

QUESTIONS SUBMITTED TO MR. JOSEPH M. ENGLISH BY THE SUB-COMMITTEE ON SCIENCE, RESEARCH AND DEVELOPMENT

*1. It has been proposed that the directors of Federal laboratories have funds available to pursue research relevant to national problems (such as crime) up to the point where proposals could then be submitted to the agency having the primary mission responsibility. What do you see as the advantages and disadvantages of such a concept?*

*(a) How would Federal laboratory personnel be aware of the specific needs of law enforcement agencies?*

1. The providing of uncommitted funds which would be available to directors of Federal laboratories to pursue research relevant to National problems, such as crime, up to the point where proposals could be submitted to the agency having primary responsibility would appear to offer a number of advantages. It should speed the transfer to the forensic sciences of new knowledge and technology from the many disciplines represented in these laboratories. Disadvantages are not apparent at this point in time. However, problems are predictable. These for the most part would be problems of management.

(a) Federal laboratory personnel could be made aware of the specific needs of the Forensic Sciences in several ways. One possible way would be to institute a Joint Congressional Science and Technology Utilization group. Such a group should keep Federal laboratory personnel aware of the needs of law enforcement agencies and in turn should keep law enforcement agencies acquainted with new developments in the sciences. An example of a Federal agency which has already demonstrated a concern that their research product serve the broader National needs is the Technology Utilization Division of NASA. NASA utilization teams have been organized for specific areas of possible application of NASA-developed technology. To insure optimum screening of the total Government research community, a liaison team designed for this purpose would appear to be essential. The team, I believe, should be based in the Legislative branch. The necessary funding of specific undertakings, I believe, should be managed by this group with the aid of an advisory panel drawn from among the outstanding people in the Forensic Sciences as well as from among those in pertinent scientific disciplines and the Law Enforcement profession. To attempt to operate without such a utilization team presents serious problems. First, at this point in time, there does not appear to be a realistic base for budgeting the amounts which should be awarded to each of the many participating agencies. Second, making this the concern of all research facilities means that we make it the prime concern of none. On the other hand, the existence of funds which a Federal research agency might court and the leverage provided by the utilization group's Congressional base would tend to form a powerful combination which, in my opinion, would bring results far more quickly and efficiently in dealing with agencies of the Executive Branch than another Executive agency created for this purpose is likely to be able to accomplish.

The function of such a Congressional group would be distinct from that of the Law Enforcement Assistance Administration (LEAA) and the Institute of Criminal Justice (ICJ), whose responsibilities are far broader, involve distribution of information and support to police throughout the Nation. The LEAA and the ICJ would be keenly interested consumers of the output resulting from the Congressional group's activities within the Government research community.

*2. In your testimony you indicate that certain work in government laboratories could contribute to the forensic sciences but this would require that the laboratory directors have funds in significant amounts at their disposal to pursue this work. Would you cite specific examples of the work you are referring to and how much money you estimate would be required to carry the work forward?*

2. Examples of work in Government research laboratories which could contribute to the Forensic Sciences include the following areas of scientific investigation which have been supported by the Atomic Energy Commission, the Department of Defense, NASA and others.

Work with radio isotopes and nuclear generators for use in chemical analysis, such as: alphas excitation X-ray fluorescence systems, portable neutron generators and californium as a source of thermal neutrons which may bring neutron activation analysis within reach of more police department crime laboratories.

Advanced detector systems employing advanced solid state detectors and light weight, highly reliable, low power multi-channel analyzers, as well as the miniaturized ion sputtering source mass spectrograph as additional tools for analysis of physical, including small particle evidence.