

To Clare Colvin
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From Peter A Tingey.
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Dear Clare Colvin,

This is an indication of my activities for this period;-

My Experimental Days of Colour Television at the BBC.

Foreword

On 25th of July 1953 the Americans published a report 'Final NTSC Colour Transmission Standards' of which I have a copy.
In 1953 I was a Test Equipment design engineer at E.K.Cole (Southend). I purchased literature on Colour TV published by RCA (Radio Corporation of America) and I transferred department to the Colour Television Development Laboratory at E.K.Cole. The BBC was now transmitting colour test signals with a studio programme after the normal evening transmissions from Alexandra Palace and the system was an adaptation of the American NTSC system on 405 lines with positive modulation and AM sound.

Members of BREMA exhibited their colour receivers at the Radio Show (Earls Court). I therefore met Gordon Parker, Tom Worswick and Neville Watson at the BBC technical area and the E.K.Cole receiver I exhibited was appreciated. The BBC purchased my receivers and one was placed in a quiet office where the Queen was entertained when she opened the Television Centre. Tony Stanley introduced the Queen to the Colour Receiver while Lime Grove put on a live show. At the time I was with Tom Worswick behind the curtains at the back of the receiver....just in case anything went wrong!

UHF 625 Line Colour Television

Meanwhile 625 line Monochrome Test Transmissions on UHF were proceeding and the Pilkington Report was published which recommended the new system, as used in Europe. In six months I completed the change over of the signal generating equipment, including a receiver, to the new system. Once the BBC engineering sections knew of this they arranged for five BBC engineers to visit me at E.K.Cole (Southend) to assess the complete system.

Committees were set up to facilitate the introduction of the UHF 625 Line Colour System throughout the UK. I was on UHF committee 5 where I again met Tom Worswick and Berny/Bernadette Rogers of Bush Radio.

For the next Radio Show the BBC had switched to the 625 line system and manufacturers exhibited appropriate colour receivers. This system development occurred during the introduction of transistors, which heralded the eventual demise of valves. Thus hybrid receivers and equipment was common.

A BBC employee

January 1963 I became a BBC engineer at Designs Dept. (Western House) in Studio Section 8. Gordon Parker was in charge of this section.

Colour Systems

I developed decoders (transistorised) and Graham Roe developed the encoders for many colour systems envisaged at that time. I also developed Test Equipment necessary to assess colour encoders and equipment conveying colour signals.

I often went to other sections in the BBC to familiarise and assist their operations. At Designs dept. each colour system was available at the touch of a button in the laboratory and adjacent viewing room, while signals were distributed throughout the building and available elsewhere. Other sections in Designs Department could test a system for its noise immunity, patterning, colour fidelity and optimize its signal parts.

External Operations

In 1964 I went with John Shelley and Dave Savage to Moscow to assist the Russian engineers in their selection of a colour system. We took sufficient NTSC system equipment for the tests and Studio H contributed with signals sent across Europe via Finland to Russia.

In January 1965 I again went with Chris Cadzau to Moscow to assist the Russians in their public tests and selection of a Colour system.

Diversity

Video Tape Recording machines were being perfected and here more testing was required to optimize the equipment for a Colour system. Peter Rainger was in charge of this section at Western House.

A special Colour Television demonstration of many aspects, lasting days, was prepared and shown to EBU (European Broadcasters Union) using viewing areas in Western House and Broadcasting House. Many visitors were shown the Colour systems available and lectures were given to visiting parties.

Authors of technical literature visited us frequently and questioned engineers as to Colour signals and equipment. Many private firms with a colour problem would phone Designs Department for help.

Many Colour TV transmission problems experienced with existing equipment were solved, while new equipment was assessed for the propagation of colour signals.

The first colour signals sent by satellite to America originated from BBC equipment at Western house.

Implementation

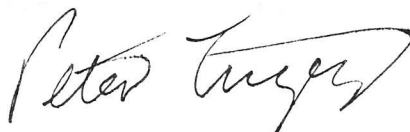
Once the PAL colour system had been chosen it was necessary for equipment designed to be manufactured in quantity at Equipment Department. Equipment drawings were made available to industry.

Continuation

I transferred to the RF section (5) and continued developing Colour receiver equipment using devices that industry perfected. Better transistor integrated circuits and new devices like Surface Acoustic Wave Filters were becoming available.

I hope this will assist you in defining your requirement. As I write more memories flood in to distract, but on paper they become permanent in black and white.

Yours Sincerely,



Peter A. Tingey.