

ENG

The Quarterly For BBC Engineering Staff

D.E. reports on CBA conference in Sydney



Bryce McCrirrick speaking at 13th CBA Conference in Sydney

" The thirteenth General Conference of the Commonwealth Broadcasting Association was held in Sydney, Australia, from the 16-25 September. It was attended by 101 delegates from national broadcasting organisations throughout the Commonwealth.

The Conference splits up into two separate committees - one dealing with administrative and programme matters and the other engineering. The BBC was represented at the Administrative and Programme Committee by M.D.Tel., Alasdair Milne, M.D.R., Aubrey Singer and Controller International Relations, Noble Wilson. I was present at the Engineering Committee which had, itself, 32 delegates from 24 broadcasting countries.

During the seven days that the Committee sat, we considered 62 technical papers of which 14 had come from the BBC. The papers covered all fields of radio and television broadcasting with particular emphasis on the application of a communications technology for remote areas and the appropriate technology for developing countries. The delegates from the country originating the paper had to give a presentation of ten to fifteen

minutes and then was required to discuss the points which were raised. The great difficulty at this, my first CBA Conference, was the tremendous variation in the technical level of the broadcasters represented. At one end of the scale we had the BBC, Canadian CBC and Australian ABC - all with highly developed television services - and at the other end some of the African countries who only had a very elementary radio service. To be discussing such matters as a possible future television digital standard limited the participation greatly. As a result of this we have agreed to give much more thought to the composition of the agenda for the next Conference so that it can be of more value to the majority of the participants and we thought we may also have one or two teach-ins on specific subjects of interest at the time. Notwithstanding, I found the experience most valuable, renewing some old friendships and making many new ones.

The next General Conference of the Commonwealth Broadcasting Association will be held in Canada in 1982. I hope that next time it will not coincide with the me. "

Bryce McCrirrick

Olympic Games not forgotten

By now the Olympic Games may seem just a memory in the past. As they missed our first edition and were a 'special', we are including a description of our technical involvement in Moscow.

We had to cut our coverage of the Olympic Games to only 45 hours but even so BBC engineers had to put together systems and equipment that ensured that the coverage from Moscow met the high standards that we always set in sports broadcasting. The Olympics condensed so much sporting activity into a single fortnight that it needed a good deal of engineering and production ingenuity to devise systems that ensured that events of particular interest to British viewers were not missed.

To simplify production arrangements virtually all our coverage was produced and presented from a studio that we had hired in the Olympic Television and Radio Complex (OTRC) in Moscow. The programmes put out from this studio reached Britain through one channel of Intelsat IV.

The Moscow studio had access to 'feeds' from all major sports locations and some of them supplied more than one international vision feed. Athletics from the Lenin Stadium, for example, generated three independent international vision feeds covering field and track events.

The job of the studio was to link these sources together into coherent television programmes. The studio was equipped with three cameras and was used for interviews and preview programmes as well as linking coverage to the separate events.

All the television signals from Moscow were originated in SECAM, the colour television system adopted by the USSR and they were still in SECAM when they arrived at the BBC Television Centre in London. There they were transcoded to the British PAL System using ACE, the BBC's four-field digital standards converter, the most advanced and accurate device of its kind in the world.

With so many events going on at the same time, video-tape played an important part in the coverage. Engineers installed six VPR2 machines in a separate video-tape area one floor above the BBC Moscow studio in the

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New film and video-tape dubbing theatre at Lime Grove

The new multirole film and video-tape dubbing theatre came into operation at Lime Grove on 13 October 1980. The new theatre will be used mainly for sport and current affairs programmes.

Ian Hare, of SCPD, the Project Leader, says, 'The theatre has been designed to be as flexible as possible and can be used for drama, documentaries and sports programmes. Few viewers realise how important dubbing is in television. In Current Affairs productions, films, and video tapes arrive at Lime Grove, perhaps only minutes before transmission, completely mute - without sound or commentary. After being edited, they need to have background sound, commentary and sometimes music added in such a way that they follow the action. This is where the new facilities will come into their own'.

The new theatre is based on an empty former studio, with a floor space of 300 square metres. The focal point is the mixing desk in the main Dubbing Mixer Room, around which are two commentary studios, an Effects Area, an Apparatus Room, a Monitoring Room and a Projection Room. They are laid out so as to give the operator in charge, the Dubbing Mixer, eye contact with both studios, the Effects Area and the Apparatus Room, as well as having the large projection screen in front of him.

The Neve 20-channel, 6-group, Mixing Desk includes several special features. The main section has 10 channel modules and faders on each side of a Central script rack. Each channel is only 40 mm wide so that the operator can span five faders in each hand. Above each fader is a Response Selection Amplifier unit (RSA) and a switching module. Each of the fader units has access to a Klark-Technik graphic equaliser, noise gates and a telephone effects unit. The centre area contains two stereo auto faders, timet footage counter controls and 'lo-fi' monitoring.

A separate effects 'mini-mixer' console in the main mixer room, has disc reproducers, two cartridge recorders and two Studer tape recorders routed to it. Each of the Studer tape recorders has its own BBC-designed synchronise

which is controlled by a microprocessor. Using it, the addresses of 99 effects can be put on to each tape. They can be automatically located and then cued manually when needed by the Dubbing Mixer. Reviews of entries in either the master or slave store are possible without disturbing what is going on at the time.

A BBC modification to the disc reproducers, which use quick-start Technics SP 10 Mk II turntables, provides variable speed operation from 20 to 80 rpm, with instant change. It does this whilst at the same time maintaining full broadcast quality.

In the Apparatus Room, there are nine 16 mm Perfectone Rapimag sepomag transporters. The machines, fitted with EBU twin-track heads, are arranged as two 1600 metre capacity simplex main recorders and six 1000 metre capacity duplex replay transports. Two of the replay machines can also be used for recording when required. The sixth machine is normally used for commentary recording or for Quadruplex VT transfer but can be used as a seventh replay transport.

With the increasing use of video tape on location, being able to dub on to video tape is a useful innovation in the new theatre. In the BBC system the programme material is transferred, together with a continuous time code, from a Quadruplex VT machine to a U-matic. A BBC-designed interface unit allows the same varispeed control as with film and also translates instructions to the U-matic into a language it understands. After the dub is complete the programme is transferred back to Quadruplex tape.

Editorial

Despite the obvious errors in crediting the ACE standards converter to Research Department and not Designs Department, the first edition of 'Eng Inf' was well received by most engineers.

We apologise to those areas that received insufficient copies, it was never our intention to provide one for everyone, but hope that our new mailing list is better than the old one.

Much of this edition is given over to IBC 80, and we hope that this compensates those engineers who were unable to attend in person. It is pleasing to note that of all the exhibition stands by both manufacturers and broadcasters, the BBC stand was the one which attracted most visitors. This is surely a reflection of the high standard of inventiveness and engineering still seen in the exhibits, and bodes well for the future of BBC broadcasting.

One grateful reader rang to thank us for his copy of ENG INF. It arrived on his desk the morning before a board. Apparently he found the answers to many of the questions there. We never did find out whether he was successful or not!

Contact us on London BH 5432/5433 with your comments or your news

View of the multi-role dubbing theatre in action