3. Research should be undertaken to examine the influence of a person's social and political role upon his autonomic responses.

4. Attention should be paid to the use of corneal reflections to measure the

direction in which the eye is looking, as pointed out by R. C. Davis in 1958.

5. Electroencephalograms may possibly be used if sufficient research is done to understand the meaning of the phase changes.

6. Improved techniques for automatic data recording and processing are im-

portant in the evaluation of multiple recordings.

7. Equipment should be minaturized in order to make it more portable and reliable.

8. Work should be conducted on "bugs" in a lie detection system, such as false

positives and false negatives.

- 9. The cost-effectiveness of nonphysical and physical inspection concepts should be compared with the knowledge that they may be complementary rather than redundant.
- 10. Evaluation of the social acceptability of lie detection techniques is most desirable, both in our own, as well as in foreign cultures. When dealing with people from other cultures, other variables are introduced beside the subject and interrogator. These are the interpreter, the semantic differential associated with words used in the interview and the unknown social sensitivity of the individual to the test procedure. All of this must be studied if we wish to use lie detection in other cultures.

11. While it would be desirable to develop a technique which automatically gives evidence of a lie, it is conceivable that pattern reading would also be

acceptable.

12. It was considered desirable to study collective or group lying.

13. Reliability checks are desirable for comparing the performance of several

interrogators on the same subject or test material.

14. Further work must be done to determine the actual existence of pathological liars, and to evaluate the extent to which test records can be contaminated by such people.

15. What means, such as drugs, hypnosis, special equipment or special psychological procedures can be used deliberately to introduce spurious effects into test

records.

16. A study should be made, perhaps using public opinion techniques to examine how people in the street would react to questions concerning their possible knowledge of secret work on arms development or on weapons testing. This is in recognition of the fact that the technical questions involved are only one phase of a major sociological and political problems.

17. Further work is required to study by physiological or other means whether

it is possible to detect an intention to act in the future.

There was some discussion about the possibility of creating an international research group, including the United States, U.S.R.R., and other countries to ex-

plore and improve these techniques for mutual interest.

The meeting ended with the affirmation that lie detection techniques had sufficient merit to warrant their consideration as part of an inspection scheme for an arms control agreement and, possibly, for application as a truth demonstration device in political negotiations.

MEMORANDUM TO THE IDA FILE ON LIE DETECTION—MINUTES OF A MEETING, AUGUST 9, 1961

Topic:

Research to improve the objective measurement of autonomic responses for use in lie detection, July 20 and 21, 1961.

Institute for Defense Analyses, Research and Engineering Support Division, Washington, D.C.

Attendees:

Albert F. Ax.
Lewis Bohn (July 20).
Chester Darrow.
Ralph Gerard, Chairman (July 20).
John I. Lacey.
David C. Lykken.
Martin T. Orne.
Jesse Orlansky (Chairman on July 21).
Herbert Pollack.