

that a contract is being awarded to a named firm or that "competition" is limited to named companies; all others are told bluntly to stay away.

Consequently, the Department of Defense and the contracting services are not now in a position to say that smaller firms are lacking in the kinds of scientific knowledge required to do work on EDTR projects. They simply do not know. They deal only with the established concerns and exclude from consideration anyone else. While everyone agrees that we want to use the best resources available in the performance of complex research, there is serious doubt as to whether we are actually doing so; the large firms, though generally capable and possessed of great talents, have no monopoly on technical expertise. Yet the Defense Department presently acts as if they did.

It is my considered judgment, on the basis of the inquiries I have made, that the Department of Defense could do a much better job in broadening the base of R. & D. awards if it revised its procedures to give all comers an opportunity to demonstrate their competence in respect to given research undertakings.

The aftermath of R. & D. contract awards

As was suggested earlier, a contract for the performance of research and development is only the beginning of the story. If the effort has its intended purpose and results in a usable item of hardware, production opportunities lie immediately ahead. And in most instances the large company anticipates that it will earn its largest returns at this stage of the process. When the contract for production is let, it is common for the organization that did the pertinent research to be awarded the new production contract. Defense Department officials admit frankly that the developer is in a preferred position, its familiarity with the product deemed to make it the most efficient manufacturer. And frequently this will be the case.

Yet once the product has been developed and detailed plans and specifications prepared and submitted (as the usual R. & D. contract requires) it is rare that other qualified firms cannot produce the item. But not infrequently they are simply denied the opportunity to bid. This kind of situation was reviewed recently by the Subcommittee for Special Investigations of the House Committee on Armed Services in respect to the Navy Department procurement of a radio known as the AN/PRC-41. There the Navy planned to grant a sole source, a \$4.4 million contract for production to the developer; another company sought to bid, but until a Member of Congress intervened strenuously in its behalf it was denied the opportunity; when it did attempt to bid it was handicapped because the developer had not submitted the detailed specifications and drawings required for manufacture; and ultimately the Navy did make the award to the company it had first favored. This is a typical example; thousands of others like it could be found. Once a company does the relevant R. & D. work, it will normally be awarded the production contract—a practice that thus tends to entrench further the initial pattern of concentration. (For the fiscal year 1961 the largest six recipients of EDTR awards from the Defense Department were also at the top of the ladder for non-EDTR procurement.)

When one considers also that many of the products developed under contract with the Government (e.g., chemicals, drugs, a variety of products and new processes) have immediate or long-term civilian applications, the significance of patent policy becomes readily apparent. This is a complex question and raises a host of other issues and I will not attempt to treat them more than superficially on this occasion. It is widely known that the Department of Defense does not generally seek a patent on products developed under its research contracts; it permits the developer to secure the patent even where Government funds may have represented all or nearly all of the costs incurred (and even where, as is usually the case, the project was financed on a cost-plus basis). The Defense Department simply takes back a nonexclusive, royalty-free license.

In following this course of action DOD not only departs from the policies of other Government agencies (like NASA and AEC), which take title to the patent, but also contradicts the procedure employed by private companies in dealing with their own employees and subcontractors. When they supply funds or facilities for research they require the subordinate to assign title to whatever patents that are acquired in the process. By following a different course the Defense Department (and NASA, if proposed legislation is adopted) seems likely to insulate still further the position of the big concerns with which it does most of its research contracting. And, as has been indicated, many defense-financed projects have civilian uses, so that the patents acquired may give the firm a dominant position in the civilian market as well as in military and Government sales.