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## The Packard Commission

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# National labs sold to the highest bidder

by Paul Gallagher

David Packard, the "pro-defense industrialist" named to head the latest commission on the "reform" of the defense industry, has headed two previous such bodies, the President's Commission on Industrial Competitiveness, and the President's Commission on the Future of the National Laboratories. Packard is a Trilateral Commission member, board member of the "Aquarian Age" think-tank, Stanford Research Institute, and a close associate and fellow Bohemian Grove member with George Shultz. The report of his earlier Commission on the National Laboratories, given to President Reagan in 1983 with the strong backing of Science Advisor Dr. George Keyworth, should be a warning.

The major national laboratories and the aerospace-defense industry have grown together since the Manhattan Project, with the national labs and NASA pacing and sustaining industrial R&D development. Packard is leading a drive to "privatize" both, forcing them to "diversify into market-relevant hi-tech," from the nuclear science- and aerodynamics-centered research which sustained U.S. scientific and military power.

The Packard Commission's recommended policy changes for the national labs have been partly implemented, over resistance from the leadership of the most important labs. Packard gave his report the cover of "drop this solar power and alternate energy stuff, and concentrate on real technology"; that served to gain acceptance for the recommendations within the administration. "Magic of the marketplace" ideology provided the remainder of White House vulnerability to his proposals.

Until recently, the consortia of 100 major national and military laboratories, and the services, agencies, or universities which operated them, took the clear position that the fruits of publicly funded scientific research should be available to any qualified firm. For 40 years, national lab patents were government property, licensed to all interested U.S. companies for a small fee. NASA, which in hundreds of cases directly ordered certain technologies to be developed, took the same open approach to patenting. From this came the nuclear reactor, the supersonic aircraft, the superconducting magnet, generation after generation of computers, and so forth.

But Packard, after 40 years, suddenly discovered that

"nonexclusive licenses discourage commercialization," that firms would be reluctant to invest without exclusive licenses, which would make the labs' work "relevant" to the high-tech private market—the catchword of all Packard recommendations. Patent policy was changed, firms began to receive exclusive titles to inventions developed by the national labs. Laboratory personnel policies were changed, ending a long-term policy of strict limits on lab scientists selling themselves to private firms while remaining in their laboratories—with the overhead still financed by the federal government.

One result, as a Sandia labs director pointed out recently, is that classified work, often on the most critical technological breakthroughs, will become less attractive to lab scientists because it will not lead to commercial and consulting contracts which are offered on "things industry wants." Another is that breakthroughs crucial to human health and welfare worldwide can become the exclusive property of a single small-company supplier.

For example, flow cytometry for rapidly sorting and identifying cells and molecules, is a frontier technology being developed at Los Alamos. One project involved the development of a technique for rapid diagnosis of viruses and bacteria. In an unprecedented move, Los Alamos sold the technology to Chicago venture-capitalist David Silver, who raised the money by forming an R&D limited partnership with Prudential-Bache Securities. The partnership acquired full ownership of the technology and then granted an exclusive license to Mesa Diagnostics, a new company wholly owned by Silver's venture-capital firm, Santa Fe Private Equity Fund.

After raising \$8.5 million, Silver paid Los Alamos \$4 million to build a commercial prototype, and hired away Dr. Charles Gregg, one of the developers of the technology. Gregg still works in the same laboratory, but as a fully paid private employee of Mesa Diagnostics.

The net result of this juggling, which required multiple patent waivers and 11 different contracts, is that not only does a speculative startup operation, liable to bankruptcy, own an important technology: It is changing the actual structure of a National Laboratory as well as its research emphasis. Los Alamos is building facilities for commercial-prototype instrument development, a capital investment that cannot help but further shift priorities toward the commercially feasible rather than the scientifically important.

Packard's policy thus makes the greatest scientific and technological concentrations of manpower and infrastructure ever developed in the West, subservient to the quick-buck standards of judgment of the "hi-tech" marketplace. Ironically, this marketplace itself would not exist without the national "crash programs" of the wartime and postwar period: The Manhattan Project invented the computer; aerospace and rocket development programs centered upon NASA were the driving force in its development from the 1950s. Today's most advanced computers, are still being built by or for NASA.