34. Highway separators and crash rails of a resilient material or some other

substance to replace present crash rails and fencing.

35. Development of TV "instant" reply of crime and traffic scenes so patrol officers, evidence technicians can take pictures used by investigators and laboratory personnel. (See No. 31.)

36. Back-pack propulsion units for patrol service.

37. Better radar which can calculate the speed of vehicles driving toward police vehicle or crossing in front of a moving police vehicle.

38. Improve senses through physical or chemical processes.

a. Vision: better night vision by using infra-red goggles or lenses or taking

chemical such as bilberries.

b. Hearing: improved and selective hearing discerning various noises such as sonar detectors, identification of certain noises which activate warning

c. Smell: improve ability to smell various conditions, burning wood, metal cutting torch, the presence of a person in a building being searched, or even

the identity of individuals. (See No. 33.)

39. Vehicle incapacitator: ability to direct a beam at a specific vehicle, causing

the engine to stop running.

40. Ability to scan city and identify specific vehicles, their location, ownership, etc. Keep this data for short duration so when a crime is reported, the time and

place can be checked to see what vehicles were in the area.

41. A colorless "tagging" material which leaves a subliminal "odor" trail and which may be sprayed upon a fleeing suspect or vehicle. This should remain for a period of two or three days and should permit subliminal odor tracing by instrumentation. By this manner officers could avoid using deadly force in attempting to apprehend fleeing subjects.

42. The development of a cartridge similar to a bullet which may be fired by the officer at a subject. This cartridge would have the effect of causing instant paralysis of the subject. This paralysis should last but a few minutes. (Related

43. Development of a world-wide data system comparable to N.C.I.C., using such advanced techniques as satellite communications and optional scanning of fingerprints and photographs in support of immigration processing and interna-

tional police operations.

6. Based upon your experience with running a clearing house on law enforcement research, how useful is this concept as you are presently performing it? What advantages and disadvantages do you see in tying such a function to a Federal agency that already is performing a clearing house function for scientific

and technical information?

6. We are now witnessing the most wide-spread "information explosion" in our nation's history. The law enforcement profession is feeling the pains of this recent proliferation of research information, and we have found that it is most beneficial to have a central depository and place of dissemination for reference material relative to police science, criminalistics, law enforcement, and police administration. The advantage of this type of specialized clearinghouse is obvious. The researcher only has to inquire of one source for information regarding law enforcement. I see no advantage in tying this information source into the Federal Clearinghouse for Scientific and Technical Information. It does not seem to me that the Clearinghouse can be as responsive to the needs of law enforcement as a specialized law enforcement center.

7. As we understand the functions of the FBI's laboratory, it is primarily a service laboratory devoted to the analysis of evidence and to whatever research and development is needed for its services. To what extent would it be desirable for this laboratory to seek a leadership position in the forensic and police

7. As I have stated, the FBI laboratory has contributed tremendously to law enforcement and literally thousands upon thousands of criminal cases have been brought to successful culmination because of the existence of this laboratory. At the same time, many individuals have been exonerated of wrong-doings through the application of science by the FBI laboratory. I think this service should be expanded.

8. Roughly speaking, what do you estimate it would cost per year to reverse the increasing crime rate, or at least bring it into harmony with the population rate? In what broad fields would you apportion these funds (training, operations,

research, etc.) and why?