

2. ELECTRONIC MUSIC FACILITIES

When the Radiophonic Workshop began, the method of working involved firstly the recording of a sound produced either via a microphone i.e. "concrete" or via an electronic generator i.e. "electronic". The sound was then manipulated by altering the speed of the tape, filtering, looping, editing, playing it backwards, adding feedback and a host of other "classical techniques". It took a long time to make even a simple piece of music. In the sixties the perfection of voltage control led to the development of the synthesizer and it became possible to create electronic sounds within one piece of equipment and play them in real time on a conventional keyboard, thus producing the music more quickly. However, the synthesizer only produced electronic sounds and the use of concrete sources diminished as using them involved all the old time consuming "classical" techniques. Consequently electronic music began to sound rather boring, even at the Radiophonic Workshop. Fortunately technology has now reached an adjacent point on the spiral of development and the computer promises not only to do for concrete sound what the synthesizer did for electronic sound but also to further improve the control of electronic sources.

The acquisition of the Fairlight Computer Musical Instrument has made a tremendous impact on the work of the department, speeding up conventional techniques and allowing development of new ideas previously out of the question because of the pressures of time. The Computer based digital synthesizer is perhaps the most exciting development in electronic music since the invention of the tape recorder. Although more expensive than an analogue system - £15,000 to £20,000 rather than £4,000 to £6,000 - a digital synthesizer, being software controlled, is capable of expansion and development, usually by the provision of a new systems disc and occasionally by relatively inexpensive hardware updates. The Fairlight company estimates that using this system there is a development potential of up to ten years in each instrument at an average cost for updates and maintenance of about £2,000 p.a. This is in sharp contrast with most analogue systems which become obsolescent the day the designer passes his plans to the manufacturer and in service should ideally be replaced every two years, a luxury we have been unable to afford.

Over the next five years we must expect to provide digital synthesis facilities in all six areas at the rate of one per year and maintain a proper level of software updates. In addition, we must not allow the analogue devices to rundown as they can often perform certain functions more efficiently than the digital systems. This is where "development" money will be most useful as our facilities need to be expanded rather than replaced.

The cost of this is difficult, if not impossible to forecast. The market is presently dominated by the "Fairlight" from Australia at about £18,000 and the "Synclavier" from America at £23,000 plus: However the German PPG System looks interesting and is expected to cost about £12,000 whilst the Japanese, who have been uncharacteristically caught up a concept back alley this time, are expected to announce systems at competitive prices in the next twelve months (probably at the Frankfurt show in March). If anything, price per facility will fall but systems will offer more facilities so prices will probably tend to stabilise in the £15,000 to £20,000 area which compared with development in the computer graphics field is astonishingly cheap.

5. STAFFING

The establishment staff of the Radiophonic Workshop is as follows:-

H.R.W.

O.R.W.

Engineer Radiophonic Workshop

6 Producers (Radiophonic Music)

1 Assistant Engineer

1 Secretary

(a) Producers

For some time we have been operating the composition service with the aid of our attachment scheme and indeed last year the attachees contributed over 2,000 hours to the total worked on programmes. Provided the flow of people continues we could survive this way but standards and efficiency would inevitably suffer so thought must be given to the establishment of a seventh composition post with its inevitable requirement for an additional studio.

(b) Engineers

On the Engineering side, urgent action is required. We are fortunate in having an excellent Engineer, Radiophonic Workshop and he is assisted by one engineer on attachment who is of an equally high standard. The Radiophonic Engineering team is unique in that it is responsible for all installation, development, modification and maintenance at the Radiophonic Workshop. It is, quite frankly, overwhelmed with work. In 1977 a consultancy study of the engineering staffing recommended that $3\frac{1}{2}$ engineers were required at that time. This recommendation was never implemented and we find ourselves with an extra studio, more advanced technology and still less than the recommended staffing. The result of all this had been the creation of a backlog of development items which are delayed through lack of manpower. The provision of an additional assistant engineer would solve this problem.

(c) Secretarial Support

The Secretary Radiophonic Workshop works for the Head of Department, the Organiser, the six Producers, the Engineer. She is telephonist, typist receptionist and production secretary when necessary so it is no accident that we have been operating with a supernumerary assistant for the past four years, often costing, from an outside agency, more than we pay the secretary. It would be helpful if this situation could be regularized.

Administration

The Radiophonic Workshop was originally part of Programme Operations Radio, its staff mostly being recruited from that department and most of its work being done for Radio. In 1979 the reorganisation of Programme Operations led to separation from that department and we are now responsible to General Manager Planning and Resources Radio though working 75% for the Television Service. This system works perfectly well and indeed it would be hard to find an administrative home in the Television Service. We are certainly not part of Television Sound any more than we are part of Graphics so in the absence of a "Shared Service" directorate we are perfectly happy to remain where we are. However the link with Radio means that salaries relate to those of Radio Producers and our relativity to Designers, Sound Supervisors and Graphics has been adversely affected over the last few years. It must surely be possible for our Television responsibilities to be taken into account when discussing grading even though we are administered by Radio.

4. ACCOMMODATION

Maida Vale has certain advantages not the least of which is its physical situation half way between TC and BH. Unfortunately, it was not designed as a studio centre. The rooms are cramped and oddly shaped with neither a natural nor a conditioned air supply. By the internal reallocation of certain areas we have managed to create three studios which are above the minimum size - i.e. 20 x 13 - but are left with three others which are really too small for comfortable use. In addition, we need a room for the engineers' office and space for our library which is at the moment spread around the building with tapes in a basement corridor and the paperwork on the ground floor in someone else's area. We also are likely to need some room for expansion. The building of Studio Seven at Maida Vale has created many problems but as this nears completion I hope a comprehensive plan will be devised for the building, reallocating the accommodation and reconciling the demands of Film Unit, Programme Operations, The Radio Orchestra, The Symphony Orchestra, Central Services and ourselves. If we can get enough space at Maida Vale then we must be prepared to provide proper air conditioning for the working areas and have a certain amount of building work done over the next five years. This will probably cost about £300,000. However, if we are unable to get a satisfactory allocation of space then thought must be given to re-housing the Radiophonic Workshop in another building, this would cost in the region of £1,000,000.