

ENGINEERING

The quarterly for BBC engineering, technical and operational staff

AUTUMN 1991 *No. 46*

TC's NEW DISH ANTENNA

During the late summer, a 9 metre dish antenna was installed at Television Centre, above the roof of the Central Wedge. Used for both transmitting and receiving, it can be aligned on geostationary satellites across an arc from 53 degrees east to 56 degrees west. The receiving

facilities were expected to be in service towards the end of November.

According to Peter Marchant, Chief Engineer, Television: *"Not only will the dish pay for itself in a little over two years and then continue to pro-*

vide large savings for many years to come, it brings new flexibility to the reception of OB and international traffic. "

A full description of the installation will be published in our next Issue.



Des Hill, ACED

The 9 metre dish being hoisted onto the roof of Television Centre on 21st September

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Stories for the Spring
edition should be forwarded
to the Editor by Friday
14th February, 1992.

Transmitter News

The following services opened or
changed between 24th August and
15th November:

New TV relays

Gravelly Hill	Birmingham
Hampstead Heath	London
Leitrim	Co Down
Ramsgate	Kent
South Tredgar	Gwent
Tedburn St Mary	Devon

New FM stations

Berwick-upon-Tweed	Northumberland
Saddleworth	Gtr Manchester

Radios 1 and 4 on FM

Carmarthen	Dyfed
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Mast flashing safety lights

Manningtree	Essex
Meldrum	Grampian
Mendip	Somerset
North Hessary Tor	Devon
Redruth	Cornwall
Rosemarkie	Highland

Local Radio

An opt-out of Radio Sussex opened in the Guildford area on 14th November, operating on 104.6 MHz. Known as *BBC Radio Surrey*, it broadcasts 40 hrs of local programmes each week, taking Sussex programmes at other times.

EsIC Conference

Due to difficulties in confirming the speakers and venue, the annual EsIC Conference had to be put back from its usual November date. It will now be held on the 28th and 29th of January, 1992, at the usual venue - the IEE, Savoy Place. Further details from John Pinniger of EID on White City 25985.

D&ED's Open Days

D&ED's annual Open Days will be held at Avenue House on Wednesday 29th and Thursday 30th January, 1992 - coinciding with the EsIC conference. The building will be open from 9.30 am to 4.30 pm on both days and everyone in the BBC is welcome to attend on either day.

D&ED staff will be available to demonstrate the range of new equipment designs produced over the past year, as well as the wide range of services available to the BBC. Further details from D&ED's Liaison Engineer - Bob Hartley - on AH 4375.

Engineering Components Catalogue

Did you receive a copy of the *Engineering Components Catalogue* last April? If you should have but didn't, it could be because you moved offices and haven't yet told us. So, to help us revise our mailing list, D&ED would like to hear from any recipients of the catalogue who have changed addresses.

If you have a copy of the change-of-address slip which is sent out with each catalogue, could you please complete it and return it to Neil Sutton, Room 215, Avenue House, as soon as possible. Alternatively, you can ring Neil on AH 4287 and give him details of your new BBC address.

The current issue of the catalogue was published in April 1991 and an updated price list was released recently; copies of both can be obtained from Neil on request. The next edition is due to be published in April 1992 - so please make sure Neil has your correct address and requirements well before then.

Peter Jefferson
Technical Information Manager
D&ED

Wales

Film dubbing operations in Cardiff have been moved from the Stacey Road premises to Theatre B at Llandaff. The new Film Dubbing Theatre has a totally-digital audio mixing console; an AMS Logic console with twenty-eight stereo channels and two groups; Otari multitrack and Studer A812 tape machines; R-Dat and CD players, sep-mag equipment and a Sony BVW-75 vt machine. All equipment is interfaced to the desk via a/d converters, thus allowing the digitised sources to be processed with minimal degradation and recorded digitally on the Audiofile.

The biggest advantage of the desk is its automation. Setups - including fades, gain and Eq - can all be saved and recalled at a later date, while mixes can be performed in real time allowing adjustments to be made before the final recording.

According to film dubbing mixer, Tim Ricketts: "*The greatest advantage of this desk will be the time savings in setting up the desk. No longer will it be necessary to labour through every fader and knob; a simple recall from floppy disk memory will restore the correct levels. We have already had some considerable success in the dubbing of FiHpina Dream Girls, a drama recently shown on network television.*"

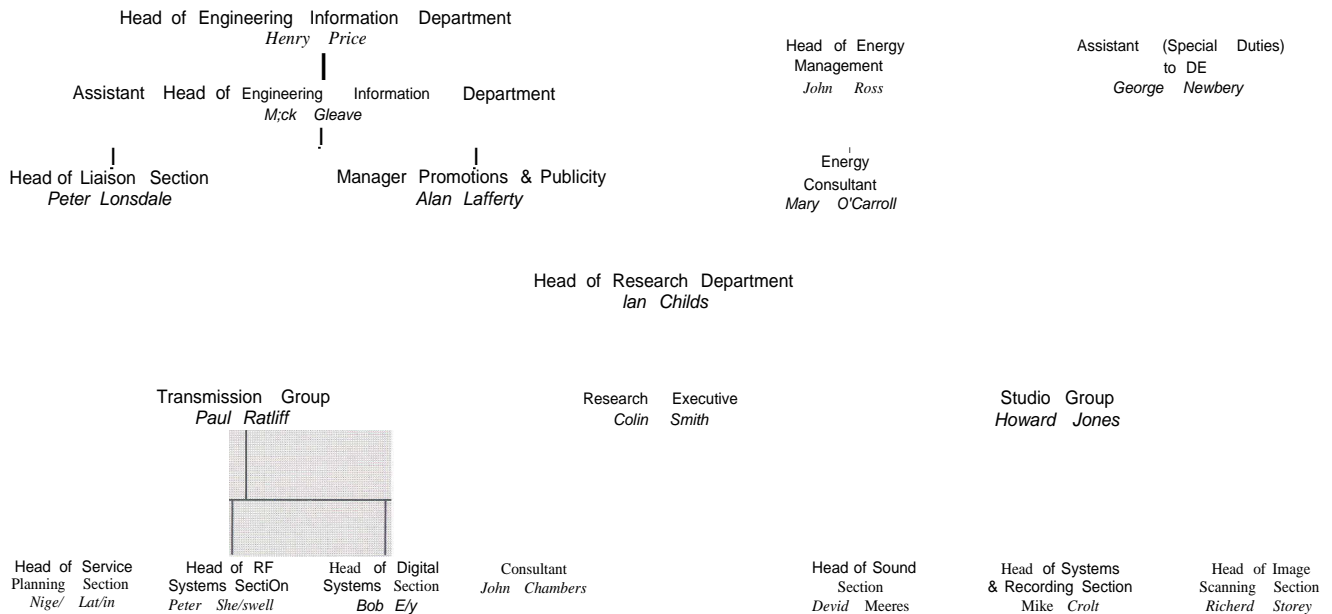
The installation contractor was Television Systems Ltd (TSL) of Maidenhead, under a project led by P&ID Tel.

Eric Hutchinson
Recording and Film Group
P&ID Tel

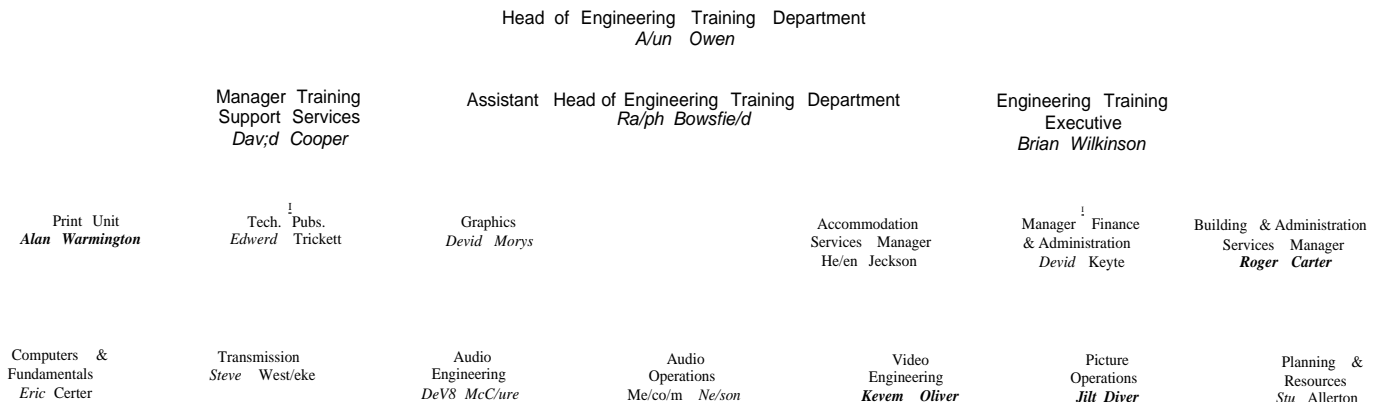
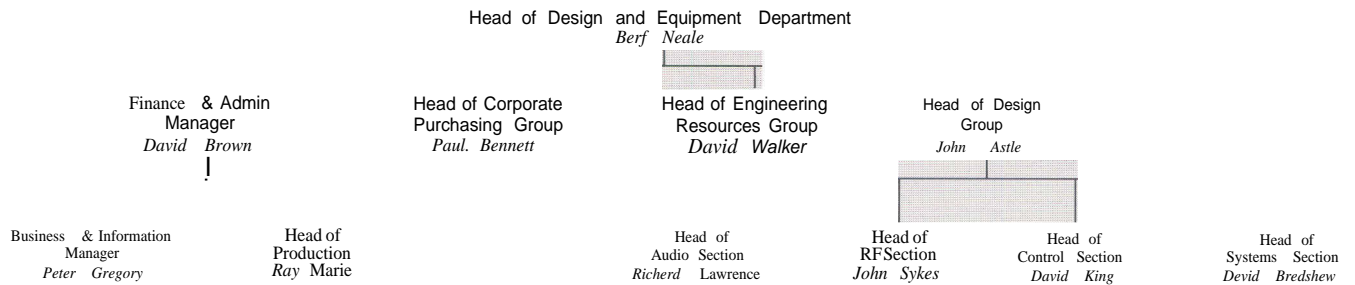
FAMILY TREES

Engineering R & D

Chief Engineer
Research and Development
Phil Laven



Note
An L&RS librarian is available at Kingswood for enquiries (telephone extension 408)



Engineering Research & Development 21st November 1991

SOUTH & WEST REGION

Southampton moves into the 90s

On September 9th, television broadcasting from Southampton moved from the old premises at South Western House to the new purpose-built Broadcasting Centre at Havelock Road in the centre of town. Pat Turner describes the new centre.

The BBC has had a presence in Southampton for over three decades. Until recently, the regional home has been a converted hotel - the old South Western Hotel - where existing Home Service wireless studios were converted to television use. Many of the remnants of a bygone age were still there such as impressive marble-lined public areas and ornate plasterwork in the television studios.

It did not make an ideal broadcasting centre: the newsroom was cramped, chimneys with real soot had to be used as cable ducts between floors; the studio could only be used on-air with the ventilation system turned off, and equipment bays were crammed into every nook and cranny. Radio Solent, housed on a separate floor, had to face similar difficulties.

The need for a new Broadcasting Centre was identified ten years ago - a requirement which would give the opportunity to bring together both TV and Local Radio in one bi-media centre. Five locations were considered and the Havelock Road site came out favourite.

At the time, it was being used as a municipal 'bomb site' car park, the most significant feature being its slope. The ground falls away steeply from the frontage on Havelock Road to its lower end in West Park Road, a difference in level of about 8m. Further challenges came from the London to Southampton railway running adjacent, artesian wells below and the chimes from the Civic Centre belfry opposite. The main redeeming feature was its proximity to the centre of the city and therefore its accessibility to the public.

After extensive discussions with all parties, a project plan was drawn up and approved by the Board of Governors in March 1988. Work then commenced on the detailed design.

Building Design

South & West Region laid down a number of design requirements. Princi-

Aerial view of the new Broadcasting Centre in Southampton

pally, there was a need to bring TV and local radio together in a common newsroom and to maintain flexibility throughout the building, so that future changes in BBC policy and programming arrangements could readily be incorporated. There was also an urgent need to provide Radio Solent with new facilities as the existing equipment had become a maintenance liability.

Southampton City Council also set tight guidelines - in particular, the building should complement the Civic Centre. This is a dominant landmark in Portland stone with copper roofs, designed in the 1930s by E Barry Webber. Its 50m high belfry was a lookout for fire watchers during the Battle of Britain.

The Broadcasting Centre in common with others of its type is a 'highly serviced' building. Such requirements do not generally go hand-in-hand with good aesthetics; the local town planners had a personal interest in its design because of its prominent location directly opposite their own offices in the Civic Centre!

The design adopted has a copper roof and artificial stone pilasters on a

contemporary external shell. Care was also given to landscaping as the site previously had the appearance of a relatively-green park, as well as being adjacent to a pedestrian walkway leading to the railway station.

ACED was responsible for the conceptual design, based on the Region's requirements. The building construction programme was split into two phases - *shell* and *fit-out*. Detailing and site management of the shell was assigned to local architects, following client and planning approval.

The fit-out was detailed and managed in-house by ACED, because of the inherent specialist content and the need for interdepartmental liaison. The contract was split into several sections in order to ensure early completion of the Local Radio areas, which were described in *Eng InfNo 43*.

Green Heat

The new building is unique within the BBC in that heat is provided by a geothermal heating system. A study was made of the options for fuelling the new building, including the geothermal heating system run jointly by