One ludicrous argument is that research is retarded and science is frustrated because small concerns do not engage in scientific research for the reasons that the costs of research and risk of its being unsuccessful act as deterrents. Aside from the fact that many small concerns do engage in scientific research, the alternative implications of this argument are certainly esoteric. Does the author mean to imply that the existence of many small concerns which render essential economic services cannot be justified unless, in addition to a primary economic usefulness, these concerns also engage in research? Is there a positive, inescapable duty on the part of all businesses to engage in scientific research? Does he mean to imply that small businesses should be eliminated in favor of large businesses simply because a large business is more capable financially of conducting research?

While Professor Kapp copiously documents his books, this documentation reveals a fundamental weakness of his approach. For the most part, the authorities he cites are government publications, the writings of theoretical economists and studies by various academicians. They are essentially good authorities, but what is significant is the vast amount of relevant literature which Professor Kapp has ignored completely. There is no actual consideration of such "business literature" as that published by the American Management Association, the Committee for Economic Development, the National Industrial Conference Board, or the numerous technical and trade journals. This area of literature cannot be ignored by one who undertakes a study of the social costs of private enterprise. Professor Kapp should have taken time to learn what private enterprise is actually doing about some of the questions he discusses.

John R. Stockham*

SECURITY, LOYALTY AND SCIENCE. By Walter Gellhorn. Ithaca: Cornell University Press. 1950. Pp. viii, 300. \$3.00.

This book is a functional appraisal of our methods and systems to insure the security of data and the loyalty of our scientific and government personnel. No one disputes the need for adequate safeguards against the risk that the enemy may derive benefit from our scientific progress. But the cost of our security and loyalty programs is not equally appreciated and recognized.

Walter Gellhorn has brought his remarkable experience as a critical investigator in the field of administrative techniques and procedures to the study of the efficiency and of the compatibility of our security and loyalty systems with the democratic institutions and principles they are intended to preserve. His scholarly research is presented in a clear and simplified style free from that legal jargon which would have restricted the broad appeal of the book to the larger audience it is meant to reach. The problems involved transcend the interests of the legal fraternity, not only because they strike at the most vulnerable areas of our system of govern-

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ment, but primarily because widespread understanding and support are needed for readjustments and reforms of our security and loyalty measures.

Recent convictions of spies have crystallized public opinion behind the need for secrecy in our atomic establishments. Yet all scientists agree that secrecy hinders progress not only for our adversaries, but for ourselves. An atmosphere of freedom is traditionally regarded as highly important, if not necessary, for the natural development of scientific research. Classification leads to compartmentalization and fragmentation of knowledge. But discoveries are more often occasioned by untrammelled association and free contacts among men of science than by isolated individual research. As Chancellor Compton remarked: "unforeseen develop ments are the result of every great discovery." The author presents an impressive balance sheet of our secrecy program and points out the ever increasing difficulty in recruiting new competent personnel, both because of the "fear of smear" and because of the ban on publication—the traditional means of scientific personal and collective advancement. It is also known that secrecy regulations have hindered the establishment of those schools of nucleonics which alone can enable the large scale training of new generations of nuclear scientists.

Again, at least from a long-range view, secrets do not keep, and the true issue is to remain ahead of our adversaries. Thus, secrecy far from being a foolproof panacea is an essential but costly device to be applied and enforced with the utmost caution after a careful balance is determined between two conflicting needs. Gellhorn suggests that "secrecy ought not to be readily attached to scientific or technological matters merely because in some aspects they have military significance. It should be attached unhesitantly if their sole significance is a military one."

The author warns that the vitality of German laboratories was sapped by replacing merit with Nazi orthodoxy. It is a striking contrast that exiles from totalitarian Europe made most essential contributions in the crucial days of atomic development in this country. Then the scientists met great difficulty in persuading the military of the warlike potentialities of their atomic discoveries and they operated in a regime of self-imposed censorship.

Orthodoxy leads toward sterility. Overemphasis on loyalty programs brings about conformity in an uncritical and unquestioning acceptance of prevailing notions and practices, to the cost of evolution, and of natural progress. These words of Gellhorn deserve thoughtful attention:

One of the virtues of democracy is its maintenance of a climate in which normally timid persons are allowed to entertain opinions without having to demonstrate heroic qualities. The central tenet of the democratic philosophy is that governmental policy should be shaped by the discussion of men who are free—free to inquire, to confer, to experiment, to debate, and to complain. The loyalty program drifts in the direction of curtailing that freedom.

Of particular interest to lawyers is Gellhorn's discussion of the procedures established to insure secrecy of confidential material and loyalty of personnel. Present regulations are analyzed with a remarkable wealth

of details in specific instances of their actual enforcement. The requirements of due process are tested not only against the constitutional guarantees but also in the light of higher standards of fairness which the government could well adopt even toward applicants for employment, Realistically considered, a denial of "clearance" is often as fatal to a young scientist as a dismissal for loyalty reasons can be for a long-time employee. The author recommends that the present procedure whereby the Atomic Energy Commission denies any hearing to applicants for clearance, should be revised to afford them some opportunity to be heard. Other procedural improvements suggested concern the disclosure to the employee affected of more detailed charges and, whenever possible, of the source of the evidence against him.

One of the main theses of the author is that security and loyalty are basically different and that:

the security program involves persons in whom we wish to have the fullest confidence because of the nature of their responsibilities.... when we withhold "security clearance" we make no finding that otherwise an undesired event will surely come to pass; we merely find that there is an undesireable possibility and we seek to avoid even the possibility, let alone the actuality. But the loyalty program is differently oriented. It deals neither with "sensitive agencies" nor with "sensitive jobs."

Gellhorn urges that disloyalty should be proved by conduct rather than through opinions or "sympathetic associations," and that "security clearance" be required only as to "sensitive" jobs to be designated by the head of the agency. "Effectively, if unintentionally, the focus upon opinion as a measure of loyalty tend to discourage the holding of any opinion at all."

This book, which is part of the Cornell Research in Civil Liberties project directed by Professor Robert Cushman, is a credit to the project and to the Rockefeller Foundation which provided the necessary grant. It is as well informed as it is courageously provocative. Walter Gellhorn has made an important contribution to crucial issues of these critical times, which perhaps do not admit of any clear cut and all-embracing solution, but which require the watchful attention of our best lawyers and scientists, lest protective devices become more costly than the risks and dangers they are intended to ward off.

Paul B. Rava*

CASES AND MATERIALS ON WORLD LAW. By Louis B. Sohn. Cambridge, Mass.: The Foundation Press, Inc. 1950. Pp. xxii, 1363. \$8.00.

International legal study has received much prominent consideration since the end of World War II. Many law schools are placing "International Law" on their curriculum for the first time and others are making it a required course in lieu of the more usual "option." Not only in law schools is the growth of international study evident but many universities now offer a wide range of courses in the field of international affairs and relations. The increased interest is due, in no small measure, to the

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