



UNCLASSIFIED

(U) COGNITIVE SCIENCES PROGRAM

(U) SRI INTERNATIONAL, MENLO PARK

(U) May 1989

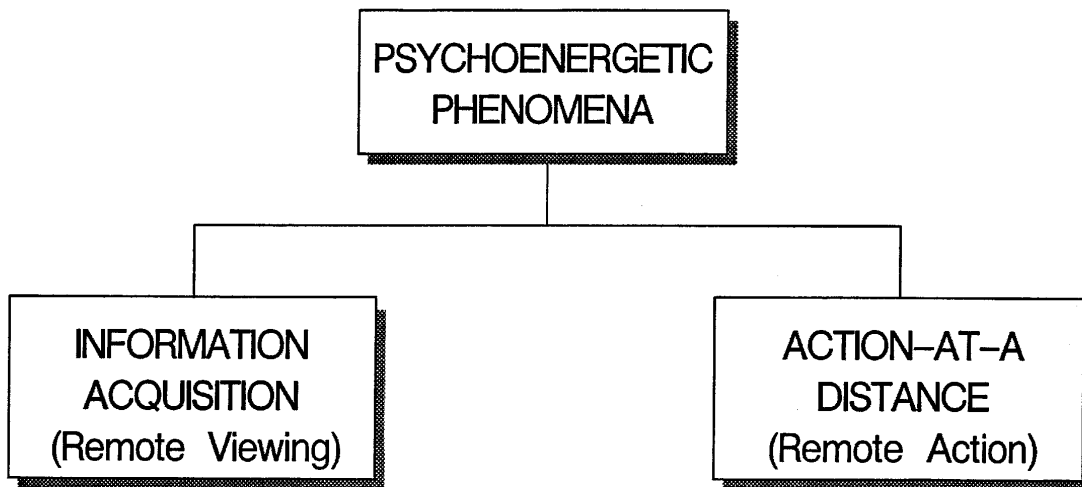
CONTAINS S/NP  
MATERIAL - SO  
MARKED.

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## (U) OVERVIEW OF PSYCHOENERGETICS

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## (U) DEFINITIONS

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- (U) REMOTE VIEWING (RV)
  - (U) The acquisition of information that would normally not be available because of spatial or temporal distance or shielding.
  
- (U) REMOTE ACTION (RA)
  - (U) Interaction with matter that would normally not be allowed because of spatial or temporal distance or shielding.

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## (U) REMOTE VIEWING PROTOCOL — A SCHEMATIC

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TIME	EVENT
10:00	Monitor and Viewer are Sequestered
10:05	Assistant Randomly Selects Photograph from a Set of 100
10:10	Remote Viewing Begins
10:25	Remote Viewing Ends
10:30	Monitor Copies RV Output and Obtains Target Photograph
10:35	Monitor Displays Target Photograph and Copied Response to Viewer

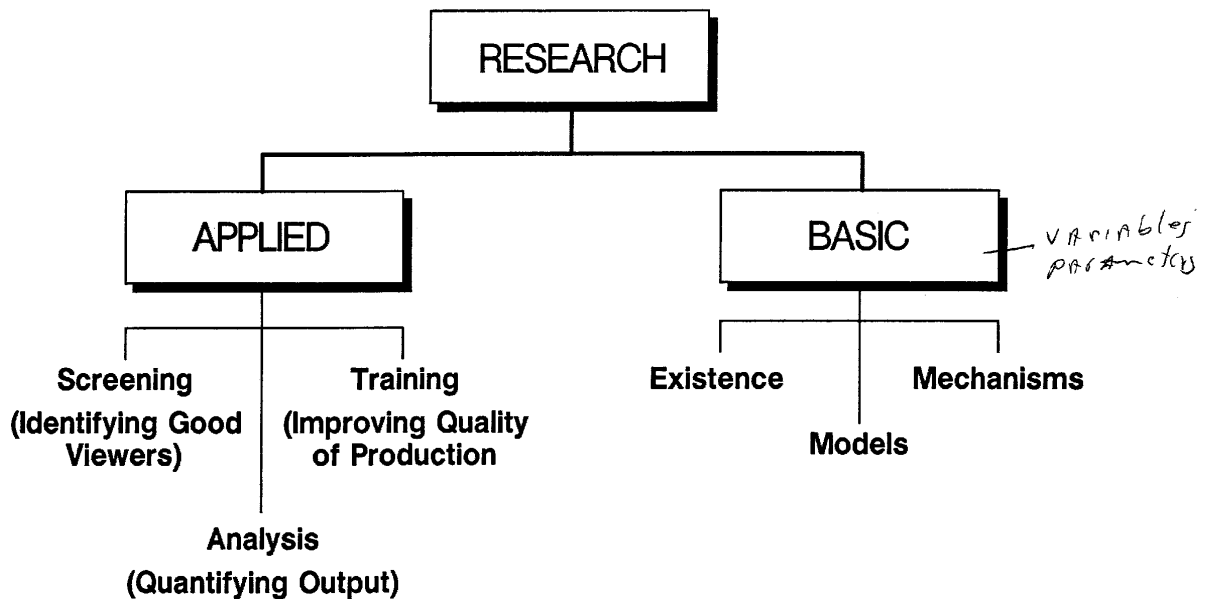
UNCLASSIFIED *Session judged  
Results*

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## (U) GENERAL OUTLINE

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## (U) EXISTENCE — APPLIED

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- (S/NF) OPERATIONAL UTILITY

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## (U) EXISTENCE — BASIC

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- (U) TECHNICAL REVIEWS (META-ANALYSES) *~ Explain*
  - (U) SRI Cognitive Sciences Program (1972 – 1988)
  - (U) Non-SRI Remote Viewing (1976 – 1988)
  - (U) Random Number Generator Experiments (1969 – 1987)
  - (U) Forced-Choice Precognitive Remote Viewing (1935 – 1987)

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(U) COGNITIVE SCIENCES PROGRAM 1972-1988 — I

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- (U) DATABASE DOMAIN
  - (U) 117 Documents (5025 Pages)
  - (U) All Experiments; Formal and Pilot
  
- (U) MAJOR RESULTS
  - (S/NF) Across All Experiments, Odds Against Chance Are Better Than  $2 \times 10^{20}$  to 1
  - (S/NF) Magnitude of the Remote Viewing Effect Qualifies as "Large" According to Accepted Behavioral Science Standards
  - (S/NF) Remote Viewing is Repeatable and Robust

# Labs  
# Scientist

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(U) COGNITIVE SCIENCES PROGRAM 1972-1988 — II

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- (U) RESULTS — SPECIFIC
  - (S/NF) Remote Viewing Does Not Degrade Over Time
  - (S/NF) Quality is Independent of Target Distance or Size
  - (S/NF) Natural Scenes are Significantly Better Targets Than are Symbols or Numbers
  - (S/NF) Electromagnetic Shielding is not Effective
  - (S/NF) Potential Neurophysiological Indicator has Been Identified

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## (U) NON-SRI REMOTE VIEWING 1976-1988

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- (U) DATABASE DOMAIN
  - (U) 20 Individual Studies
  - (U) Over 400 Remote Viewing Trials
  
- (U) MAJOR RESULTS
  - (U) Across All Experiments, Odds Against Chance Are Better Than  $2 \times 10^9$  to 1
  - (U) Magnitude of the Remote Viewing Effect is Statistically Equivalent to the SRI Results
  - (U) Remote Viewing is Repeatable and Robust

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## (U) RANDOM NUMBER GENERATORS 1969-1987

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- (U) DEFINITION
  - (U) In Random Number Generator Experiments (RNG) Individuals are Asked to Modify, by Mental Means Alone, the Otherwise Random Output of Hardware Devices
- (U) DATABASE DOMAIN
  - (U) 330 Individual Studies
  - (U) Over  $10^9$  Binary Bits
- (U) MAJOR RESULTS
  - (U) Across All Experiments, Odds Against Chance Are Better Than  $2 \times 10^{17}$  to 1
  - (U) Magnitude of the RNG Effect is Small According to Accepted Behavioral Standards, but is Repeatable

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## (U) PRECOGNITIVE REMOTE VIEWING 1935-1987

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- (U) DEFINITION
  - (U) In Forced-Choice Precognitive Remote Viewing Experiments, the Target Material (Numbers or Symbols) is Generated After the Remote Viewing is Completed
  
- (U) DATABASE DOMAIN
  - (U) 309 Individual Studies
  - (U) Nearly  $2 \times 10^6$  Separate Trials
  
- (U) MAJOR RESULTS
  - (U) Across All Experiments, Odds Against Chance Are Better Than  $5 \times 10^{29}$  to 1
  - (U) Magnitude of the Effect is Small According to Accepted Behavioral Standards, but is Repeatable

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## (U) SCREENING FOR HIGH-QUALITY REMOTE VIEWERS

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- (U) RESULTS TO DATE
  - (S/NF) Approximately 1% of the General Population Possess a Natural Talent for Remote Viewing
  - (S/NF) Personality and Neuropsychological Variables are Marginally Useful
  - (S/NF) Preliminary Data Suggests that High Scores on the Stanford Hypnotic Susceptibility Scale Indicate Natural Remote Viewing Ability
  - (S/NF) Selecting Sub-populations Significantly Improves Screening Efficiency
  - (S/NF) Preliminary Data Suggests a Possibility of a Neurophysiological Indicator for Natural Remote Viewing Ability

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## Hypnosis Experiments

- GOALS
  - Confirm previous findings that hypnosis facilitates psi processes.
  - Begin a data base for comparing susceptibility and psi ability.
  - Enhance the RV process and produce higher quality viewings.



## Hypnosis Experiments

- PILOT STUDY
  - Experienced hypnotist hired to:
    - ▶ Administer *Stanford Hypnotic Susceptibility Scale*.
    - ▶ Develop individually specific induction and RV protocols.
    - ▶ Conduct hypnosis sessions.
  - Target pool consisted of 200 *National Geographic* photos.
  - One experienced viewer participated in 24 remote viewings, 12 prior to one of two treatment conditions; 6 following a hypnotic induction and 6 following a proof-reading task.



## Hypnosis Experiments

- RESULTS
  - No evidence of RV in pre-treatment condition.
  - Significant evidence of RV following hypnosis.





## Hypnosis Experiments

- SECOND STUDY
  - RV sessions conducted while in trance.
  - Two viewers participated in 16 trials each.



## Hypnosis Experiments

- CURRENT ACTIVITY
  - Used same protocol as pilot study.
  - Two viewers are participating in 20 trials (40 remote viewings) each.
  - One viewer complete shows trend toward enhanced RV in hypnotic condition.



## Hypnosis Experiments

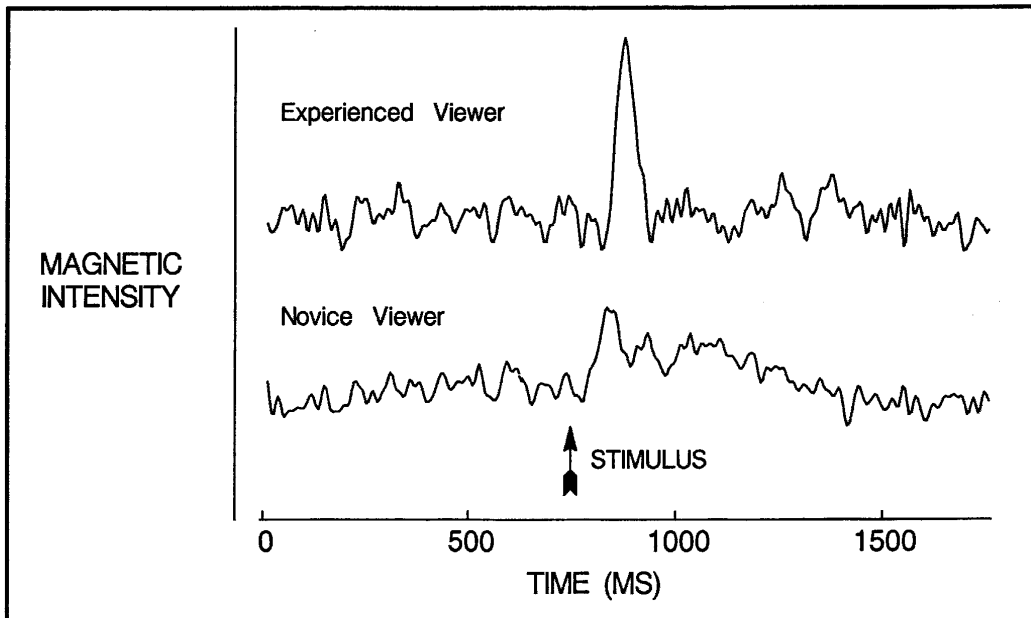
- HUMAN USE ISSUES
  - Much sensationalism accompanies media portrayal of hypnotic phenomenon.
  - Hypnosis is a poorly defined term.
  - Hypnosis designated “at risk” by DHEW.
- EXPERIMENTAL STUDIES VS. CLINICAL REPORTS
  - Clinical evidence based on anecdotal reports and opinions with psychiatric populations.
  - Experimental studies use more mentally stable populations, are of relatively short duration, do not elicit emotional responses and use structured and benign hypnotic suggestions and procedures.
  - Experimental studies show hypnotic procedures causing no more harmful aftereffects than common experiences such as taking exams, attending classes, verbal learning and college life in general.



## (U) POTENTIAL NEUROPSYCHOLOGICAL SCREENING

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### (U) NEUROMAGNETIC RESPONSE TO DIRECT LIGHT STIMULI



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(U) FUTURE APPLIED RESEARCH — SCREENING

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- (U) CONFIRM NEUROPHYSIOLOGICAL RESULTS
- (U) CONFIRM HYPNOTIC SUSCEPTIBILITY RESULTS
- (U) SCREEN SPECIFIC POPULATIONS
- (S/NF) TEST SELECTED INDIVIDUALS UNDER OPERATIONAL CONDITIONS

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## (U) IMPROVING REMOTE VIEWING QUALITY

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- (U) RESULTS TO DATE
  - (S/NF) Significant Improvement has Been Observed in Remote Viewing of Symbols (Single Viewer)
  - (S/NF) Qualitative Evidence for Improvement in Remote Viewing of Visual or Natural Targets
  - (S/NF) No Decline of Ability Over Time
  - (S/NF) A Preliminary Neurophysiological Correlate to Remote Viewing Suggests the Possibility of Conditioning for Improved Quality

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(U) FUTURE APPLIED RESEARCH — TRAINING

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- (U) REVIEW EARLIER TRAINING PROTOCOLS FROM AN EXPERIMENTAL PSYCHOLOGY PERSPECTIVE
  - (U) Develop Quantitative Testing Procedures
  - (U) Suggest Improvements to Existing Protocols
  - (S/NF) Create and Verify (Under Operational Conditions) New Training Procedures
- (U) VERIFY NEUROPHYSIOLOGICAL CORRELATE
- (S/NF) DETERMINE IF NEUROPHYSIOLOGICAL CONDITIONING IMPROVES QUALITY OF OPERATIONAL DATA

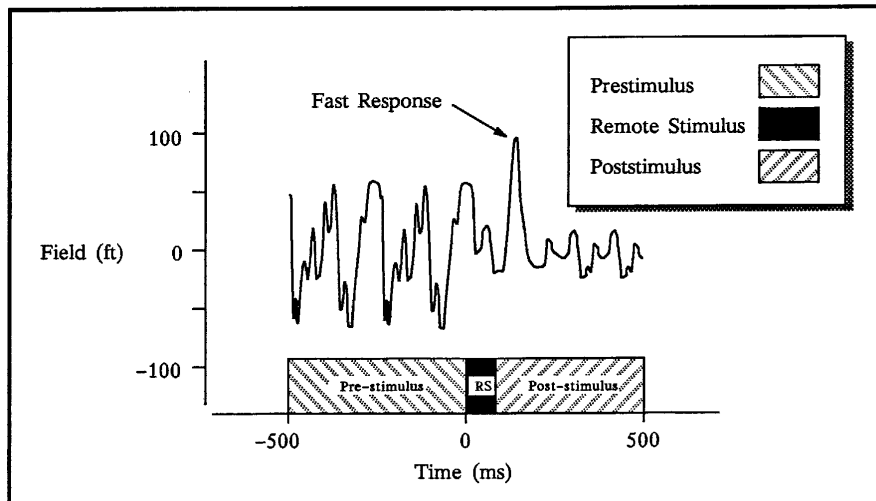
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## (U) NEUROPHYSIOLOGY PROTOCOL — I

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- (U) ISOLATED VIEWER
- (U) REMOTE LIGHT STIMULUS
- (U) MONITORING MAGNETIC ACTIVITY OF THE BRAIN



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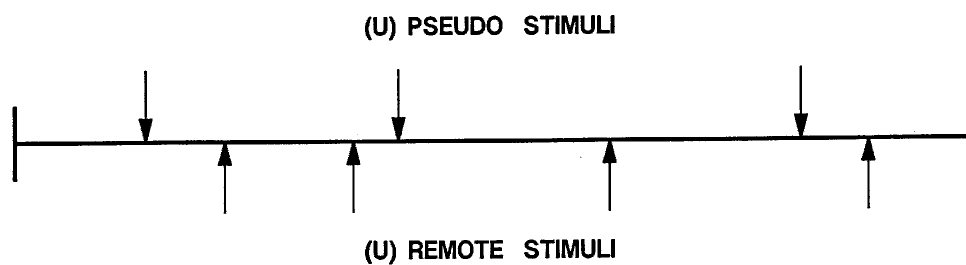




## (U) NEUROPHYSIOLOGY PROTOCOL — II

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- (U) SINGLE RUN TIMING — 120 SECONDS

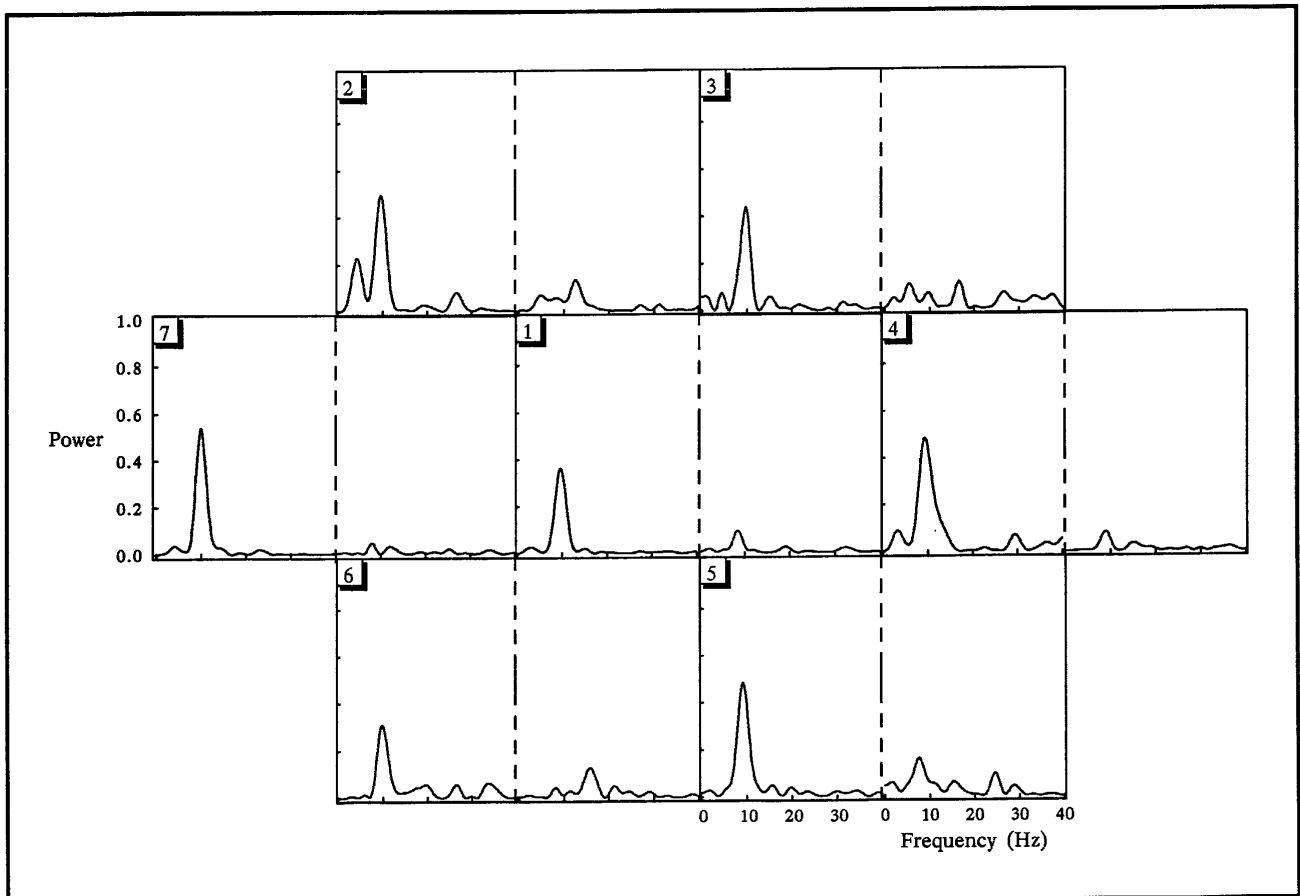


- (U) 10 RUNS OF APPROXIMATELY 100 TRIALS
- (U) SIGNAL AVERAGE  $\pm 0.5$  SECONDS
- (U) POWER SPECTRUM FOR PRE- AND POST-STIMULUS

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(U) POWER SPECTRA: -0.5 TO +0.5 SECONDS FROM REMOTE STIMULI - V002, 8/25/88

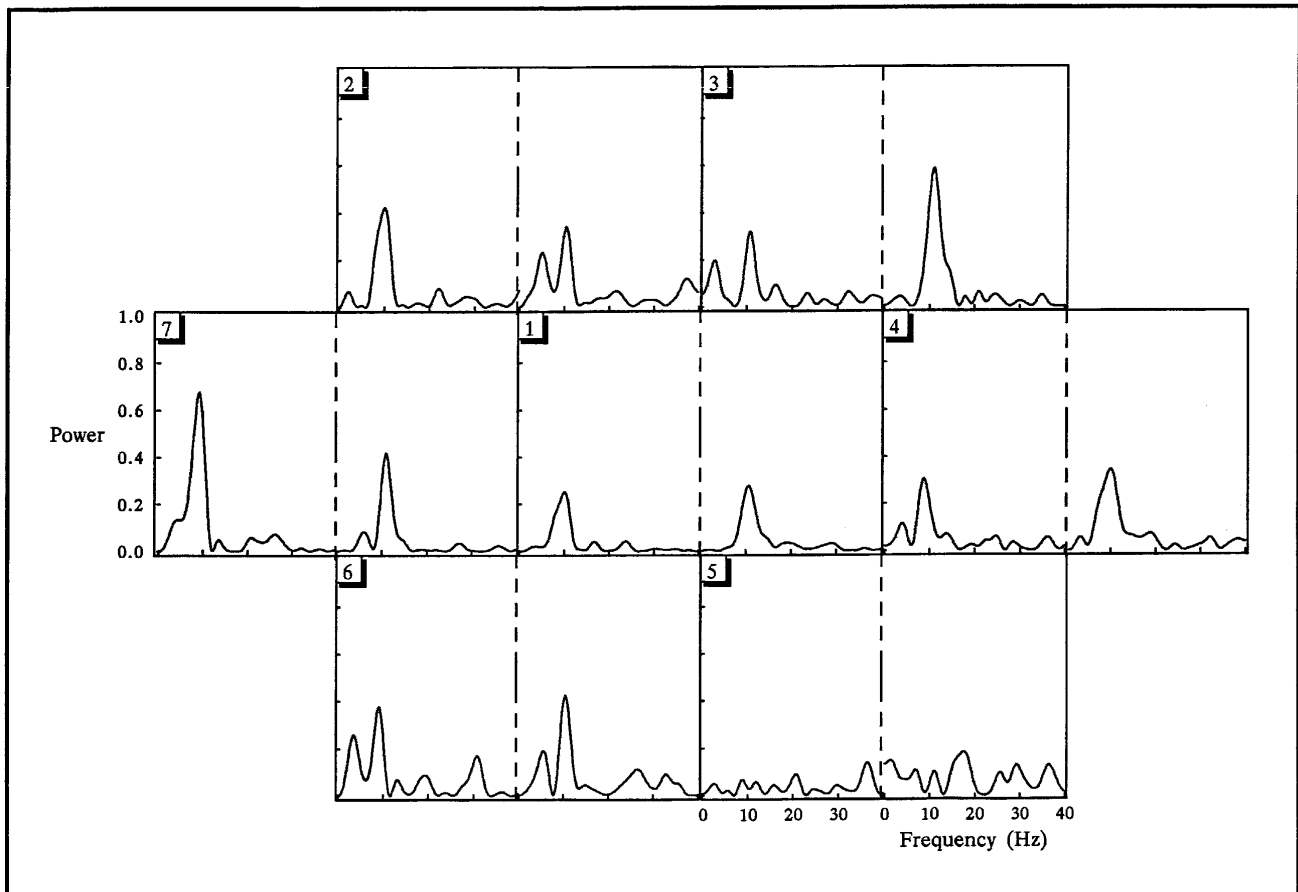


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(U) POWER SPECTRA: -0.5 TO +0.5 SECONDS FROM PSEUDO STIMULI - V002, 8/25/88



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(U) REMOTE VIEWING ANALYSIS — PROBLEM

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- (U) PROVIDE QUANTITATIVE ASSESSMENT OF REMOTE VIEWING RESPONSES UNDER TWO SITUATIONS
  - (U) Laboratory Experiments – Targets Known
  - (S/NF) Operations – Targets Generally Unknown

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## (U) REMOTE VIEWING ANALYSIS — DEFINITIONS

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- (U) TARGET      A crisp set (T) of attributes derived from a fuzzy set with a specified alpha-cut and mission definition (e.g., visual impact on scene).
- (U) RESPONSE      A fuzzy set (R) of attributes defined as an analyst's estimate of presence or absence from the response.

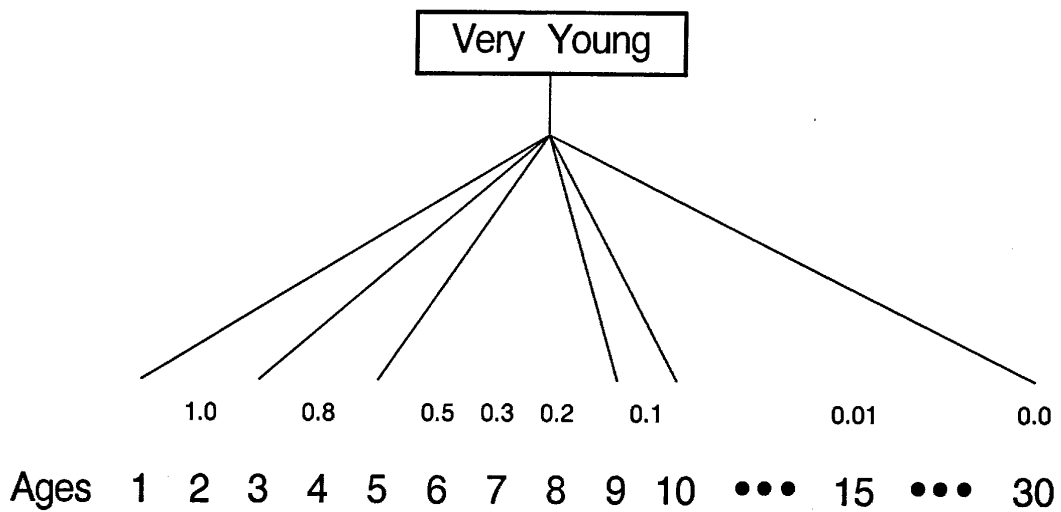
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### (U) FUZZY SET ATTRIBUTE EXAMPLE

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### FUZZY SET THEORY — AN ATTRIBUTE



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## (U) FIGURE OF MERIT (FM) — DEFINITIONS

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- (U) ACCURACY      Percent of target described correctly.
- (U) RELIABILITY      Percent of response that is correct.
- (U) FM              Accuracy times reliability.

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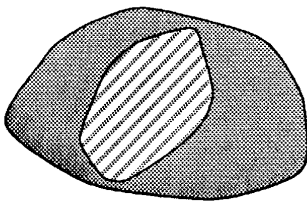
(U) FIGURE OF MERIT (FM) — SETS



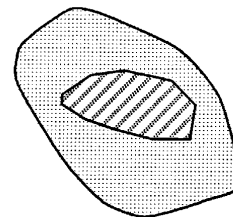
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ATTRIBUTE SPACE

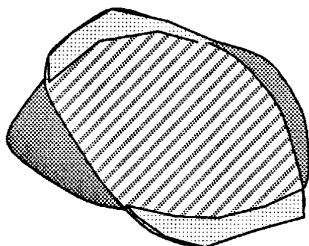
SET THEORY



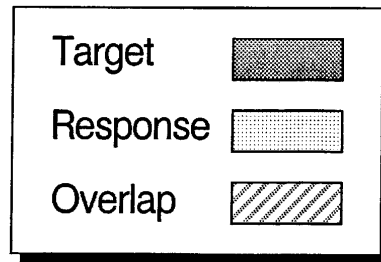
Reliable But Imprecise  
Low Figure-of-Merit



Accurate But Noisy  
Low Figure-of-Merit

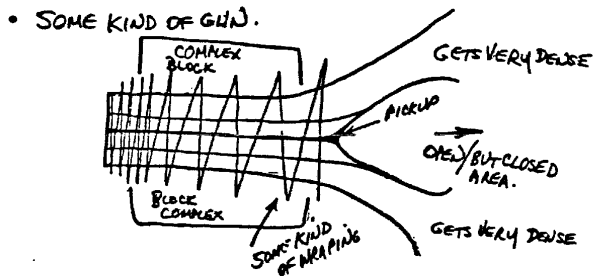
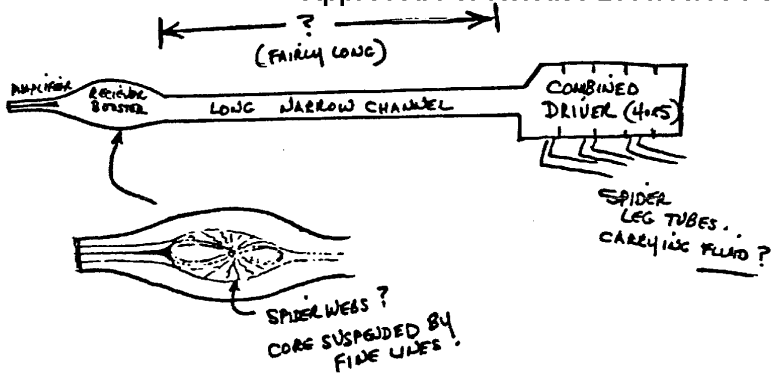


Reliable and Accurate  
High Figure-of-Merit



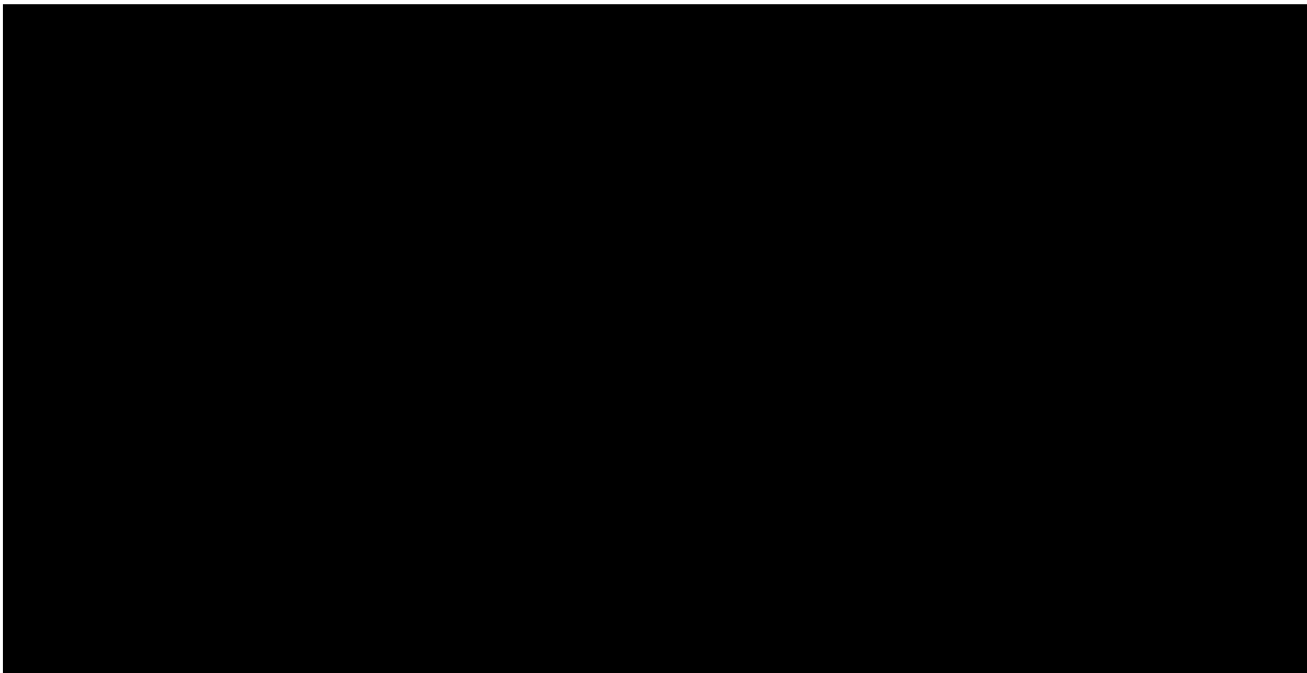
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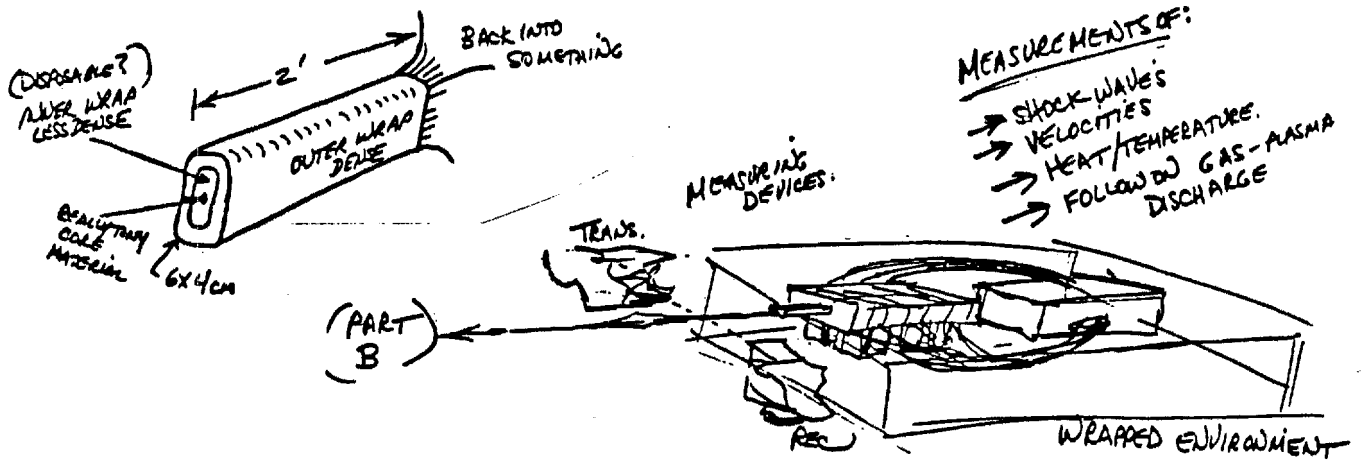




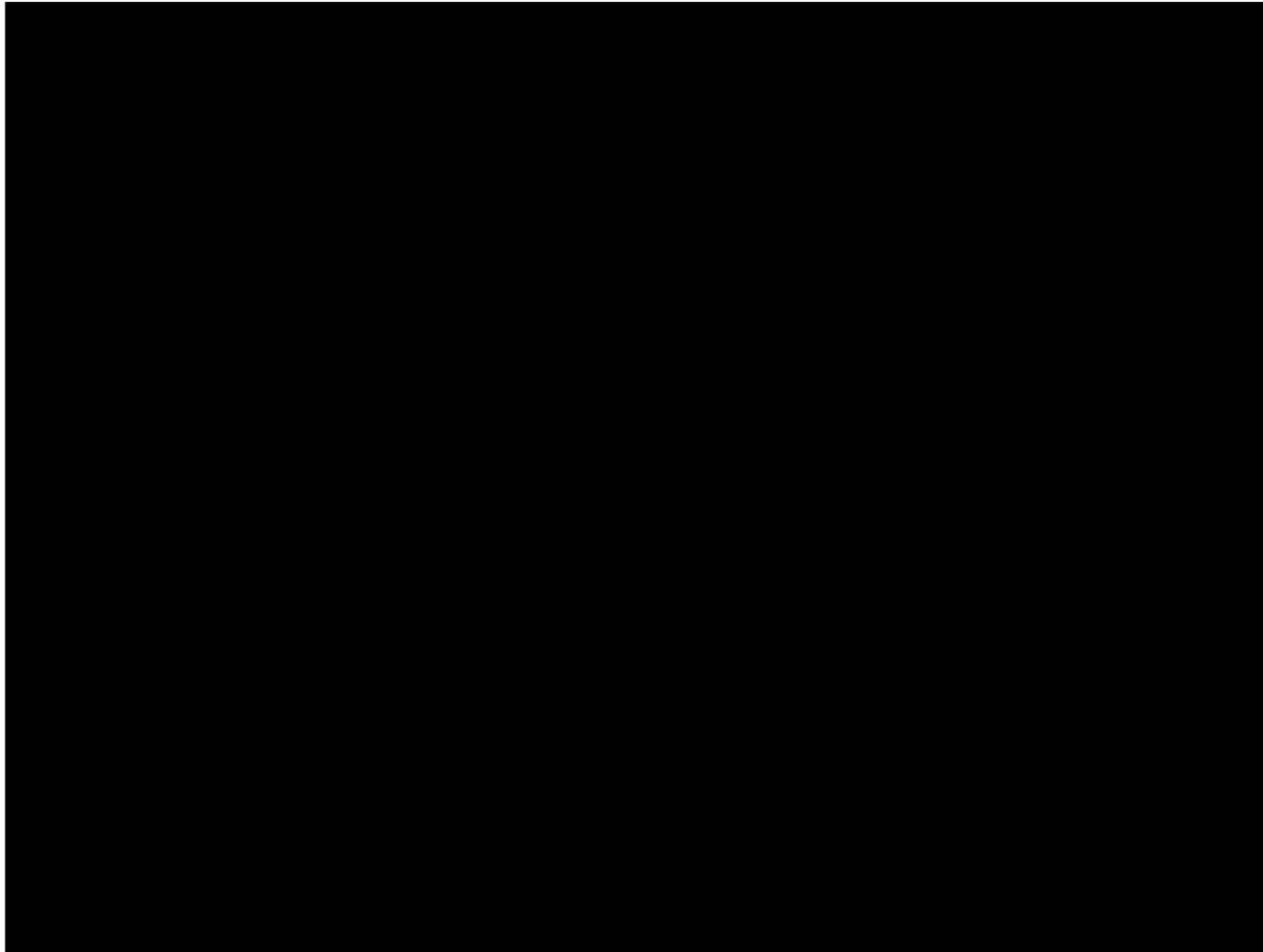
• SOME KIND OF GUN.

SG1A

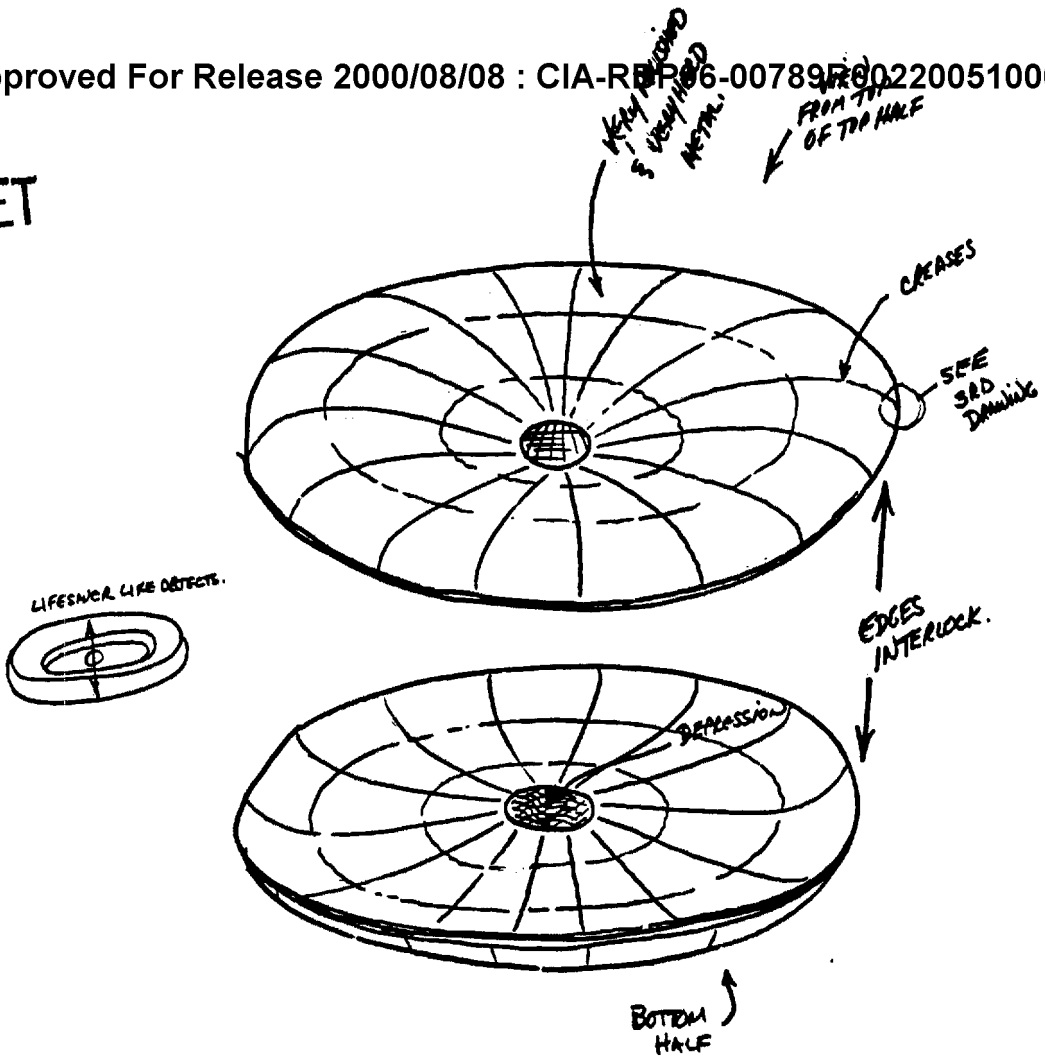




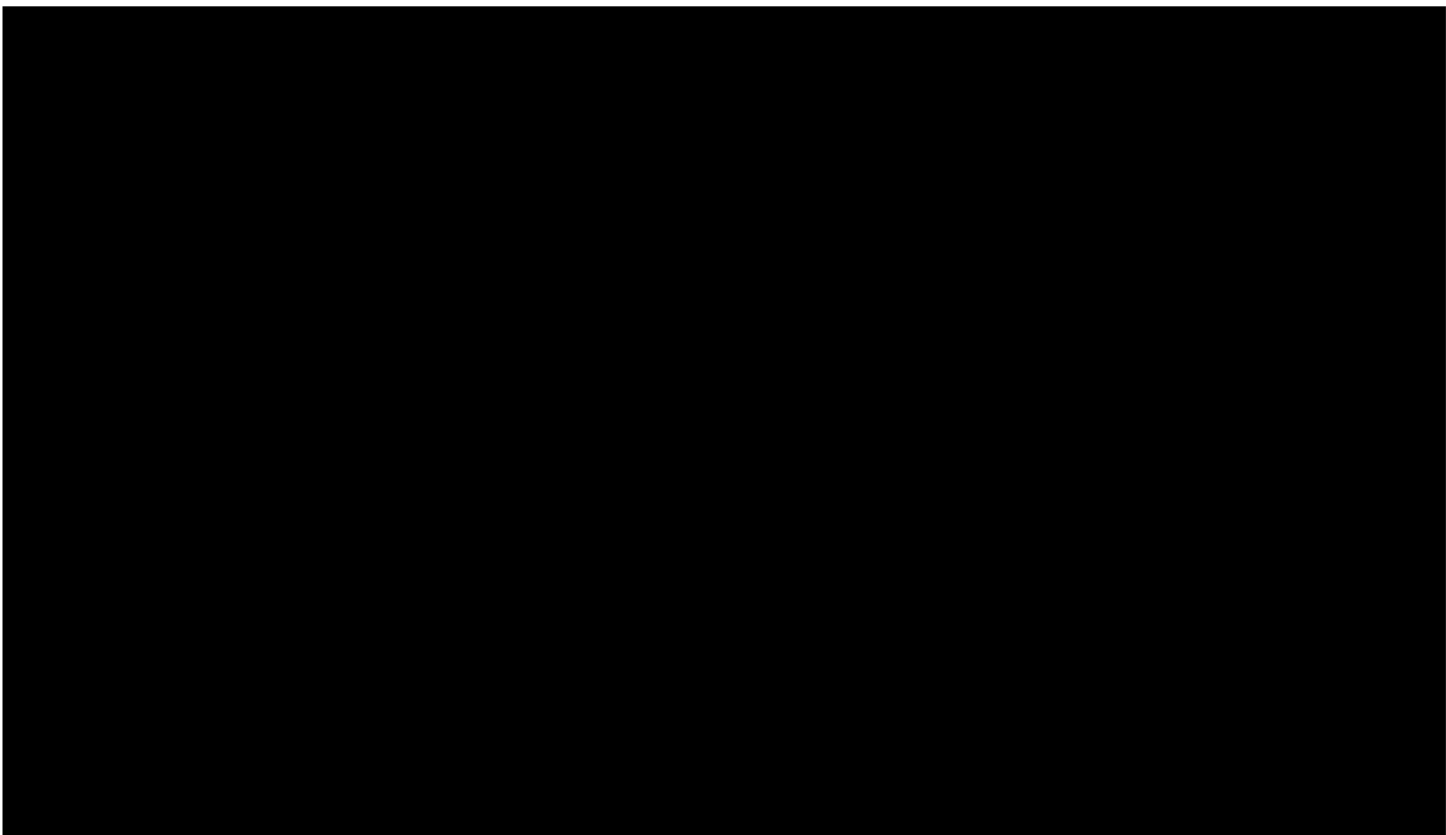
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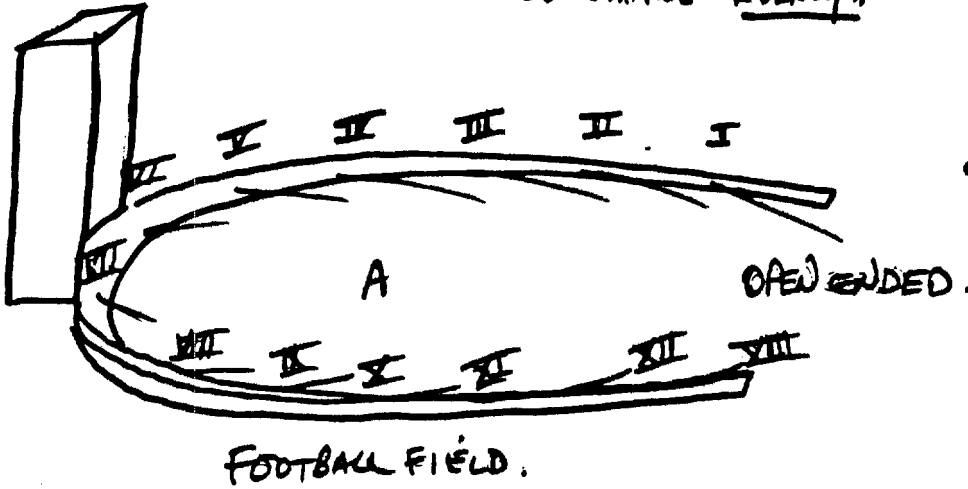


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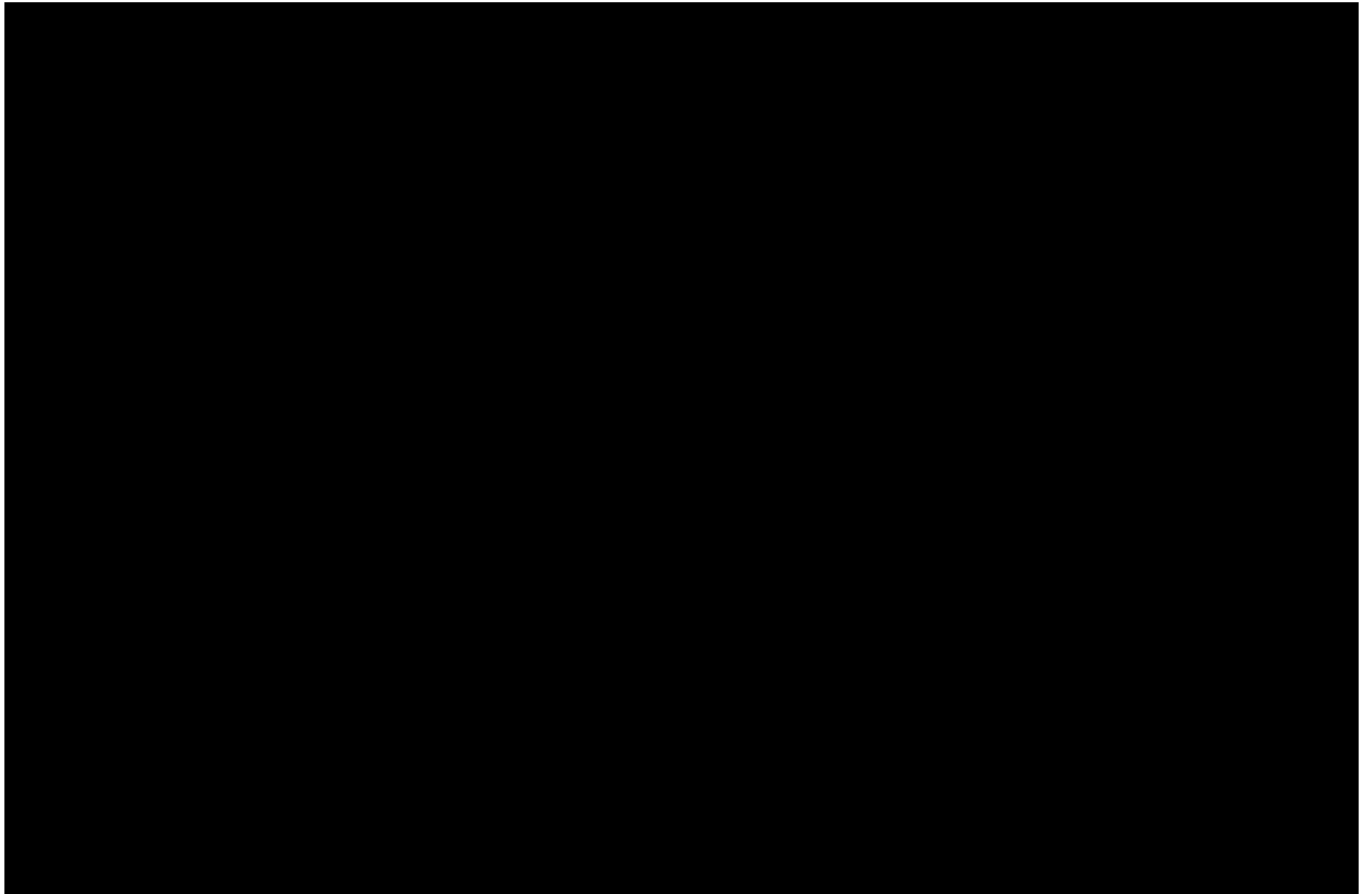


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- GROUND FOCAL AREA.
- SPECIFICALLY LAID OUT FOR "CATCHING" SOMETHING "EVENLY".



SG1A



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(S/NF) FIGURE 4 VIEWER 372: POSSIBLE RESPONSE TO THE SOLAR FACILITY

SG1A

Approved For Release 2000/08/08 : CIA-RDP96-00789R002200510001-1

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(U) SIMULATED OPERATIONAL APPLICATION — RESULTS

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Element Type	N	$ T \cap R $	$ T $	$ R $	Acc.	Rel.	M
FUNCTIONS	8	10.00	11.40	12.43	0.88	0.80	0.70
RELATIONSHIPS	16	15.25	21.95	23.65	0.69	0.64	0.44
OBJECTS	48	46.70	56.70	73.42	0.82	0.64	0.52
TOTAL	72	-	-	-	0.80	0.71	0.57

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## (U) DECISION AUGMENTATION — A HEURISTIC MODEL

- (U) MANY COMPLEX INPUTS TO A DECISION
  - (U) Real-time Information
  - (U) Past Experience
  - (U) Intuition
  - (U) Others
  
- (U) THE MODEL PROPOSES ONE ADDITIONAL INPUT
  - (U) A Weak Statistical Bias Which is Mediated by Some Form of Psychoenergetic Functioning



## (U) EVIDENCE FOR PRECOGNITION

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- (U) META-ANALYSIS OF FORCED-CHOICE EXPERIMENTS
  - (U) 309 Experiments
  - (U) 62 Senior Authors
  - (U) 50,000 Subjects
  - (U) 2 Million Individual Trials
  - (U) 52 Years
- (U) METHOD
  - (U) “File Drawer” — Experiments Not Published
  - (U) 8-Point Quality Rating — Blinds, Controls, etc.
- (U) OVERALL RESULTS
  - (U) Combined Effect of  $11.4 \sigma$
  - (U) No Correlation With Quality
  - (U) Experiment Quality Correlates With Year-of-Publication
    - ▶ (U)  $r = 0.239$ ,  $df = 307$ ,  $p \leq 7.2 \times 10^{-5}$

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(U) BINARY RANDOM NUMBER GENERATOR — PROTOCOL

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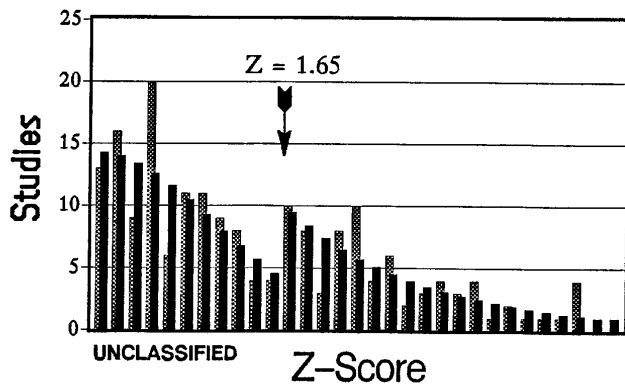
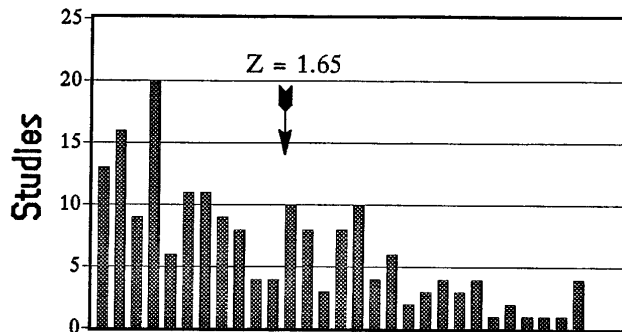
- (U) SINGLE BUTTON PRESS
- (U) COLLECT  $N$  BINARY BITS
  - (U) Task is to “Force” as Many 1’s as Possible
- (U) CALCULATE SCORE

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### (U) Z-SCORE DISTRIBUTION WITH "FILE DRAWER"

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## (U) DECISION AUGMENTATION — CONCEPTS

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- (U) THREE POSSIBLE OBSERVATIONS OF THE DATA
  - (U) Nothing is Happening — Mean Chance Expectation
  - (U) Causal Interaction — Remote Action
  - (U) Informational Interaction — Precognition
    - ▶ (U) Individuals are Able to Anticipate the Locally Deviant Sub-sequences
- (U) ASSUMPTIONS
  - (U) MCE—Unperturbed Parent and Sampling Distributions
  - (U) RA—Slightly Perturbed Parent Distribution
  - (U) Unperturbed Parent and Biased Sampling Distribution

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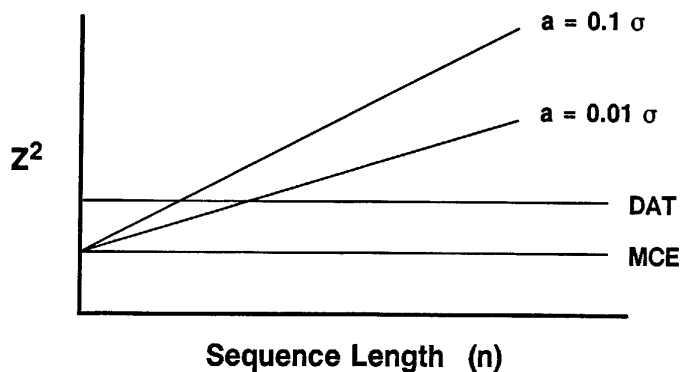


(U) DECISION AUGMENTATION — FORMULATION

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- (U) PROBLEM: TO CALCULATE  $E(Z^2)$  FOR EACH CONCEPT

	<u>MCE</u>	<u>Causal</u>	<u>Informational</u>
$E(Z^2)$	1	$1 + a^2 n$	$\mu_z^2 + \sigma_z^2$

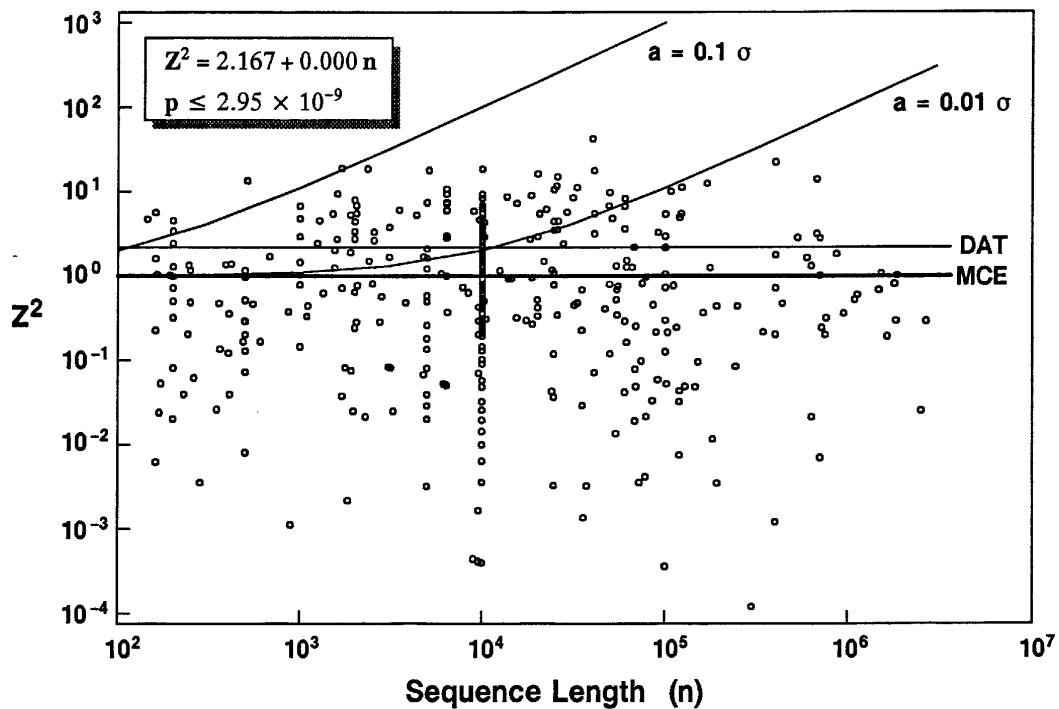


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### (U) RNG DATA — 1984

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## (U) PHYSICS SPECULATION ON PRECOGNITION — II

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- (U) MUST BE ENERGY TRANSFER WITH INFORMATION TRANSFER
  
- (U) ENTROPY CONCEPTS ARE VALID
  - (U) Anecdotal Observations
    - ▶ (U) High Changes of Entropy are Viewed More Easily
    - ▶ (U) Dynamic Targets (e.g., video tape) are Viewed More Easily Than Static Photographs
    - ▶ (U) Natural Site are Viewed More Easily Than Static Photographs

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## (U) PHYSICS SPECULATION ON PRECOGNITION — I

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- (U) SECOND LAW IS VALID
  - (U) At Micro-level
  - (U) In the Classical World
  - (U) Cosmological (i.e., Surface Areas of Black Holes)
- (U) PRECOGNITION IS VALID
  - (U) Meta-analysis and Other Evidence
- (U) THEREFORE PRECOGNITION MUST BE A STOCHASTIC PROCESS

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