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11 November 1965

U. S. Government
Washington, D.C.

Declass Review by NGA

Attention: Contracting Officer

Subject: Contract [redacted]
Task Order No. O2(100,077)65-R

Enclosure: a) Prototype Modulated-Light Film Viewing Tables
Monthly Narrative Report - October 1965
Two (2) copies

Gentlemen:

[redacted] forwards
herewith enclosure a) in accordance with the reporting requirements
under Item 4 of subject contract task order.

By copy of this letter we are forwarding three (3) additional
copies of the report to the Technical Representative.

Should you have any questions or desire further information in
this matter, please feel free to contact the undersigned.

Very truly yours,

[redacted signature box]

Contract Representative

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c: Technical Representative (w/enc. (3)) ✓

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PROTOTYPE MODULATED-LIGHT FILM VIEWING TABLES

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CONTRACT NO. [REDACTED] TASK ORDER NO. 02(100,677)65-R

Monthly Narrative Report - October 1965

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This is the fourth of a series of monthly narrative reports on the development of two prototype modulated-light film viewing tables. With these tables, photographic transparencies will be illuminated by a fast-moving spot of light whose intensity will be automatically varied to effect large-area contrast compression. This report covers the work performed by the [REDACTED]

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[REDACTED] during the period from 22 September to 22 October 1965.

A. Current Status of Work. The electrical design and assembly of the prototype modulated-light film viewing tables have been completed, and system checkout is proceeding satisfactorily. System checkout of the first prototype table, which includes operation of the flat-face kinescope, operation of the remote light-pickup assembly, operation of the table-top control panel, and final adjustment of the video circuits, is now scheduled for completion by 26 November.

The mechanical design of the prototype tables is approximately 80-percent completed. Detailed drawings of the film drive assembly, light diffuser assembly, and protective kinescope shield have been released to the machine shops. Final design of items to be manufactured, including the tilt and rotation mechanisms, the counterbalanced microscope transport system, the table top and bottom assemblies, and the remote light-pickup assembly, is now scheduled for completion by 5 November.

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Approximately 80 percent of the items to be purchased, including parts for the tilt and rotation mechanisms, motors and controls for the film drive assembly, and jewels for the microscope transport (pantograph) system, have been specified and ordered. This task is now scheduled for completion by 5 November.

All known major problems of an engineering nature have been resolved. The cover glass which will be laminated to the kinescopes to achieve flat-facing has been received. The mold for casting the RTV-615 silastic on the kinescopes has been completed. Fabrication of the flat-face kinescopes, beginning with test runs on available samples, is scheduled for completion during the next monthly period.

Huge work loads on company and outside machine shops have resulted in unanticipated delays in the manufacturing of parts for the prototype tables. Hence the final design of the main support structure, one of several critical items, is being influenced by expected delivery dates associated with possible fabrication processes.

B. Problem Areas Encountered.

1. Unanticipated delays in the manufacturing of critical parts, resulting from the huge work loads on company and outside machine shops, have affected the schedule of delivery of the prototype tables. The revised schedule now indicates delivery of Prototype I and Prototype II on 17 December 1965 and 14 January 1966, respectively.

2. Checkout of the prototype electronic systems revealed a need for minor modification. Hence circuits have been added to provide clamping and blanking (of the kinescope electron beam); their checkout will be performed during the next monthly period.

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C. Projected Work for Next Monthly Period. A revised schedule of milestones associated with the completion of the first prototype modulated-light film viewing table has been prepared based upon expected delivery of purchased and manufactured items:

<u>Task</u>	<u>Completion</u>
Specification of all purchased items	5 November
Detailed design of all manufactured items	5 November
Delivery of all purchased items	18 November
Delivery of all manufactured items	19 November
Final machining of all special parts	26 November
Electrical system checkout	26 November
Electro-mechanical assembly and integration	10 December
Electro-mechanical test and quality checkout	16 December
Delivery of Prototype I	17 December
Delivery of Preliminary Operating Manual	17 December.

Work projected for the next monthly period is based upon successful execution of this revised schedule.

D. Status of Fund Expenditures to End of Monthly Period. Funds expended at break-even level to 24 October 1965:

July
August
September
October



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E. Documentation of Verbal Commitments and/or Agreements During the Period.

1. Each prototype modulated-light film viewing table will utilize a light pickup technique employing a remote photomultiplier located approximately 15" above the working surface.

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STAT 2. Each prototype table will feature a counterbalanced Zoom 70 microscope, unmodified save for provision for local light pickup.

3. The prototype tables will not incorporate the design changes grouped (in a separate proposal submitted on 1 October 1965) under the titles: human engineering convenience items, operational items, and dual film drive.

4. Delivery of the first prototype table will occur on 17 December 1965, and delivery of the second prototype table will occur on 14 January 1966.