

Harbeth, as sponsor members of the Institute of Broadcast Sound, introduce the Monitor 40 to the IBS AGM at CTS Studios, Wembley, London. Reprinted from *Line-up* Oct/Nov 1998

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Meeting at CTS Studios



Alan Shaw holding the 'active' part of the Monitor 40, not seen at the meeting, but now in production.

Harbeth's MD and designer, Alan Shaw, set the scene by explaining the origins of the company name, Harbeth, derived from the names of Dudley Harwood and his wife Elizabeth. Harwood made his mark at the BBC as Research Department's loudspeaker guru, and is best remembered as the father of the LS3/5a, only recently discontinued after a quarter-century run.

It's hard to believe in the current climate of cut-back's that the BBC would be prepared to invest time and money in pursuit of better loudspeakers, and it's a tribute to Shorter, Harwood, Gundry and Hughes – to name only a few – that these engineers revolutionised what we expect from a monitor speaker, and in so doing established British loudspeakers as the best in the world.

Alan explained how he came to take over Harbeth in the mid 1980's, turning (quite literally) a schoolboy's ambition into a business. It all started with him being fortunate enough to become a Saturday assistant (tea boy) at BBC Radio Brighton – when in his mid teens! – and that led to the question 'just what is a monitor loudspeaker?' and the answer 'go and listen to the presenter then come back to the control room and compare the reproduced sound with what you heard. What differences can you hear, if any?'

Set up in the Studio at CTS were three generations of BBC Monitor speakers from Alan's private collection: an LS3/6, featuring a heavily doped 8 inch bextrene cone and HF1300 tweeter and familiar in its trapezoidal cabinet to members who used them in TV sound, the LS5/5 three-way system being an LS3/6 with a 12 inch woofer and the current (since about 1980) LS5/8 monitor. Harbeth also demonstrated their

Harbeth's ALAN SHAW AIBS presented a new generation of BBC Monitor speakers

Monitor 40, this being their replacement/upgrade for the LS5/8, a three way design with the same configuration as the LS5/5: 12 inch plus 8 inch plus 1 inch drive units spanning the audio band.

A speech test CD was used as the test source, a private recording that Alan had made (outside) with the 4038 ribbon mic (also designed by Harwood) which he described as 'a little lacking in top, but completely natural in the mid range', and the speech was played on each of the four speakers in turn.

It was quickly apparent that the earlier BBC models – LS3/6 and LS5/5, despite their age were reasonably, but not completely, neutral and of similar balance and that the current LS5/8 was quite different. The Monitor 40, shared the same 'classic' BBC balance as the 3/6 and 5/5 but with no detectable colouration. The Monitor 40, therefore, came closest out of the group to reproducing Alan's voice. The LS5/8 was then examined, and it was shown that this large two-way system pushed a 12 inch polypropylene unit way out to 3kHz, handing over to a large-diaphragm tweeter. The explanation for the design was that, at the time, achieving a very high SPL was top priority, and other considerations, such as frequency response, dispersion, colouration, may have had a lower priority.

Turning to the speaker cone in the Monitor 40, Alan explained that the Monitor 40 benefits from £140,000 of Government funded research into cone materials, since it is the mechanical properties of the cone that determine the basic qualities of the loudspeaker. Polypropylene, as used by virtually all speaker designers, was not even considered as good enough for the M40 (even though Harwood was the original patentee of polypropylene) as it has a characteristic sonic fingerprint: a dull, soft sound, whereby the 'air' around speech and music is completely missing.

The evening ended with many questions about speaker design, the philosophy behind Harbeth's approach, changing listening tastes, and the dangers of following trends. Alan concluded by encouraging members to make their own speech test tapes, since 'if speech sounds right, music will usually fall into place naturally'.

The IBS thanks Alan for his presentation, and CTS Studios for the use of their premises.

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