Letters to the Editor

Note: Readers are invited to comment on any article published in the SMPTE Journal. *Such comments should be addressed to the Editor, SMPTE Journal, 862 Scarsdale Avenue, Scarsdale, NY 10583.*

Re: "A History of British Television"

by Phil Sidey, Bob Longman, David Glencross, and Tony Pilgrim, *SMPTE Journal*, Dec. 1981, pp. 1165–1175.

Dear Sir,

The contribution to December's *Journal* entitled "A History of British Television" made very interesting reading but it was noticed, once again, that it followed what has become a "traditional" pattern.

Historically, there is little doubt that Baird's work, particularly his demonstrations, did much to publicise the potential of television. However, as is acknowledged in the article, it was the ingenuity of Zworykin and the parallel, independent development work by Schoenberg's team at E.M.I. which led to the development of the Iconoscope/Emitron and the practical realisation of all-electronic television, originally envisaged by Campbell Swinton in 1909.

In addition to priority in the establishment of a public television service using the Iconoscope type of tube, the development of the improved variant, the Image Iconoscope or Super Emitron and its application in public service, was also pioneered in Britain by the BBC and EMI. It should also be acknowledged that the development team at EMI were early to recognise that most of the problems inherent in the Iconoscope type of pick-up tube could be overcome by the adoption of "Cathode Potential Stabilisation." The EMI team identified the need for orthogonal scanning and their use of the solenoidal magnetic field has been used as the basis of all subsequent pick-up tubes, e.g. Orthicon, Image Orthicon, Vidicon, etc.

In describing the post-war developments the authors have failed to recognize the influence of the CPS Emitron on future development. Although the predecessor of the Image Orthicon, the CPS Emitron, or Orthicon, was capable of producing excellent picture quality under controlled studio conditions. As a consequence, whereas in the USA the earliest versions of the 3-in. Image Orthicon were immediately accepted for both studio and remote use, in Britain the same tubes were considered inadequate for studio application. Impetus was thus given to the development of improved 3-in. Image Orthicons which did not suffer from the shortcomings of the original 5820 type, and produced pictures more comparable to those of the CPS Emitron.

In the first instance, improvement was achieved by the incorporation of the field mesh. Subsequently, due to the foresight of the Marconi and EEV Companies, the decision was taken to develop and produce an improved version of the 4½-in. Image Orthicon originally conceived by Otto Schade of RCA. Although the 4½-in. Image Orthicon was readily accepted, as the preferred pick-up tube by British and most other users, acceptance in the USA was delayed until the introduction of video tape recorders necessitated an improvement in the standard of the original picture.

Recognition of the contribution of the Marconi and English Electric Valve Companies was accorded in 1961 by the award of the first overseas 'Emmy' by the U.S. National Academy of Television Arts and Science. It is surprising therefore that these companies are not even mentioned in the paper!

Papers dealing specifically with British Television often overlook a major benefit of the retention after the war of the 405-line system.

Any transatlantic traveller in the 1950's could not fail to notice the difference in the picture quality in the home between the 405 system and the higher line US system. It is probable that the superiority of the British pictures as viewed on the domestic receiver was due to the very modest bandwidth requirement imposed on the UK receiver manufacturer. The theoretical superiority of the US 525 line system was not realized at the receiver due to the inability of the receiver to provide or maintain the larger bandwidth.

Yours faithfully,

E. D. HENDRY, Manager–Image Orthicon, Image Isocon, Vidicon Dept;

W. E. TURK, Marketing Manager–Phototubes, ENGLISH ELECTRIC VALVE COMPANY LTD., Chelmsford, England

April 13, 1982

Ed. Note: The author of this article chose not to reply to this letter.

Re: "Mementos of Early Photographic Sound Recording"

by F. K. Harvey, *SMPTE Journal*, March 1982, pp. 237–244.

Dear Sir:

The March, 1982 issue of the *SMPTE Journal* contains on pages 237–244 a very interesting and informative article, "Mementos of Early Photographic Sound Recording" by F. K. Harvey, formerly of the Bell Laboratories. While I am sure that the author checked carefully all details related to sound recording, I have noted an error in one sentence of the third paragraph on page 239 concerned with the early history of film. As printed the sentence reads, "Eastman only introduced film in 1885 and it wasn't available in motion picture lengths until 1888."

From my researches while Technical Editor of the Kodak Research Laboratories from 1925–1963 I found considerable information on the early history of the availability of motion picture film. In the light of this experience I would restate and expand this sentence in Dr. Harvey's article as follows:

> Eastman introduced a stripping film called Eastman American Film in 1885 that used paper as a temporary support for the emulsion. After development of the film the paper was stripped off, leaving a very thin film negative which was then mounted on glass to use in making prints. Flexible transparent film on a cellulose nitrate support was produced experimentally by Eastman and Reichenbach in the fall of 1888. This film was made available during the summer of 1889 and in September was supplied to Edison and Dickson who used it in lengths of about 50 feet and widths of about 35mm (1⅜ in.) in their Kinetoscope, a peep-hole device for viewing motion pictures. Until the year 1889 no flexible transparent film in long lengths (several feet) was available in the world for experimental use.

Having been interested in various aspects of the history of motion pictures for more than 50 years I was pleased to read Mr. Harvey's article and I consider it has added a valuable reference to the literature of sound recording.

Sincerely,
GLENN E. MATTHEWS
Rochester, N.Y.

April 23, 1982

Dear Sir:

I am indebted to Glenn Matthews for his clarifying remarks on the evolution of motion picture film in the early days. He is to be commended for setting the record straight.

Sincerely,
F. K. HARVEY
New Providence, N.J.

August 26, 1982

"Even at 22,000 feet on Mt. Everest, the Canon Scoopic Worked Perfectly!" *David Breashears*

These are the words of David Breashears, cameraman on the nearly successful first attempt by an all-American team to conquer Mt. Everest's east face. A Canon Scoopic 16mm camera was ultimately used to record most of the images of the climb, sponsored by ABC's "The American Sportsman" TV series.

"After three days in trucks over primitive dirt roads, then lashed to the side of a yak for six days, then hand carried by porters across the glacier to our base camp, I can't say how many times the Scoopic was dropped, turned upside-down and generally banged around while enroute."

"On the mountain, the Scoopic was not brought into our heated shelters regardless of conditions. It remained outside in its case night after night. The most amazing thing was not that the camera survived all this, but that its automatic exposure system remained accurate. Even at 22,000 feet –our highest ascent– the Scoopic worked perfectly."

We didn't build the Canon Scoopic specifically to climb Mt. Everest. But, like David Breashears, we're glad it was there. If you need to get your shot on the first take, take along the Canon Scoopic. It's lightweight and compact. Rugged and simple. And it works.

Canon®

Professional Motion Picture Division
One Canon Plaza, Lake Success, N.Y. 11042 (516) 488-6700
123 Paularino Avenue East, Costa Mesa, Ca. 92626 (714) 979-6000
3245 American Drive, Mississauga, Ontario, Canada (416) 678-2730
Canon Amsterdam N.V., Industrial Products Division
De Boelelaan 8, Amsterdam, Netherlands

Scoopic can do it.

Please send me information on the Scoopic 16MS and its system

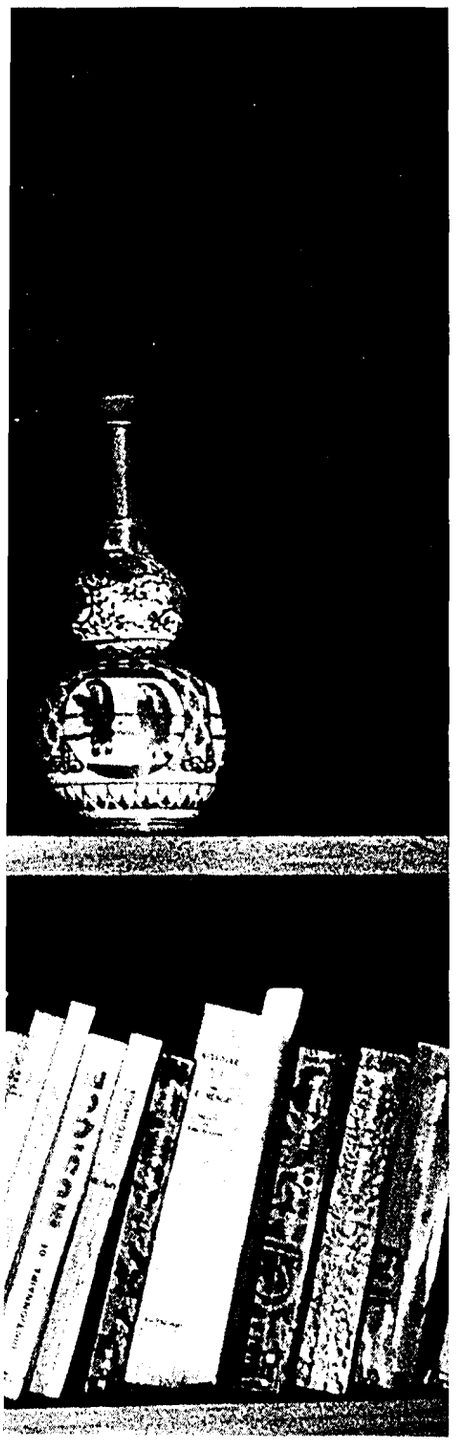
Name _____ Title _____ Company/Organization _____ Phone ( ) _____

St. _____ City _____ State _____ Zip _____

Sounds. R


DESIGN POUR UN MONDE REEL
LES PUISSANCES DE L'IMAGE
LA RAISON PURE

ecordists



Take your time with Aaton.

Once you're released from the servitude of the slate (and the clap-bang it imposes in an otherwise harmonious audio atmosphere) you can concentrate on what you like doing : playing with sounds, enticing them, capturing what is hidden in the image.

Forget chalk, slate, clapper. Don't get ordered around : it disrupts the filming atmosphere. Progressively evolve from pilotone + slate to ***pilotime.***

Equipped with the compatible circuit installed by Aaton, the Nagra you have now can handle both. The time address recorded on the quarter inch pilot track will be laid onto the edge track of the full coat every second during transfer.

When it comes to editing, the time information printed right onto the fullcoat backing will be matched with ease to the clear time addresses exposed onto the film edge by Aaton 16 and 35 mm cameras.

Quietude. Serenity. Aaton

B.P. 104 Cedex / Tél. (76) 42.64.09 / 38001 Grenoble France