29 OCTOBER 1980

REMOTE PERTURBATION TECHNIQUES (U)

MANAGERIAL SUMMARY

I. (U) BACKGROUND

(S) There have been many reported accounts of phenomena variously known as telekinesis, psychokinesis, teleportation, etc. Most of these accounts are clearly derived from carefully staged tricks which are revealed whenever they are studied under controlled and well recorded conditions. There are a few, however, which describe serious research by reputable investigators. Included among these are experiments in which the subject attempts to perturb, by mental processes alone, the outcome of an otherwise random event. This kind of remote perturbation experiment is appealing in that it involves no subjective interpretation - the results may be expressed entirely in probabilistic terms. Appendix A of Reference 1 contains a summary description of these experiments. As an overall evaluation of this data base, it is unlikely that the apparent RP effect is simply an artifact of selected reporting by the laboratories involved. Even if one were to assume that there were ten unreported nonsignificant experiments for each reported significant one, the entire expanded data base would still show significant effects with odds against chance of better than 2000:1.

(S) There are, however, two characteristics of this data base which pose problems. First, the effects are rarely stable with one individual's RP effort - the quoted results being averages over a number of individuals. Secondly, the physical environment of the random event sources and associated electronics was not discussed in any detail for any of the experiments, so it is possible that some of the effects may be the result of normal and possibly subtle electronic interference. This experiment is designed to replicate the type of experiments described in the data base under more rigorously controlled conditions in order to evaluate the claims of having demonstrated the RP phenomenon.

(S) While this experiment can not prove or disprove the existence of RP phenomena, the findings discussed in the referenced appendix do strongly indicate that further research is appropriate. In view of the obvious military value of being able to disturb sensitive enemy equipment, it is to the advantage of the Army to assess the validity of RP claims.

(S) Two separate but technically identical RP experiments on random number generators were undertaken at SRI International and at the US Army Missile Command (MICOM). The director of this program is under the oversight of a committee of three senior scientists/managers at MICOM.

II. (U) PERIOD OF PERFORMANCE

(U) Work began on this program in the first quarter of FY 79. The contract for the experiment at SRI International became effective on 2 June 1979 and continued for 14 months (including a two-month extension). The in-house experiment is in the final stages of data acquisition and is expected to be complete by 31 October 1980.

III. (U) PERSONNEL INVOLVED

a.	(U) Project Director	1 man year
b.	(U) Electronic Engineer	1/2 man year
c.	(U) Oversight Committee	(three persons)
d.	(U) Experimental Subjects	(fifteen persons)

IV. (U) FUNDING

RDT&E Funds (P/VI)	$400,000
GDIP Funds (P/III)	0
TOTAL	$400,000

V. (U) TESTS UNDERTAKEN AND METHODS USED

(U) Expressed in simplest terms, the contractor/in-house experiments may each be described as follows (Appendix B of Reference 1 gives a detailed technical description):

a. (S) A truly random sequence of 0's and 1's (binary sequence) is generated by processing and sampling the behavior of a noise source or random event generator (REG).

b. (S) The RP participant is instructed to bias the composition of the sequence in favor of 1's or 0's by exercising mental processes.

c. (S) Feedback is provided the participant so that he can instantaneously be aware of the degree to which he is succeeding.

d. (S) The associated computer equipment simultaneously carries out a statistical analysis of the sequence of digits until it can be deemed perturbed (biased as instructed) or not, whereupon the trial is ended.

e. (S) Subsequent to a familiarization and screening period, seven participants were selected to contribute 100 such trials each (termed a run).

f. (S) Two tests are thus undertaken, one at the US Army MICOM and one at SRI International.

VI. (U) OBJECTIVES

(U) The overall objectives were discussed in Section I, Background. The pre-established criteria for judging runs and tests are as follow:

-- Runs: 16 or more perturbed (.9 confidence)/100 trials - $P<.05$

-- Tests: 2 or more significant by above criterion/7 runs - $P<.05$

The .05 confidence level is typical in performance testing.

VII. (U) TEST RESULTS

(S) The contractor experiment met the above criteria with two significant runs (16/100 and 17/100) out of seven. Moreover, the total of 87 successful trials out of 700 is significant at the P = .021 level.

(U) The in-house program is currently in the final data gathering stages. Completion is anticipated by 31 October 1980.

(S) Control runs in the absence of experimenter and RP participants do not show significant deviation from chance.

VIII. (U) CONCLUSIONS

(S) Based upon the completed part of this experiment, the observed results are improbable (1:47) if the binary stream is unperturbed (random) while subjects are actively participating. Control runs without subject participation, on the other hand, behave as if the binary stream were random. Although this kind of experiment is not deterministic, when considered in the framework of the existing data base, it is difficult to disregard claims for the existence of remote perturbation.

(U) Final conclusions must await completion of the in-house test.

IX. (U) RECOMMENDATIONS FOR FUTURE P/III ACTIVITY

(S) If the in-house test should not prove significant, an additional brief phase of testing will be undertaken at MICOM using one of the successful subjects from the SRI International test. In addition, the stored raw data from both experiments should be reanalyzed. Only after this post-test reassessment to see if the failure is attributable to shortcomings in MICOM techniques or personnel should further involvement in RP be planned.

(S) If, on the other hand, the in-house experiment is significant, the following efforts are proposed:

a. (S) The data base should be re-examined and further testing undertaken to see if the putative effect is attributable to actual remote perturbation (wherein the random event generators are affected) or to precognition (wherein the subject initiates the trial upon sensing that a favorable sequence impends).

b. (S) If precognition is implied, the degree to which personnel exhibit native ability or trainability in this area should be determined. Such an aptitude should prove advantageous in tasks where the ability to "guess" the course of events in the immediate future is involved, as in gun or missile firing situations. The ability to precognitively anticipate pseudo random number sequences also has implications for the way many Monte Carlo analyses are carried out -- in particular computer war games.

c. (S) If the random event generators appear to be vulnerable to remote perturbation, an effort should be made to determine if sensitive equipment such as inertial guidance systems can be affected. There is also interest in the use of some RP sensitive device placed in covert secure areas to serve as an intrusion alarm against these areas being compromised by enemy remote viewers.

X. (U) REFERENCES

1. Remote Perturbation Techniques - Project Description and Experimental Protocol (U) (Secret Report), US Army MICOM, October 1979.

2. Phase I: Hardware Construction and System Evaluation (U) (Quarterly Reports 1 & 2) (Secret Report), SRI International 0-4267, June 1978.

3. Phase II Test Plan (U) (Quarterly Report 3) (Secret Report), SRI International O-4255, May 1980.

4. Phase II Final Report (U) (Secret Report), SRI International O-4406, September 1980.