

Copy to: H.P., H.E.I.D.

6th October 1965

By hand

Dear Mr. Marshall,

Mr. McLean has gone abroad for two or three days, and has asked me to send you the attached copy for the 'Opinion' page of Systems and Communications. I hope this is on the lines of what you had in mind, but if you would like to make any alterations please do not hesitate to let us know.

I also enclose a photograph and brief biographical note.

Yours sincerely,

A. H. Robinson

Secretary to
Director of Engineering

Charles A. Marshall, Esq., B.Sc., A.M.I.E.E.,
Editor & Director,
Systems and Communications,
Systems Publications Ltd.,
Bugle House,
Noel Street, W.1

MKPR

BIOGRAPHICAL NOTE

F.C. McLEAN, C.B.E., M.I.E.E., as Director of Engineering of the B.B.C., a position he has held since May 1963, is responsible for all aspects of engineering - the studio and the transmitter sides of television, sound and external broadcasting. He has been particularly concerned with the developments in colour television over the last ten years or so. He has been with the B.B.C. for nearly thirty years, having previously been with Standard Telephones & Cables.

MKPR
5.10.66

ARTICLE FOR THE 'OPINION' PAGE OF "SYSTEMS AND COMMUNICATIONS"

by

F.C. McLean, Director of Engineering, BBC

To operate colour television in the U.K. on 405 lines as well as on 625 lines has received strong support in some quarters. These supporters believe that to do this would bring colour within the reach of a large part of the population at a much earlier date than if colour remains on 625 lines. There are however very strong objections to this course, and I believe that there is no reason at all to depart from the present decision, taken after a long study of all the factors, that colour should be on 625 lines only.

If colour were put on 405 lines, then a number of serious consequences would follow. It would mean that the colour receiver would have to be able to receive two standards of colour signals, would have to incorporate two separate delay lines, and it would ^{be} not only a much more expensive receiver but one extremely difficult to design and to maintain in adequate order on both standards. It would be necessary to modify both the programme distribution networks and the transmitter networks in order to make them suitable for colour signals. This would take a considerable amount of time. As things stand at the moment, 625 lines is completely engineered for colour and, by the end of 1967, 70% of the population of the country will be getting an adequate colour signal on 625 lines. To put out colour on 405 lines would, as I have said, mean very extensive modifications to the distribution networks and it would be out of the question to give coverage to 70% of the population on 405 lines by the end of 1967. It would be about the end of 1968 or well into 1969 before 70% of the 405-line population could receive colour, by which time the 625-line coverage could be approaching 90%.

This would be the situation for the main transmitters, but an even more difficult problem would be the re-engineering of the many relay stations in use in small communities for both BBC-1 and ITA. To make these suitable for colour, often when working on adjacent channels, would be one of extreme difficulty.

The interference problem would be one of the major objections. At the present time in Bands I and III used for 405-line transmissions, the channel distribution in Europe is completely unco-ordinated, because of the existence of 5 Mc/s, 7 Mc/s, 8 Mc/s and 14 Mc/s allocations within the same spectrum space. The result of this is that various interfering carriers come close to various ^{colour}/sub-carriers, and the interference to colour transmissions, particularly at times of high Sporadic E propagation, would be very serious indeed. The effective service area of the colour transmissions on 405 lines would be very much less than it is on the same line standard for black and white. Then of course the intrinsic picture quality is appreciably less. This may not be so noticeable on present sizes of picture and present sizes of display tube, but would become increasingly obvious as picture display devices improved.

In addition to all this, the 405-line PAL system would be unique in the world, and British manufacturers and operating organisations would be called on to produce equipment and programmes which would be special to a single market. Export of equipment would be harmed, and exchange of programmes would be impeded. As I see it therefore, to depart from the agreed plan to use colour only on 625 lines, would be harmful to the best interests of the U.K., especially when seen in the long term.

FCM₀L/CVO
6.10.66

Mr. Charles Marshall (Hon. Sec. Tv. Society) Editor & Director of
Systems and Communications

Each month, one page is devoted to the personal opinion of one man on
a topic of the day. The page is called "Opinion".

He would like to know if you would like to take advantage of using this
page in the next issue, November, for an opinion of Colour Television.

Keep open for week : 700 words. Would like copy during next week.

I said I would try to ring him tomorrow morning (Friday) Gerrard 7722,
to leave message for him.

Otherwise you could ring him at home over weekend on Berkhamsted 4092.

Done
30/9

MKPR

29.9.66

SYSTEMS AND COMMUNICATIONS

Policy and Background

SYSTEMS AND COMMUNICATIONS is a monthly international electronics journal of high technical integrity which is distributed free of charge to 12,000 registered readers throughout the world. It was launched in September 1965 and in the last twelve months it has become widely accepted throughout the world's electronics industry. By regular reading of this journal it is possible to appreciate more fully the whole front on which electronics technology is advancing; full coverage is given to all electronic developments, especially from the systems concept.

At the time of launching SYSTEMS AND COMMUNICATIONS, the publishers naturally were aware that other controlled circulation journals existed in this field, but all these were principally concerned with the listing of new products. SYSTEMS AND COMMUNICATIONS does much more than this; it provides an editorial service of high calibre which includes first-class professional articles, editorial comment, interviews with senior executives, technical news and features. It is these qualities which have made the journal take a unique place in the literature available to people in the industry - especially in the free circulation class. Its original format on the International Standard A4 size and unique layout have also set new standards in the industry.

SYSTEMS AND COMMUNICATIONS covers a wide range of topics, e.g: communications, navigation, data transmission, radar, computers, system control, television, broadcasting, line systems, space communications, guidance systems, industrial and commercial applications. A rapid Reader Enquiry Service is operated.

Co-operation with industry in a project of this scope is essential. The S & C staff, who are themselves engineers, work in close touch with the Trade Associations, the Government Research Centres, the Professional Institutions, the Ministries and the Services.

The readers are drawn from many quarters of the electronics industry itself and from users. By careful control of the circulation build-up, it has been possible to slot readers into approximately 1,600 categories. (Summarised information for the readership breakdown is shown in the attached tables)

SYSTEMS AND COMMUNICATIONS, because of its international acceptance, has now become a powerful selling medium in markets throughout the world. In a relatively short time it has stimulated new thinkings on many economic, technical and administrative topics in the industry. For these and many other reasons, SYSTEMS AND COMMUNICATIONS is one of the few technical journals which are read from cover to cover.
