IV. (U) BASIC RESEARCH:

1. Neurophysiological Correlates:

- Determine potential magnetoencephalograph (MEG) visual response correlates:
  - Between talented people and a variety of external near-field stimuli conditions.
  - Between talented people and a variety of external far-field stimuli conditions.

- Determine potential MEG non-visual correlates:
  - Between talented people and a variety of external—near and far field stimuli conditions.

- Initiate research to identify and locate brain areas where parapsychological data may originate:
  - Extend research to show how data is eventually processed into conscious awareness.

2. Psychophysical Correlates:

- Determine potential for psychophysical parameters:
  - Galvonic skin response (GSR).
  - Other central nervous system (CNS) parameters.
  - Role of distance and other variables.
  - Potential for counter-influence.

3. Physical/Psychophysical Model Exploration:

- Role of target "state" (degree of energy, chaos, size, distance, shielding, target format, etc.).

- Role of psychological factors (goal, empathy, target type, etc.).
- Role of other possible influencing parameters (i.e., no "sender" present, presence of "sender," and degree of linkage).
- Other candidate factors.

4. Altered State Investigations:
- Determine if various altered states can improve data reliability (e.g., lucid states, deep relaxation conditions).
- Determine if various altered states correlate with cognitive style or with target type.

5. Potential Influences of External Fields:
- Determine if geomagnetic influence can affect results.
- Develop new experiments with adjustable external field conditions.

6. Develop a Comprehensive Target Pool:
- To help sort out possible target characteristic influences.
- To use as a possible screening device.
- For assessing application issues.

7. Initiate Evaluation of "Energetics":
- Identify possible "follow-on" with available select talent (when located).
- Visit people/areas to observe demonstration.
- Identify equipment monitoring needs.
V. (U) APPLIED RESEARCH:

1. Neurophysiological Correlates:

   - Develop magnetoencephalograph (MEG) screening/selection techniques (visual, non-visual).
     - Measure sufficient known talent.
     - Measure other select populations (e.g., creative, yogi, martial arts).
     - Measure general population.

   - Examine feasibility for refinement to permit talent sorting according to task type or need (e.g., visual vs. verbal style).

   - Perform follow-on talent validation experiment with new candidates to confirm MEG findings.

   - Use as a check for training/development status or progress.
     - Evaluate individual strategies.
     - Evaluate specified training programs.

   - Examine feasibility of transmitting information (i.e., via redundancy coding methods) for near-field and far-field conditions according to cognitive style.

2. Physiological Correlates:

   - Determine potential of information transmission via GSR or other CNS parameters.

3. Application-Oriented Issues:

   - Investigate neurophysiological/psychophysical measures useful for predicting data quality.

   - Determine if self reports, focused intent, or other factors can be found that help in predicting data quality.
General screening investigations:

- Develop new target pools that are comprehensive and can identify various talent and talent preferences.

- Conduct in-depth study of people previously involved in this research to search for patterns in background, personality, or other factors.

- Reassess/investigate psychological or psychophysical measures that show promise for screening:
  - Defense Mechanism Test (DMT).
  - Stanford Hypnotic Suggestibility Scale.
  - Subliminal Perception Responses.

Application improvements (Intelligence Related):

- Examine methods for improving information quality or reliability:
  - New internal strategies.
  - Task/response timing.
  - Specific goal setting.
  - Spatial/temporal issues on strategies for search improvement.

- Determine if results from conventional altered state research have applicability to application quality/reliability improvement.

- Conduct various experiments, review data bases, and apply various evaluation methods to determine application potential and to identify methods of improving data quality as appropriate.

Explore other applications:

- Communications potential:
Use of redundancy coding (with conscious response).

Incorporate with other basic/applied projects.

Simulate "real" problems:
- Hostages (lost people).
- Underground or submarine environment.

Predictive:
- Identify approaches for follow-on.
- Involve other labs, other talent.
- Examine influences of event complexity, time-of-occurrences.
- Tie to psychological/cognitive style.

Code breaking:
- Perform preliminary investigations for follow-on.

Training Developments:
- Develop improved ways to measure or evaluate the role of training, the training method, practice, goal setting, session timing, or other factors.

Review a wide variety of "training development" approaches to identify candidate avenues for new basic/applied research (e.g., potential use of subliminal perception training).

Compile appropriate evaluation procedures and statistics:
- Use of control groups.
- Improved artificial intelligence methods.
- Bias detection methods.
- Other
VI. (U) OTHER ACTIVITIES:

2. Develop "Multi-Disciplined: Research Plan:
   - To incorporate findings from FY91 work.
   - Develop new interlab/interdisciplinary links with:
     - Neuro-cognitive sciences.
     - Optical data processing/neuro network technology.
     - Altered state research:
       - Hypnagogic/Hypnopompic
       - Other
     - Advanced physical theories:
       - Recent viewpoints on gravitation.
       - Postulates involving scalar waves.
       - Other

3. Activity Support:
   - Research Management.
   - Scientific Oversight Committee (SOC).
   - Human Use Review.
   - Computer Support.
VII. (U) SCHEDULE CONSIDERATIONS:

(U) The following pages contain table summaries of key activities identified in the previous sections. Estimated level-of-effort, as well as key milestones and other data, are included on the tables.
### External Support - FY91

**Basic Research**

<table>
<thead>
<tr>
<th>Area</th>
<th>Est. Level of Effort</th>
<th>Est. Start</th>
<th>Est. Comp.</th>
<th>Interface</th>
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</thead>
</table>

1. Neurophysiological Correlates
   - Visual Response MEG
   - Non-Visual MEG
   - For Select and Control Groups
   - For Near and Far Field

2. Physiological Correlates
   - Candidate CNS
   - Near and Far Field
3. Energetics Phenomenon
   - Initiate Review
   - Locate People
   - Develop In-Depth Plan
   - Identify Equipment

4. Physical/Psychophysical
   - Physical, Cognitive Constructs
     - Target State, Environment
     - Possible Variables
   - Comprehensive Target Pool
   - External Field Effects
5. Altered State Investigations
   - Lucid States; Other Noise Reduction Conditions
   - Correlation to Cognitive Style

6. Review of Relevant Conventional Research
   - Neurosciences/Biophysical
   - Advanced Physics
   - Psychological Issues
EXTERNAL SUPPORT - FY91
APPLIED RESEARCH

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</table>

1. Neurophysiological Correlates
   - Visual MEG
   - Non-visual MEG
   - Select, Control Groups
   - Information Transmission

2. Physiological Correlates
   - CNS Parameters
   - Screening/Selection
   - Information Transmission
EXTERNAL SUPPORT – FY91
APPLIED RESEARCH

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3. Application Enhancement

- Factors for Predicting/Improving Data Quality
  - Pattern Analysis
  - Strategies, Training
  - Other
- Use of Multiple Sources
- Task/Person Matching
  - Calibration Target Pools
  - Talent Quantification
- Insight from Talented People
- Use of Selection Aids
  - Psychophysical Measures
  - Subliminal, Other Scales
  - MEG Findings
EXTERNAL SUPPORT – FY91

APPLIED RESEARCH

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</table>

4. Explore Various Applications
   - Intelligence Needs
   - Communication Potential
     - Subconscious (MEG)
     - Conscious (RV, Other)
     - Coding Techniques
   - Predictive
     - Preliminary Investigations
     - Develop Follow-On Plan (FY92+)
     - Multi-Labs
     - Timing/Complexity
     - Cognitive Style
   - Code Breaking
     - Preliminary Investigations
EXTERNAL SUPPORT - FY91
APPLIED RESEARCH

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</table>

5. Training/Development Investigations
   - Review Worldwide Literature
   - Role of Training, Practice, Goal Setting, Other

   - Research Projects
   - Various Operational Activities
2. Develop Comprehensive Multi-Disciplinary Plan (For FY92+)
   - Integrated, Multi-Lab
   - Neurosciences/Cognitive Sciences
   - Advanced Research (Physics, Biophysics)
   - Other
3. Activity Support
   - Research Management
   - Scientific Oversight Committee (SOC)
   - Human Use Review
   - Computer Support
   - Travel
   - Administration