

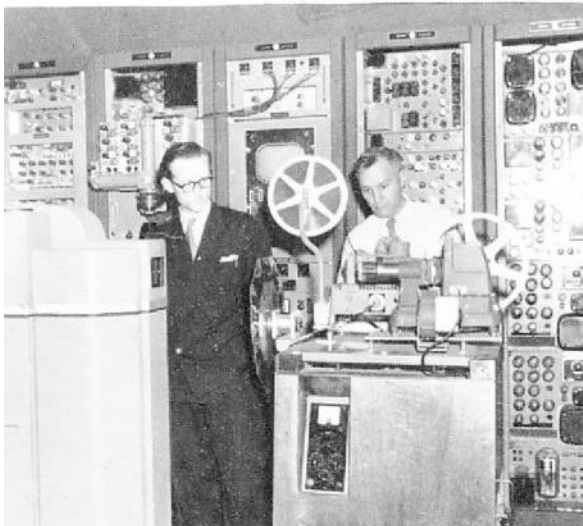


Talking

'VISION-TELEVISION-COLOUR TELEVISION' was the title of a lecture given by V. J. Cooper, Chief Television Engineer, to the Association of Mining Electrical and Mechanical Engineers, at their annual Convention in the Waldorf Hotel this summer. The lecture was illustrated by colour slides and demonstrations of visual perception, concluding with a closed circuit colour television demonstration.

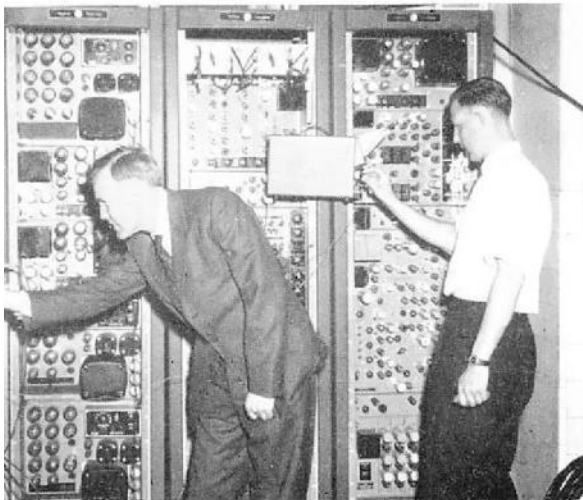
Mr. Cooper's lecture was notably well attended and aroused the greatest interest among the delegates. As most of the A.M.E.M.E. members come from the north of England, this was for many of them the first opportunity of seeing colour television.

At the conclusion of Mr. Cooper's



LEFT (from top to bottom):

Some of the equipment set up in the Waldorf Hotel for the demonstrations. On the left is the colour projection receiver with the many slide projectors used in the explanation of the mixture of coloured light. How by using colours in pairs, yellow, magenta and cyan are made; e.g. red+green=yellow, or by using red, green and blue together white can be produced. Left to right: L. J. van Rooyen, Chief of Technical Services Section, Baddow, Dennis Shevel and Roger Fenton, also of Baddow



The 3V colour film camera and projector which were used at the lecture, taken here in the laboratory of Building 30, with Bill Hobbs (left) of Television Development, who is being assisted by Ron Martin. Bill set up and operated the camera channel

The signal generator rack (right), the signal processing and power supplies racks, all operated by John Howe, right. On the left is Michael Drayson, television development engineer of Group C, adjusting the channel 3 transmitter feeding a standard colour signal to the domestic receivers in the auditorium

of Colour

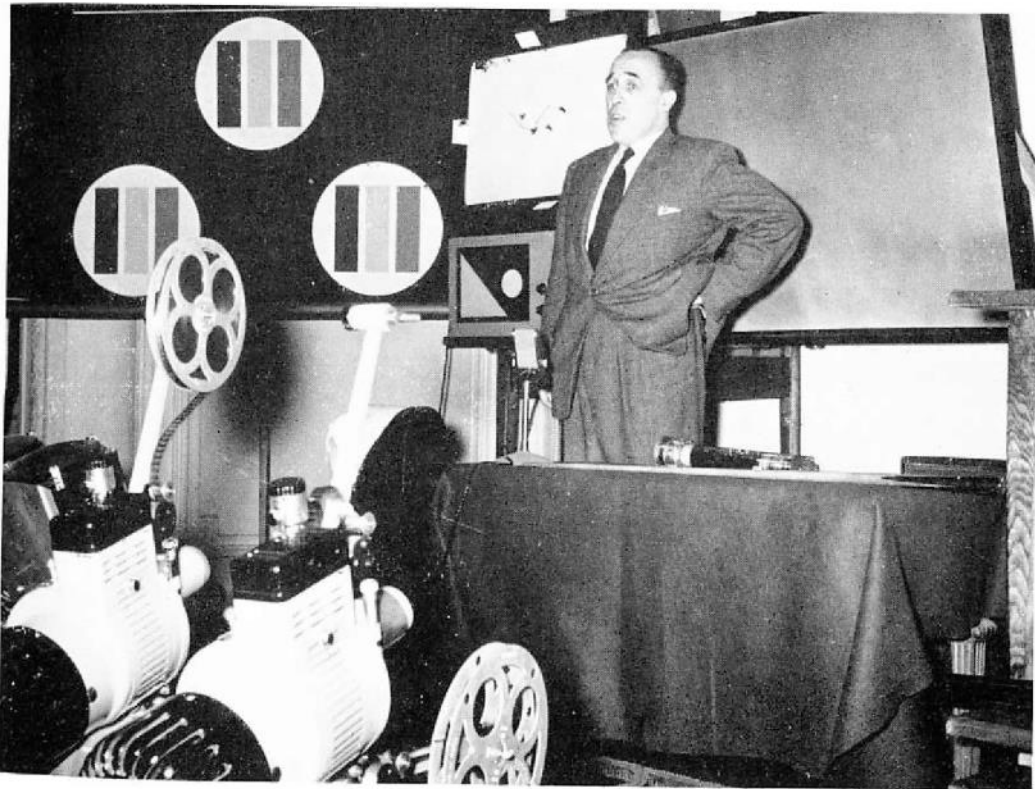
lecture and demonstrations the President of the Institution, Mr. J. E. Ridley, introduced the Chief Engineer of the National Coal Board, Mr. B. L. Metcalf, who proposed a vote of thanks.

Marconi equipment was used throughout for the generation and transmission of the colour signals and for the colour projection system. The 2 in. x 2 in. colour slides and 16 mm. colour film were scanned on the 3-Vidicon Colour Camera Channel produced by N. N.

Parker-Smith's Television Development Group B in Building 30. A small R.F. transmitter, developed by M. Drayson and R. G. Mitchell of J. E. A. Nixon's Television Development Group C in Building 30, fed the colour signal to the receivers. The direct display was given on eight 21-inch colour receivers specially lent for the occasion by a number of receiver manufacturers and the B.B.C.

The planning and organising of the demonstrations were carried out by L. J. van Rooyen, of E. Davies' Television Development Group A at Baddow. Preparations for the event were started many months ago. A printed booklet of the lecture had to be ready in time for the Convention and nearly twenty illustrations, many in colour, were drawn by

Our Chief Television Engineer, V. J. Cooper, speaking on colour television to an audience of 250 members of the Association of Mining Electrical and Mechanical Engineers. The circles enclose colour strips which in all cases would appear the same three colours if illuminated by the same colour light, but appear to be different in lights of different colours. In the foreground are the Debric 16 mm. projectors for demonstrating 16 and 48 c.p.s. flicker





V. J. Cooper with L. J. van Rooyen and N. N. Parker-Smith, Chief of Television Group B, New Street, talking of the demonstration which compared brightness flicker at 50 and 60 cycles per second

Tom Pearce, Ted Cooper, and Dennis Shevel. Dennis worked at high pressure to photograph these and other material on to 35 mm. colour film to make slides to use during the lecture.

A number of demonstrations such as showing the addition of primary colours to match the light from a sodium lamp, and the splitting of light into colours by dichroic filters were borrowed from Mr. G. G. Gouriet of the B.B.C. Research Laboratories. Other demonstrations showing flicker effects and mixing colours were prepared at Baddow by Roger Fenton.

Before going to London, Bill Hobbs and John Howe, who were major contributors in the development of the colour equipment, had to reorganise the units to fit into four 7 ft. cabinets and the R.F. transmitter into a 4 ft. cabinet.

Several weeks before the lecture was given, a visit was paid to the Adelphi Suite at the Waldorf Hotel to see how and where these could be placed. Mr. Plant, the Reception Manager, was very helpful and we were able to put all the

racks and test gear in the serving kitchen where Miss Smith kept us going on afternoon tea and toast. The 3V colour camera, camera control consoles and colour monitor were housed behind screens in the passage-way leading to the kitchen. This passage opened out onto the road behind the hotel, but unfortunately it was a Covent Garden parking area! However, assistance from Bow Street Police Station and the Covent Garden Parking Attendant (a real Arthur English who could get the largest lorry into an impossibly small space) smoothed away all our parking problems.

The equipment was all unloaded without a hitch from well-packed works transport, and worked when first switched on, that is, after 50 yards of mains cable had been obtained and run down into the subterranean passages of the Waldorf to the mains distribution panel!

The day did not finish so well, as tests from the transmitter to a receiver indicated considerable pick-up of the B.B.C.'s Channel 1 signal on the cable. It was decided to change to Channel 3, so the transmitter was brought back to Building 30 for modification. As a sound channel was not available on this frequency, sound equipment was hurriedly collected together to take up with the transmitter.

Just as the lecture was due to start a pneumatic drill went into operation down below. Mr. Palmer, who is in charge of the suite, helped us and arranged for the drill to stop for two hours. It started again, on the dot, just as the vote of thanks was being given!

It had been a busy week for everyone and now after a successful conclusion, all that remained was to pack up and load the vans. As we drove clear of Covent Garden the parking attendant gave us a broad farewell grin. We well remembered his first greeting—'Oi, Guv, you can't park that there 'ere!'

L. J. VAN ROOYEN