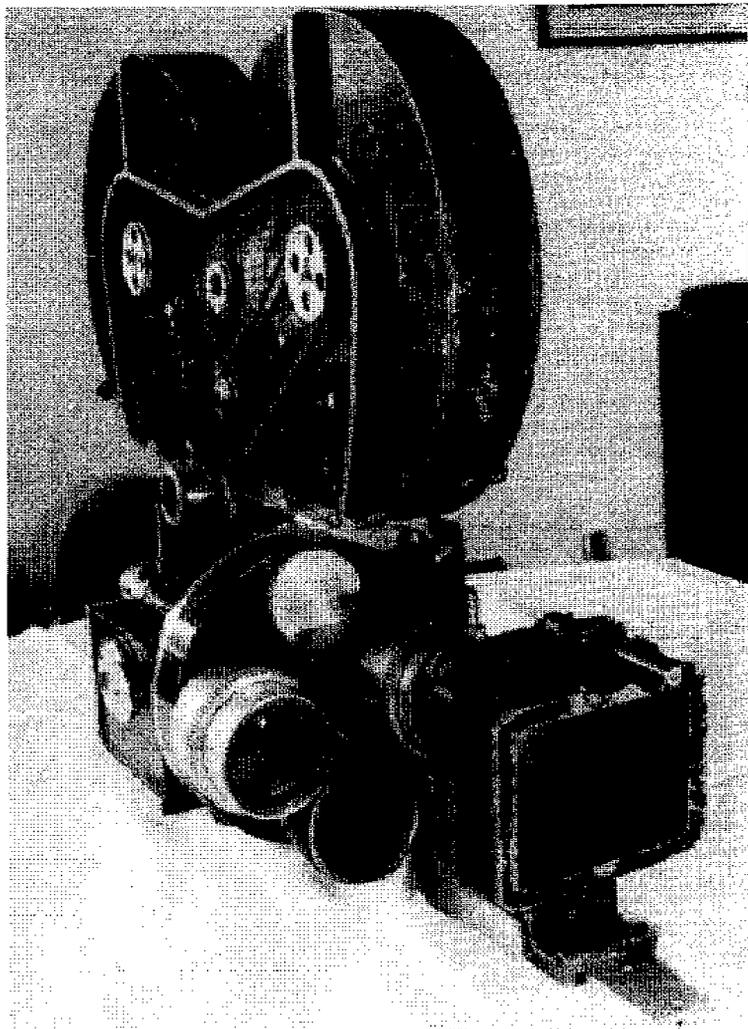
Gordon Sharpley told the present author that his erstwhile friend had no apparent inkling of the true nature of what he possessed, (and neither did his widow!) He collected the various cameras and bits of movie hardware only for their intrinsic value – their mechanical beauty.

Tragically, Gordon Sharpley himself died in October of last year, leaving the fate of Baird Vinten H camera in something of a limbo. As has been stated, Gordon didn't own the camera (he was only assembling and looking after it). At the time of writing the precise whereabouts and status of the camera is unclear. (The present author was due to visit Gordon Sharpley – to inspect and photograph the Vinten H camera – but Gordon died two days prior to the visit).

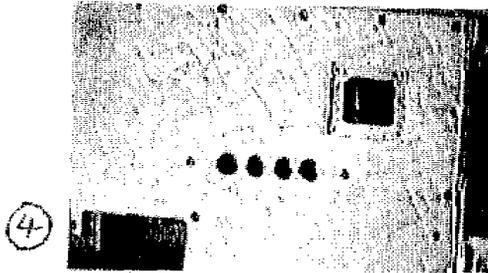
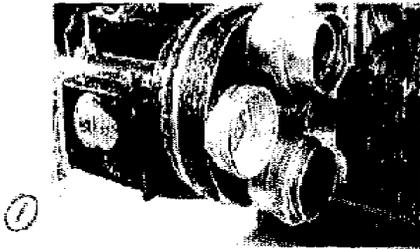
Concurrent to Gordon Sharpley's reconstruction of the camera, a local solicitor acting entirely for the benefit of the camera's owner got wind of this 'historic find' and has since garnered an estimated value for the camera of £4,000. Whether this figure is a realistic 'asking price', only time will tell. Recently, one unidentified individual offered £2,000 for the camera. It can also be reported that Vinten Broadcast Ltd was asked if they were interested in buying the camera at the £4,000 price tag. For various reasons, Vintens have since declined to purchase.

Of course, the only right and proper place for this unique Vinten H camera is in the British National Collection. But these days all museums have to rigorously justify costs. Even for a worthy item such as Baird's

Intermediate Film Camera, it is almost certain that £4,000 is a price too high.



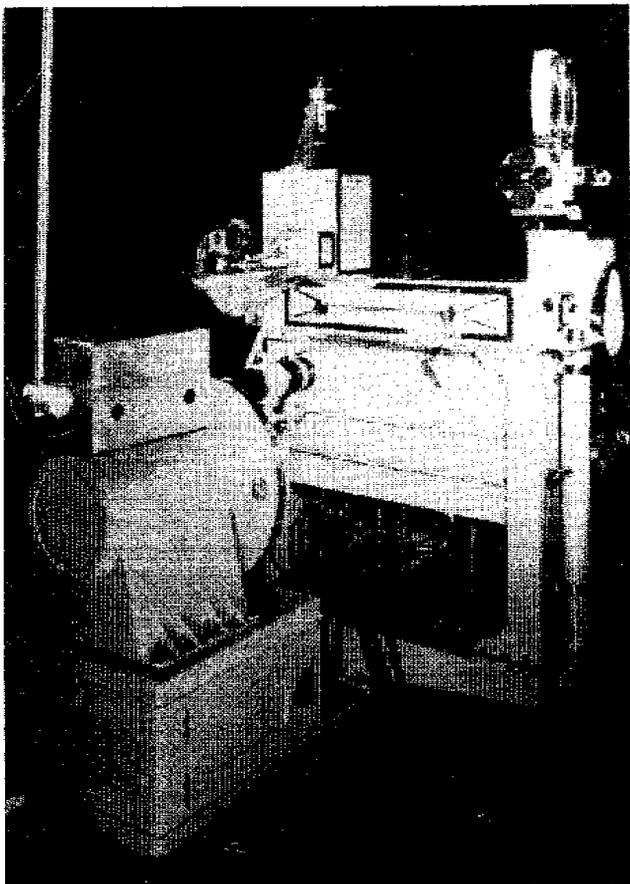
The camera – in the flesh!



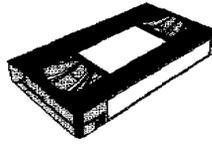
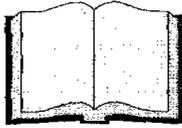
Photos from video stills of the recently discovered Baird intermediate film camera.

1 and 2: The four-lens turret and film magazine.

3 and 4: Aperture for the 17.5mm film to exit below the camera and enter the developing tanks (photos Dicky Howett).



Baird intermediate film equipment for Alexandra Palace, 1936 (240-line system). The camera found recently is clearly visible in this shot at top right (print kindly supplied by Ray Herbert).



REVIEWED FOR YOU

From the Palace to the Grove, by Michael Barry.

Royal Television Society, Paperback, £4.75 (ring 0171-430 1000 to check postage rates).

In January 1938, Michael Barry, a newly appointed producer, approached the BBC's polished bronze doors of Alexandra Palace. Michael recalls in his illuminating book that together with producers like Desmond Davies, Royston Morley and George More o' Ferrall, they were truly pioneers. There was no Head of Television Drama for many years, hence no clear guidance, no direct lead given – it was up to the individual. Indeed, he likened those days to the licence given to privateers of an earlier period to chart routes where none existed. Someone after all had to find a way, and it led to heady exhilaration. What chance such a term being heard in drama departments in the early nineties?

The thirties' practice at Alexandra Palace of producing theatre and radio scripts did not satisfy Michael. While today we can enjoy skilful translation of 'classics' in seasons like *Performance* mounted by the BBC, theatre plays are nevertheless not appropriate to the screen and certainly not the three-act West End plays then in fashion. Michael wrestled with this new problem. His chapter on the nature of the theatre play in relation to the needs of the screen expresses for me this issue more clearly than ever before.

This book is an invaluable record of the period, always expressed on a personal level, making it very readable. For this reason the chronology is not always certain; I would have valued an index. The titles and cast lists of some sixty Michael Barry productions are given; production stills also catch the period flavour.

[Condensed, with acknowledgement, from a review by David Rose in *Television*, the journal of the Royal Television Society.]

Birth of the Box, by Ian Sinclair

Sigma Press, 1995

This well-printed book of nearly 200 pages is by an author whose name is familiar to readers of the technical monthly magazines. It is a solidly bound paperback of A5 size and is profusely illustrated with relevant diagrams and photographs. Typographic errors have been carefully eliminated from this latest 'history' but, regrettably, errors of fact abound. Under no circumstances should this work be used for reference purposes in regard to persons, places or events.

The author claims to have consulted Abramson's *History of Television* and Bruce Norman's *Here's Looking at You* in compiling this volume, but none of the numerous errors committed occur in those two reference works. A few examples immediately obvious in a quick first reading will suffice.

The pre-war U.S. system (441 lines) becomes 525 lines. The Baird/BBC 30-line system becomes 32 lines: the low-definition studios at Long Acre, Broadcasting House, and Portland Place, are magically transported to the Crystal Palace, starting four years before J.L. Baird signed the lease; the BBC's 2LO transmissions from Selfridges and Brookman's Park are also transferred to the Crystal Palace, as is the odd event at Alexandra Palace situated miles away; Ray Herbert is promoted to J.L. Baird's "only assistant in 1940, a position he is unlikely to add to his published CV!

Verdict: nice pictures, pity about the editing!

[Review by Doug Pitt, first published in the newsletter of the Narrow Band Television Association.]

William Tell: The Legend Begins

ITC Video, £13.99 VHS cassette

Well, at long last, the video that all (or most) vintage television buffs have been waiting for – a double tape set of *William Tell*. These old monochrome shows that were filmed in the Welsh mountains in the winter of 1957/58 are well worth seeing all over again and are far superior to that awful imitation that was screened in most ITV regions during the 'wee small hours' in recent years.

Anyway, the first tape starts with the pilot episode. *The Emperor's Shot* sets the pace for the rest of the series and depicts the famous legend in which a peasant named William Tell forms a resistance movement and fights against the evil Gessler. Oddly enough, this is followed by episode 29, entitled *The Raid* and then episode 7, *The Assassins*, in which guest stars Edwin Richfield and Alfred (Marker of *Public Eye*) Burke feature as the villains of the title.

Tape 2 begins with an action-packed episode called *The Hostages* in which a young James Booth makes an appearance. This was the second programme shown on television and I can't understand why they are not presented in numerical sequence on this tape. Still, it's entertaining. In *Landslide* (episode 18), Tell comes face to face with his villainous 'double' and Wilfrid Brambell appears as a nutty peasant. Finally Frazer Hines of *Doctor Who* and *Emmerdale Farm* guests in episode 16, *Boy Slaves*, in which Tell tries to do a deal with Gessler, although Tell is unarmed.

REGULAR CAST

William Tell	–	Conrad Phillips
Hedda Tell	–	Jennifer Jayne
Walter Tell	–	Richard Rogers
Gessler	–	Willoughby Goddard

An Incorporated Television Programme Co. Ltd. Production.

[This review was submitted by Alan Keeling many moons ago and if nothing else, demonstrates that all contributions surface to the top of the pile eventually! Sorry for the delay.]

WRIGHT'S REPLAY

Jeff Wright tests your memory

Norman Vaughan, the man who grew on you

Norman Vaughan leapt to stardom in January 1962 when he took over from Bruce Forsyth as host of *Sunday Night At The London Palladium* when Bruce was ordered to rest.

He was terrified; "I was paralysed with nerves with the thought of twenty million viewers watching me."

And it was from this nervousness that his legendary catch phrases "swinging" and "dodgy" sprung. It was just something to say at rehearsals and it caught on; it was never planned.

Like most overnight stars, Norman had been around a long time. He was 34 when he took over at the Palladium and had first appeared on television in 1954.

Norman did over 100 SNATLP shows and left the series in June 1965. Jimmy Tarbuck was the next host.

His fame led to a long running commercial for Cadbury's Roses chocolates. For five years he had roses growing all over him

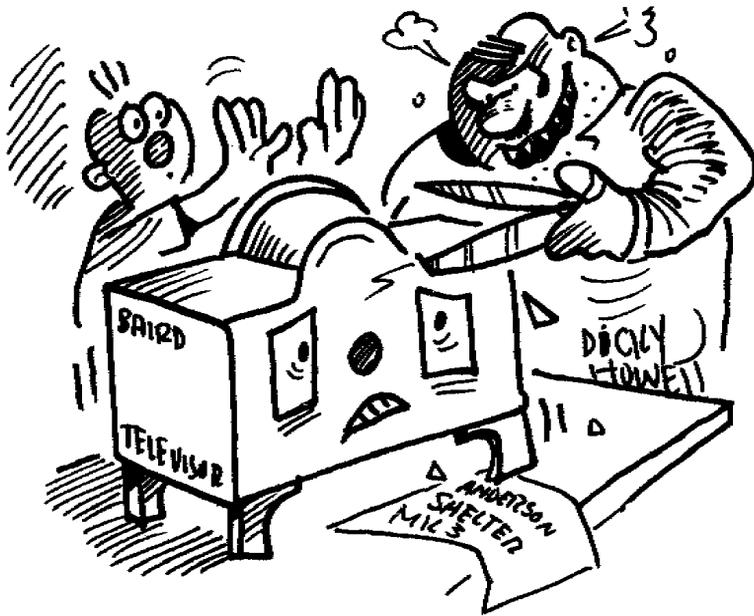
But soon "Whatever happened to Norman Vaughan?" stories began to appear. TV's instant fame was whipped away: no telly work = no success. He was in fact doing very nicely as a straight actor until 1972 and came back to the TV studio with *The Golden Shot*. This time taking over from Bob Monkhouse as the host of the Sunday evening live game show.

He suddenly disappeared from that show in September 1973 when a bomb scare cleared the studio just before his farewell to the show. An emergency pre-recorded edition was run instead.

The game show *Bullseye* was his next success, but this time not as presenter but as creator of the format, and that one's still on the 'ochie' ten years later. Smashing. Super. Great.

BEWARE THE FIEND WITH THE KITCHEN SCISSORS!

Bernard King relates a sorry tale...



The story related on pages 34 & 35 of issue 26, of the theft of a 30-line Baird Televisor made unpleasant but essential reading! For me it not only warned of the dangers of the corrupt society in which we now live, it also served as a reminder of an awful incident concerning one of the old Televisor sets. It is well known that John Logie had premises at the south end of the bygone Crystal Palace. Possibly as a result of my sister's involvement at Baird's in Long Acre, my elder brother, Eric, gained employment with the Baird company at Crystal Palace up to the time of the great fire in November 1936.

I had the pleasure to visit the Baird premises as a mere boy of 12 at the time of the Silver Jubilee in May 1935. It was not a tour of the studios, etc., although that would have been very acceptable, but the privileged opportunity offered to families of the staff to ascend the South Tower on Jubilee night to witness the lighting-up of the nation-wide bonfires, many of which were – in theory – visible from the top of the tower. In fact, the evening was misty and there wasn't a damn thing to be seen beyond a couple of miles!

Many of staff and their families turned up that evening to enjoy the fun and by the time we had made the somewhat spooky climb to the top of the South Tower it was getting quite congested on the balcony at the top. (I heard someone mumble something about

the balcony only being safe for a small number of people but no-one seemed to bother!) There was not, of course a lift to aid our ascent; instead we climbed what could be described as a spiral staircase except that it wrapped itself around the central brick-built chimney. Floor-by-floor, we climbed the eleven storeys to the top in the fading evening light and I can remember being struck by the desolate appearance of each of the successive floors, all looking exactly like the other but each one gloomy and completely empty. They were circular and quite vast rooms but seemingly with absolutely no purpose whatsoever.

At the top we could walk around the balcony except where the aerial structures were placed; a great wooden device quite unlike the later metallic structures of modern times. But all this wondrously impressive building was to witness a vast change about 18 months later for, although the South Tower survived the fire of late '36, the Baird association with Crystal Palace was very much reduced. And it was this fire disaster that was to lead to a further disaster at the outbreak of World War II, which had an even more impressive effect on this teen-age lad!

My elder brother reported to the Baird premises the following morning – what there was left – to ascertain his and the company's future. At that time some TV receivers had been put out to staff members for the purpose of 'assessment of programme reception'. In fact, it was probably a way of saving storage space at Crystal Palace! As both my father and my Baird-employed sister had taken part in 30-line tests, it seemed somehow appropriate that a 30-line Televisor set should reside in the house. (Both Dad and my sister, Connie, had been co-opted around 1929 as these two family members were involved in Dad's concert party. They could perform their comedy and songs 'on the cheap' which admirably suited the scant resources of the Baird company purse.)

When brother Eric made his appearance at the Baird premises on that depressing 'day-after', he reported that a 30-line Televisor was at our Tooting home. The response was not unexpected – "Forget it! It's written off in the fire!!" And so Televisor No. 397 became part of the King household!!

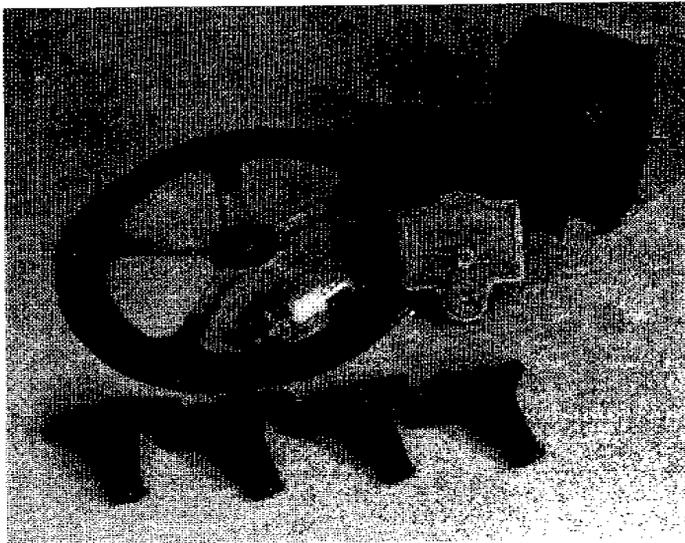
But if only that glorious situation could have been allowed to last! By 1939 war was very much the topic of the day and, along with other war preparations, there was the issue of Anderson air-raid shelters; those corrugated iron sheds set half-way into the ground. By the time we got our shelter at the outbreak of the war, I was a mere 16 years old and certainly not of a state of maturity to have acquired an awareness of preservation of artefacts for the future. But the horrific incident that followed converted me into a very caring preservationist; a state of mind which remains with me to this day!

The Anderson shelters were duly installed by the local council but in the crudest and most basic form. My Dad always had a talent for improvisation, due I suppose to always having to make do with very little – he called it 'faking things up'. The new air raid shelter offered untold opportunities to Dad for his finely honed 'art'. (He had been in the trenches in WWI as a Company Sergeant Major so had gained an 'A'-level in 'Muck and Bullets'.) His idea was to 'furnish' the shelter with as many home comforts as he could contrive, including shelves and a door over the opening. It was all done in



Above: We climbed to the top on a hazy Jubilee evening, 1935 but we could hardly see a damn thing!

Below: All that remained of the 30-line Baird set after 'modifications'; in '39 – and a burglary in '42!

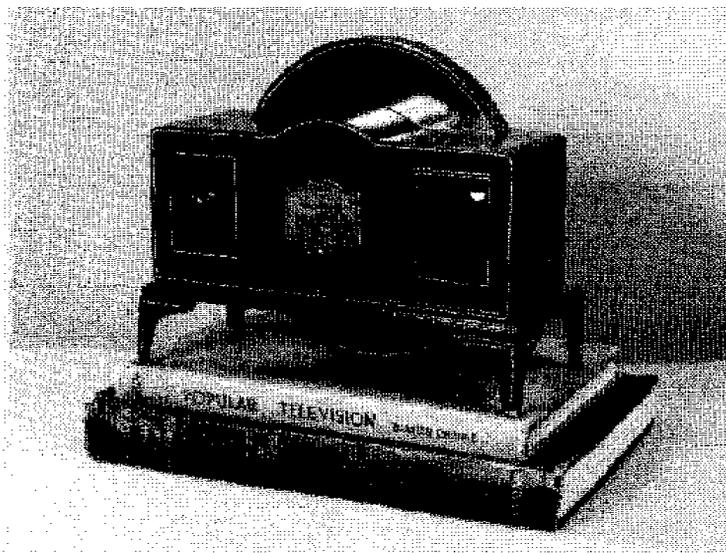


the best tradition of WWI trenches. This ambitious 'development programme' called for pieces of metal for the fabrication of brackets, etc., and then it happened!! His inventive eyes fell on the Baird Televisor!!!

Strangely, even at that young age, I instinctively realised that the TV set was going to be historic one day and pleaded with him not to use it for his mundane modifications. But to no avail! My 'dear' Daddy took the heavy kitchen scissors and cut up the aluminium Televisor casing for his beastly brackets, etc., items which could have been easily contrived from cake or toffee tins.

Folks, if you have dared to read this so far, I can only add that you'll find the smelling salts in the medicine chest! I did manage to rescue the remaining parts but even some of those were stolen in a break-in in 1942. The irony is that only a few weeks after that diabolical vandalism, Dad decided we would move from Tooting to Hampton Wick. Hardly any use was gained from those metal parts.

What eventually survived went, quite recently, to responsible, legitimate Baird enthusiasts who are restorationists. I am glad to report that the surviving parts were actually set-up and made to work again with a test signal. Having told this awful true story I shall retire to lie down in a darkened room!



Still pining for the lost TELEVISOR No. 397, the writer produced this quarter-scale model in 1986.

FLASHBACK TO 1935/36



Bernard King continues:

Now, on to the BAIRD test card. Ray Herbert and I have fully exploited the possibilities of this grainy item. The original was taken in 1935 or 36, shortly before the Crystal Palace fire by my elder brother, Eric, during one of his lunch-time breaks. He had bought himself one of the tiny Ensign folding cameras and was looking for anything around Baird's and the CP grounds which he could photograph to try out his new camera.

He spotted the test card through an open door, under a spot light, and photographed it. Just in time for the 1986 *Television in the Home*' exhibition at the Royal Festival Hall on the South Bank, and prior to the opening of MOMI, I did the best I could to reconstruct the test card and the result was shown at the *Television In The Home* exhibition. Thanks to Ray Herbert it was also reproduced on page 137 of the Royal Television Society book *Sermons, Soap & Television* (1988).

THE Highbury Experiment – AN UNTOLD STORY

Cy Young reveals what's known

Over the last few years there have been various accounts of the line systems being developed in parallel with the marketing of wide-screen television. Yet the transmitting of high definition images, comprising any number from 625 to 3,000 lines, was a reality in Britain more than 40 years ago; it was the first serious attempt to reconcile film and television methods of production. In the early 1950s, experiments in achieving a synthesis between the rival media initially concentrated on devising ways to project television broadcasts onto cinema theatre screens.

In 1951 Norman Collins, lately Controller of Television for the BBC, had formed a company named High Definition Films Limited, with the participation of Rank, British Lion and Pye – distributors of cinema features and manufacturers of television sets in an unlikely alliance. By May of 1952 a demonstration film, based on a 625-line electronic standard, had been completed and shown. Although it was of good enough technical quality to project onto a theatre screen, henceforth the new system would only be considered for broadcasting on television. Even so, because of the BBC's uncompromising adherence to live studio drama and outside broadcasts, it was not until the arrival of ITV in the autumn of 1955 that recorded programmes became commonplace on British domestic screens.

Throughout 1954 technical publications and newspapers monitored the HDF experiments at Highbury Studios (previously used by J. Arthur Rank to make B movies and religious features), where the enterprising Harry Alan Towers was gearing up to supply British commercial television with economically-made programmes on film. On ITV's first Sunday, 25th September 1955, he supplied ATV with 30 minutes worth of Donald Wolfitt re-creating Sergeant Buzfuz from "The Pickwick Papers"; the dramatised episode BARDELL v. PICKWICK became the first of a series of television playlets that would air under the generic title *Theatre Royal* in the months ahead. Although presented in *TV Times* as live transmissions, all 39 had actually been pre-filmed using the High Definition process.

The secret of HDF was in the use of a closed circuit system, via which images generated on television studio monitors were directly filmed. A 35mm motion picture camera was lined up to photograph the main screen in the programme director's control room, on which appeared the entire performance; in other words, a live and continuous production staged for three electronic cameras – with shot changes made in the normal way by a vision mixer – was simultaneously registered on negative film stock. The result was the equivalent of an edited cinema feature.

Essentially this was the method already being used by the BBC to record television dramas for a second broadcast, but with one important difference. BBC telerecordings were derived from the picture as transmitted on the 405-line standard, whilst the HDF system had access to a picture undiluted by the demands of actual transmission. Broadcast television was always subject to limitations of bandwidth, and to the need for cable repeater stations to disseminate its live programmes nation-wide; beyond this loomed the cost to viewers of purchasing new sets that could receive a standard of more than 405 lines.

None of these inhibitions applied to the High Definition studios at Highbury. Since the television signal only had to travel from camera to monitor within the same building, there were no external technical limitations to prevent the generation of a 1,500-line image. This was quite enough for HDF's telerecordings to equal the sharp resolution of 35mm features being made at studios like Pinewood; although with characteristic hype, Harry Alan Towers announced that he would be using a 3,000-line standard. With Norman Collins he gathered together a nucleus of hand-picked talent, most of which inevitably had to be poached from the BBC

On 1st October 1955 Desmond Davis, one of the producers recruited from the Corporation, directed a George Bernard Shaw adaptation for ATV's weekend drama slot *TV Playhouse*. Publicised in *TV Mirror* magazine as a 60 minute film shot in only 3 days for a mere £5,000, *MAN OF DESTINY* exemplified the advantages of HDF production. After rehearsals, every scene was completed in one take; and the cast (including James Donald as Napoleon) appreciated the rare opportunity to deliver a sustained performance, without the breaks and interruptions of conventional film making.

Since the original *raison d'être* for High Definition Films was to devise a quick, economical method of turning out movies for theatrical exhibition, it was illuminating to discover that in September of 1954 Davis had been hired by producer Victor Hanbury for a one-off shoot

that achieved this original purpose – in a roundabout way. Hanbury was preparing to make a filmed TV series called THE ADVENTURES OF AGGIE at Nettlefold Studios, with Hollywood actress Joan Shawlee in the title role. It happened that one of the 25-minute episodes was to take place entirely in a West End hotel, and so Victor Hanbury decided to move production to Highbury where it could be 'filmed' in a single day via HDF's unique facilities.

In May 1955 a 75-minute supporting feature BORN FOR TROUBLE was distributed theatrically in Britain. According to the *Monthly Film Bulletin* review, this was "an episodic, TV-style crime melodrama" in which fashion buyer Aggie Anderson ran up against design pirates, counterfeiters, and a mad strangler, in Paris, Berlin and London respectively. With Davis credited as the sole director BORN FOR TROUBLE seems to have aroused no suspicion that at least one of the stories was a high grade telerecording rather than conventionally produced film. Four months later, Desmond Davis and others would be supplying the new ITV companies with scores of what – in all but name – were the first British-made TV movies.

The bonanza for Harry Alan and 'Highbury Towers', as his studios were popularly known, anticipated the famous remark made later about an ITV contract being a "licence to print money" and in those early, golden days of commercial television this really seemed to be true. However, in June of 1956 there was a change in the companies' attitude towards pre-filmed drama with the announcement that Associated Rediffusion and Granada Television intended to abandon film because the average costs were quadruple those for a live studio production; although it should be emphasised that A-R's experience had been with filmed plays made at Shepperton Studios on traditional lines, and not the revolutionary HDF system.

When actor John Clements' production company therefore ceased filming classics like Ibsen's THE WILD DUCK for ATV's *International Theatre* slot, Harry Alan Towers moved in; but his 90-minute version of James Bridie's THE ANATOMIST (with Alistair Sim repeating his stage role as Doctor Knox) was filmed conventionally at British National's refurbished Elstree studios, not at Highbury.

*The High Definition Films experiment was over before it had really got up steam, and if anyone reading this article knows exactly why it all ended so abruptly – and mysteriously – do write. Meanwhile, researches continue. See also Dicky Howett's article later in this issue – **A Visit to the Pan and Tilt Man.***

BEFORE YOUR VERY EYES

Dicky Howett investigates a spot of television trickery

In issue 26 of the estimable *405 Alive*, Jim Pople cautions correctly against rash disseminating of unsubstantiated 'facts' concerning the early history of television. He suggests we wait for future authoritative publications such as that now being researched by the Alexandra Palace Television Society.

Jim Pople's philosophy has merit and doubtless any forthcoming APTS publication will prove extremely interesting. But unfortunately, this too will inevitably contain small errors, misunderstandings and perhaps a spot or two of sheer fantasy. The problem here is the human factor.

Even those very important workers on the spot (I include here myself as an actual humble 1960s BBCtv person) can sometimes confuse rumour with fact, relate spurious incidents or even forget where exactly they were on a given date thirty years ago! After all, we television employees were only doing a job of work at the time, not partaking in some grand foresight of historical remembrance!

These days, for us poor toilers amidst the archives, programme and technical logs (if they exist) are invaluable. Also photographs, recordings and films. When I research my articles for *405 Alive* and others I use as many sources as possible and cross-refer. This method is not infallible. Also, I set great store by the use of photographic evidence and films which can help to expose an incorrect statement or reinforce a true one.

But photographs and films can mislead horribly. For example, photographs can be incorrectly captioned or cropped at a vital spot. As for films... Well, one interesting example of the producer's skill at deception (which I discovered only recently) can be found during Richard Cawston's prize-winning documentary film of 1959, *This Is The BBC*. This highly entertaining – and now fascinating – record of a broadcasting organisation much changed contains a sequence featuring Rudolph Cartier directing *Mother Courage* with Flora Robson and a studio full of Marconi Mk III cameras.

Early in the film we see a shot of the exterior of Lime Grove Studios. Next comes a close-up of a street sign 'Lime Grove W12', then another sign which reads 'BBCtv Studios'. The viewer is left in no doubt that this is the BBC's Lime Grove studios. The next shot is of lighting being lowered from a studio ceiling and various shots of scenery and props, including a cart, all being positioned on the studio floor. Later in the film we return to the sign stating 'BBCtv Studios' and then we cut again to the previously seen studio floor with its sets, cameras and that cart.

We then cut to Rudolph Cartier in the gallery directing the play. More shots follow with cameras and actors lining up and rehearsing. Very entertaining.

For years I believed what I was seeing. For years I had assumed that the busy studio scene I was watching was at Lime Grove. Not so. Careful observation reveals that this studio is in fact dear old **Riverside One**, two miles down the road at Hammersmith!

I can understand why Richard Cawston included Riverside One in his film. The BBC was very proud of that studio. It was the first 'custom designed' BBC studio and in the film looked very smart with its Marconi cameras and lighting, its sleek production and control gallery. (Riverside One was Rudolph Cartier's favourite BBC tv studio. Cartier liked working there, not only for its size – 6,000 sq ft – but also for its Marconi Mk III image orthicon cameras, which produced pictures that travelled better to the home receiver).

It was probably editing expediency, and not a deliberate deception, that juxtaposed the 'Riverside' scenes with the 'Lime Grove' exterior. Also, at that time, viewers would have been quite familiar with the concept of 'Lime Grove' as a BBC establishment (*The Grove Family* etc.). Lime Grove was of course BBC Television's headquarters and not many would have heard of Riverside. Indeed, in pure photographic terms the *actual* exterior of Riverside was – and is – very unprepossessing, looking more like the back end of a bus garage. On the other hand Lime Grove had the robust appearance and clean lines of the film studio that it was.

Still who cared? It was a filmatic falsehood nonetheless and very cleverly executed. However it is something that today could continue to mislead researchers. Hardly an earth-shattering deception, but still a small fracture that has now been repaired. All the more important too, to correctly establish the history of the place, considering that Lime Grove Studios have since been heedlessly demolished. I hope I have demonstrated that such artful pitfalls can only serve to illuminate the problem of researching the 'true' history of television.

Research sources:

BBC Television – A British Engineering Achievement. BBC, 1958.

Television By Design. Richard Levin. The Bodley Head, 1961.

Sound and Vision Broadcasting. The Marconi Co. Magazine, Spring 1960.

This Is The BBC. Film by Richard Cawston. BBCtv Film Unit, 1959.

A VISIT TO THE PAN AND TILT MAN

Dicky Howett talks to innovative television industry pioneer Bill Vinten (and coincidentally, throws some more light on the story of High Definition Films Ltd)

Bill Vinten is the man who invented the unique **Vinten Mk III** pan and tilt head. This fact might not mean much to the ordinary citizen, but television industry veterans have much to thank Bill Vinten for. It was he and his company who introduced, in the mid-1950s, correctly designed and ergonomically functioning television studio camera mounts. Things that actually worked and made life just a bit easier!

Since retirement, for the past 12 years, Bill Vinten and his wife have lived in the rural splendour of their 17th century home near Bury St Edmunds, Suffolk. Bill's home boasts a huge and ancient barn that has been sympathetically converted into a workshop. The barn houses lathes and timber cutting tools. Bill is now turning eight Dutch Elms (felled due to disease) into exquisite furniture for the family. The barn provides also shelter for a ping-pong table, a church organ, two classic cars, a clutch of motor cycles and, shrouded in dust sheets, a few items of veteran Vinten camera equipment. When the mood takes him, Bill occasionally ventures out to shoot wild fowl from a punt (using his home-made gun) and come holiday time, sails members of his family around the Mediterranean in his yacht.

Bill, who's 76 this year confesses, "I don't seem to get much time for 'retirement'. I left the group board of Vintens three years ago. I still take an interest in the company, Vinten Broadcast and in various new products such as the latest 'Vector' pan and tilt head. Lately they wheeled me in to ask my opinion on a future development. This was for a new drag and friction control on a forthcoming pan and tilt head design."

One way and another, pan and tilt heads have featured frequently in Bill Vinten's life. Born in 1920, Bill was one of five children. His father was William Vinten, the renowned cinematographic engineer, and Bill's early years found him being raised literally over the shop floor. During the 1930s, the Vinten family lived in a spacious flat on the top storey of the Cricklewood factory. Bill recalls that his introduction to engineering was prompted by his father who, when asked for the money to buy a part for a bike, told Bill to go down and make it himself!

"My father would let me use most of the machines on the factory floor. By the age of fourteen I was quite proficient at metal work."

Later Bill attended the Northampton Engineering College. At the end of the course he sought employment with optics manufacturer, Taylor Hobson in Leicester, but a car accident badly damaged his left eye, permanently blinding it.

Bill recalls, "The car rolled over and flying glass cut my cornea and lens. To this day I can only distinguish light and dark in that eye. Understandably, a job with Taylor Hobsons was out of the question. When I recovered from the accident, the war had just started. I saw an advertisement asking for tool makers at the Rawlplug Company in Mill Hill. I spent a year there and then moved to Cooper Stuarts in Hendon making speedos for Ford vehicles."

Back at the family firm, the early stages of the Second World War was putting pressure on the Vinten company. There was a government order for two thousand F24 reconnaissance cameras which sorely stretched Vintens' resources. The company urgently need engineers and so Bill returned. With his poor eyesight, coupled with a job in a pivotal 'war effort' industry, all this now threatened to keep Bill stuck in Cricklewood for the duration. Family friction didn't help matters, and this was exacerbated by a regret of being left behind as all Bill's friends were mobilised.

Bill relates, "I wasn't about to be called up, not with my C3 eyesight, so family friend, Claude Friese-Green offered me a job as a clapper/loader. I know it might seem a strange thing to go from mechanical engineering into the artistic world of film making, but at least I knew how cameras actually worked, especially the Vinten 'H' model. I also hoped to get a shoulder up into the Services. The first film I worked on was the story of Dr Carey and his missionary work. This was shot in a small studio near Crystal Palace."

As the war progressed, the Services urgently needed skilled people, and Bill eventually joined the Royal Navy Film Unit. This was based at Tipnor, near Portsmouth. Working with silent cameras, notably the Newman-Sinclair model 'G' clockwork variety, Bill worked on an extensive collection of training films on the subjects of gunnery, deck landing and radar. Some of these films were photographed in the Mediterranean. "If nothing else, I got on a lot of ships," says Bill.

After the war, Bill Vinten joined the Rank Organisation at Elstree. "I worked for a small company there called Gate Studios. I even filmed the opening title shot, a model

of a gate opening. Basically, though, we made a lot of modest films suitable for showing on Sundays. If you recall, Rank cinemas were always closed on Sundays. But times were moving on and finally Rank gave in and set up Gate Studios to make films with a moral or uplifting theme. So then it was all right to show them on Sunday. But it was all good practice; I was learning as I went along. I became a 1st and then an operator. I got a lot of good advice from cameraman Francis Carver, who would always stop and encourage you. I had only been operating for about three years when I became a lighting cameraman. I think I went much too quickly up the ladder to have been amongst the best."

During his time at Gate Studios, Bill first became involved with television. The Cintel Company (part of Rank) had shipped from the USA three television cameras. These cameras were from an electronics company called Allen B. Du Mont Labs Inc., who made broadcast equipment and who also ran an American television network. The Du Mont cameras were early image orthicons and Rank had the idea to produce movies via teleerecording techniques. It was a bold, or perhaps desperate, measure, with the promise of a quick turnaround and the enticing prospect of cutting studio costs. To record the television image, a 35mm back-projector was modified and positioned in front of a TV monitor. According to Bill, the results were atrocious.

"Those Du Mont television cameras weren't really up to it. They were 3-inch image orthicons with four-lens turrets. The tubes were not very easy to light for, all halos and crushed whites. Also the image would stick on the tube from time to time. However, we did make a 35 minute children's film called *Mr Marionette* using just one of the television cameras and editing it like an ordinary film. It wasn't all that good, but I could see that the potential for television was enormous. That was the business I wanted to be in for the future."

Because of Bill Vinten's experience at lighting these early telerecordings, in 1949 he was invited to light some special recording trials being undertaken by the Pye Company. Bill visited Pye's Cambridge factory and found he had to work, not in a studio but in an old corrugated shed. At the time Pye was pushing into all areas of broadcast technology (including colour) and these recording trials were an attempt to overcome the serious loss of definition associated with existing monochrome film/television recording systems. The ultimate aim was for a system that could be applied successfully to full-scale movie making, using two or more linked high-resolution cameras, recording onto 35mm film. The result had to be suitable for projection onto a large cinema screen. Initially, the cameras used in the Pye experiments were Pye Photicons (Image Iconoscope types). Later, an improved

version, the Pye P.E.S. Pesticon camera was used. Progress was swift but the results were not altogether satisfactory.

In 1950, the old Highbury Studios in North London were taken over by Norman Collins and Terence Macnamara (both formerly of BBC Television). There they continued Pye's experiments, (with Pye's equipment and money), renaming the enterprise High Definition Films. The high-definition film system differed from the conventional British broadcast standard in several important areas. To simplify the recording system, HDF used a sequential non-interlaced frame rate of 24fps scanning at between 625 and 834 lines per frame. The monochrome pictures were recorded using a Moy RP30 35mm recording camera. The overall bandwidth of the system was 12MHz, a big achievement in those days (some of those test recordings still exist).

Bill Vinten spent 18 months lighting several HDF productions, including short tests and commercials, which were made to a high standard with real products. These commercials were then shown to Members of Parliament in an attempt to convince them that commercial television in Britain might not be such a bad thing. Norman Collins was one of the leading lobbyists for the introduction of commercial television in Britain and his production studio at Highbury was established in anticipation of the event. But after four years of trials and much tribulation, Collins fell financially at the last post and the studios of High Definition Films were acquired by Associated TeleVision (ATV) for use in 1955 for the opening of ITV.

Bill Vinten adds: "I once lit a HDF production for Orson Welles. He came over for a week and we shot a short extract from a Shakespearean drama. He did it like any film shoot, with one camera. Working with Orson Welles was quite an experience and not something that many can boast of. Also the Pye Pesticon cameras we used were lovely to light for with a good grey scale. The final filmed recordings were of very good quality."

In 1952, Bill Vinten returned to the Vinten company to concentrate on starting TV equipment manufacture. Until that time, British television studios had to rely on film studio gear from companies such as Debie, Newall or Mole Richardson. This equipment was fine for shot-by-shot movie making, but plainly inadequate for continuous live television.

One of Bill's first Vinten products was a camera pedestal. The BBC had tendered a specification for an entirely new type of pedestal that could support cameras up to 200lb weight. Also, the spec. required the pedestal to be capable of being operated by

a single cameraman with as varied a height range as possible without the cameraman losing sight of the viewfinder. Finally, the pedestal had to be highly mobile and capable of manoeuvre whilst on air. Very important.

This specification was dished out to several manufacturers, but Bill Vinten was determined to get this order. He favoured an hydraulic solution and with the team of Ivor Dunningham and Ted Galione, they set about winning the race. The end result was the classic HP 419 three-stage hydro-pneumatic pedestal balanced on compressed nitrogen. The first two examples (with tillers only – no central steering wheel) were delivered to the BBC in 1956 and installed in Studio E at Lime Grove, where they had heavyweight Marconi Mk III cameras sitting on them.

Bill Vinten remembers: "The BBC were extremely patient with us. The hydraulics in the HP 419 ped. were designed against the advice of the hydraulics industry, who said it couldn't be done. With a light touch you always get leaks, they said. In fact it took us two and a half years to finally cure all the problems. The initial eight pedestals were delivered to the BBC at a price of £800 each. This was way below developments costs but we reaped the benefit because 40 years later we're still selling the descendants of the old HP 419."

The BBC next required a design for a new pan and tilt head. In 1956, Vintens had two on the market. The Mk I was an adaptation of a pre-war film model and the Mk II utilised compression springs. Neither could tilt more than 35 degrees. The BBC (who were also using Debie heads) wanted a flexible head that had a tilt angle of at least 50 degrees. As before, this specification was thought unachievable. It was then that Bill remembered a statement made by one of his lecturers at engineering college. The lecturer had said that work is only done when a mass is raised or lowered. So if a camera could actually tilt without altering the height of its centre of gravity, then no work or effort would be needed. If the centre of gravity remained on a horizontal plane, gravity would not affect it, and a camera would remain always in whatever position it was left.

This novel idea lead directly to the now familiar concept of a fixed cam resting on rollers. With this innovative design it was now possible for cameras of various weights to be tilted to 50 degrees with little more effort than a push on the pan bar. When the Research Director at Marconis saw it (they had been working on their own torque-bar head) they immediately stopped work on their design. They saw the Vinten Mk III as one of the greatest breakthroughs in camera mountings. Introduced in 1956, the latest

world sales for the Mk III head (and its more recent versions) have exceeded 20,000 units.

In the late 1950s Vintens received a request via the BBC from the Queen. This pivoted on the fact that as she was soon to broadcast her Christmas Day Message from Sandringham and as she didn't fancy the idea of large dollies rumbling over her carpets. So could the BBC please arrange for something smaller and neater and less rumbly... ? Enter the Lightweight Outside Broadcasting Camera Dolly. Bill Vinten designed the basic outline over one weekend. The light tubular frame incorporated a new steering system giving perfect steering geometry through 360 degrees rotation. The chassis was built within six weeks and a method of raising and lowering the frame devised by assembly shop foreman, Tom Lilly. In manufacturing terms this is an extremely short time scale. The dolly itself was quite narrow (28 inches) so it could be wheeled easily along a narrow passage or through a royal living room doorway. The dolly (which ran on solid or pneumatic tyres), was 51 inches long and had a turning width of 54 inches. The OB Dolly is still in operational use throughout the world.

Bill Vinten: "Also around that time we were working on an entirely new type of crane. We called it the Peregrine and it was designed to yet another BBC specification. The BBC wanted a crane that could raise and lower a camera more quickly than any existing, go higher, use a minimum crew and occupy a very small floor area. In fact they wanted a crane that could follow and keep up with a ballet dancer across the studio floor. Our design separated the camera from the cameraman. We put the camera at one end of a pivoted jib, and the cameraman sat at the back on the chassis controlling pan, tilt, zoom and focus via servo motors. The tracker sat beside the cameraman. The jib could be raised ten feet in four seconds and the six-wheeled base was little wider than a normal pedestal."

Bill Vinten muses: "The design didn't take off, even though it was given a Queen's Award for Technical Innovation. In fact the Peregrine crane just never got past the prototype stage. Our existing two-man Heron crane was doing almost the same job, but not with the camera separated from the cameraman. An important point. The trouble was that with the Peregrine, camera crews would have had to re-train to work it. No one seemed very keen on that idea. Also servo-motor technology wasn't very smooth or reliable then. In any case the first generation of 4-tube colour cameras would have been much too heavy for the Peregrine crane to lift."

Bill Vinten recognises that it isn't an easy task to change working practices and alter standard methods of camera operating. The Vinten Swan Post Head is a case in point,

where the camera's centre of gravity is pivoted at the side and not underneath. Bill adds, "I made a short film using a camera conventionally mounted and a camera side-mounted on the post head and then asked cameramen to spot the visual difference. Of course there wasn't any, apart from the greater flexibility of the post head design."

Bill still holds high hopes for another of Vinten's products, the Merlin crane arm. "I thought that that crane would have sold better than it did. I still think it has a very good future, but again, it needs a fair bit of camera operator practice and skill to get the full benefit of the system."

Bill Vinten put a lot of work into his product designs. His overall philosophy was to get the basic design right and then pass it to a good, practical engineer. Bill confesses, "I tended to lose interest after I'd got the principle right. I was fortunate during my working life to be able to turn to engineers like Ted Galione. For example, it was Ted who really made the Fulmar pedestal work."

Recently Vinten Broadcast received another prestige award. This was from the American Society of Operating Cameramen and it was their 1995 Technical Achievement Award. The Award reads: "Presented to Vinten Broadcast Ltd, Ted Galione and Bill Vinten, inventors. For the introduction and development of the Fulmar Pedestal in 1972. The first extended range pneumatic camera pedestal which has significantly contributed to the art and craft of the camera operator."

WE NEVER KNEW BOREDOM AT ALEXANDRA PALACE

W.C. (Paff) Pafford

If this is another edition of that well known epic "The Day War Broke Out" then the author is in for a rough ride, but hold on... let us not forget that British Television first came into service in 1936, followed by World War II in 1939. And that is what this story is all about

Because many people including most television viewers were under the impression that Alexandra Palace had closed down during the war years (1939-1945)

But how wrong could they be? In fact it was Winston Churchill himself who became so strategically involved, that when Alexandra Palace was taken over for anti-radar work, using its own powerful television transmitter, it was Mr Churchill who dubbed it "The Battle Of The Beams".

Typically, this colourful phrase caught on amongst the technical boffins of the time of which I happened to be one, better known as a Back-room Boy. It was the extraordinary events which led up to all this, that takes a bit of believing, so let us start from the beginning.

When Great Britain opened the world's first electronic television service from Ally Pally in 1936, not only was our national press highly suspicious but also 'steam' radio entrenched at Broadcasting House became green with envy, or was it professional jealousy? So imagine steam radio's delight as a senior partner of the BBC, when it received official orders to close down the television studios at Alexandra Palace for the duration of the war.

We just could not believe it. Surely either we had blown the main fuses at the power station, or Hitler had started his invasion without notice. Such was the panic that no one stopped to ask questions, for fear of being caught in the first German air-raid on London, or could it be Ally Pally?

Within a few hours all staff had been evacuated from the studios and that same afternoon most of us were on our way to regional war bases. In my case it was to the transmitter station at Daventry. As we all soon discovered it turned out to be 'panic stations', the beginning of the long 'phoney' war. After a few months of weary

boredom, it was decided to make a few staff changes and some were sent to other stations. I was lucky in being sent to our new overseas transmitters near Bridport in Dorset. After a few months there, we had the excitement of the first German Heinkel bomber coming down on the beach at West Bay. Apparently it had returned from a raid on the Midlands, but was forced down by a punctured petrol tank and crash landed near the sea edge. Fortunately it carried coded information giving clues to further bombing raids in the Midlands and later the night blitz on London.

So it was full circle for me, as I was then sent back to London, where Alexandra Palace had by this time been taken over by the Ministry of Defence. The transmitters were to be used against the night blitz on London, which would be controlled by the latest German radar system, code-named Y-GERÄTE. The code name for our own anti-radar TV beams was DOMINO, meaning the addition of false information which would destroy the accuracy of the Luftwaffe's timing of bombing and position.

So far so good. An excellent plan to break the German's latest radar system developed as early as 1938 and in production by 1940. So what was the problem? Believe it or not, it was bureaucracy. Where were the BBC technicians to do the job? They had all been sent away for safety measures and it was not possible to retrieve the situation in time for the night blitz on London, at least not by recovering sufficient BBC trained experts, who would know the Alexandra Palace apparatus inside out.

Fortunately we were lucky enough to get hold of a couple of BBC engineers together with myself and six RAF technicians in uniform, whom we were able to train on-site for secret operations just in time for the very first night using *Domino* to wreck the new German radar system. To say the least it was risky, like jumping off the deep end; and it was certainly a night to remember as we were using a powerful transmitter on a job for which it was not designed. It was a complicated technical operation which is explained in detail in Professor R V Jones' book **Most Secret War**. Briefly it consisted of the tuning of beam frequencies to zero beat, then raising our beam power just sufficiently to cause confusion among the German pilots who were relying for range and accuracy on their own beams, which were being broken. On our side we were relying on listening by headphones tuned to pilots radio giving us some idea of the panicking and shouting of instructions back to base for direction and position, all to no avail.

We learned later that they were blaming their own equipment as being unreliable when the same chaos occurred on following nights. They tried altering their frequencies (wavelengths), but without success, as we had already practised for this eventuality by tuning to zero beat thus synchronising wavelengths which made them undetectable.

As the war and science progressed, the principle of detection became more and more necessary as was demonstrated at Frankfurt in 1944, when British bombers flattened the German anti-radar station near the Frankfurt TV tower. Their technicians had been careless in not synchronising pulses which laid them open to detection and reprisal. A lesson we all had to learn for self preservation.

Back home the 'Battle of the Beams' was at its peak during February 1941, but due to continuing German radar failure their nightly bombing raids were easing off. Until by March their losses were increasing so rapidly that the Blitz was virtually over. By May we had the last major raid on London and fortunately for us the Luftwaffe turned east towards the Soviet Union.

Incidentally, another technical problem we learned later had occurred during a raid on Coventry, on the night of the 13/14th of November, when RAF jamming devices had been operating off-tune, which made them ineffective. Again a lesson to be learned whereby a simple check by an independent operator, such as the frequency checking station at RAF Radlett, would suffice. Such are the contingencies of beam warfare.

One last error worth recording, but non-technical, this time. It was in fact an indiscretion at the highest strategic level, which of course makes it all the more interesting.

We were told by the Ministry of Defence to modify our Vision Transmitter at Alexandra Palace, the most powerful in Europe at that time, to be ready for jamming a full scale invasion of Britain by the Luftwaffe, and German troops when they returned in six weeks time after defeating Moscow. So once again it was all hands on deck, to carry out frequency modifications to our vision transmitter, which necessitated a new type of aerial.

After six weeks of work on modifications, and dead on time, our transmitter was ready and set to go. This also included erecting the new secret cage aerial, which was just over 600 feet above sea level, to combat the new German Freya radars using 200 ft aerials, installed

along the Northern coast of France. But as we all know, the invasion never came, and nothing of the kind envisaged happened in Russia, so we all had second thoughts and a jolly good breathing space.

Instead of facing boredom the opposite happened. We were lucky enough to get a visit from VIP Ed Murrow, America's top newscaster. He had previously come up to Ally Pally from Broadcasting House, when we were operating 'Domino', as he was always interested in what we were up to, especially if it was top secret. But on this occasion he was after news on the Eastern front. "What the hell is going on in Russia?", was his first question. Obviously flabbergasted, that our top brass got their time-table wrong. Naturally being President Roosevelt's top news guy, Mr Murrow had to get his foreign news items right first time, if he was to keep his job.

We were honoured to feel that he should seek advice from a bunch of back-room boys; but after all he was a man of vast experience and he knew we had plenty of resources to call on; like the Beaverbrook press report on our new cage aerial being 'the key reception aerial for secret reports from British agents and saboteurs in occupied Europe'. Quite enough to interest Ed Murrow.

So we offered up our opinion that we thought MoD's judgement on the 'six week ultimatum' was based on conjecture rather than factual reports. The latter suggested that the 'Barbarossa' plan had been cracked during the sever winter of 1941 on the Eastern front, when Hitler's final push, code-named 'Typhoon' was blown at Ostankino, north of Moscow, where their television tower was built.

We had several further meetings with Mr Murrow, as to be expected, because this ran counter to the popular conception that Stalingrad was the turning point of the war on the Eastern front in 1943. Later at the Nuremberg Trials, Wilhelm Keitel gave Moscow as the turning point. He was there in charge of German troops, he should know. Maybe the historians can sort that out.

We never knew boredom at Alexandra Palace.

A second opinion, by Philip Swatman:

Having just read "We never knew boredom at Alexandra Palace", I think Pafford is too self effacing to mention the part he played over this. As Engineer-in-Charge, Paff (as we all know him) became effectively in control of the Engineers, RAF personnel, Fire Service, Defence Force, Commissionaires, Cleaners, Boiler men and Canteen staff. About 40 of whom would be on duty at any given time.

Quiet and unassuming respected by all. No noticeboards or written orders. If anything was required he would quietly ask and it would be done at once without question. Never once heard a complaint against him. His personal courage was known to all. If damage to the aerials or mast was suspected due to gales or to lightning he would don a flying suit and climb the mast often in unpleasant weather conditions, which would deter many, and see for himself. took at least 25 minutes to reach the top of the mast, part of it pulling oneself up hand over hand with the mast swaying up to 18 inches in a breeze. It would take at least 20 minutes in which to get down from 300 feet. A motor car would appear to be 1/4 inch long. He would also go up the mast on occasions when a BBC aerial expert came to inspect.

He had the welfare of the staff in mind and recreational facilities were made available – billiards and snooker and table tennis. Paff was no mean performer at table tennis and when conditions allowed would often challenge a game. When it became apparent that one at least of the RAF could play an instrument a band was quickly formed which Paff would lead on violin, often giving up part of his spare time to attend evening rehearsals. This band even played for a dance for nurses at one of the London hospitals.

Paff disliked interference from officialdom. He would be polite to the ‘powers that be’ and Broadcasting House but on putting the phone down, he would say to Harty (J F Hartright, his deputy): "This is where we take our coats off. The result being that no more was heard.

As one of the four original RAF ‘technicians’ sent to A.P., I feel that the part Paff played should be recorded. I was at A.P. for 18 months and sorry to leave when the RAF had other work for me. I am honoured to know Paff – one of the world's gentlemen.

*Philip Swatman, ex RAF 80 Wing
May 1996.*

WHERE DID THEY GO?

Although I don't collect antique TV sets myself I admire those who do. But where do these intrepid restorers find their spares?

I needed some brass rod last week and realised I hadn't the faintest idea where to get it – and yet, surely, it wasn't long ago that I could have bought it in a shop.

But such shops have gone. Like the three garages in my village which once employed cheerful men who would adjust a hand-brake or replace a water-pump their functions have changed. My village now has three filling stations which sell flowers.

When Jack Kine and I first started in special effects we were able to get most of the materials we needed in Shepherd's Bush, but for the more esoteric items we went to Lisle Street behind Leicester Square. Here, in an assortment of small shops, one could buy anything from a mains transformer to a field telephone, from a condenser to a set of bakelite control knobs.

As well as being a components centre, Lisle Street was also a notorious red-light area and Jack and I invariably went there together in order to prevent being dragged up a flight of stairs by predacious prostitutes.

But the best shop of all was the one in Oxford Street which sold government surplus. Here one could buy gyro compasses, altimeters, boost gauges, knife-switches and theodolites. What a marvellous place it was. It now sells 'I love London' tee-shirts and Union Jack mugs.

I mourn the passing of those shops, particularly the old-fashioned oil-shops (now called hardware stores) which, when I was young supplied rock ammonia, earth colours, naphthalene, sulphur, potassium nitrate and powdered charcoal (the last three for firework making). At one time they even sold mealed gunpowder, used by my father and others for the rapid cleansing of wash-boiler chimneys.

And this is why I applaud the activities of 405 readers – they are doing something to retain the past.

In what turned out to be his last article for us, Gordon Sharpley relates his inimitable tale of

The Dreaded Eidophor!

Despite my being a bit on the short side, the very biggest lumps of television technology seem to have followed me during my career (see my previous article *The Flying Spots*).

One large bit of machinery I met was the Eidophor big-screen television projector. A very clever Swiss invention. Running the Eidophor at Granada was linked to being in charge of telerecording and providing scoring devices for games shows. The logic in this arrangement escapes me, but perhaps it was that they were peripheral things which were more of an *art* rather than a science!

The Eidophor is one of those devices that, like the shadow-mask tube, should not really work. You can imagine the scene in the research labs when the inventor of the colour tube explained his idea to his colleagues. I bet they were rolling on the floor... a million little holes!... perfect alignment with phosphor dots!... Ha ha ho ho ho. It will never work!!

I think the same thing probably happened to the Eidophor chap. The Eidophor was probably unique in that it required the simultaneous services of an electronic engineer, high vacuum technician, plumber, refrigeration specialist and dare-devil to operate it.

The Eidophor was mainly used for public relations jobs. One favourite was providing a large picture of the proceedings at party conferences, in an adjacent hall (where the bar was located!). Another was world-class boxing, in cinemas, usually very late at night, via satellite.

In a nutshell, the picture projected came from a high intensity Xenon arc lamp via a revolving mirror in a high vacuum carrying an oil film. A scanning electron beam deformed the oil film with the image. This deformation caused light to pass through a Schlieren optical system and then through a lens onto the screen. Simple isn't it!... *Actually the whole thing was very complicated by the facts that the oil had to be at a precise temperature to avoid lag. The oil had to be recirculated and spread very evenly over the mirror. The electron beam was focus-modulated and the electron gun and mirror chamber had to be demountable and were continuously pumped. The cathodes had a hard life and had to be replaceable! It was capable however of producing a bright 100:1 contrast ratio picture on a 24 x 32ft cinema screen if required.*

The Xenon arc lamp was not too simple either. It had an internal pressure of fifteen atmospheres. Nearly three hundred pounds per square inch trying to get out (a cathode ray tube has only one atmosphere trying to get in!) The handbook was full of dire warnings about the lamp and terrifying stories were told by Eidophorists (?) of flying glass and square lamphouses becoming spherical! Thoughtfully, goggles

and a very long thick pair of Swiss woolly gloves were provided. It was also suggested that one wore ones jacket back-to-front to protect the chest and neck! As the Eidophor usually travelled with its lamp removed, it was necessary to replace it on site. Not being able to see properly because of the goggles. Not being able to feel or grip because of the gloves as well as being restricted by the back to front jacket this was not an easy task! Assistance was never forthcoming as the rest of the crew magically disappeared as soon as the lamp box was opened! Fitting the lamp required tightening two large clamps which gripped the lamp glass to copper seals, a job not for the faint hearted or ham-handed!

The thing consumed 25 amps at 80 volts. This power came from a wheeled power supply about the size of a tea trolley but infinitely heavier. To get the Eidophor fired up the first thing was to start up the high-vacuum backing pump. This made a jolly *tapocket, tapocketa* sound but if it went *spladap, spladap* you were in trouble already. When the pressure had been reduced sufficiently by the backing pump, one started the oil diffusion pump. All this pumping took about an hour and a quarter at least. The electron beam was then set with a black-level video signal fed into the machine and the Schliren bars adjusted so that the light was just cut off from the screen.

All was now ready to go. If the picture trailed and smeared, as though it was being written on the sands of time, it probably meant the oil temperature was wrong. That's where the heating and refrigerating came in. De-ionised water was used as an interface in the heat exchanger with the oil and that's where the plumber comes in! Eidophor cathodes lasted about 100 hours but of course with the usual perversity of inanimate objects, always blew at the most critical moment. Eidophorists have almost been lynched in cinemas full of fight fans when the screen went black as the knockout punch was on its way!

The machine I had dealings with was of course monochrome but some years later a colour version came along. This was basically three Eidophors bolted together! We never had one of those, thank goodness!

'Eidophor' is a registered trademark belonging to GRETAG Aktiengesellschaft, Zurich, Switzerland. This must be put in - I might get shot by crossbow!



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At this point you were to have enjoyed John P. Hamilton's article describing how a band of stalwart pioneers celebrated the 40th anniversary of the opening of Independent Television. Unfortunately – take a deep breath! – a technical hitch (the dreaded 'hard disk full' message) led to the total and utter loss of this article and scanned illustrations. What's more, in my desperate panic to save the rest of the text for this issue, I managed to overwrite the backup disk! Deepest apologies to John and indeed to everyone else. Meanwhile, here as an alteration to our intended programme is a different gem from the pen of John P. as we now learn all about...

COOL FOR CATS

For some readers the question will be, "What was **Cool for Cats**"? But that's easily answered.

The older Brits amongst the membership surely remember the pop record television programme of that name which started transmissions from the London-based weekday independent television contractor Associated-Rediffusion in January 1957.

It was a pioneering attempt to add visuals to the pop music of the day. The programme was devised by a journalist called Ker Robertson, working for a long-defunct tabloid, the *Daily Sketch*. Robby brought the idea to the company and was the host for the first few programmes. He chose the records and wrote the linking material. He selected discs which he thought might reach the Top Twenty of the day, either because of their musical value or distinctive performance.

The music was edited to a manageable length of about two to two and a half minutes and at the planning meetings with the choreographer, set designer, costume designer and senior technical staff, decisions would be made on the visual treatment. Most were for dance interpretation – hence the team of dancers, 'The Cats', usually four girls and four boys – or a mime by an artiste making a personal appearance; others were illustrated by a cartoon or film.

The pioneer dance director was Dougie Squires, a brilliant young man who brought a new concept of rhythmic dance to television. He was a hard taskmaster, and the team soon became one of the most disciplined and exciting to watch anywhere.

To start with, the show was a fifteen-minute slot, twice a week, and live to the nation. This was all about two years before we got our first Ampex video tape machines in the UK.

In the early years, the programme directors had a tough time because, of course, the technology was not as advanced as it is forty years on. But they experimented with what was available and the engineering staff did everything they could to help by contributing ideas. The programme became immensely popular and one of the most innovative directors, Joan Kemp Welch, won a Director's Guild Award (the awards that pre-dated BAFTA) for **Cats** as the Light Entertainment show of the Year.

As the programme settled into a half-hour weekly network slot, it became the envy of the other televised pop music shows on both BBC and the other UK regional companies. The presenter – originally the man who devised it, Ker Robertson – had been replaced after just a few shows by Kent Walton. Kent was an unflappable individual who had started with A-RTV as their chief sports commentator and continued in that career for many years after the demise of **Cats**. The directors and choreographers also changed during the programme's lifetime, as did the dance-team as their commitments dictated.

My own stint as director of the programme started in July 1959, when I inherited it from my wife, Daphne Shadwell, who went off to another area of programming. I have always considered myself the lucky one because the real surge in pop music was just starting as Elvis and the Beatles and many of the great artistes were really beginning to boom, and there was a vast amount of material to choose from for a weekly show. The record companies and publishers loved the show as a vehicle for plugs, of course, although we paid the live appearance artistes absolutely minimum fees. Nevertheless we achieved an astounding number of first plays on the programme.

The show finally came to an end on 21st February 1961. It was killed by a combination of network politics and bad luck. In its last year **Cats** had been taped off-air from its original late Friday night transmission and repeated at 6.30pm on Monday evenings by Granada TV, then covering the whole of the North of the UK. We got a bigger audience for the repeats than we got for the origination because, of course, we now acquired a youthful audience who were not allowed to stay up (in those days) to the late hour on Fridays. Granada decided they wanted to do an early evening news and current affairs slot at that time and dropped the repeats. The viewing figures plummeted and that was that.

THE BLACK AND WHITE BREAKFAST SHOW

Dicky Howett unearths some more TV snippets

It's definitely an unknown fact that yours truly took part in Britain's very first breakfast TV programme. Now when was that, you may ask? Oh yes, 1971.

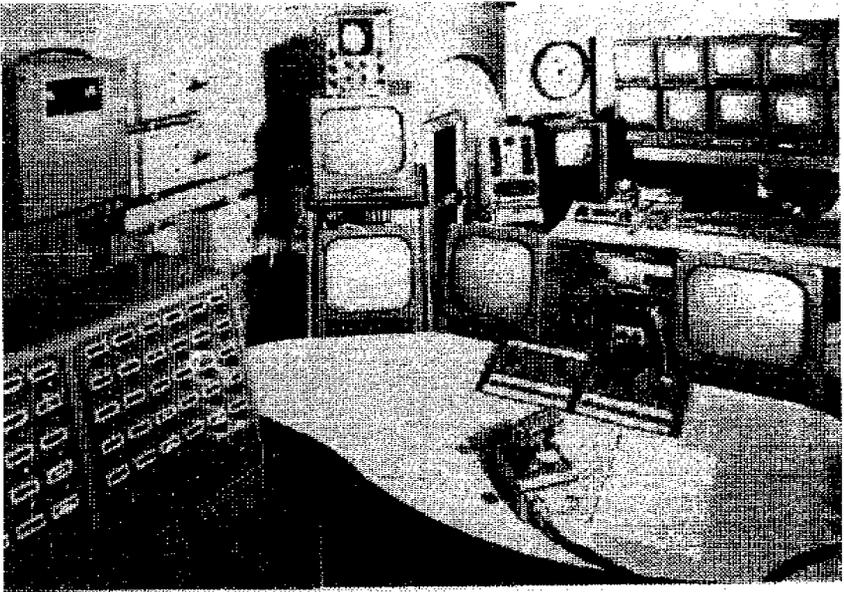
Mind you, this TV programme was never broadcast to the world at large. It was only a closed-circuit BBC 'Directors' Course' staff training show, produced in cheap and glorious monochrome.

This training programme took place in studio 'G' at Lime Grove on the 13th December 1971. The show was wittily entitled *7 UP*. Taking part in this precursor to GMTV, Breakfast News plus the Big One (little did we realise what we had started!) were Douglas Cameron, Barry Hains and Maggie Gilchrist (proper broadcasting persons) and with me as a 'spot' cartoonist trying (and failing) to be instantly 'humorous' on the day's news topics (in 1971 it was something about French fishermen, so what's new?).

The show itself was unremarkable, just a collection of news reports and interviews, with the odd (me) joke item. It bore little resemblance to the flashy modern variety of breakfast shows (no sofas or interview beds). In those days the nearest role-model was radio's *Today* programme. However, on the date in question (1971) it is interesting to note that even though colour television was up and running by several years, the BBC still had a few monochrome studios in full operational order (albeit only for training or non-broadcast projects).

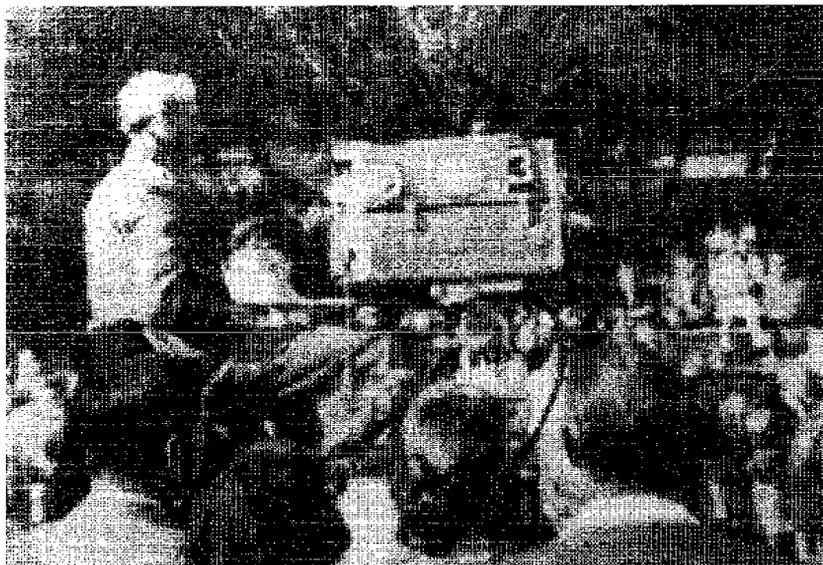
Stinting nothing, our little breakfast sojourn had a proper technical line-up in Studio 'G'. This included four cameras (EMI 203 types) all on pedestals, three with zooms and the fourth with a turret and Autocue. Other items were a Telejector machine, a Photomix, one boom, two table mics, three stand mics, two (12"x9") caption stands, six floor monitors and one practical digital clock.

The following year (1972) I contributed to yet another BBC monochrome training show, down the road in Studio 5, Television Centre. I wasn't 'on air' this time, but supplied ten ready-drawn cartoons that were to be cut live to music. The purpose of the exercise was to train script girls and vision mixers. (Those were the days when broadcasting organisations, as a matter of course, actually trained with a full-sized studio!) Banks of monitors and switching gear were laid out on the studio floor from whence the trainees could practice 'cutting'.



AP studio 'B' gallery showing the camera remote control system with the 'joy stick' camera controller on the desk(1960).

ATV-owned Pye Mk 3 camera at Southend Carnival 1956.



The cartoons had to be cut on the beat and in the correct order; 'Shot 5 on Camera 3, cut to 5, shot 6 on Camera 2, cut to 6 etc...'. Could get a bit confusing. Some dancers and singers, provided also, other chances to 'cut with the beat'. I recall that the cameras in Studio 2 (Marconi Mk IVs) produced some cracking pictures, the pity of which such studio quality was rarely (if ever) seen on the average home receiver.

Mind you, I saw some really rotten monochrome pictures from source at Alexandra Palace during my time there (1965/1968) working on TV News. I always cringed at the film picture quality which was produced from 16mm negative (and some agency positive) remorselessly pushed through Pye Staticon telecine machines. To start with the pictures came out scratchy (the original film went through an exhausting process where by it was viewed, edited, perhaps dubbed with extra sounds, rehearsed and then transmitted, all in a rush).

Also, the pictures had to be graded on air. No easy task with a vidicon-tube telecine with a restricted contrast ratio. The end result was little better than industrial quality, resulting in lots of soot and whitewash. The broadcast images lurched, smeared and ballooned all over the place, the *piece de resistance* being those horrible (but essential) circular cue dots at the end of each sequence (remember them?). They were applied manually by using a sort of rolling hole-punch which produced several 'dots' in one go.

The news studio cameras were cheap devices also. Studio 'A' (BBC 2) had four EMI 201 vidicons and studio 'B' (BBC 1) had some strange-looking

BBC-design bullet-shaped camera channels that were remote controlled. These cameras were vidicons also and were based on the electronics of the EMI 201 cameras. The focus, zoom and tilting were all controlled by a 'joystick' apparatus up in the gallery. By this ingenious means, four cameras were controlled by two operators. A cost-cutting exercise and jolly fun to be sure. Pity about the picture quality.

Talking of pictures, as a lad my enthusiasm for all things television bordered on the metaphysical (who said it still does...?). Anyway, I used to look forward to live OBs, especially ones that came from locations I could reach easily. Once, a swimming gala was being transmitted on *Grandstand* from a pool near our street. I hot-biked it down to the baths and had a 'grandstand' look myself, ogling the scanner vans and chatting to the engineers. On another occasion, I recall standing spellbound on an *exact* bit of Southend pier in the full knowledge that an *actual* BBC camera had stood there during a relay. Hallowed be thy planking. Mind you, years later I continue to dream on, these days with my magazine 'nostalgic TV' articles. Once such soon upcoming (ah, the prose) will be in *Yours* magazine. The article will be all about the time I appeared on *Juke Box Jury*, only as a member of the audience! This was 1963. Later I took a snap of myself off the television set during the broadcast recording. So 30 years later, I just *had* to write about it, didn't I?

The Radiophile



* Service Panels - The Memorabilia etc. - The Glass Approach +
 * Reproduction Circuit Diagrams from Services - "Apprentice 50 Year Service"
 * Restoring an Old AMB - Big History - "The Friends of R.T.C. Brown"
 * Old Radio, Top Gun - "Head Start" - "Surviving With Stray"

INTRODUCING THE RADIOPHILE

If you are interested in vintage radio you may already have heard something of our magazine. Now we cordially invite you to sample it for yourself, believing that you will agree with our readers that it is by far the best of the vintage radio publications, with its authoritative yet friendly articles and its devotion to the "feel" of the period with which it deals. *This is not a "coffee table" magazine with merely superficial appeal.*

The Editor, Chas.E.Miller, has been engaged professionally in radio work since 1948 and in technical journalism since the early 1970's. His book *A Practical Handbook of Valve Radio Repair* (due to be re-published as a completely new edition) is the definitive work on the subject. The various writers who contribute are also well qualified in their fields and provide a valuable store of information for the readers. Nor is this all: The Radiophile also offers its subscribers a service that is unmatched elsewhere, for its large library of service sheets and manuals covers a vast range of makes and models and these are available as photo-copies at very reasonable prices - typically half or less than those charged by specialist firms. This is augmented by special "workshops" - informal one-day events - at which participants of all level of experience are shown how to improve their radio servicing skills by experts who have learned their trade through many years of practice. As an additional service to readers, they may place small advertisements in the magazine free of charge. The Radiophile operates several Vintage Radio Expositions each year at which readers meet to buy, sell or exchange equipment - and chat - in a friendly, relaxed atmosphere markedly different from other such functions. At the Spring Exposition is held the original Concours d'Élégance for Vintage Radio Receivers, with awards for the best entries. This feature and the Workshops have become so popular that they have now been given the ultimate accolade of emulation elsewhere. Most events include vintage radio auction sales for readers who wish to dispose of equipment, from single items to complete collections, whilst special auction sales for enforced disposals can be arranged at short notice and a sympathetic and confidential service is assured. *For subscription details please turn to page 83.*

And now Larry Coalston relates

BBC TELEVISION THEATRE: THE FIRST YEARS

The Shepherd's Bush Empire was purchased by the BBC in summer 1953 with the intention of converting the building into a Television Theatre for Light Entertainment, where a large audience could be invited.

The first programmes scheduled the temporary use of a Mobile OB Control Room (Scanner) from London Tel. OBs, equipped with Image Orthicon cameras. A day or two before the date for the transmission of the programmes, the OB unit was parked at the scenery entrance and all technical equipment unloaded into two unused dressing rooms and the cameras set up on the front part of stage. For the best picture quality, television programmes could only be transmitted live, and so two or three rehearsals and a final dress run of each show were very often planned.

I recall working on the very first series of *What's My Line* on Sunday evenings, when only a short pre-transmission run was possible. The celebrities on the panel and the other personalities did not arrive until about an hour before the transmission time, and adjustments to the lighting and sound balance were made with one or two members of the production team sitting in on the set beforehand. However, when the chairman (Eamonn Andrews) and the other members of the panel were cleared by make-up department, they came onto the stage and were introduced to the audience. There was just time for a short rehearsal with one or two of the challengers who had been asked by the producer to state a fictitious occupation.

As well as *What's My Line*, other shows from the Television Theatre included an early Saturday evening Fashion show, and a series of *Emney Enterprises* with comedian Fred Emney. Over the Christmas period a Victorian melodrama and a musical programme was scheduled, with Ray Martin and his orchestra. The sound of the violins in this orchestra was very similar to the well known singing strings of Mantovani and to achieve the special effect a separate feed from a microphone close to the violinists was fed to an amplifier and loudspeaker in an echo room. About 8 feet in front of the speaker a microphone picked up the clean violin sound as well as the 'echo'. The output from this microphone was fed back into the main sound desk

and mixed into the orchestral sound balance by the Sound Engineer. For a suitable 'echo' room a Gents toilet with fully tiled walls and an entrance from only one side of the upper circle, was chosen and the area closed to the public audience. During rehearsals the sound engineer noticed strange hissing and popping noises on the mixed feed from the violins and after some thought and investigation found that these were coming from the urinal cisterns in the 'echo' room, which automatically emptied and filled every 10 minutes or so. The sound of the running water was being picked up by the special microphone and so for the final run and transmission the water supply to the cisterns was turned off.

Although four Pye Photicon camera channels, which had been taken out of service at Lime Grove, were later installed in the theatre on a permanent basis, and the MCR was not required, the OB crews were still detailed for duty at the theatre. The control units and other apparatus were installed in a small dressing room and the vision mixing desk and production monitors in a separate side room. The sensitivity of the Pye Photicon cameras was not as good as the Image Orthicons and they required extra lighting to achieve good quality pictures. Power for the extra lights was provided by two mobile diesel generators parked alongside the theatre and two rows of large flood lamps were suspended with reflectors high up above the audience between the upper circle and the proscenium. When the lights were switched on just before each transmission, an audible gasp of surprise could be heard from the audience because of the exceptional brightness from the lamps.

One of the stock faults on these older Pye cameras was that of a loose tube carriage which caused the picture to go out of optical focus when tilting (panning) down. This fault would often occur on the cameras positioned in the circle but was always put right in time for the live transmissions.

At the end of the 1950s, the theatre was temporarily closed and refurbished with new Image Orthicon cameras similar to those already installed in Riverside Studios, Hammersmith. During the shut-down the stage was extended under both sides of the proscenium and a central platform constructed in the stalls, wide enough for the no. 1 camera to track when mounted on a large studio 'crane' (dolly). A vision control room and lighting gallery was also constructed at the side of the stalls.

The Television Theatre re-opened, with popular light entertainment shows like the *Black and White Minstrels* and *The Billy Cotton Band Show*. However, these were not transmitted live but recorded on

Ampex video-tape machines installed in the new BBC Television Centre at Wood Lane. This was more convenient for the artistes taking part in the shows as they were free to undertake interim engagements, especially at the weekends. The replay picture quality from the tape was almost as good as a live transmission.

WRIGHT'S REPLAY

Jeff Wright tests your memory again

Dragnet

Sergeant Joe Friday of the Los Angeles Police Department was the creation of actor Jack Webb. He researched, wrote, produced, and played the lead.

Dragnet was the first American cop series to be shown in the UK and the catchphrases of "All I want is the facts, mam" and "My name's Friday – I'm a cop" soon became public property.

To the delicate ears of fifties' viewers, the police jargon was a mystery **APBs**, **459s**, **415s**, **211s** – gritty reality, yes, but what did it all mean?

After watching nearly forty years of US television, I suppose most of you know, but for our younger viewers... an **APB** is an All Points Bulletin; a **459** is a burglary; **415** - disturbing the peace and a **211** is a robbery.

The straightforward format and documentation of crimes followed Friday and his side-kick Officer Frank Smith through over 300 successful investigations between 1951 and 58. In 1967, Webb brought the series back, with a new side-kick played by Harry Morgan – later seen as Colonel Potter in *M.A.S.H.* – for another two year run of over 90 stories from the files of the LA PD.

And now we introduce Jim Palm, who writes regularly in *Journal Into Melody*, the bulletin of the Robert Farnon Society. If you have any interest at all in the music used in television and radio productions, you owe it to yourself to join the RFS (address inside the rear cover of this magazine)...

WILTSHIRE WORDS

ITV's Fortieth Anniversary

(First published in the December 1995 issue of *Journal Into Melody*)

These Wiltshire Words are being recorded at the end of September which is a nostalgic time for yours truly; exactly forty years ago, I left the Army at the end of my two years' National Service. "Well," I said in my diary, "I'm now a 'Mr' again and it's a wonderful feeling!" In the course of 18 months abroad I had, inevitably, acquired some new records but had sent them home and now was the time to play them. The following month, Nixa released the Eric Coates SOUND AND VISION March which was written for ATV, and yet another disc went into the collection!

Independent Television had started up on 22nd September 1955 and few people remember now that there was trouble with ATV at the beginning; they initially called themselves 'Associated Broadcasting Company' but ABC TV, which were set to start transmitting from the Midlands and North, objected. To have two ABCs would, they claimed, cause confusion – the Northern company was an offshoot of Associated British Cinemas and, historically, they had first claim to the title. So the 'other' ABC changed their name to Associated TeleVision, hence the initials ATV.

If you have a copy of Oriole CB 1312, the label for THE JOLLY JUGGLER by Vivian Ellis states 'Signature tune of ABC's Television programme *Sunday Afternoon*'. But CS 1312 (actually a reissue of Chappell C 494) was released in November 1955, when ABC TV did not start transmitting (from a converted cinema, incidentally: the former Astoria in Aston Road, Birmingham) until February 1956. So for 'ABC' on the Oriole disc, read 'ATV'. Pye got it right with SOUND AND VISION, however; no doubt Oriole's labels were printed before the change of name occurred.

ITV's fortieth anniversary (which, in keeping with that network, was scarcely celebrated at all!) prompts a recap of the set-up when the whole thing began. The Independent Television Authority which was established to oversee the whole operation and run the transmitters, decided that the major conurbations, i.e. London, Birmingham and Manchester, should have separate programme contractors for weekdays and weekends. So Associated Rediffusion (which later became hyphenated and had grown out of the Rediffusion radio relay system for which Eric Coates had written his REDIFFUSION MARCH - MUSIC EVERYWHERE in 1948) became the London weekday contractor, and ATV were responsible for programmes at weekends.

When the Midlands transmissions began early in 1956, ATV were the weekday contractors with ABC operating on Saturday and Sunday; later that year Manchester came 'on line' with ABC again responsible for the weekend schedules and Granada providing programmes during the week. Of these companies, Granada is the only one to survive in its original form: Associated-Rediffusion were later forced by the ITA to merge with ABC to form Thames; ATV lost their London franchise to London Weekend Television and, now operating solely in the Midlands, were ordered to diversify by opening new studios in Nottingham to supplement those in Birmingham; they renamed themselves Central TV in the process. Thames TV subsequently lost their franchise to Carlton, but still make programmes, both for the ITV network and the BBC (as does Granada) – a situation which would have been unthinkable 40 years ago!

Real hostility existed at the start of ITV, the two sides barely managing to speak to each other, and this even extended to the transmitters where much money was wasted in needless duplication. By late 1955, the BBC's national network was well established and, having 'got in first', they naturally chose the best sites from a technical point of view. Many of the ITA's were second-best and, in the south of England, the situation reached absurd proportions. The BBC already had a prime transmitter site at Rowridge on the Isle of Wight; when the ITA came along, they opted for a site on Chillerton Down, some two miles to the south-east. However, the microwave links which 'connect' transmitters up and down the country have to operate over 'line-of-sight' paths with no obstacles in the way, and Chillerton Down could not be 'seen' from the mainland. The 'solution' was to beam the ITV signals from Hampshire to the BBC mast at Rowridge, then bounce them off the Rowridge mast to Chillerton Down for re-transmission in the normal way. Yes, all rather daft and very expensive. Fortunately, in these 625-line UHF days, logic prevails and, in the great majority of cases, one mast transmits all four terrestrial channels and often radio as well. Incidentally, BBC 1 and 2, ITV and Channel Four are all now radiated from Rowridge. By the way: it's 'Row' as in 'Cow' and not as in 'Low'.

Among the benefits of membership of the Robert Farnon Society are a regular 72-page bulletin similar in format and style to 405 Alive as well as exclusive access to buying production and mood music CDs not available to the public. Many other CDs can be bought at discounted prices – but only by RFS members!

DAVE JOHNSON'S TELEVISION MUSEUM

James Hawes KB9EPQ makes an exploration around a remarkable private collection

Who inherited Jack Benny's vault?

Remember this deepest of pits, this subterranean sanctum, this mysterious grotto where Benny secreted his wealth? Dave Johnson remembers.

Of course, as Dave will tell you, Mr. Benny's vault was the greatest make-believe. It was the folklore of the recent, but fading past. But Dave is one of the few who know the value of that make-believe.

In his very own grotto, there are shadows of Benny's real treasure... Echoes of golden days that we seek but can never find... Dreams that shimmer like electrostatic dust from the back of radio and television sets.

Dave Johnson lives in a big, friendly house in Berwyn, Illinois. December 28, we visited Dave and viewed his splendid collection of antique TV and radio receivers. Dave greeted us and took us around to the back entrance of the house. This is the entrance to his cavernous basement. There Dave introduced us to his charming associate, Barney the Cat.

Actually, half a dozen cats live with the Johnsons. But only Barney is qualified to work on the equipment in Dave's museum. Bottom line: *Only Barney knows how to retract his claws when inspecting the inlaid veneer!* Incidentally Barney's a black-and-white feline, so he particularly likes pre-colour TV sets. He knows all 40 televisions, the 25 radios and all the repair parts. Although I didn't check on his title, I guess Barney is Dave's chief technician.

A 1938 monoscope tube greets visitors as they enter the museum. (*Station engineers once used monoscopes to provide test images for equipment calibration. That way, they could obtain a good on-screen image without a camera.*) Dave installed his monoscope in an old oscilloscope chassis. The monoscope's monitor displays a stationary, monochrome image of one-time star Mary Eastman.

In Dave's shop was a Western Television mechanical television chassis. That 45-line mechanism, based on the Ulysses Sanabria patent, dates from about 1930. Dave observed that most 45-line, interlaced transmissions originated in Chicago. Yet, he continued, "Collectors have discovered 45-line sets

hundreds of miles from Chicago. That's because the 45-line transmitters operated on the short-wave band."

Imagine! DX hounds nation-wide once received pictures from 45-line stations in Chicago, Kansas City and Iowa City.

Among Dave's radios is one of the first remote control models. And Dave's tube collection contains several iconoscopes, the camera tube invented by Zworykin. These include the first ham radio iconoscope, the 1847. That one debuted in 1939! We also noted Farnsworth's image dissector camera. Nearby is a multipactor, Farnsworth's improved camera with a built-in electron multiplier.

An RCA TK-11 mono television camera dominates the main room of Dave's museum. This dinosaur brought back a flood of memories for me. I trained on three TK-11s at University back in the 70s. Joe, our teaching assistant, joked that the only other working TK-11s resided Smithsonian. By now, the ones I trained on may be there too!

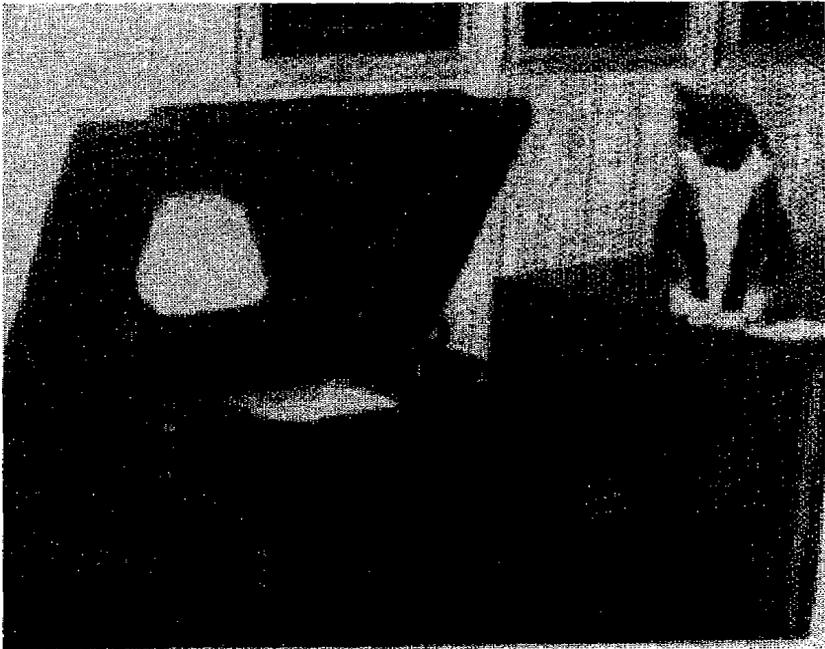
Dave devotes his back room to a collection of console radios. Among these are fine examples by Philco and Zenith. Barney led the way to 'parts warehouse'. With his tail Barney caressed tubes, chasses, replacement capacitors and speakers of every size. Dave gestured at a set of metal shelves in the corner. On one of these shelves stand two sturdy, metal boxes. Each contains a ruggedised, military iconoscope from the nose cone of a television-guided bomb. But these aren't the high-tech armaments of the recent Gulf War. *They're surplus from World War III!*

If you rub Barney's neck, he'll impersonate Nipper by the pre-war RCA TRK-12 television. But mostly he likes to sleep atop sets with big, octal tubes. You know, the ones with pleasantly warm filaments. *This is definitely not a seven-pin miniature animal!*

Barney also enjoys crawling languidly across the peak of the sofa by Dave's jukebox. Visitors seated there must scratch his arched back. No doubt about it... Barney knows old TVs. And Barney definitely knows cat people when he sees them. In fact, you might say that Barney's the original cat's whisker detector. Certainly he's an appropriate custodian for dusty memories at Dave Johnson's wonderful museum.

Good Scanning! – KB9EPQ.

**A TV monitor displays the image from Dave's
1938 monoscope tube.**



**Barney the cat looks transfixed by the
1939 RCA mirror-lid TV set**

SPOTLIGHT SOUTH WEST

From BOB NETHERWAY in BRISTOL

Last Thursday, the 18th April saw the 35th anniversary of our regional magazine programme from Plymouth.

It hardly seems like 35 years since we first saw a local news programme. Before that, the BBC had to send us the output of their Bristol newsroom.

On the day in question the programme opened just after the national news, and was then called *South-West at Six*. It was introduced by Sheila Tracey, I cannot remember who else was there at the time, but not long after that, when the programme was renamed *Spotlight*, Sheila was joined by Joe Pengelly, Peter Crampton (who tragically died at an early age) and Hugh Scully, (now well known for his appearances in the *Antiques Road -Show*).

Spotlight has been a friend of mine from that day to this, and I now watch it here in Bristol using a high gain aerial and amplifier system.

It charted the voyages of many mariners like that of Donald Crowhurst, who convinced the world that he had sailed round the globe single handed, and was proved to be a fraud by *Spotlight's* weatherman Capt. Craig Rich. It also followed the fortunes of Sir Frances Chichester, who sailed round the world 'honestly', and also covered the story of the *Torrey Canyon* when it was wrecked off the Scillies in 1966.

The engineers at BBC Plymouth tried to pioneer colour on 405 lines for the West Country, but the government of the day would not let them. and now they lead in local broadcasting by using satellite links between the outside broadcast sites and the studios.

My signal here is weak, but watchable. On some occasions when there is a lift in atmospheric conditions, the picture is very good indeed, even enabling me to resolve teletext and I hope soon, NICAM.

I hope that when I am in my 70s I shall still be able to see *Spotlight* via a digital picture, which I predict will give me a much clearer pictures.

REFERENCE SECTION

As a 'eleven years on special' and to help keep the memories alive, here is a handy transmitter guide. Its use is now sadly only historical but it will serve as a reminder of the British 405-line system at its most fully developed. Please check it over for errors and send them in; we'll correct them in the next issue. There are several gaps for missing information – for instance, did Redmoss and Glencairn share the same channel and aerial polarisation as their subsequent replacements?

A LIST OF VHF 405-LINE TRANSMITTERS

All transmitters other than main stations are indented to the right.

BBC

Station	Channel, polarisation	Maximum ERP (kW)	In service date
LONDON AND SOUTH EAST			
Alexandra Palace	1V	500	2.11.36-1.9.39 7.6.46-27.3.56
Crystal Palace #	1V	200	28.3.56
Bexhill	3H	0.15	1966
Eastbourne	5V	0.05	16.12.63
Hastings	4H	0.015	14.12.60
Hungerford	4H	0.025	
Newhaven	8V	0.05	
Rye	3H	0.05	
Oxford	2H	0.65	29.1.62
Swingate	2V	1.5	21.4.58
Canterbury	5V	0.03	29.6.64
Folkestone	4H	0.04	14.7.58
MIDLANDS			
Sutton Coldfield #	4V	100	17.12.49
Churchdown Hill	1H	0.25	29.11.65
Hereford	2H	0.05	14.9.64
Northampton	3V	0.1	1966
EAST ANGLIA			
Peterborough	5H	1	5.10.59
Bedford	10H	3	1966
Cambridge	2H	0.1	7.3.66
Tacolneston	3H	45	1.2.55
Aldeburgh	5V	0.025	
Manningtree	4H	5	22.5.62
SOUTH			
Rowridge #	3V	100	12.11.54
Brighton	2V	0.4	5.8.59
Ventnor	5V	0.01	4.5.64
Weymouth	1H	0.05	
Truleigh Hill	3		9.5.53

(Truleigh Hill was a temporary station, replaced by Brighton-Whitehawk Hill)

WEST

Wenvoe #	5V	100	15.8.52
Barnstaple	3H	0.2	1966
Bath	6H	0.25	1966
Marlborough	7H	0.025	
Swindon	3H	0.2	5.11.62

SOUTH WEST

Les Platons	4H	1	3.10.55
North Hessary Tor #	2V	15	17.12.54
Bude	4V	0.1	
Okehampton	4V	0.04	13.7.64
Sidmouth	4H	0.03	
Redruth #	1H	10	26.2.62
Bodmin	5H	0.01	
Isles of Scilly	3H	0.02	

NORTH WEST

Winter Hill #	12V	125	20.4.64
Douglas	5V	3	20.12.53
Kendal	1H	0.025	1966
Morecambe Bay #	3H	5	3.12.62

NORTH

Belmont (relay)	13V	20	1966
Skegness	1H	0.06	8.8.63
Holme Moss #	2V	100	12.10.51
Scarborough	1H	0.5	8.3.65
Sheffield	1H	0.05	24.5.60
Swaledale	13H	100	Note 1
Wensleydale	1V	0.02	

NORTH EAST

Pontop Pike #	5H	17	1.5.53
Richmond	3V	0.045	
Weardale	1H	0.15	21.2.66
Whitby	4V	0.04	
Sandale #	4H	30	5.11.56

WALES

BBC Wales programme

Blaenplwyf #	3H	3	14.10.56
Dolgellau	5V	0.025	
Ffestiniog	5H	0.05	
Machynlleth	5H	0.05	28.6.65
Haverfordwest #	4H	10	15.2.64
Ammanford	12H	0.02	
Cardigan	2H	0.045	
Llanddona	1V	6	15.5.62
Holyhead	4H	0.01	9.3.64
Moel-y-Parc #	6V	20	28.10.65
Betws-y-Coed #	4H	0.035	
Llangollen	1H	0.035	
Wenvoe	13V	200	8.2.64
Abergavenny	3H	0.03	
Carmarthen	1V	0.02	15.3.65
Kilvey Hill	2H	0.5	
Llandrindod Wells #	1H	1.5	4.12.61
Llanelli	3V	0.015	
Llanidloes	13H	0.02	

BBC-1 programme			
Holme Moss #	2V	100	12.10.51
Sutton Coldfield #	4V	100	17.12.49
Wenvoe #	5V	100	15.8.52

Some parts of North and East Wales are served by the 405-line BBC-1 service from Holme Moss (channel 2V) or Sutton Coldfield (channel 4V).

Note 1: Shown "not yet in service" in 1969. Appears never to have been opened.

SCOTLAND

Kirk o'Shotts #	3V	100	14.3.52
Ashkirk #	1V	18	17.6.63
Ayr	2H	0.05	
Campbeltown	5V	0.5	
Dundee Law	2V	0.01	13.7.64
Forfar	5V	5	13.7.64
Girvan	4V	0.02	
Lochgilphead	1V	0.02	
Millburn Muir	1V	0.01	
Perth	4V	0.025	26.10.64
Pitlochry	1H	0.2	21.12.64
Port Ellen	2V	0.05	
Rosneath	2V	0.02	
Toward	5V	0.25	22.2.65
Meldrum #	4H	17	12.10.55
Ballater	1V	0.01	
Bressay	3V	6	15.4.64
Orkney	5V	15	22.12.58
Thrumster	1V	7	15.12.58
Redmoss			14.12.54
(Redmoss was a temporary station, replaced by Meldrum)			
Rosemarkie #	2H	20	16.8.57
Ballachulish	2V	0.1	18.3.63
Fort William	5H	1.5	28.2.63
Grantown	1H	0.4	8.2.65
Kingussie	5H	0.035	
Kinlochleven	1V	0.005	8.4.63
Melvaig #	4V	25	26.4.65
Oban	4V	3	22.6.63
Penifiler #	1H	0.025	11.4.66
Skriaig #	3H	12	14.3.66
Sandale (BBC1 Scotland)	6H	70	27.9.65

NORTHERN IRELAND

Divis #	1H	35	21.7.55
Ballycastle	4H	0.05	
Brougher Mountain	5V	7	24.2.64
Kilkeel	3H	0.025	
Larne	3H	0.05	5.4.65
Londonderry	2H	1.5	18.12.57
Maddybenny More	5H	0.02	
Newry	4V	0.03	15.3.65
Glencairn			1.5.53
(Glencairn was a temporary station, replaced by Divis)			

INDEPENDENT TELEVISION

Station	Channel, polarisation	Maximum ERP (kW)	Service date
THE BORDERS AND ISLE OF MAN			
Caldbeck #	11H	100	1.9.61
Selkirk #	13V	25	1.12.61
Richmond Hill	8H	10	26.3.65
Whitehaven	7V	0.1	30.1.68
CENTRAL SCOTLAND			
Black Hill #	10V	475	31.8.57
Rosneath	13V	0.1	13.12.68
Rothsay	8V	1	30.8.68
Lethanhill	12V	3	31.1.69
CHANNEL ISLANDS			
Fremont Point	9H	10	1.9.62
EAST OF ENGLAND			
Mendlesham	11H	200	27.10.59
Belmont	7V	20	20.12.65
Sandy Heath	6H	30	13.7.65
LANCASHIRE			
Winter Hill #	9V	100	3.5.56
LONDON			
Croydon #	9V	350	22.9.55
MIDLANDS			
Lichfield #	8V	400	17.2.56
Membury	12H	30	30.4.65
Ridge Hill	6V	10	30.7.68
NORTH-EAST ENGLAND			
Burnhope #	8H	100	15.1.59
NORTH-EAST SCOTLAND			
Durris #	9H	400	30.9.61
Angus	11V	50	13.10.65
Mounteagle #	12H	50	30.9.61
Rumster Forest	8V	30	25.6.65
Aviemore	10H	1	29.11.69
NORTHERN IRELAND			
Black Mountain #	9H	100	13.10.59
Strabane	8V	100	18.2.63
Ballycastle	13H	0.1	6.7.70
SOUTH OF ENGLAND			
Chillerton Down #	11V	100	30.8.58
Newhaven	6V	1	3.8.70
Dover	10V	100	31.1.60
SOUTH-WEST ENGLAND			
Caradon Hill #	12V	200	29.4.61
Stockland Hill #	9V	100	29.4.61
Huntshaw Cross	11H	0.5	22.4.68

WALES AND WEST OF ENGLAND			
St. Hilary (English) #	10V	200	14.1.58
St. Hilary (Welsh)	7V	100	15.2.65
Bath	8H	0.5	13.5.68
Abergavenny	11H	0.1	23.4.69
Brecon	8H	0.1	30.4.70
Presely #	8H	100	14.9.62
Arfon	10H	10	9.11.62
Bala	7V	0.1	26.7.67
Ffestiniog	13V	0.1	28.2.69
Llandoverly #	11H	0.1	30.8.68
Llandrindod Wells#	9H	3	1.7.69
Moel-y-Parc	11V	25	28.1.63
YORKSHIRE			
Emley Moor #	10V	200	3.11.56
Scarborough	6H	1	11.6.65
Sheffield	6H	0.1	23.3.69

..... Station still listed in service at 1984.

* The later UHF station here carried Yorkshire Television, not Anglia, programmes.

OTHER BRITISH TRANSMITTERS

G3CTS	special	12 watts	(Note 1)
Tower TV	6	Probably never	
		transmitted	(Note 2)
Radio City TV	3	Projected	(Note 3)
Caroline TV		Projected	(Note 4)
EMI Ltd, Hayes	1		(Note 5)
Baird Ltd, Crystal Palace	special		(Note 6)

1. G3CTS was the Royal Television Society's own experimental and demonstration transmitter in London, operating from 1954 until some time around 1970. Vision was on 427MHz DSB (12 watts peak to aerial feeder), sound on 423.5MHz (10 watts), later 430MHz vision (150 watts DC to transmitter) and 426.5MHz sound (45 watts ditto). An article on this unusual and indeed unique station appeared in issue 4 of *405 Alive* and the Best of Volume 1 reprint.

2. Pirate television became quite a talking point during the mid-1960s, following the apparent success of the offshore radio stations. **Tower TV** was to broadcast from the Sunk Head fort in the sea 14 miles off Walton on the Naze on the Essex coast. Although photographs exist of a rather crude-looking industrial CCTV camera shooting the Tower TV caption, there is some dispute whether they ever in fact went on the air. The alleged first reception was at 4.20 AM on Tuesday 9th November 1965. The channel chosen (5) and power (10 watts), had Tower ever gone on the air, would reportedly have caused harm to radio astronomy experiments at Cambridge.

3. **City TV** was a project to broadcast from an ex-Naval minesweeper: it did not reach reality, though detailed plans were made. These were announced

on 8th June 1965, following the Government's announcement of its intention to ban cigarette advertising on TV from 1st August. Initial capital outlay was estimated to be US\$ 85,000 and if advertising support was forthcoming, 'top quality' films and news bulletins were to be broadcast on channel 3 (used by the BBC in Wales, well out of the range of City's projected coverage of south-east England).

4. **Caroline TV** was to be broadcast from a plane, similar to the American Stratovision experiments of many years previously. It too did not get off the ground, though photographs of the station idents were issued. In fact the only successful British offshore television station was in fact TV Noordzee, a British-owned affair on an artificial island off the Dutch coast. It was a 625-line affair, operating in Band III, and was declared illegal after a while [see *International Broadcast Engineer*, November & December 1964 for a detailed description].

5. **EMI Ltd** had a test transmitter and antenna similar to Alexandra Palace's at Hayes, which was used for tests before Alexandra Palace opened.

6. **Baird Ltd** operated a 405-line transmitter at Crystal Palace in the late 1930s. Ray Herbert (amateur callsign G2KU) is one of the few surviving employees of the old Baird television company. He started work there in 1938 in the transmitter department and recalls: "They had no camera, hence nothing to transmit, so they used an electronic generator to make a horizontal bar. This generator was based on 405 lines and produced horizontal stripes as a sort of test pattern.

"The intention was to relay events from film (sports events and the like) within 3 or 4 hours of the event to Gaumont-British cinemas in central London from the transmitter at the Crystal Palace. This would have used interlaced 405-line scanning to BBC standards.

"The transmitter was located in the South Tower, which had survived the disastrous fire of 1936 which had destroyed the rest of the Crystal Palace buildings. Baird used the former School of Arts at Crystal Palace, in the extreme south-east wing, for aerial television experiments (e.g. work for French government).

"Baird's monoscope was used not at Crystal Palace but at the TV factory for aligning TV receivers. This factory was at Worsley Bridge Road, Lower Sydenham."

The frequency of Baird's transmitter was stated in October 1933 as 6.25 metres, i.e. 48MHz and Ray says: "the transmitter frequencies were not changed as the aerials [would have] had to be modified and this was a steeplejack's job. There would be no clash with the BBC as there were no transmissions from Crystal Palace from about November 1935 except for spasmodic test with the 240-line gear [destined] for Alexandra Palace. At a later date Baird transmitted his colour pictures on 37MHz. Our [airborne] system [for the French air force] was 400 lines sequential on 51MHz."

7. **Radio Astronomy**. Channel 6 was used for radio astronomy experiments at the Mullard Radio Laboratory, Lords Bridge, near Cambridge.

IRISH REPUBLIC

Main transmitters

Kippure (Co. Dublin)	7H	100	opened 1961, closed 31.1.79 or 13.2.79
Truskmore (Co. Sligo)	11V	100	closed 27.8.78 or 28.8 78

These closure dates are taken from official records; probably the first date is the proposed one and the second the actual date of closure.

Low-power transposers

Dublin (Donnybrook)	3V	25W	closed 1.11.78
Fanad (Co. Donegal)	7H	1	closed 15.6.82
Letterkenny (Co. Donegal)	6V	1	until 23.11.90*
Moville (Co. Donegal)	12V	2	due to close end 1983
Monaghan	10H	1.6	not available

* The 1990 date was given by RTE but is clearly wrong; the station was due to close at the end of 1983. Further research needs to be done with regard to opening and closing dates.

A LIST OF VHF 441-LINE TRANSMITTERS

FRANCE

Paris (Eiffel Tower)	SplV	30kW	26.8.37
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Note: The station started transmissions on reduced power in August 1937 for the International Exhibition; full power started with the official inauguration on 8.4.38. It was planned that it should continue in operation until 1958 but it was destroyed by fire on 3.1.56. Various line standards between 455 and 441 were used during this period.

GERMANY

Berlin	IIV	40kW	Late autumn 38
Brocken	I V	-	April 39
Feldberg	IIV	-	Not opened

Note: An exact date for the opening of the **Berlin-Witzleben** transmitter is not stated. Power was originally 14kW. The station was destroyed by bombing on 26.11.43.

Brocken was transmitting experimentally using its own telecine in April 1939. There was no link from Berlin. Two months later the transmitter was taken over for military purposes.

Feldberg was to have served Frankfurt am Main. In early 1940 only the sound transmitter had been fitted and this too was removed for military use in the autumn of that year.

The transmitter for **Munich** was completed and tested in the factory but never installed.

NETHERLANDS

The pre-war 405-line experimental sound and vision transmitter operated by Philips Ltd at Eindhoven used the same frequencies as London (A.P.). [Wireless World Guide to Broadcasting Stations, fourth edition].

SOUND AND VISION CARRIER FREQUENCIES

Channel designation	Sound	Vision.
BRITISH ISLES		
1	41.50	45.00
2	48.25	51.75
3	53.25	56.75
4	58.25	61.75
5	63.25	66.75
6	176.25	179.75
7	181.25	184.75
8	186.25	189.75
9	191.25	194.75
10	196.25	199.75
11	201.25	204.75
12	206.25	209.75
13	211.25	214.75
14	216.25	219.75

Note: Channel 14 allocated but not used. Relatively few tuners were equipped for this channel.

FRANCE

Special	42.00	46.00
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Note: This channel was used by the transmitter in Paris (Eiffel Tower).

GERMANY

I	40.01	42.80
II	45.00	47.80
III	50.00	52.80

Note: Berlin used channel II. No stations were allocated to channel III.

TALES FROM THE INTERNET

TALES FROM THE INTERNET

LeAnne Davis (e-mail: LeAnne.Davis@ti.com) asks:

I have a twelve year old son who has caught the bug here and he is now interested in helping me repair an old RCA TV that was left in our 1894 Queen Anne home by a previous owner. The stem on the picture tube (CRT) is broken and wouldn't you know I left my notes about the markings on the tube at home this morning? Are these old picture tubes still available anywhere? It is a Philco picture tube and I think it had a 5 or six digit alpha-numeric part number seems like I remember like a 17CP-4 or something like that.

The label inside the TV warned for the consumer not to try to replace that particular tube. Are there any dangers I need be aware of when and if I can find a replacement tube? I do have a BSEE and feel like I could handle the disassembly and re-assembly pending, of course, the procurement of the picture tube.

Hank van Cleef replies:

"Old RCA TV" with a "Philco picture tube" covers a lot of territory. First of all, is this a color or a black-and-white set? Secondly, if it was built after about 1955, the design and construction was, to put it bluntly, likely to be "instant electronic junk." You will want to look the set over very carefully before spending a lot of time and effort on it. If it is built with Compactrons and has a lot of paper-base phenolic etched circuit boards, you are looking at a real labor of love to get it working again, and at a design that probably has severe bandpass and ringing problems in the IF amplifier and video section.

17CP4 is, by the way, a valid CRT type. It is a 17 inch rectangular CRT with a non-aluminized screen, magnetic focus, and an ion trap magnet, placing it in the 1951-53 period, and might be worth the effort. On replacement CRTs, about all I can suggest is to get on the phone to CRT rebuilders and start looking for someone who either handles old CRTs or who can rebuild yours. You may get some "you've got to be kidding me" responses, but keep trying and asking - probably one service shop works on older stuff and knows sources of supply. There is some interchangeability between 17 inch CRT types, but you'll have to consider the mounting method. Check that the Philco CRT is the original RCA type, not a substitute. An RCA set would have had an RCA CRT originally.

If you do decide to put some time and effort into it, you will probably have to replace all of the larger fixed capacitors, and may have to replace all of the molded carbon resistors as well.

Test equipment needed will be a good VOM or DVM of some sort, an RF generator capable of operating up through 42MHz sine wave (for IF alignment), and an oscilloscope (not mandatory, but it

sure makes life a lot easier). Voltages involved run between 150 and 450 in the receiver and CRT deflection circuits, and the high voltage supply (flyback type) delivers 12-14kV for a typical B&W 17 inch CRT.

There should be a model number, and perhaps a chassis number, on the set someplace. For schematic diagrams and service info, you can check your local library for "Sams" (Howard W. Sams Co.) "Fotofact" info, or get Antique Electronic Supply to copy and send you the appropriate info, once you have a definite model/chassis identification.

Hank van Cleef

The Union Institute

E-mail vancleef@netcom.com or vancleef@tmn.com

Anybody know for sure when/why pedestal or 'set-up' was added to the television signal? I've heard two stories about why it was done. Since a more positive video signal (more toward white) means increased carrier modulation, set-up was supposed to save money on the transmitter's power bill. The other story says it was to overcome sloppy sync separation in receivers, since set-up increased the distance from sync tip to black. Do both of these sound true? —*Tim Mullen*.

Yup. I broke out Terman 1956, which discusses the B&W and color NTSC standards, and which is a bit more explicit about the pedestal than the Zworykin-Morton material. This is what I get for relying on memory when I haven't even thought about the RS-170 signal for at least 15 years (I'm one of those folks who owns a TV set, but can't remember when he last turned it on—long enough ago that it may not work if I turn it on now, which translates into about three years).

The horizontal rate is 63.5 microseconds (there is a typo in Terman giving 53.5). The horizontal sync pulse generator at the transmitter operates at double the 15.75kHz rate and is gated to transmit every other pulse except during the front part of the pedestal. The pedestal repeats every 16.67 milliseconds. One linescan, it rises, with the first of six double-time equalizing pulses at the middle of a horizontal line. On the other scan, it rises at the end of a horizontal line, but with the same six double-speed equalizing pulses. This is followed by an inverted pattern of six double speed pulses, and then by another upright pattern of six more double speed pulses.

This adds up to eighteen equalizing pulses in three segments of time for three lines each. The middle inverted pattern is what is integrated to provide the vertical sync signal in the receiver. The purpose of the equalizing pulses is to space the vertical sync signal back from the pedestal rise and setup the integrator for the vertical sync signal with a train of double-speed pulses so that the integrator and sync pulse don't have significant jitter as a result of the half line/full line beginning point of the pedestal on alternate scans, and the trailing equalizing pulses assure there is no jitter in the unblanking. Terman

gives the effective unblanked picture as about 482 lines, so the pedestal continues well beyond the nine lines of equalizing pulses.

Zworykin's description begins with a very detailed drawing of interlace lines, but the drawing is for an even-line system, which would require the vertical rate to shift back and forth, and there is no comment on the equalizing pulses, even though the same pattern was used in the 441 line system. – *Hank van Cleef*.

After reading Hank's latest on the television signal (unabashed tip-o'-the-hat here: Love this man's writing. He's obviously not spent *all* his time in the lab.), it dawned on me that what I know as pedestal is something completely different. I had always thought it was synonymous with set-up – the 7.5IRE black level that occurs whenever the signal is unblanked. That's why I was wondering when this came about. As far as I know, television had started out simply using blanking level as the black floor, and pedestal/set-up (the British call it 'lift') was added later on for transmitter power savings or receiver manufacturer reputation saving. Or have I been using the term pedestal incorrectly? What Hank described sounds like what I've heard called the 'hammerhead', so termed because of its appearance on a CRT. – *Tim Mullen*

It's been over 30 years since I rode 'a gain control at the transmitter', and I have never been into video, but I am pretty sure that the explanation of the equalizing pulses proffered above is quite wide of the mark. The equalizing pulses do not "force the horizontal oscillator to shift forward a half-line". The horizontal time base in the receiver operates with a fixed time interval, which does not vary due to the equalizing pulses. The purpose of the equalizing pulses, is to prevent the differing temporal relationship between the horizontal and vertical pulses in alternating fields, from affecting the vertical timebase, and messing up the interlace. Terman's book, *Electronic and Radio Engineering* has an explanation of what the equalizing pulses are for and how they work.

My memory is fuzzy, so I may be mistaken, but I think the transmitter that I knew, did modulate relative to the pedestal. I think the modulator clamped the pedestal to a fixed level. In the control room, the transmitter control panel had a video gain control that controlled the amount of video modulation, and a second control that adjusted the height of the sync pulses, as I remember it. This was all monitored on a special Tektronix Television waveform monitor.

The term 'pedestal'. The receiver does not "shift the horizontal oscillator forward a half-line" during the vertical sync interval. It's the vertical timebase that has to handle this 'busy time' well, to maintain proper interlace. The problem is that the vertical interval may vary from field to field, if things are not handled properly. – *John Byrns*.

I've read the Zworykin book some more, and see the term 'pedestal' used in a few places, although it is not in the index. So far as I've seen, Zworykin's comments on the signal characteristics are the same as the comments Chuck Miller made at Tektronix in the sixties, with one exception. Chuck said that the 1941 standard was chosen to give the same resolution as 16mm home movies. However, this is the 525-line standard, which post-dates Zworykin's book by about a year.

On the signal choices:

1. Black-going positive (i.e., the modulation peaks) allow:
 - a. Noise is black, not white flashes.
 - b. Sync blanking is embedded in the signal, and does not have to be filtered out of the video going to the CRT.

2. Blacker-than-black horizontal sync pulses provide DC restoration at the end of every horizontal line. With 525 line, this is 63 microseconds; with 441 line, 76 microseconds. A reference time constant of about 200 microseconds in AC coupling is enough to assure that the signal does not undergo a significant DC shift from left to right, so the floor of video amplifier bandpass can be relatively high. (These are my numbers, not Zworykin's).

3. Use of a long-dwell pulse for vertical blanking allows a very simple sync separation set-up; essentially an RC differentiator for the horizontal, an RC integrator for the vertical.

4. The double-rate horizontal equalizing pulses force the horizontal oscillator to shift forward a half-line (32 microseconds on 525 line) during the vertical sync blank interval. While I don't think Zworykin mentions AFC oscillator control (which didn't appear in post-war production until around 1950, as I recall), it is no great engineering feat to shift the DC level to the sync input of an Eccles-Jordan "bistable multivibrator" by integrating the equalizing pulses or to create a DC bias in an AFC trigger; and to control it so that it is close to a 32 microsecond move across the blanking interval.

Zworykin talks about using the pedestal as a DC corrector signal in the transmitter. I haven't read all of this, but I suspect that he is referring to a compression scheme here, to maintain an approximately constant light level on the viewing CRT without having to have someone ride a gain control at the transmitter diligently.

- Hank van Cleef

The pedestal is the proper reference point for the video. Well designed receivers will use it for reference (DC restoration). More poorly designed receivers often use the tip of the sync pulse for reference. But

the sync pulse is a higher level, and thus more susceptible to compression through the video chain, making its use as a reference rather chancy.

I have seen circuits on video recorders where the sync is purposely clipped to reduce the peak-to-peak excursions of the video, thus making more dynamic range available for the visible video. There is then a circuit to restore the sync pulses to their full level on playback.

- Donald Borowski

The evolution of broadcast technology, programming and personalities. Tour the NBC radio studios as they appeared in 1930. Tour the facilities of WMAQ-TV as they appeared in 1970.

<http://www.mcs.net/~richsam/home.html>

Alf Jacob Munthe in Norway asked:

Can anyone give me some hints about the prices and availability of old TV sets from the forties, early fifties? The smaller the screen, the better! I would guess they are collectors items, but they occur very seldom in this newsgroup!

Andy Emmerson replies:

Market values and collector-desirability tend to baffle newcomer collectors since they are idiosyncratic and appear to follow strange cult trends. But what is logical is that collectors are prepared to pay high prices for clean, undamaged articles and extremely low ones for items that are defective in any way. In other words, scratched cabinets or missing knobs and back panels make a set worth only a quarter of the price it would fetch complete.

Top favourites are immediate post-war sets; many of these use pre-war circuitry and look very antique. Ekco even made a mirror-lid set, which fools many people into thinking it's pre-war. Note that these sets have transformer EHT supplies, so they are LETHAL to tinkerers. Price: £100 or more for a good one.

Anything with a bakelite cabinet is very collectable. This means the Bush TV12 and TV22, also the two GEC bakelite-cabinet sets. Expect to pay £200, even for a non-worker.

Next favourites: single-channel sets, such as the HMV 1807A and the Pye and Invicta 9" screen table top and console (floor-standing) sets. All of these are attractive (the cabinets of the Invicta clones are more strikingly designed) and the consoles are not as desperately heavy and big as other consoles. Price: £100 or more for a good one.

Most other 1940s and 1950s sets have very little collector appeal or value. It's sad because they are often as interesting! Table sets, with 9" or 12" screens, always attract more interest than console sets, simply because they are easier to store and display.

Good sources of supply: charity shops, provincial furniture auctions, amateur radio swapmeets, general boot sales and, of course, the small advertisements in *405 Alive*, the only magazine in the world devoted to vintage television.

And Keith Schengili-Roberts replied:

I don't know where you are located, but here in Toronto there is a dealer called Gary Borton who runs a shop called "Popular Culture", which deals primarily with stuff from the '30s to '50s. He also deals in old TV sets, and almost single-handedly acquired the sets for Moses Znaimer's MZTV Museum collection (<http://www.citytv.com/mztv>). He is generally open on Saturdays, and his phone number is (416) 504 2687. Last time I saw his warehouse, he had several dozen old TV sets to offer, including at least one pre-war set I recognized, one or two bakelite TVs, and a few others from the 40s and plenty from the 50s (including about a half-dozen Predictas of various models). I have my eye on an old 40s Motorola set, which was going for about \$200 Cdn. or so.

Don't know how he is with pricing on the other sets, but I've picked up several nice radios from him in the past, including an Addison, RCA Radiola 33 and a rep-wood faced speaker from the 20s. Highly recommended.

You've almost finished the magazine so who cares if the rest of these snippets are a bit off-topic...

Subject: Nostalgia Digest

Imitation is the Most Sincere Form of Flattery

I suppose that's what the Police *Squad* gang thought as they set out to do their dead-on send-up of a late fifties cop show. Am I the only one who did not realize that Police *Squad* is a camp-up of *M-Squad*? [No. *Police Squad* borrows very little from *M-Squad* really – only the theme in fact – but plenty from 1950s TV cop shows in general. AE] Imagine my surprise when I loaded the VCR with an *M-Squad* ep kindly provided by Dr. Ron Evans and lo and behold – the *Police-Squad* theme began.

If you didn't know this before, I do suggest getting a hold of a few copies of this slick, type-y police drama. About *M-Squad*, **The Big Blue Book of Television** says the following:

M-SQUAD [NBC]

First telecast: Sept. 20, 1957. Last telecast: Sept. 13, 1960.

Cast:

Lt. Frank Ballinger -- Lee Marvin
Captain Grey -- Paul Newlan

"The M-Squad was an elite group of plainclothes detectives working to fight organized crime in Chicago. Lt. Frank Ballinger was one of these top detectives who worked, as did most of the other members of M-Squad, by himself. Ballinger was a hard-nosed cop with no romantic interests. His commanding officer, and the man who assigned him to most of his cases, was Capt. Grey. Lee Marvin starred as Ballinger, who also served as narrator of the series.

The original M-Squad theme had been composed by the show's musical director, Stanley Wilson. At the start of M-Squad's second season, however, the original theme was replaced by a more jazz-oriented tune composed by Count Basie, [damn close if not identical to the Police Squad theme- KCS] which was also known as *The Theme From M-Squad*."

More than you ever wanted to know.

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From: dlock@ix.netcom.com (Dick Lochte)
Subject: Martin Kane

As others will probably note, it was Mark Stevens who played Martin Kane and Craig Stevens who was Peter Gunn. The Kane series leads went like this: William Gargan originated the role in 1949 and played it through the 1951 season. Lloyd Nolan took over for about a year. Nolan was a fine actor, but he had trouble memorizing his lines, which may be why he was replaced by Lee Tracy. Tracy, who played the role until '53, would solve the problem of a short show by taking minutes lighting his pipe (full of the sponsor's Old Briar tobacco) and shaking out the match. It was amazing how inventive he could be with that match. Stevens took over from '53 until the show went off the air. It came back a few years later, sort of. It was filmed in London for syndication with William Gargan back in the role.

I'm not sure if Nolan also played the part on radio, but seem to recall that he did.

Editor's note: Here we have an American television series filmed in London. Can anyone say if it was ever screened over here?

This next snippet may just strike a chord with those of us who may occasionally struggle with broadcast archives. No further comment is necessary!

From: **Adrian_Cosentini@nypl.org**

Subject: **Museums**

A couple of days ago Bob Jennings made some comments concerning museums dealing with broadcasting history. Early in my career as an audio engineer I had the good fortune to work at The Museum of Broadcasting, now known as the Museum of Television and Radio here in New York City.

This was a great job for me since most of my time was spent remastering and restoring old-time radio. I mean think of it, spending 35 hours a week working on Fred Allen, Jack Benny, Orson Welles, H.V. Kaltenborn, Rudy Vallee etc. etc. The problem was the money. Most non-profit institutions pay peanuts. Especially if you're not management. In a town like New York where everything is expensive, the kind of salaries these institutions are willing to pay people will not attract the most talented or conscientious people to stay.

I'm not saying that the people who work there don't care or aren't talented. There are many fine people who work at these institutions. But they are underpaid and very overworked. I get the impression that the main focus of The Museum of Television & Radio is fund raising. Of course that's important and they should do it. But in this whirlwind of fund raising I feel certain priorities get lost. Something as simple as cataloguing falls behind, especially if you go through three different cataloguers in four years.

So you have a situation where there is all these radio shows ready to be listened to but they've never been put in the main database. The radio fan and the researcher in particular never get a chance to hear the program. It's true that a lot of material that gets donated will just sit in a vault for a long time before someone gets around to making it or a copy accessible. Of course the big problem with that is things can get lost or forgotten about.

The solution for any potential donor of materials is, don't give them the original. Make arrangements to have it copied and donate the copy. I know that the

sound engineers at The M of T&R are very good (I trained them). The video engineer is a very dedicated hard working person. But you wouldn't believe the amount of work that gets dumped on these guys. And the same goes for most of the workers there.

They are put in a real tight spot. That's why most people don't stay too long. Whenever you have a situation with a relatively high turnover, work tends to slow down because of all the retraining. And with the specialised knowledge one needs for most of the jobs there, things get lost in the shuffle.

I'm not criticising the people who work at the M of T&R. However, the efficiency should (must) be improved if this kind of institution can be of real service to the public.

Adrian Cosentini, Audio Engineer.

From: **Tim Mullen**
Subject: **25-cycle power**

Harry Dodsworth wrote:

> I had assumed from the discussion about the persistence of 25 cycle power in
> Ontario that the switchover date to 60 cycle was before the introduction of TV.
> TV transmission began in Canada in the mid 1950s although sets were sold before
> that date to receive US stations. I was surprised to see a floor model TV in a local
> thrift store today which was supposed to work on 117v. 25 or 60 cycles power. The
> set was a (Canadian) Admiral Super Cascode model C2225X with a chassis 22A3X
> and picture tube 21ZP4B. The same store had an RCA New Vista tube TV model
> TC3850 (the 'New Vista' tuners used nuvistors, miniature vacuum tubes developed
> during the Korean war for VHF/UHF circuitry. Note the play on words!).

RCA made a special version of their 1939 TRK-12 for use with 50Hz power in Los Angeles. Not sure if this was continued with the TRK-120 released in 1940 or if it extended to the other models of the pre-war line.

From: **dmcintyr@acs.ualgary.ca (Deane D. McIntynre)**
Newsgroups: **rec.antiques.radio+phono**
Subject: **Re: 25 cycle power**
Date: **5 May 1996 11:40:20 -0600**

In article <4mh6gg\$kg5@freenet-news.carleton.ca>,
Harry Dodsworth <af877@FreeNet.Carleton.CA> wrote:
>

> I had assumed from the discussion about the persistence of 25 cycle power in
Ontario that the switchover date to 60 cycle was before the introduction of TV.

When I was a kid growing up in a small town near Toronto in the 60s we had a 25 cycle RCA 17 inch table model set that was made in 1953 (in Montreal) just after television transmission had started in Canada. It worked just fine on 60 cycles.

I can't remember if our 1954 Dumont was 25/60 cycles or just 60 cycles. I also remember 25 cycle radio sets. Second hand stores were still trying to sell 25 cycle electric clocks as late as the late 70's in Ontario. Buyer beware.....

Incidentally television first became available in Ontario in 1947 when the first Detroit stations went on the air. Toronto was served from WBEN Buffalo starting in 1948. The first Canadian stations, at Toronto and Montreal, opened in Sept 1952. By the end of 1954 all major Canadian cities had a television station.

From: **Bob Okas**
Subject: **Neon bulbs**

>> What happens to a neon bulb with age? Does it just stop?
>> Is it possible to tell if one is near the end of useful life?

To which Hank van Cleef responded:

- > The little NE-2 solder-ins in the horizontal amplifier of an old Tek
- > scope are one common fault area. General symptom is increase in firing
- > voltage, or won't fire at all. Also, some of them are light-sensitive,
- > and will fire in light, won't fire in the dark.

A former OT associate of mine told me many war stories of his experiences. Once he related a tale of how his company built some TTY switching gear full of NE-2s that worked like a charm during system test. This gear was enclosed in a 19" rack with doors on the front and back. After testing, the doors were closed and the unit was shipped to the customer, whereupon it failed to function reliably. After much head-scratching and pondering, the problem became obvious: the NE-2's were being operated in the dark! A small fluorescent light fixture was installed on the cabinet ceiling and the system worked without a hitch.

I remember that story every time I see the NE-2 pilot lights in my switched outlet strips flickering in a darkened room. As soon as the lights come up, they assume full brilliance. Apparently, a few extra photons help excite the gas enough to lower the ionisation point.

[OT = old-timer; TTY = teletype]

From: **Rhett George**

Richard in Sacramento asked about neon bulbs – the boatanchor version of an LED. The neon is slowly adsorbed into the inside of the glass envelope if the bulb just sits. When operated, the neon ions are given a fair velocity and re driven into the surface at a greater rate. Twenty years of storage may not affect the bulb, but twenty years of operation may be expecting too much. As the available number of neon atoms drops, the light gets dimmer. The inside of the envelope may darken with metal shaken loose from the electrodes and deposited there. This is a parallel effect, not directly related to loss of neon. When the neon pressure gets sufficiently low, the light may go on and off randomly, signalling end of useful life.

Several of us have speculated on the possibility of heating such a bulb for 3 to 4 hours to liberate a few neon atoms from the surface and see if some improvement in a well-used bulb is noticeable.

When the bulb is used for voltage reference, loss of atoms equates to increased dynamic resistance and probably increased voltage drop. Hope this helps.

From: **Emil Switzer**
Subject: **Soldering tales**

In the spring of 1943, when I was 13 years old, I set out to build a regenerative 1-tube receiver I had read of in a *Mechanic Illustrated* article.

I had no soldering iron, but had read of what you had to do to solder so I took a family table metal table knife and heated it on the eye of an electric stove until a stick of solder I had gotten at a hardware store would puddle on it. It had a green end and said 'rosin core' on it while other rolls at that store had a red end and were labelled 'acid core'. I think the display may have stated that the rosin core was for electrical work; in any event, in some manner I had learned that rosin core was what you were supposed to use. Also I had heard that you melted the solder on the metal of the wires or tube socket pins you were wanting to 'wet', not on the 'iron' itself - in this case the knife. Fortunately there were few joints.

The radio 'worked' as described in the article, and had no bad joints. I found it in a box of stuff I was moving the other day, put in one D cell, a new 1S4, and a 9 volt battery, and it talked just like it had 52 years earlier. My father's old cigar box it was built in was sad shape, but a lot of mending tape fixed that.

About half way through the soldering process, my mother discovered what I was doing and took great exception to melting metal on her stove. I had to adjourn to the basement and use the top of a cast iron wood burning water heater stove to finish the job. Stove 'eyes' of the era were flat ceramic plates with spiral groves in them with the heater element exposed in the groves... each end on the 'high' position were at a full 120V AC to ground, so it was probably just as well I was chased off before I had accidentally touched the all one piece metal knife to the spiral too close to a 'hot' end.

A point here is, that a 'kid' could and did make satisfactory solder joints with a minimum of instruction and very crude, make-do equipment, so in the post war 'Heathkit era', there should be no reason others could not do just as well or better, if they read and followed basic principles.

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They say the old jokes are the best ones but after reading this hoary old horror, attributed to Mark Bushnell, I'm not so sure!

A REWARD OF

500 MICROFARADS IS OFFERED FOR THE INFORMATION LEADING TO THE ARREST OF A HOP-A-LONG CAPACITY. THIS UNCERTIFIED CRIMINAL ESCAPED FROM A WESTEN PRIMARY CELL WHERE HE HAD BEEN CLAMPED IN AWAITING THE GAUSS CHAMBER.

HE IS CHARGED WITH THE INDUCTION OF AN 18 TURN COIL NAMED MILLI HENRY WHO WAS FOUND CHOKED AND ROBBED OF VALUABLE JOULES. HE IS ARMED WITH A CARBON ROD AND IS A POTENTIAL KILLER. CAPACITY IS ALSO CHARGED WITH A DRIVING A DC MOTOR OVER A WHEATSTONE BRIDGE AND REFUSING TO LET THE BAND-PASS.

IF ENCOUNTERED HE MAY OFFER SERIES OF RESISTANCE. THE ELECTROMOTIVE FORCE SPENT THE NIGHT SEARCHING FOR HIM IN A MAGNETIC FIELD, WHERE HE HAD GONE TO EARTH. THEY HAD NO SUCCESS AND BELIEVED HE HAD RETURNED OHM VIA A SHORT CIRCUIT.

HE WAS LAST SEEN RIDING A KILOCYCLE WITH HIS FRIEND EDDY CURRENT WHO WAS PLAYING A HARMONIC...

And finally, the best laugh I have had in ages (and yes, spotted on my computer screen). Someone started off an amazing thread by writing

I could never figure why anyone would buy one of those Casio wristwatches which incorporate a remote control for your TV. Most remote control tellies come with a remote control!

To which the reply came:

I now have a Casio wrist remote... :-) I love annoying the footie nuts at the local pub (switching TV off at a crucial moment!)

and...

- ❖ *They are still available from H. Samuel, Argos, etc. at £49. Other fun things to do:*
- ❖ *Turn up the volume on ALL tellies in the window of Dixons, Currys, etc. & watch the young spotty salesman go frantic with an armful of remotes :-)*
- ❖ *Convince your friends they have a ghost in the house or their brand-new 33inch TV is knackered by switching it off/changing channels/volume.*
- ❖ *Use the 'learn' function to copy car alarm remotes and set them off/turn them off.*
- ❖ *Switch off the security cameras at Marks & Sparks :-)*

<fx: Ford Escort ad. theme music> 'What do you do with yours?'

Regards, Naughty Nigel.

> "Use the learn function to copy car alarm remotes and set them off/turn them off."
> Does that really work?

Oh yeah, you betcha!

I have a friend called Rhodri, he has loadsamoney and makes sure we all know it. He bought a brand new Ford Escort XR3i (N-reg) had a £600 alarm installed. He was boasting about how it was thiefproof, I managed to get hold of his remote, copied it into the watch. Betted him a tenner I could get into his car in a coupla seconds without setting off the alarm. Needless to say, £10 collected to the sound of jaw hitting cement :-)

Nigel.

TREASURES IN TRANSITION

FOR SALE: Link 102 caption camera, b/w 1" vidicon type, switchable 405/625, with lens, 19" rack control unit, cables and documentation. Ex-Racecourse Technical Services, £20 to good home. Also an **RCA twin-carousel slide projector**, which would go extremely well with the caption camera – the two are made for each other! This one is part of the original equipment of Anglia TV in Norwich (has their badge on it somewhere), complete with accessories and documentation, £50. **Associated-Rediffusion 405-line off-air receiver**, valve type, used as check receiver at Wembley Studios. Effectively a complete TV receiver without the picture tube and speaker (just connect your video monitor and audio amplifier). Built as a 19" rack-mount unit, 10 1/2" tall, mains powered, with full documentation, £20. Andy Emmerson, 01604-844130.

BOOKS FOR SALE: BBC ANNUAL 1935. £15. Very rare in this larger annual' format. This copy is in excellent condition. Usually sells for twice the price. **BBC HANDBOOK 1939.** £10. Another reasonably scarce edition. Some nice pictures of the BBC's pre-war 'Mobile Television Unit' and studio scenes. **VGC. No d/w. ATV SHOW BOOK No. 1.** Adprint 1957. £8 Almost mint copy of this popular ATV picture-book series. Plenty of early ATV shows featured with lots of production photographs of ITV stars. **SEE IT HAPPEN – The Making Of ITN.** Geoffrey Cox. 1983. £6. Fascinating illustrated history of ITN. **ITV 1982.** £6. Getting scarcer. **ITV ANNUAL 1963** £3. No spine paper. Plenty of ATV studio shots. **WORLD RADIO AND TV**

HANDBOOK. 1973. 1975. £3 each. DOCTOR WHO ANNUAL No. 1. £5. Slightly scuffed cover. THE BLUE PETER BOOK OF TELEVISION. £3 VGC. ESSENTIALS OF ELECTRICITY FOR RADIO AND TELEVISION, Slurtzberg and Osterheld. Pub. McGraw Hill 1950. Illustrated. No d/w £5. All books clean and in vgc. Postage £1 per book. Contact Dicky Howett 01245-441811.

FOR SALE: Four early post-war TVs: Pye LV20, LV30, VT4, Marconi VT50A plus many service sheets – £100 the lot. Derek Warnett, 01437-891017 near Milford Haven (NS).

SELL/SWAP: HMV single-channel wood-case set, splayed legs, gold flip-front and trim, nice cabinet, screen size 17"? Prefer swap for anything radio/TV, else sell cheap. Dave Jerrom 01252-510148 (Farnborough, Hants. NS).

FREE: CV-2100 tapes free to anyone collecting (from West London). These tapes contain various Thames Television training films from the early 1970s, one Open University programme, two shows with studio talk back for training. Also, several 1500 and U-matic tapes with shows such as *Hazell*, *Rainbow* and *Bless This House*, direct from video tape, not off-air. As there are no rare/deleted programmes amongst any of these, they will be disposed of if they are of no interest to anyone. Call Neil Ingoe on 0181-890 7633.

WANTED: AXBT microphone wanted by private collector, top price paid. Please telephone Tony on 01495-223864 after 7pm and weekends.

MICROPHONES WANTED: any broadcast quality microphone designed over 20 years ago would be of interest. Richard Lamont, tel: 01785-812784 (e-mail: richard@stonix.demon.co.uk)

WANTED TO BUY OR EXCHANGE: Sound tapes for Teflon machines. Collector is interested in corresponding with anyone with an interest in these early cassette recorders. Klaus Simon, Tempelstrasse 3, D-63571 Gelnhausen, Germany. Phone/fax +49 6051-69636 (NS).

WANTED: Can anyone help? I would love to see again the following old BBC b/w TV series: *The River Flows East*, *Paradise Walk*, *Prudence Kitten*, *Little Laura*, *The Stranger* (Australian series), *Stranger on the Shore*, *Stranger in the City*, *The Desperate People*, *The Old Curiosity Shop* (1962), *Martin Chuzzlewit* (1964) and other classic 1960s serials. Ian K. McLachlan, 1 Hawthorne way, Stranraer, DG9 7QY.

WANTED: Video recordings (VHS or S-VHS) of the opening titles to *Grandstand* in the 60s (with the camera showing four pictures in the lenses). Also *The Fools On The Hill*, *This Is The BBC*, *The Lime Grove Story* and any other documentaries about British TV history. Martyn Victor, 01639-820070.

WANTED: Baird dual-standard colour set. Leslie Hine, 01229-582557 or 584458.

WANTED: Tektronix colour monitor type 650 (NTSC) or 651 (PAL) with working EHT unit or EHT unit alone. Gordon Shorley, 01858-565854 (NS).

WANTED: 1. For National NV-1020E. Replacement video head bar assembly (or just the heads) for this $\frac{1}{2}$ open-reel video tape recorder. Would consider a non-working or incomplete recorder provided the video heads are in good condition.

2. For Shibaden SV700E. Replacement capstan drive belt and a Service Manual (buy or borrow) for the Edit version of this $\frac{1}{2}$ open reel video tape recorder.

3. "Hang On, I'll Just Speak To The World". VHS (or S-VHS) recording of this TV programme about the BBC World Service, first broadcast around 1982.

I would be grateful if anyone can help with VHS (or S-VHS) recordings (and the transmission dates) of the following BBC TV programmes:

1. *PLUNDER. BBC 2.* A series of programmes that raided the archives of BBC Television, broadcast around the end to late sixties. Started as part of *Late Night Line-up* then became a separate programme. The edition about *Dance Bands of the Thirties* introduced by Roy Plomley with guests: Harry Roy, Jack Payne, Nat Gonella and Roy Fox. I would also be interested in hearing from anyone who has video (or audio) recordings of any of the *PLUNDER* programmes.

2. *SATURDAY NIGHT AT THE MILL. BBC 1.* Live light entertainment show from the BBC Pebble Mill studios, Birmingham. This edition, broadcast circa 1981, was hosted by Bob Langley and Jenny Hanley with guests Lena Zavaroni, Derek Nimmo and Bill Wyman of the Rolling Stones.

3. *THE NEW SOUND OF MUSIC. BBC 1.* Introduced by Michael Rodd. Broadcast on Tuesday 5th June. 1979 at approx. 10.05pm. Information please on this BBC Radio programme:

4. *NEWLY PRESSED. BBC LIGHT PROGRAMME.* This programme started in December 1964 and used *Up Cherry Street* by Herb Alpert's Tijuana Brass as its signature tune. Any information about this programme, e.g. who presented it and when it was transmitted (time of day, daily or weekly?), would be most welcome.

Dave Young, G8TVW, 58 Furzeffield Road, WELWYN GARDEN CITY, Herts., AL7 3RJ. Phone: (01707) 325347, evenings or weekends.

CAN YOU HELP WITH A COLOSSAL PROJECT?

You've doubtless heard of Colossus, arguably the world's first programmable computer, installed during World War II at Bletchley Park. Used for decoding German secret messages, it has been described as 'the machine that won the war' and now 50 years on, a dedicated, unpaid and unsponsored team is constructing a complete working replica using authentic components. They are making excellent progress too (you can see the machine on regular open days) but they are running out of...

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EF36, EF37 (CV358), EF37A 6J5 triodes GT1C thyratrons Special <i>surface-mount</i> bakelite valve bases for B5 valves (P.O. type 16, 600 needed of these alone), for Octal valves (P.O. type 21A) and for 807 valves (P.O. type UY5) Seven 4-volt, 100-amp and ten 6-volt, 100-amp transformers.
--

These items are needed to re-create a crucial part of Britain's heritage. If you can help by donating (or even selling at discount price) any of these items, please contact TONY SALE on 01234-822788.

Please don't leave it to someone else, they're relying on you!

THE TEST CARD CIRCLE

This society was founded in 1989 with less than twenty members. Since then it has grown in membership to almost one hundred, and has certainly grown in stature. The various broadcasting authorities acknowledge the wealth of information and expertise possessed by the membership, and regularly refer inquiries direct to the society.

All aspects of television trade test transmissions are included within the interests of The Circle: Test Cards and patterns, accompanying music, slides and still pictures, Service Information bulletins, Trade Test Colour Films, and, of course, the dear old BBC Demonstration Film.

A quarterly 48-page magazine is issued which contains lively and interesting articles on all of these topics. Each Spring, a convention is held in the little market town of Leominster, where members can meet for a delightful weekend of wonderful music and pictures, good companionship, and pure nostalgia. It is also a great deal of fun. There are usually guest presenters at the convention, and in 1994 these were Andrew Emmerson, of 405 Alive, and broadcaster Tony Currie, formerly of Scottish Television and Radio Clyde. We also had the honour of the opening announcement being specially recorded for us on video by Sylvia Peters, Sylvia, and BBC continuity announcer David Allen also recorded in-depth interviews for us on video.

Previous guests have included Steve Ostler, John Ross-Barnard and David Allan. John and David were the two men responsible for compiling all of the BBC trade tests tapes used between 1959 and 1977, and we were delighted when they accepted Honorary Life Membership of The Circle two years ago. We were also highly honoured when Roger Roger, the French musician and composer, whose music has been used during BBC trade tests since the mid fifties, agreed to become Patron of The Test Card Circle in 1992.

If you are interested in this fascinating subject, write to the Secretary, Doug Bond, 98 Great North Road, Gosforth, Newcastle upon Tyne, NE3 5JP, and if you send a 12.5" x 9" self addressed envelope with a 43 pence stamp, Doug will be pleased to send you a sample copy of the Circle's magazine.

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Enquiries requiring an individual reply. These are answered when time permits. You **must** include a stamped addressed envelope and preferably also your telephone number (in case it is quicker to telephone a reply). Please be patient - thanks.

Articles are also most welcome. We get so many good ones that publication can take up to two years or so, but don't let that deter you. They can sometimes be held back when we group two or three together when they support a common 'theme'.

Payment. We're a not-for-profit magazine so sadly we cannot pay for material. On the other hand, full-length feature articles do earn the author a year's free subscription once published so that's an incentive. You retain copyright of your article so you are free to offer it - probably in a revised version - to other, mainstream periodicals to earn some money. At least one of our contributors does this very successfully.

But I can't write like the big names do! Don't worry. We can sort out your grammar and spelling. It's the facts and your ideas that count.

How to submit material. If at all possible, please **TYPE** your contributions using a dark, black ribbon. This enables them to be read straight into the word-processor by a document scanner. Magic! Contributions on computer disk are particularly welcome and your disk will be returned. We can handle most variations of IBM PC and CP/M disks in 3.5" and 5.25" size but please process your words in some popular word-processing format, ideally as an ASCII or WordStar file. Through the good offices of Radio Bygones, we can handle Amstrad PCW and Macintosh disks, but not BBC format. If in doubt please ring first on 01604-844130. Thanks. You can now also fax your letters, ads and articles on 01604-821647.

BACK NUMBERS

All stocks of back issues have been sold now, including combined edition reprint. In a few cases we can lend originals for photocopying.

FAQ FILES

FAQs are frequently asked questions, so we are keeping two files of FAQs and their answers ready for printing out on request for readers. These files will be updated as new information comes in. These two files are already quite lengthy and contain material already published, so it would not be fair on established subscribers to reprint them in the magazine. FAQ file 1 runs

to 24 pages and covers general points about old TV and how to get old television sets working again. FAQ file 2 is a reprint on all the articles on test card music and ITV station ident themes; it covers 11 pages. FAQ file 1 costs £3.00 and file 2 costs £2.00 (both post paid). These prices cover just the cost of copying and postage plus the horrendous cost of banking your cheque (68 pence!). FAQfile 3 covers suppliers of hard-to-find components and service data; for this one send one first class stamp and a SAE. (Available from 71 Falcutt Way, Northampton, NN2 8PH; cheques payable to Andrew Emmerson.)

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TELEPHONE ENQUIRIES REGARDING SUBSCRIPTIONS

You can call the Staffordshire office on 01785-284696 between 09.00-13.00 or 14.00-17.00 Mondays to Fridays. At other times you will reach an answering machine. Please *do not* ring the Northampton (01604) number as all business details are now handled from Staffordshire.

EXCHANGE PUBLICATIONS

You may wish to contact the following allied interest groups and publications (please send SAE with all enquiries).

BRITISH VINTAGE WIRELESS SOCIETY: Gerald Wells, Vintage Wireless Museum, 23 Rosendale Road, London, SE21 8DS.

VINTAGE RADIO CIRCLE: Geoff Williams, 4 Sunnyside Park, St Ives, Ringwood, Hants., BH24 2NW.

BRITISH AMATEUR TELEVISION CLUB: Dave Lawton GOANO, Grenehurst, Pinewood Road, High Wycombe, Bucks., HP12 4DD.

NARROW BANDWIDTH TV ASSOCIATION: Doug Pitt, 1 Burnwood Drive, Wollaton, Nottingham, NG8 2DJ.

TEST CARD CIRCLE (TV trade test transmissions and test card music): Stuart Montgomery, 2 Henderson Row, Edinburgh, EH3 5DS.

BBC TEST CARD CLUB, Keith Hamer, 7 Epping Close, Derby, DE3 4HR.

SAVERS OF TELEVISION AND RADIO SHOWS (S.T.A.R.S.), 96 Meadvale Road, Ealing, London, W5 1NR.

IRISH VINTAGE RADIO & SOUND SOCIETY: Henry Moore, 9 Auburn Close, Killiney, Co. Dublin.

RADIO BYGONES (vintage radio technology): Geoff Arnold, 9 Wetherby Close, Broadstone, Dorset, BH18 8JB.

THE RADIOPHILE (vintage radio): Chas. E. Miller, "Larkhill", Newport Road, Woodseaves, Stafford, ST20 0NP.

TELERADIO NEWS (current radio and TV transmitter news, long-distance reception): Keith Hamer, 7 Epping Close, Derby, DE3 4HR.

TUNE INTO YESTERDAY (Old-Time Radio Show Collectors Association):
Membership secretary: John Wolstenholme, 56 Melbourne Avenue, Dronfield Woodhouse, Sheffield, S18 5YW.

VINTAGE LIGHT MUSIC SOCIETY: Stuart Upton, 4 Harvest Bank Road, West Wickham, Kent, BR4 9DJ.

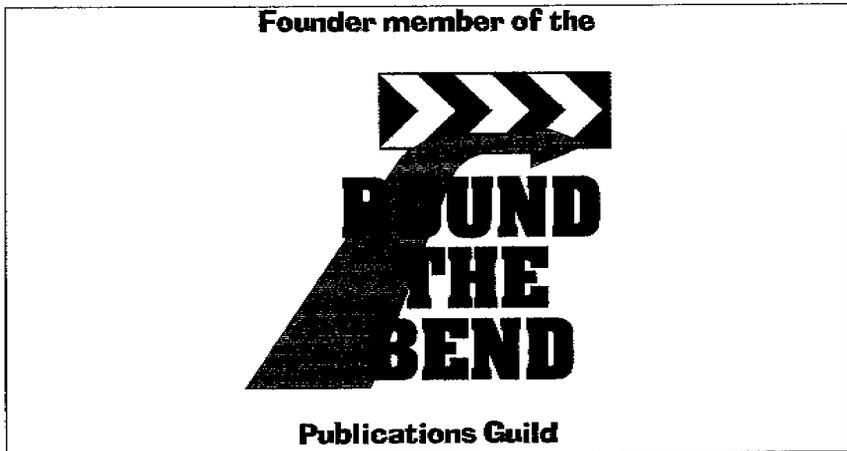
ROBERT FARNON SOCIETY (also light music): David Ades, Stone Gables, Upton Lane, Seavington St. Michael, Ilminster, Somerset, TA19 0PZ.

MEMORY LANE (78rpm-era popular music): Ray Pallett, 226 Station Road, Leigh-on-Sea, Essex, SS9 3BS.

IN TUNE INTERNATIONAL (music of the years 1935-1960): Colin Morgan, 12 Caer Gofaint, Groes, Denbigh, Clwyd, LL15 5YT.

PROJECTED PICTURE TRUST (cinema history): Harold Brown, 2 Eleanor Gardens, Aylesbury, Bucks., HP21 7LT.

VINTAGE FILM CIRCLE: Alex Woolliams, 11 Norton Road, Knowle, Bristol, BS4 2EZ.



THE BACK PAGE

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Editorial policy. This magazine acts not only as a forum for research, the republication of archive material and as a monitor of current developments but also as a means for all interested in this field to keep in touch. Readers are encouraged to submit articles, photographs, notes and letters.

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✉ IMPORTANT POSTAL INFORMATION ✉

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