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Sir Robert Fraser

Notes for speech to Radio Industries Club, Scotland, in Peebles the 2nd May '67

YESTERDAY, TODAY AND TOMORROW

by

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There is not usually much profit or interest in talking about yesterday, but within the last year or so very appreciable improvements have been made to the broadcasting facilities in Scotland. We have opened television relay stations in Girvan, Kingussie, Lochgilphead ^{Skriaig} and Penifler, and VHF/FM relay stations in Kingussie, Lochgilphead, Melvaig ^{Skriaig} and Penifiler. The actual number of people receiving the improved services is about 60,000. These are not very impressive figures of themselves, but they are very impressive when considering that virtually all these relay stations are in sparsely populated areas. We would like to do more but the shortage of money and the shortage of channels are both against this.

What is happening today, and what will happen tomorrow are much more interesting. On radio the Popular Music Programme is due to open in the autumn. It will provide continuous entertaining music of a popular, modern kind, and in Scotland will be radiated from Transmitters at Burghead, Redmoss and Westerglen on a frequency of 1214 kHz or 247 metres. The Light Programme will continue on 1500 metres and on VHF. In England, the Local Radio experiment will start before the end of the year. No plans are envisaged at the moment for such experimental services in Scotland but the Government has undertaken to review the whole future of local radio after the experiment has run for about a year. These local radio programmes will be carried on VHF and should do something to stimulate an interest in VHF reception. Stereophony is radiated from a small number of stations in the South of England and is to be extended to the Midlands and the North of England early next year. Further extensions of the service, both in relation to coverage and to the number and character of the stereo programmes transmitted, will be considered in the light of public reaction and of the economic resources available.

However, improvements in the VHF/FM network will be made and stations will be opened at Ballaculish and Campbeltown, which will mean that reception will be possible for 95% of the whole population of Scotland. FM receivers are going down in price and it is very much to be hoped that the public will take increasing interest in the purchase of these sets. The interference situation from continental stations on medium waves continues to get worse, and it is impossible to see any improvement in this situation but only a continuing deterioration. The way out of this is to use VHF which gives good quality interference-free reception in all parts.

In television, BBC-1 on 405-lines will make further expansion and the Scottish population covered will be up to 98%. New stations will be opened in Ayr, Ballater, Campbeltown, Helensburgh, Jamestown and Port Ellen (Islay). Again this is pushing television reception out into the sparsely-populated areas. Construction of these stations is entirely uneconomic. They cost very many times more per person served than in the most densely populated areas but, in spite of this, we are still planning to do as many of these as the channels available - and this is the most severe limitation - and the money available will allow.

BBC-2 is being extended and in addition to the station at Black Hill already in service, a new station will open at Durriss next month. The next of the main stations in Scotland will be Angus (in the summer of 1968) and Craigkelly (the winter of 1968).

All these stations are being built so that they will radiate the colour signal, and the Post Office is working hard on the completion of the necessary programme line facilities to bring the colour programme to the transmitter. It is expected that Black Hill will be radiating colour by about October and Durriss will follow shortly afterwards.

As was announced on 20th April, a period of BBC-2 colour launching will start on 1st July with regular transmissions from all the stations able to radiate colour at that time. A full service will be given to a large part of the country, including 51% of the population of Scotland, when the regular service starts on 2nd December.

Colour launching will consist of items from a live studio, items from mobile outside broadcast cameras, and of course films. The spread of the programme items will be as wide as possible and the extent and variety of the programmes will build up as additional studio facilities become available. Before the start of the full service on 2nd December, there should be adequate facilities to do more than three hours colour programmes per day on BBC-2. In considering these dates it should be borne in mind that the decision on the colour system to be used could not be finalised until after the Oslo Conference in July last year. Building up these facilities has meant very extensive effort on the part of all concerned in the BBC, Post Office and Industry, to provide the equipment, a greater part of which is of entirely new design. It has required the most intense study of the various problems concerned and has of course also meant the expenditure of considerable sums of money. It has involved the training in colour operation of a very large number of men and women. This has been done both on the programme side and on the engineering side. Successful colour operations require knowledge and skills additional to those required for black-and-white television and without this knowledge and those skills successful colour would not be achieved.

Colour in the United States is now enormously successful and popular and with ever increasing numbers of colour receivers being sold to the extent that the present forecasts are that colour sales next year will exceed black-and-white sales and that by 1970 the number of colour sets in use will be much more than half the total number of sets in the United States.

This very satisfactory situation was not, however, realised without some very unfortunate experiences and for something like eight years colour in the United States was having a bad time. We must ensure that this situation does not occur with us and I think the steps taken both by the BBC and the Industry will ensure this is not the case and that colour will make a good start and rapidly become popular.

Some hundreds of men, spread out all over the BBC network, have already been through courses in colour technology and in handling colour signals and equipment. In addition we have had in use an experimental colour studio occupied in training programmes, for both technical and programme staff, since the latter part of last summer. On the transmitter side, we have equipped the transmitters with all the required additional test equipment and are giving training in the use of this equipment. As far as possible therefore we are doing all we can to build up the necessary basic knowledge and expertise in handling colour well before the start of the service. We have had for a long time a most extensive series of test transmissions and the programme of these is being extended. By this training and repetition in practice, we hope to maintain the highest standards of picture transmission.

The problem for the receiver Industry is more serious and in many ways more difficult than is our problem. We have to have adequate numbers of men in specified places, but they have to have men with the necessary qualities available over the whole country and in very considerable numbers. They also have to get adequate test equipment into the hands of the radio servicemen. This brings in not only an economic problem but a manufacturing problem if this equipment is to be ready in time, as in one way or another it must be. But the most important, and perhaps most difficult, problem is to give training to these men, either centrally or locally. The Industry has these problems well in hand. It is realised that the situation has its difficulties, but everybody concerned realises how serious it would be if adequate solutions are not found for all sides of the problem, and the arrangements now in hand will ensure that by the time the receivers are being

installed in the homes of the public adequate service arrangements will be available. The BBC will help in this programme by radiating special films illustrating some of the problems of colour receiver installation and adjustment.

So much for colour on BBC-2. But you will be wanting to know what is to happen to colour on BBC-1 and also colour on the ITA. After an exhaustive examination of the problem the Technical Advisory Committee recommended to the PMG that the BBC-1 and ITA services on 405 lines should be duplicated in UHF on 625 lines and that colour in these services should be delayed until this was possible. That this would be the solution was foreseen, however, when the first planning of the UHF networks/^{was}made and the sites were chosen and the facilities created such that the additional duplicated services could be readily and speedily added. Accordingly work is already in hand to add to the various UHF transmitting stations throughout the United Kingdom the additional facilities to radiate BBC-1 and ITA programmes on 625 lines and in colour. It is still too early to announce the start of such transmissions but it is expected that four stations can be ready by the autumn of 1969 and will spread over the rest of the country as quickly as possible after that date. We are putting proposals to the Postmaster General which would enable services to be given in Central Scotland by early 1970.

From the viewers' point of view these transmissions will give all programmes in the same waveband, that is the UHF waveband, and all programmes will be receivable on the same line standard. This will effectively give equal service areas to all three programmes, will give reception of all three programmes on a single aerial and, by simplifying the design of the receiver, as it will, for a single waveband and a single television standard, make the receiver easier to tune and cheaper to manufacture. The 405-line service

will not close down for many years, but the two services - 405 and 625 - will run in parallel. After duplication has started, the difference between them will be that the 625 will be coloured, while 405 will be giving the same programme in black-and-white.

Colour will be attractive; it will cost more and require more careful initial installation but it will give a lot more. We shall have colourful television.