

In our view, the only lasting solution to these interference problems is to require that before a device capable of causing interference leaves the manufacturer, it be properly designed so as to limit its radiation to acceptable values. Under the present scheme of the Communications Act, compliance by manufacturers with our rules and regulations is on a purely voluntary basis. Of course, many manufacturers have voluntarily complied with our radiation requirements and are to be commended for their cooperation. But at the same time, many others have refused to do so, citing in justification of such refusal our lack of legal authority to control the manufacture of such devices under the present provisions of the Communications Act. Quite often, this refusal stems from the fact that compliance would entail additional manufacturing costs.

Nevertheless, the effects of this refusal to comply with our radiation requirements are clear. In terms of fair competition between manufacturers, it penalizes the responsible manufacturer who wishes to hold down excessive radiation by placing him at a competitive disadvantage vis-a-vis the marginal manufacturer who prefers to ignore our rules. In terms of the consumer, who generally is unaware that an inadequately suppressed device will cause interference and who purchases the device in good faith, it forces on him the cost of bringing his equipment into compliance. Obviously, it is unfair that the buying public should bear the brunt and embarrassment of our enforcement procedure, but under the present terms of the Act, the Commission has no alternative. Our proposed legislation has been drafted with a view to these problems.

The proposal consists of three subsections. Basically, subsection 302(a) describes the radiating devices which would be subject to our authority as those "... which in their operation are capable of emitting radio frequency energy by radiation, conduction or other means in sufficient degree to produce harmful interference to radio communications." In the case of such devices, the Commission would have authority to prescribe rules applicable to the "manufacture, import, sale, offer for sale, shipment or use of such devices" and would prescribe the permissible degree of emission of radio frequency energy of such devices. Subsection 302(b) prohibits the use, import, shipment, manufacture, sale or offering for sale of devices which fail to comply with radiation limits duly promulgated by the Commission under the authority of Section 302. Subsection 302(c) sets out four exceptions. The proposed legislation would not apply to (a) carriers transporting interfering devices without trading in them, (b) the manufacture of devices which are intended solely for export, (c) the manufacture, assembly, or installation of devices for its own use by a public utility engaged in providing electric service, or (d) devices which are used by the United States Government or any agency thereof.

Several observations regarding this proposal are in order. Perhaps most important of these is that while this legislation may at first seem novel, the United States is perhaps the only major industrial nation in the world which does not approach the interference problem by prescribing permissible radiation limits at the manufacturing level. Over the years there has been a progressive abandonment by other countries of the "user regulation" approach still followed under the Communications Act, in favor of controlling interference by requiring that radiation be held to acceptable limits *before* equipment is put in the hands of consumers.

This latter approach, which is reflected in our proposed legislation, has much to recommend it. It constitutes a direct approach to interference control, thus meeting the problem at its source by the application of preventive techniques. Further, it recognizes that from every viewpoint, the ideal time to prevent excessive radiation is before radiating equipment is sold. By so doing, it will bring substantial benefits to both the Government and the public.

From the standpoint of the Commission, rulemaking authority to prescribe permissible radiation limits at the time of manufacture will go far toward reducing the enforcement problems the Commission presently faces. It will avoid the piecemeal, "after-the-fact" approach the Commission must now follow in order to apprehend the users of equipment which causes harmful interference. Of course, this enforcement problem varies with the type of equipment involved. Where relatively few units of a large piece of equipment, such as multi-kilowatt industrial heaters, have been sold, tracing the owners of this equipment is not too difficult. But where a large number of radiation devices, such as garage door openers, toys, or improperly designed radio or television receivers, have been placed in the hands of the public, the enforcement problem becomes exceedingly difficult, if not indeed impossible. In the fiscal year 1966, for example, in excess of 150,000 man hours were devoted to tracing and eliminating interference of all types. This figure does not take into account the large number of interference problems