Television Outside-Broadcast Vehicles

THERE IS A LOT MORE in the design of a television outside broad-casting unit than putting a collection of people and equipment into a vehicle. To begin with, the equipment must be of a type which is suitable for the arduous service involved in outside broadcasting. It must be accessible, reliable and convenient to use under these working conditions. It is important that the personnel should be suitably accommodated, so that they can do their best work under the inevitable stress of programming. The vehicle itself must be designed to take the static and live loading, and access to equipment must be good. There must be plenty of accommodation for all the small auxiliary items.

In addition to these factors, precautions must be taken to avoid the overheating of equipment and to provide comfortable working conditions for the crew. Production techniques vary considerably in different parts of the world and, whereas in America it is quite common to operate a remote broadcast with only the technical crew, in some parts of Europe vehicles are provided in duplicate, one for the production staff, and the second for the technicians.

The Marconi Company is probably more experienced than any in the world in designing and manufacturing outside broadcast units, and equipments have been despatched to very many different climates and operating companies. Within the United Kingdom both commercial and state broadcasting systems exist and each have had quite distinct production problems. The majority of outside-broadcast units supplied and operating in the United Kingdom have come from Marconi's. We were the first people to introduce air-conditioning into vehicles of this type and pioneered the use of all-metal light-alloy bodies, which have considerably reduced the dead-weight and improved the stability of the vehicles under varying climatic conditions. Marconi designs have been copied frequently and one prominent American manufacturer is producing vehicles for the European market modelled on Marconi lines.

Our designs have been based on the importance of keeping the amount of equipment and auxiliaries to a minimum so that vehicles do not become unnecessarily heavy. Luxuriously equipped vehicles can have very little operational use if it becomes impossible to bring such a large and heavy vehicle to the site of operations. Also where parking restrictions prevent the vehicle remaining near the site, the equipment must be rapidly de-rigged and erected in some improvised control room.

Extensive practical experience has enabled the Marconi Company to achieve the optimum in balancing size and facilities.



The Canadian Broadcasting Corporation's mobile videotape unit, including a Marconi Mark IV image-orthicon camera. Seven of these units were built by the Canadian Marconi Company for CBC. Interior view of one of a unique set of television outside broadcasting and recording vehicles built specially by Marconi's to meet the requirements of Intertel NV.

Photo by courtesy of Intertel NV. 9024