

E**N****G****I****N****F****SPRING 1989****No. 36**

TRANSMISSION WINS GEC-MARCONI MAINTENANCE CONTRACT

BBC Transmission, based at Warwick, has secured a competitive contract for the exclusive maintenance of GEC-Marconi's National One base stations. The contract will initially run for three years,

National One is a speech and data service which offers subscribers a wide range of facilities such as selective two-party calls, fleet calls (to all users or selected groups), dispatcher facilities, vehicle tracking and security, etc. The network now covers a large area of the country, catering for local, regional and national fleet operators.

Under the terms of the contract, engineers from Transmission Operations Department will be responsible for maintaining National One's base stations. There will be seventy-four in service by the end of this year - some co-sited with BBC transmitters - and other base stations will follow as the National One network develops.

If a fault occurs, GEC-Marconi will telephone the appropriate Monitoring and Information Centre (MIC) to arrange a visit from the designated BBC engineer, who will be on 24 hour call. The BBC is contract-bound to

respond to a GEC-Marconi request within four hours. Faults will be cleared on a module-exchange basis, the BBC retaining a stock of spare GEC-Marconi modules.

According to Bert Gallon, Chief Engineer Transmission: "BBC Transmission is well placed to undertake contracts of this type, given the expertise of staff and the locations of Maintenance Bases throughout the UK. In addition to providing another dimension to the work of staff, the contract will provide a useful addition to the income obtained from Transmission's commercial activities."

RD HOSTS GOVERNORS' MEETING

Research Department hosted an out-of-town Board of Governors Meeting at Kingswood Warren on Thursday 30th March. The previous evening a number of Governors and several members of the Board of Management were shown conditional access broadcasting techniques, HDTV and RDS - highlighting both the range of work undertaken by RD and the stage that these important projects have reached.

Following the Governors' normal business meeting, RD and Tel OBs jointly demonstrated work on radio-camera antennas,

including Helitrak which had been successfully used, experimentally, at this year's Boat Race.

Some sixty members of Research Department were invited to a buffet lunch with the Governors and Management, which allowed a valuable exchange of views. Both the Chairman, Marmaduke Hussey, and the Director-General, Michael Checkland, gave a brief word of thanks and expressed their confidence and pleasure at the way in which Research Department is assuring the technological future of the BBC.



Chris Gandy explains radio-camera antennas to the Board of Governors. In the front row are: DG, Michael Checkland, and Governors Marmaduke Hussey, Lord Barnett and John Parry. Cameraman is Andrei Austin.

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ENGINEERING

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Welcome to our new format. It's not that we've succumbed to the desktop publishing revolution; this issue has been prepared as usual on the office wp but the text has been typeset professionally.

At this stage, we would like to express our gratitude to Dianne Lafferty (nee Fountain) who has contributed a great deal to the layout of 'Eng Inf', since its inception in the summer of 1980. Dianne left the BBC in February for a similar job, not far from her home. Our warmest thanks also go to Roger Foster who worked on 'Eng Inf' layouts over a period of about six years, before leaving the BBC last Christmas (again, for a similar job much closer to his home).

As a result of our new format, we are able to publish more stories for a given number of pages. So please keep those drafts rolling in! And don't forget that a good photograph or two can contribute greatly to your story.

The deadline for our summer issue (no 37) is 26 May.

Mike Meyer

RADIO PB

The Spring 1989 edition of the pocket booklet 'BBC Radio Transmitting Stations' is now available from EID. Please telephone LBH 5040 to order your free copy(ies).

LICENCE AGREEMENT

A licence agreement for the new ITS Generator/Inserter, GE4SM/575 & A, has been struck with VG Electronics Ltd of Hastings.

The equipment generates ITS waveforms, including the new one-line waveform, which it inserts into a video signal for transmission. It also generates full field test waveforms, which are available at a separate output, and which can be switched to the main output. The full field waveform may be selected remotely with either tone bursts or a logic input. A current development will allow automatic recognition of this waveform by the ME3SM/502 TV Waveform Analyser (licensed to Avitel Electronics Ltd).

The Studio Generator, GE4SM/575A, is the 'full facilities' version; it includes an output of mixed syncs derived from the video input, and four external signal insertion inputs

for data such as Ceefax or Datacast. The OB version (GE4SM/575) has just one external data input, with no feed of syncs available.

Three options of both units are available, which provide:

- (i) the basic ITS/full field waveforms as above
- (ii) the addition of a digital communications channel
- (iii) the addition of a sound monitoring channel.

Further information on this Generator/Inserter appeared in the Autumn 1988 edition of 'Eng Inf' (Issue 34). For any other news on licensing matters in general, please telephone the D&ED Liaison Engineer, Peter Jefferison, on Avenue House 375.

TRANSMITTER NEWS

The following stations/services entered service between 1 January and 31 March:

FM Radio

On 6 January, Radio 4 FM was extended to the Londonderry area of Northern Ireland. And on 20 February, fm reception of Radios 2,3 and 4 was greatly improved in and around Ipswich, when the Manningtree station entered service.

Local Radio

St Valentine's Day saw the introduction of three improvements to BBC Local Radio:

- our thirty-fourth station entered service, covering the county of Hereford & Worcester

- Radio Oxford went stereo
- Radio Nottingham was extended on FM to the Mansfield area, when a new relay at Fishponds Hill entered service

Radio Nottingham gained further benefits on 22 February: the FM service for the south of the county, including the city of Nottingham, was transferred from Colwick Park to Mapperley Ridge.

Television

Three television relays entered service during the quarter:

- | | |
|-------------|----------------|
| Alltwen | West Glamorgan |
| Bridgnorth | Shropshire |
| Weston Mill | Plymouth |

RADIO SPORT NEW COMPUTER SYSTEM

Installation of a new computer system for Radio Sport has now been completed. A Basys system, similar to the one already in use by News and Current Affairs, is set to revolutionise the way in which sports staff work - providing electronic access to news, word-processing of scripts and a large amount of office automation.

The story really began early in 1988 when Computer Services Radio, in conjunction with staff from Sport and OBs, began the task of producing the system specification. It soon became clear that only two companies were capable of providing a working system and, after some hands-on assessment, Basys International Ltd were chosen as the main system supplier.

At the heart of the chosen system are two DEC Micro Vax 2000 mini-computers, each looking after a 159 MB hard disc. All information is mirrored to both discs, to automatically ensure back-up should a problem arise with either drive unit. Similarly, either MV2000 is capable of sustaining the system in the event of a processor failure.

Connected to the processors, via an Ethernet, are eight Communication Concentrator Units or CCUs. These

Sports journalists using the new system

units provide the link through which the computers communicate with all other devices. The system has thirty-five terminals and nine printers, as well as links to Manchester, Birmingham, MSS (Message Switching System), portable dial-in terminals and the ten main wire agencies. In total, the eight CCUs provide sixty-four ports to the outside world.

The basic source of input into the system comes from the wire agencies. Information from around the world is provided by ten independent services, in electronic form, and is stored in the system for immediate retrieval on any terminal. Central to the effective management of this flood of data is the system's ability to filter stories, by searching for key words, before storing them in users' pigeon holes. Key words, such as Arsenal, Bruno, Golf or Wimbledon, are set up on an individual basis; the system then scans the various wire inputs for them, continuously, even when the user is logged out.

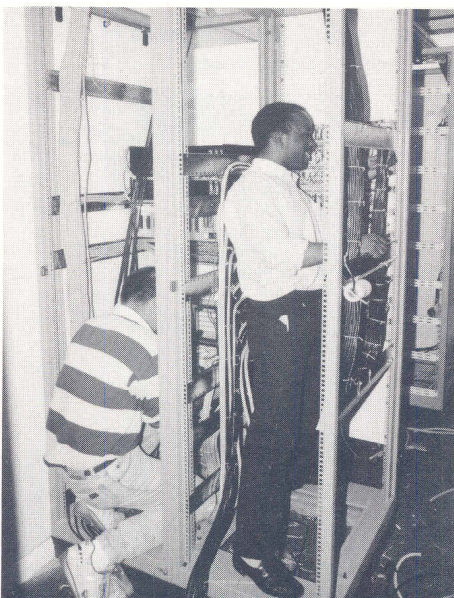
Scripts are written at the terminals using normal word processing techniques. However, it is also possible to split the screen - allowing scripts and wire stories to be viewed at the same time. Blocks of text can be copied across, if required, and when a story is completed, it is saved in the

system which automatically provides a read time for the story. This is invaluable at the stage where a complete programme is being compiled.

An editor may view the running order for a programme and quickly change the order or add items. A total duration for the programme is displayed and also the necessary start times for individual items, to meet a specified finish time for the programme. Any over- or under-run is displayed, allowing accurate slot times to be achieved with great ease.

Although scripts can be printed to a high quality, it is also possible to read the stories on-air, directly from a terminal. The Basys system produces an autocue-style output on a terminal; the double-size characters can be scrolled by the broadcaster himself, if necessary. Using this arrangement, a script will be transmitted without any paper movement being involved. Clearly, the advantages of the system are its speed and flexibility. All information on the system is available to everyone; all changes are instantly shared.

In addition to the Basys system, Computer Services Radio is installing a local area network. Based on an Apricot pc, the Ethernet system will link together eight workstations in



Giles and Delroy installing the new computer