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4 January 1966

U. S. Government
Washington, D.C.

Attention: Contracting Officer

Subject: Task Order No. 03(100,762)65R
Basic Agreement [redacted]

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Gentlemen:

[redacted] hereby advises that under subject study of Electrophotographic Processing Techniques, we are required to investigate the feasibility of applying modulated-light techniques to rear projection viewing. A three (3) month sub-study, scheduled for completion by the end of April 1966, has been cited in conversations with the Technical Representative.

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Accordingly, we are listing below, a detailed proposal of this sub-study for which we request early evaluation by the Technical Representative.

It is proposed that the investigation include, but not necessarily be limited to, consideration of the following conceptual projection systems:

A. Scanned light types (in which the light is modulated, temporally, at the source)

1. Projection cathode-ray tube
2. Modulated laser or other light beam

B. Scanned large-area modulator types (in which the modulation may be spatial as well as temporal)

1. Electro-optic crystal (for example, KDP or KD-P) with electron-beam charging
2. Modified Eidophor
3. Modified Scophony

C. Unscanned types (in which the modulator is a light-sensitive element such as a photochromic plate).

It is proposed that the "final report" summarize each of the systems in terms of its:

1. Bandwidth (spatial and temporal frequency) limitations
2. Illumination (intensity and color temperature) properties
3. Power requirements
4. Complexity
5. Compatibility with mechanical-optical systems of projection viewers
6. Anticipated state-of-the-art

The proposed information is derived from discussions with [redacted] STAT [redacted] STAT [redacted] STAT These personnel have been engaged in research and development of light modulators. They are particularly qualified to conduct an investigation of modulated-light rear projection viewers.

It is, therefore, proposed that the [redacted] conduct a theoretical and experimental investigation of the feasibility of applying modulated-light techniques to rear projection viewing. This sub-study, representing no more than a 3-man-month effort, would conclude with the delivery of a "final report" to [redacted] by 29 April 1966. STAT STAT

In addition, the report will include recommendations for further experimental and theoretical investigation in this area. Should any system (s) appear to be feasible in terms of the government's requirements, plans and costs for a feasibility demonstration (s) will also be outlined.

Accordingly, prompt evaluation with subsequent approval or modification in writing to the outlined study is requested in order to maintain schedule on subject Task Order.

Very truly yours,

[redacted] STAT

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cc: Technical Representative