

# BBC CAN LAUGH AT BOMBERS

## Comprehensive Plans For "Carrying On" In An Emergency

**L**ONG before the war broke out plans had been made by the BBC for "carrying on" in spite of hostile bombers. Of some of those plans the public have been made aware. Others are secrets. But the BBC is by no means as vulnerable as people may suppose. In a recent article in the "Lancashire Daily Post," Alan Hunter, a widely recognised radio authority, explained in how many ways Broadcasting House is safer than almost any other building in Britain.

The peculiar construction of Broadcasting House, in Portland Place, London, which was dedicated by acoustic requirements, fortuitously turns out to make the building almost impregnable against air attack. The lower part of the building is, in fact, almost bomb-proof.

For one thing, the central studio tower, rising from the basement to the roof, is actually a separate brick building surrounded by a very thick concrete wall dividing it from the administrative offices.

The studios are grouped in such a way that they are separated by whole floors of rooms, such as the music library and various stores.

By filling in these intervening service floors with sandbags, as was proposed during the September crisis, the basement could be made safe against even a direct hit.

### Stand-by Control Room

But the first thing that would be hit by a bomb falling on Broadcasting House would be the Control Room on the eighth floor just under the roof. It would be a catastrophe indeed if this intricate, though orderly tangle of wires and winking lights were disorganised.

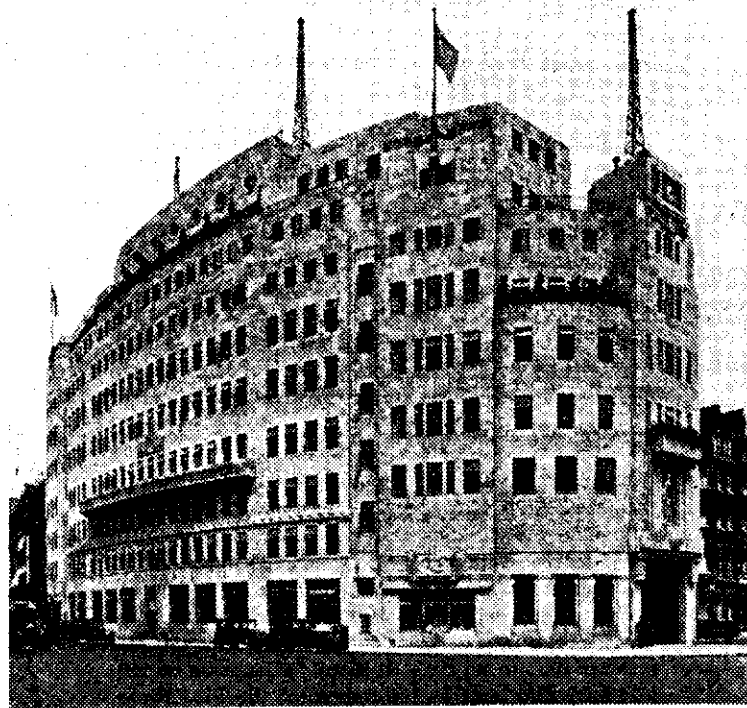
But again there is no need to worry because, foreseeing the danger, the BBC engineers have arranged a stand-by control system in the basement, to which they can switch over with very little delay and without disorganising the incoming and outgoing contacts with the rest of the country.

All the doors leading from the ground floor to the basement have, since September, 1938,

been fitted so as to be hermetically sealed against gas. The basement, 60ft. below ground level, with its air-conditioning and power supplies, not forgetting a 600ft. deep artesian well for water, is now one of the finest A.R.P. shelters in London.

### Not Easy Targets

Connection between Broadcasting House and the BBC transmitters all over the British Isles is by buried cable, relatively immune from destruction. But if by chance this vital life-line were broken, the transmitters could still carry on independently of London. Each has its own emergency studio on the spot.



A VIEW of Broadcasting House, from Portland Place, London

A transmitting station is by no means an easy target from the air. And fortunately all the main BBC stations are situated in relatively safe open country, well away from the dense centres of population.

Every station can keep going for days on end without external assistance. Each generates its own electric power from giant Diesel engines, and there is always an enormous reserve of oil to fire these.

### If The Cables Were Cut

But plans have been discussed and would no doubt be put into operation with the object of keeping Broadcasting House in

touch with the Regionals in the event of the cable connections being interrupted. One idea is to erect a small short-wave transmitter on the roof of Broadcasting House, so that messages could be sent direct to Droitwich, where, on the usual long waves, they would be relayed all over Britain.

Another idea is to transmit these short-wave signals from Broadcasting House to the BBC Daventry centre, where eight high-power Empire stations using 31 different aerial arrays could, in an emergency, supply the link between London and every station in the BBC network.

To ensure adequate range for the Broadcasting House signals the aerial would be suspended from a kite or balloon from the already high roof of the building. There is obviously little need to doubt that the BBC would be able to maintain its broadcasting service, despite complete dislocation of the Post Office telephone service, should that ever arise.

### The Weakest Link

But the chain is proverbially only as strong as its weakest link — and the weak link of the broadcasting chain is undoubtedly the receiver. More than half the country is now using the electric light supply to provide power for its radio reception. Any serious dislocation to the electric power station would render thousands of radio receivers useless.

### "Come-back" of the Battery Set

Many firms in the radio trade, appreciating this point, have redoubled their efforts to improve the standard of the battery set performance.

The "come-back" of the little portable is not accidental — and it is significant that A.R.P. authorities are relying almost entirely on this type of radio outfit.

One radio firm is conducting intensive research into the possibilities of a "cold" amplifying valve—a valve that would function without the need for more than a very small battery.

Just as the last war greatly accelerated the evolution of radio telegraphy to broadcasting, so during the present war there is no doubt that inventive genius will produce some startling developments in radio communication.