

ENGINEERING

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✿ Queen's Award presented



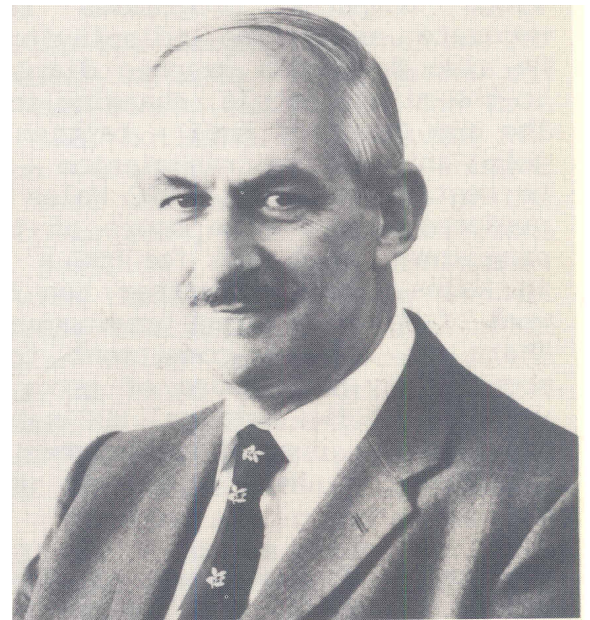
At a recent ceremony at Kingswood Warren the Director of Engineering, Bill Denny, received the Queen's Award to Industry for Technological Achievement on behalf of Engineering Division from Her Majesty's Lord-Lieutenant of the County of Surrey, Richard E. Thornton OBE, J.P. He was accompanied by Director General, Michael Checkland, Deputy Director of Engineering, Charles Sandbank and the Head of Research Department, Dr Bruce Moffat.

BBC to give annual IEE Faraday Lectures

BBC Engineering has been invited by the Institute of Electrical Engineers to present the annual Faraday Lectures. The Lectures, which are aimed at 16-18 year olds, visit seventeen different locations in the UK and Ireland, in the period from September 1988 to March 1989.

John Brooks, who has just retired as Assistant Head of Engineering Training Department, has been appointed Project Leader, and Alan Lafferty (EID) has been nominated as Tour Manager.

SMPTE Award



Michael Stickler, Deputy Head of P & ID Tel has been elected a Fellow of the Society of Motion Picture and Television Engineers (SMPTE) in recognition of his work with remote control and digital video interface standards. For the last few years Mike has been Chairman of the European Broadcasting Union (EBU) Committees which, in close collaboration with the SMPTE, have investigated and agreed the international standards for the remote control and digital video interface of television production equipment. These have resulted in the agreements contained in EBU Technical Documents 3245 for remote control systems and 3246/7 for the parallel and serial interfaces.

Michael, who has been an engineer in the BBC since 1953, received the Fellowship from M. Carlos Kennedy, President of the SMPTE during the Society's recent 129th Technical Conference in Los Angeles.

New graphics area for Cardiff

"Children in Need", on Friday 27 November, gave BBC Wales a golden opportunity to try out their new £280,000 electronic graphics area for the first time in earnest. And, according to Senior Graphic Designer (Wales), Clive Gould:

"The operation worked most successfully. Various graphic images were created using Paintbox and these, along with Slidefile, were made available as sources to the gallery in Studio C1. One of the most important contributions from the Graphics Area was provided by Car I Blundell who wrote computer programmes for eight separate animations, displaying totals. He also devised a graphic display of up-to-the-minute totals, changing in-vision. The new Graphics Area - baptism of fire, going into live transmission - proved to be most successful". BBC Wales currently produces around nine hours of television programmes each week for BBC 1 and BBC 2 in Wales, plus a further ten hours per week of Welsh language programmes for S4C. There is also a commitment to provide about sixty-nine hours of programmes per year to the two national BBC networks, in addition to special programmes such as "Children in Need", General Elections, etc.

The graphics department at Broadcasting House, Llandaff, is split into four groups:

News, Current Affairs and Sport Presentation
General Programmes
Childrens Programmes

To service these groups, Clive has the following staff working to him: five Graphic Designers; six Graphic Design Assistants; seven Graphic Assistants; one Photographic Technician; one Illustrator; one Graphics Clerk and, of course, the aforementioned Car I Blundell who is the Computer Graphics Programmer/Designer.

The Graphics Area is located on the first floor of Broadcasting House, at the north-west end of the building, above studio C2. Previously, the area relied on "cardboard engineering" techniques to produce graphics, augmented by two Acorn Cambridge Workstations driving Prisma 2 and Prisma 3 frame buffers, to provide "real time"

graphics, captions etc.

After about seven months of re-furbishment, the up-dated Graphics Area now contains a Quantel Paintbox, a Sany CCD Colour Camera (DXC3000), an Aston 3B Character Generator and the BBC Slidefile/Artfile system manufactured by Rank Cintel Ltd. There is also a new character generator area in a separate room, adjacent to the main area. The Acorn workstations from the previous set-up have been retained and are now tied in with the new Graphics Area.

The project was constructed by P&ID Tel. under the supervision of Bob Head. Working with him were Technicians, John MacDonald and Andy Belcher, along with Wiremen, Alan Choe and Graham Jardine. The following technical description of the new Graphics **Continued on Page 10**

Licence Agreement

A manufacturing licence for the Dynamic **Carrier Control Limit:IBJ Amplifier, AM6/30**, has been agreed with Marconi Communication Systems Ltd of Chelmsford. This unit allows the level of the transmitter output to be actively adjusted according to the programme content, whilst maintaining the modulation index. Because virtually all a.m. receivers include an a. g. c. circuit, this technique, known correctly as AM Compression, is unlikely to result in a perceptible degradation of the received signal quality. The system was described in greater detail in the IBC '86 issue of Eng. Inf., (Number 26.)

Transmitter News

The following transmitters have opened or changed since October:

UHF Television
Barrow -in-Furness
Cowling
Hastings
Hereford
Lumphanan
The Bournes
Voe

Cumbria
N. Yorks
E. Sussex
Hereford
Grampian
Surrey
Shetland

VHF Radio
Crystal Palace
High Wycombe

R1 (Temp)
Bucks

Note: The R4 low-frequency transmitters at Droitwich, Burghhead and Westerglen will change to 198kHz on 1st February 1988.

Newcastle move to new Broadcasting Centre

By Nick sharwoOd-Smith

If the world of Broadcasting seems to be a changing place today, in terms of programmes and technical innovation it always has been. But in terms of resources and administration policy, there have been remarkable changes since the previous article in Eng. Inf. on the construction of the new Broadcasting Centre in Newcastle. Housing both regional TV and Local Radio staff, and occupying a green field site, the building offered the opportunity to create a centre for programme making which would set the working environment for well into the next decade and beyond. The BBC's production needs have altered since the project was first conceived and a certain amount of re-thinking has become necessary as the work progressed. The work has not been all in the hands of P&ID Tel, with contracts for installation and equipment supply going to Marconi (studio vision systems), Calrec (sound desks) and Philip Drake (talkback and intercan systems).

Radio Newcastle moved into the building first and were soon able to offer network radio a regular facility by supporting a monthly edition of Wanan's Hour. TV were not far behind with, Administration staff and then, when delivery of the five Ikegami cameras took place, operational training at the end of September. A variety of work for children's programmes began with recordings of Jackanory, quizzes and a location drama; the latter utilises the station's Renault Espace van equipped for use as a PSC unit while quizzes use the audience facility in Studio A.

STUDIO A

Studio A is the larger of the two TV Studios, occupying some 240 sq metres and the full two storey height of the main part of the building. Having no observation windows to the control gallery, best use has been made of the available floorspace, with no restrictions on the position of the cyclorama. Equipped with three full-facility Ikegami 323K cameras, and able to handle up to five cameras using Triaxial cable, the studio is designed for drama, light entertainment and audience participation programmes. A tiered seating system can be brought into the studio on "hover trollies" - floating a fraction of an inch off the ground - and assembled in three sections to seat 116 people.

The studio's two longer walls accommodate four wallboxes carrying vision and sound circuits, including talkback and programme feeds, to and from the external technical areas. Adjacent to each is a camera connection box and a variety of switched and unswitched mains outlets. Audio and video tie-lines have been extended from the wallboxes to the TV and Local Radio apparatus rooms. Fifty-six low level microphone circuits go to the sound control room and twenty-eight to the Local Radio, Studio 2 cubicle. Provision has thus been made to use this large acoustically treated area for more ambitious productions in Radio as well as in Television; Radio Newcastle ~ve already used it for recording a Brass Band programme.

Above the studio floor is a twelve track lighting grid, with five motorised pantographs on each track. The sixty

Newcastle Broadcasting Centre

Links with Carlisle have become less important now that the Centre has been joined by Leeds and five Local Radio stations to form the new North East region. Regional ties have been strengthened by moving TV and Radio together from their previously separate, cramped accommodation. Joint Newsrooms, with shared intake facilities, have been designed to cater for regional and local output as well as network TV and Radio. The demise of the Link 130 cameras has meant that the new TV studios have been held up, awaiting delivery of substitute Ikegami cameras and control units, and the old studios have had to support regional programming for longer than anticipated.