

**Task No.:** 22

**Task:** Temporal Resolution

**Goal:** To determine the accuracy of remote viewing as a function of time, for various present and future targets.

**Application(s):** Ascribes reliability factor to event timings. This task will give a measure of our ability to obtain information about future events before such data can be obtained by logical inference or other sensor tip off information.

**Background:** In the course of our remote viewing experiments over the past years, we have occasionally been directed by clients to have viewers target on a location or event as it will appear at some future time. Our assessment, and that of cognizant clients, is that the quality of these future remote viewings are comparable to that of remote viewings carried out with real-time targets.

**Experiment(s):** We propose to investigate the accuracy and reliability of future remote viewing (FRV) as a function of time (days, weeks, and months) into the future; to determine whether there is any significant degradation of performance as the viewer attempts to describe events increasingly into the future. Three viewers would participate in this task, and each would be asked to contribute at least a dozen trials.

**Resource Requirements:**

**Year Task Start:** 2

Task No.: 23

Task: Error-Correcting RV Communication

Goal: To provide a nearly error free RV communication channel

Application(s): Secure communication, quantitative RV assessment tool.

Background: Error correction schemes are well known and understood. There are a number of examples in the literature where the application of error correcting and redundant coding techniques to RV experiments have produced error free results.

Experiment(s): A 5-fold list of orthogonal target attributes are to be formulated and a target pool consisting of  $2^5 = 32$  separate targets is to be constructed, each characterized by a 5-bit code which denotes the presence or absence of each of the 5 orthogonal target attributes. Using standard error-correcting coding techniques whereby the first two bits constitute message bits, and the last three bits constitute parity check bits that correct all single errors and many double errors, the RV process will be investigated as a message-sending medium.

Resource Requirements:

**Task No.:** 24

**Task:** Intelligence Analysis and Assessment

**Goal:** To provide recommendations as to the appropriate contribution of and structure for the integration of psychoenergetic technology into the overall intelligence resource mix.

**Application(s):** Resource index of application potentials categorized as to proper utility, reliability. Evaluate use and analyzes utility with regard to reliability.

**Background:** The results of past RV application studies indicate that maximum benefit can be expected when results are appropriately integrated with information from other sources, or used in a tip-off role to target other assets.

**Experiment(s):** Once a large data base has been acquired, analysis will be performed as to potential contributions, and the appropriate structure for those contributions, to COMINT, HUMINT, etc. A detailed comparison will be made as to the strengths and weaknesses, unique contributions and overlaps, of psychoenergetic technology vis-a-vis conventional forms of intelligence.

**Resource Requirements:**

**Task No.:** 25

**Task:** Environmental Effects Assessment

**Goal:** Determine influence of local environmental "noise" (auditory, visual) upon overall signal/noise ratio in remote viewing sessions.

**Application(s):** Delineates impact of environmental factors on noise in RV. Develop effective methods for eliminating local environmental noise, or curtailing its influence upon remote viewing sessions. Develop remote viewing as a "portable" capability while maintaining high signal/noise ratio.

**Background:** Transcript noise experienced in remote viewing sessions may be partially traced to psychological and direct perceptual influences of remote viewers' immediate surroundings.

**Experiment(s):** Conduct experiments in which local environmental noise (visual, auditory, etc.) is diminished to determine extent to which this decreases transcript noise level experienced in remote viewing sessions. Conduct further experiments in which potential influence of environmental noise is assessed, but not eliminated from local environment, and in which remote viewers are asked to attempt to internally reduce potential influence of local noise upon remote viewing impressions.

**Resource Requirements:**

**Year Task Start:** 3

**Task No.:** 26

**Task:** Distance-Dependent Reliability

**Goal:** Determine the accuracy of remote viewing as a function of distance.

**Application(s):** It is necessary to know the functional relationship between RV and distance in order to provide reliability assessments of RV data for targets at various distances from the remote viewer's location. Estimated reliability factor for targets at various distances.

**Background:** We have obtained remote viewing data from distant targets that appear to be similar in quality to that obtained from local targets. However, the feedback available to us from the most distant targets is not as detailed as that from more nearby targets. As a result, we have not been able to systematically compare the results of remote viewing data for near and far targets.

**Experiment(s):** We will carry out RV trials with a carefully-selected set of similar slides or for nearby and large distances. We will then analyze the RV data obtained from this systematic investigation to determine if there is any degradation of RV functioning with increased distance.

**Resource Requirements:**

When Task Starts: 2

Task No.: 27

**Task:** Additional Remote Perceptual Modalities

**Goal:** To increase efficiency of psi information collection in remote viewing sessions, and improve reliability of information collected, by emphasizing expression of nonvisual, sensory aspects of target locations by remote viewers.

**Application(s):** Opens up RV to provide information on all physical aspects of target. Collect information about target sites not available through strictly visual orientation to targets (e.g., chemical aromas associated with particular processes, sounds of machinery near target location, etc.).

**Background:** Nonvisual psi information about remote targets has been accurately reported during remote viewing sessions and in other related research (e.g., Harary and Solvvin's 1976 experiment in which Swann discriminated remote auditory targets from collections of other sounds).

**Experiment(s):** Conduct experiments in which target sites contain striking nonvisual sensory components and in which remote viewers are asked to particularly attend to multi-sensory aspects of target locations.

**Resource Requirements:**

**Year Task Start:** 3

Task No.: 28

**Task:** Tracking/Locating RV

**Goal:** To maximize the potential for increasing the accuracy of remote moving targets, or locating targets.

**Application(s):** Establishment of reliable spatial tracking technique. Tracking/location of missing persons, monitoring activities of individuals, assessing movement of equipment and personnel, track and/or locate satellites, submarines, missiles, etc.

**Background:** A large body of anecdotal data indicates that tracking has been utilized to locate lost or missing individuals and objects.

**Experiment(s):** Carry out experiments involving tracking and locating (e.g., on a grid) local moving targets whose position or movement is easily verified.

Following initial efforts at tracking, initiate RV tracking of submarine, satellite, or missile as a potential means to augmenting conventional telemetry or tracking.

Continue experiments designed to ascertain movement, activity, and location of a target individual in a large area--e.g., 20 square miles.

**Resource Requirements:**

**Task No.:** 29

**Task:** Temporal Accuracy

**Goal:** Determine the temporal accuracy limitations of the RV process for operational utility.

**Application(s):** Evaluation of the timing accuracy for isolating target events. Selection of operational time tasks consistent with RV timing accuracy.

**Background:** Certain experiments have indicated temporal accuracy of the order of 10 s out of 1 hr; however there has been little systematic confirmation of this type of result.

**Experiment(s):** We will review past experiments to provide broad temporal accuracy estimates. Following local tests on timing of well-defined remote events, we would request operational target tasks from the client community of an appropriate nature to assist in refining the temporal accuracy estimate.

**Resource Requirements:**

**Task No.:** 30

**Task:** RV Channel Capacity Assessment

**Goal:** To define the information limitations of an RV informational channel and provide reliability measure vis-a-vis target informational aspects.

**Application(s):** Establish data rate in secure communications link.

**Background:** Most channel capacity estimates in the RV area have conservatively arrived at very low bit rates. Yet, from time to time, large amounts of information appears to be available, indicating an underestimate of capacity.

**Experiment(s):** Using a well defined target evaluation bit system (developed during year 1) conduct RV experiments to quantify information transfer rate.

**Resource Requirements:**

**Year Task Start:** 3

HAROLD E. PUTHOFF

Senior Research Engineer  
Radio Physics Laboratory  
Systems Research and Analysis Division

SPECIALIZED PROFESSIONAL COMPETENCE

Research in "remote viewing" and other psi phenomena (1972-present)  
Research in lasers, quantum electronics, nonlinear optics  
Research and development of tunable solid-state lasers, electron-beam lasers, microwave tubes

OTHER PROFESSIONAL EXPERIENCE

Research associate, Hansen Laboratories of Physics, and lecturer, Department of Electrical Engineering, Stanford University; teaching, textbook author, research supervisor of Ph.D. candidates in the area of lasers and nonlinear optics  
Lieutenant, USNR: in-house research and contract monitoring on DoD (NSA) contracts concerned with the development of ultra high-speed (GHz) computers, assessment of potential of fiber optics and lasers for use in optical computers  
Research engineer, Sperry Electronic Tube Division, and Sperry fellow, University of Florida: design and testing of electron-beam focusing systems for use in microwave tubes

ACADEMIC BACKGROUND

B.E.E. (1958) and M.S.E. (1960), University of Florida; Ph.D. in electrical engineering (1967), Stanford University

PUBLICATIONS AND PATENTS

Author or coauthor of more than twenty-five papers in professional journals on electron beam and laser research, and, more recently, first major publications of research on psi phenomena in Nature ("Information Transfer Under Conditions of Sensory Shielding," Oct. 1974) and in the Proceedings of the IEEE ("A Perceptual Channel for Information Transfer over Kilometer Distances," March 1976);  
Coauthor of textbook, Fundamentals of Quantum Electronics (Wiley, New York, 1969) published in English, French, Russian;  
Coauthor of Mind Reach: Scientists Look at Psychic Ability (Delacorte, New York, 1977);  
Coeditor of Mind at Large: IEEE Symposia on the Nature of Extrasensory Perception (Praeger, New York, 1979);  
Patent on high-power tunable infrared laser source (50-250 microns).

PROFESSIONAL ASSOCIATIONS AND HONORS

American Association for the Advancement of Science; American Physical Society; Institute of Electrical and Electronics Engineers; Sigma Xi; Department of Defense Certificate of Commendation for Outstanding Performance; IEEE Franklyn V. Taylor Memorial Award for paper "A Scientific Look at ESP", listed in American Men and Women of Science.

RUSSELL TARG

Senior Research Physicist  
Radio Physics Laboratory  
Systems Research and Analysis Division

#### SPECIALIZED PROFESSIONAL COMPETENCE

- Research in remote sensing and other psychoenergetic phenomena (1972-present).
- Development of high-power gas lasers, FM laser, and supermode laser techniques.
- Optical modulation and demodulation at microwave frequencies.
- Microwave generation from plasmas.

#### PREVIOUS PROFESSIONAL EXPERIENCE

Sylvania Corporation; investigation of techniques for development of new gas lasers, making use of research with compact, self-contained multikilowatt CO<sub>2</sub> lasers

Technical Research Group; experiments in new gaseous laser media

Polytechnic Institute of Brooklyn; assisted in the establishment of Electron Beam Laboratory

Sperry Gyroscope Company, Electron Tube Division; experimental work in microwave generation from plasmas; early work in the technology of ultrahigh-vacuum and ion-pump design

#### ACADEMIC BACKGROUND

B.S. in physics (1954), Queens College, New York; graduate work in physics (1954-56), Columbia University

#### PUBLICATIONS AND INVENTIONS

Author or coauthor of more than thirty articles on lasers and plasma research, and more recently, the first major publication of research on psychoenergetic phenomena in Nature and in the Proceedings of the IEEE: "Information Transfer Under Conditions of Sensory Shielding," Nature (October 18, 1974) and "A Perceptual Channel for Information Transfer over Kilometer Distances," Proc. IEEE (March 1976)

Coauthor of Mind-Reach: Scientists Look at Psychical Research (Delacorte Press, New York, 1976); Mind at Large: IEEE Symposia on the Nature of Extrasensory Perception (Praeger, New York, 1979)

#### PROFESSIONAL ASSOCIATIONS

Senior Member IEEE; American Physical Society; President and cofounder of Parapsychology Research Group, a tax-exempt California corporation since 1963, with research and educational objectives in the area of psychic functioning.

May 1979

EDWIN C. MAY

Senior Research Physicist  
Radio Physics Laboratory  
Systems Research and Analysis Division

**SPECIALIZED PROFESSIONAL COMPETENCE**

Charged particle and gamma-ray spectroscopy; analogue and high-speed digital electronics; numerical analysis; real-time computer applications for data acquisition and analysis; research in bio-feedback technology and applications, and cardiac blood flow problems; field research in India and laboratory research at Maimonides Medical Center on psycho-energetic phenomena

**OTHER PROFESSIONAL EXPERIENCE**

Theoretical calculations in radiation transport, atmospheric physics, and E & M wave scattering at the RAND Corporation  
Experiments in nuclear reaction mechanism and nuclear structure at the U. of California Crocker Nuclear Laboratory  
Undergraduate physics teaching at the City College of San Francisco  
Equipment engineer and clinical experience at the Bio-feedback Institute of San Francisco  
Research consultant on psychokinesis at the Maimonides Medical Center

**ACADEMIC BACKGROUND**

B.S. in physics (1962), University of Rochester; Ph.D. in physics (1968), University of Pittsburgh

**PUBLICATIONS**

Author and coauthor of eleven scientific papers in experimental nuclear physics research;  
Author and coauthor of numerous scientific papers in psychoenergetic research;  
Author and coauthor of eleven research abstracts in nuclear physics for professional meetings;  
Author and coauthor of three abstracts in psychoenergetic research for professional and meetings.

**PROFESSIONAL ASSOCIATIONS**

American Physical Society; American Association for the Advancement of Science; Institute of Electrical and Electronics Engineers; Parapsychology Association; The American Society for Psychical Research

August 1979

MICHAEL H. L. HECKER

Senior Research Engineer  
Bioengineering Research Center  
Advanced Development Division

SPECIALIZED PROFESSIONAL COMPETENCE

Speech communication; psychoacoustics; audio engineering; forensic acoustics

REPRESENTATIVE RESEARCH AT SRI (since 1967)

Developed a speech rating method that provides a detailed description of the vocal characteristics of a person  
Managed a five-year research program concerned with the effects of certain diseases on the speech signal  
Coauthored a report to a national commission on the technical examination of magnetic tapes for legal purposes  
Participated in the technical examination of White House tapes during the Watergate investigation  
Studied the relationship between a measure of the speech signal and the intelligibility of individual speakers  
Served as a consultant and an expert witness in many legal cases involving voice identification and questioned tapes  
Prepared an interpretive survey of the literature on methods for identifying a person by his or her voice

OTHER PROFESSIONAL EXPERIENCE

Senior research engineer, Bolt Beranek and Newman Inc.: studied the manifestations of psychological stress and emotions in the speech signal; developed tests for measuring intelligibility and speech quality  
Project officer, U.S. Army Electronics Research and Development Laboratories: designed vocoder systems used to achieve voice security; initiated a cinefluorographic study of speech production

ACADEMIC BACKGROUND

B.S. in electrical engineering, with honors (1959), Northeastern University; M.S. in electrical engineering (1961), Massachusetts Institute of Technology; Ph.D. in speech and hearing sciences (1974), Stanford University

PUBLICATIONS

Sixteen articles in scientific and professional journals, including a 110-page monograph; many technical reports

PROFESSIONAL ASSOCIATIONS

Acoustical Society of America (fellow; past chairman of Technical Committee on Speech Communication); American Association of Phonetic Sciences (charter member); Society of Motion Picture and Television Engineers; American Academy of Forensic Sciences (fellow); Eta Kappa Nu; Sigma Xi; Tau Beta Pi

GARY O. LANGFORD (Social Security Number 552-70-4339)  
President, CONSULTANTS INTERNATIONAL COMPANY (1979)

**SPECIALIZED PROFESSIONAL COMPETENCE**

High energy laser/target interactions; directed energy weapon systems applications; optical sensor systems engineering; astronomy instrumentation; space systems engineering; countermeasure techniques

**REPRESENTATIVE RESEARCH ASSIGNMENTS AT SRI (since 1974 to 1979)**

Directed-energy weapon system concepts and applications

Development of methodologies for technical analysis and systems evaluation

Interpretation and implications of high-energy laser test facility designs

Optical countermeasure techniques and laser-guided munition

Optical detection techniques and data analysis

**OTHER PROFESSIONAL EXPERIENCE**

Research engineer, Lockheed Missiles and Space Co.: program manager for research and development work on laser/material vulnerability

in high-power laser facility and for nondestructive testing program; chaired laser vulnerability handbook committee

Instructor, Foothill Junior College: physics

Lecturer, California State University (Hayward): physics

**ACADEMIC BACKGROUND**

A.B. in astronomy (1969), University of California (Berkeley); M.S.

in physics (1971), California State University (Hayward)

**PUBLICATIONS, PRESENTATIONS, AND PATENTS**

Over thirty technical reports

Several technical presentations, including "BMD - 1985-2000" (1976);

"Laser Applications Review" (1974); "Investigation of the Geophysical Process-Earthquakes" (1974); "A New Concept in Earthquake Prediction"

(1974); "Measurement of Gravitational Instabilities in the Solar System" (1973)

One patent granted (optical scanner, 1977)

Three patent applications

**PROFESSIONAL ASSOCIATIONS**

Optical Society of America

Society of Instrumentation Engineers

IEEE

KEITH HARARY, RESEARCH CONSULTANT  
RADIO PHYSICS LABORATORY

**Specialized professional competence**

Clinical and experimental psychology; ten years psychoenergetics experimental design, theory, and research at Duke University, Maimonides Medical Center, and other laboratories.

**Professional experience**

Psychological counseling, supervision, and research: crisis and suicide intervention at Durham, North Carolina Mental Health Center; counseling terminally-ill patients and families at Duke University Medical Center; working with psychiatric inpatients at Dorothea Dix State Psychiatric Hospital, North Carolina.

Psychoenergetics research: Research Associate, 4 years at Duke University studying physiological correlates of psychoenergetic functioning; 3 years at Maimonides Medical Center doing ganzfeld research; 3 years at American Society for Psychical Research and Foundation for Research on the Nature of Man researching environmental factors affecting psychoenergetic functioning.

**Academic background**

Duke University, Durham, North Carolina. B.A., Psychology, May, 1975.  
Mental Health Center, Durham, North Carolina. Specialized training in psychological counseling and intervention. September 1972 - June 1976.

**Publications in psychoenergetics and clinical psychology**

1 reference book contribution, more than a dozen technical papers, 2 clinical training manuals, numerous symposium presentations.

**Professional associations and honors**

Magna cum laude, Departmental Distinction in Psychology, Duke University;  
Member, Parapsychological Association.

INGO SWANN

CURRICULUM VITAE

- 1933 Born 14 September 1933, Telluride, Colorado. First child of Ingo and Pauline (nee, Paul) Swan.
- 1937-1951 Primary schooling: Telluride, Colorado, and Tooele, Utah.
- 1951-1955 Higher education: Graduate of Westminster College, Salt Lake City, Utah. Double major subjects, Biology and Fine Arts; minor subject, German.
- 1955-1958 Enlisted U.S. Army. Served in Korea, Secretary on the staff of General I.D. White.
- 1958-1969 Employed at the United Nations, New York, holding several clerical and administrative positions.
- 1958-1972 Undertook unusual and extraordinary research projects of personal interest, especially in the occult and parapsychological fields: astrology, numerology, auras, theosophy, anthroposophy, Steiner, alchemy, Western and Eastern philosophies and psychologies, with special emphasis on man's extended mental nature. Continued personal research into the mechanism of the mind and neurological systems, with special emphasis on Jung and related holistic approaches to the human psychic problem. Undertook extended modern studies in contemporary innovations to the mind, including modern French and German mystics, scientology, biofeedback techniques, Silva mind control, etc.
- 1971 Began active interest in direct parapsychological laboratory work.
- 1971 Research with Cleve Backster, New York (psychokinetic effects on small samples of graphite).
- 1972 Research with Dr. Gertrude Schmeidler, City College of New York (Psychokinetic effects upon continuously recorded temperature).
- 1971-1972 Research with Dr. Karlis Osis, The American Society for Psychical Research, New York (out-of-body perceptions).
- 1972 Research with Dr. C. Silfen, The American Society for Psychical Research, New York (temporal and spatial perception aspects of remote viewing ability).

- 1972 Research with Dr. H. Puthoff, Stanford Research Institute (psychokinetic perturbation of a superconductor-shielded Josephson effect magnetometer).
- 1973 Research with Dr. H. Crane, Dr. H. Puthoff and R. Targ, Stanford Research Institute, Menlo Park, California (project Scanate: systematic utilization of non-physical targets that "refer" to real time situations [remote-viewing by coordinates]).
- 1973 Research with Dr. H. Puthoff, R. Targ and H. Sherman, Stanford Research Institute (experimental psychic probe of the planet Jupiter [remote-viewing]).
- 1973 Research with Dr. W. Harman, Stanford Research Institute (experimental prophetic correlations, an experimental effort at world-wide predictive trend analysis correlated with adept/inept dimension alternative future histories).
- 1974 Research with A. Twitchell, J. Mitchell, and J. Wingate, American Society for Psychical Research (precognition, an attempt to ascertain variables in predictive ability).
- 1974 Research with Dr. G. Schmeidler, Dr. S. Krippner and J. Mitchell, New York (Mercury, an experimental remote viewing probe of a distant planet).
- 1975 Research with Dr. R. Miller, Atlanta, Georgia (psychokinetic effects in a diffusion cloud chamber).
- 1975 Research with Dr. M. Vogel, San Jose, California (psychokinetic effects on electrical reactions of a plant).
- 1975 Research with Dr. E. May and C. Honorton, Maimonides Medical Center, New York (a dynamic PK experiment with Ingo Swann).
- 1975 Research with Dr. J. Vallee, Dr. A. Hastings and Dr. G. Askevold, cross country with Institute for the Future, Palo Alto (remote viewing experiments through computer conferencing).
- 1976 Research with Dr. W. Roll and G. Solfin, Psychical Research Foundation, Durham, N.C. (long-distance remote hearing experiments).
- 1976 Research with Dr. S. Krippner, J. Mitchell and H. Sherman (cross-country remote viewing of the planet Mars).
- 1977 Research with Dr. C. Tart, Univ. of California at Davis (direct clairvoyant viewing of internal state of an ESP learning machine).

- 1973-1977 Intermittent work at SRI to develop aspects of remote-viewing abilities.
- 1958-1977 A separate career in art. Paintings in several collections.
- 1975-1977 A special interest in audio-visual aspects of psychical phenomena, including artistic expressioning. Five slide shows have been created in association with J. Turchuk: (1) Cosmic art; (2) The remote viewing probes of H. Sherman and I. Swann of the planets Jupiter and Mercury; (3) Parapsychology in art; (4) The beauties of Kirlian and laser light photography; (5) Death--a concept reborn, the clinical death and recovery experience.

#### Publications

Mr. Swann is author of several articles on psychic research and aesthetic universal consciousness. Major books are:

To Kiss Earth Good-bye (Hawthorn, 1975)

Cosmic Art, Ingo Swann, Ed. (Hawthorn, 1976).

Star Fire (Dell, forthcoming, March 1978).