

(c) "Leak" of classified information: An attempt was made to conduct a "leak of classified information" experiment but this proved to be impracticable to perform. Although this would have closely approximated a "real life" situation, Kubis had to substitute for it a situation wherein the subjects denied knowledgeability of selected items of classified information.

(d) Countermeasure experiment: Subjects were trained to use several techniques to make it difficult for an examiner to interpret a polygraph record. The test required the examiner to guess a number on a card selected by the subject. The prescribed techniques and instructions were:

(i) Yoga: "Keep your mind as blank as possible and answer 'No' to all questions."

(ii) Muscle tension: "When some questions are asked, tense your body or foot so that the examiner doesn't see it and in a way that will mislead him as to the number you have in mind."

(iii) Exciting imagery: "Think of something that is exciting to you, in a manner that will make it hard for the examiner to guess what number you have in mind."

Preliminary results for 20 subjects show about the following accuracy:

	Accuracy (percent)
Control (no instruction)-----	75-80
Yoga-----	75-80
Muscle tension-----	10-20
Exciting imagery-----	15-25

If a subject selected a decoy number on which he consistently tensed or used exciting imagery, he could direct the examiner to this number in 55 to 70 percent of the cases. Examiners are unable to distinguish among the known decoy and "real" numbers on the basis of the polygraph records. Though this was only a preliminary experiment, it is sufficient to show that it is possible to interfere with a polygraph. It is not clear whether an alert examiner could ascertain that the subject was trying to create a spurious response.

(5) Instrumentation and transducers

The work of Dr. David McK. Rioch at the Walter Reed Army Institute of Research, Washington, D.C., includes a continuing program for the development of new physiological sensors and transducers for research in the broad area of neuropsychiatry. And any new developments in psychiatric interview procedures, sensors, transducers or physiological recording, could be applied to improve lie detection.

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(7) Staff studies

The Department of the Army⁹ is conducting a staff study to determine and recommend policies governing U. S. Army use of the polygraph for counterintelligence and security purposes. The method of study consists of a questionnaire and interviews directed to polygraph examiners. Results are not yet available.

The Office of the Provost Marshal General is modifying the monthly reporting procedure on polygraph examinations conducted in the Army to provide more detailed, statistical information.¹⁰

The Provost Marshal General's School is conducting research into the effect of hypnosis on interrogation. A preliminary report is that a post hypnotic suggestion can lead suggestible subjects to "forget" particular incidents.

B. PROPOSED RESEARCH

The research proposed below represents areas in which polygraph examiners have expressed interest. However, at the time this report was written, no formal projects had been established to perform these studies.

⁹ Project title "U. S. Army Use of Polygraph for Counterintelligence and Security Purposes" (U), ACSI-SC, June 8, 1961. The project officer is Maj. Uldrich H. Pettine, G-3, USA Intelligence Center, Fort Holabird, Md.

¹⁰ Operations Branch, Office of the Provost Marshal General, Department of the Army. The project officer is Lt. Col. Nicholas P. Rudziak.