MEMORANDUM FOR: Carol

Please DRAFT TYPE

STAT

(DATE)

FORM NO. 1 AUG 54 101 REPLACES FORM 10-101 WHICH MAY BE USED.

(47)

Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010009-7

for both Color Identification and Color Experimentation

.4.3. In summary, the selected contractor must

Consider these potential factors in developing a viable Design Concept for a P.I. Cola Control Cell:

- Determine the limits and types of visual anomalies permissable for the task of identifying colors on reconnaissance photography.

- Determine the influences upon color identifications exerted by variations in
  a) PI activities (phases of readout) and
  b) Target Types.

- Determine to what tolerances color information should be obtained

- Determine the means by which such color information should be transmitted to users.

- Determine to what extent the specification of color information should be accomplished by humans and/or machines.

- Determine to what extent optics and light sources of viewing instruments must be modified or newly-developed to best exploit the color films provided.

- Investigate the theory that human adaptation is sufficient for all types of interpretation other than specific color identification tasks.

- Reconcile the Graphics Arts luminance requirements of less than 500 ft-lamberts for color transparency viewing with PI requirements for 3000 ft-lamberts on current black & white film; thereby determine relevance and limits of magnified viewing on color films.

- Relate the response of the human eye in color film viewing with standard PI image display devices.

- Determine the effects of using enlarged originals for a substantial amount of color film photo interpretation tasks.

(OUTLINE ?)

4,2,3 Photo-Scientific TASKS within a Color Control Cell

- Micro-densitometric Studies
- Comparative Studies between two different camera systems or missions
- Changes in images produced by deviations within a mission.
- Performance Comparisons between emulsions, lenses, printers, processors.
- Determination effects of varying exposure levels and filters; analysis of multi-layered emulsions.
- Study of distortion characteristics on individual targets-images.
- Studies in preparing optimum density/contrast reproductions.
- Manipulation of spectrazonal records.
- Color separation studies.
- Image Quality grading/ranking studies
- Relationships between B&W and Color "densities"

PROPOSAL FORMAT

All Proposals Must Include the Following Information:

I. Task Abstract: Contents - Synopsis of task within 12 lines, plus estimated cost of direct labor, material, overhead, G&A, fee, total.

II. Introduction: Contents - Covering background and task justification rationale.

III. Technical Discussion: Contents - Detail and subsections as a function of the task.

IV. Work Statement: Contents - This statement should succinctly describe the individual tasks to be done and should be sufficiently definitive that one may read this section to understand the purpose and scope of the tasks.

V. Deliverable Items: Contents - 1) Interim and Final reports
2) Equipment

VI. Schedule of the project percentage of completion of performance by months and related schedule of percentage of project expenditures by month in tabular form.

VII. Time Bar Chart

VIII. Financial Considerations: Contents - Cost details, summary, GFE required.