

3 FEB 2 1969

January 30, 1969

Post Office Box 6788  
Fort Davis Station  
Washington, D. C. 20020

Declass Review by NIMA/DOD

Attention:   
Subject:

Gentlemen:

I am pleased to forward two copies of Progress Report Number 2 pursuant to paragraph 5 of Attachment 1 to Amendment Number 4 to subject contract.

Appropriate financial information through 15 January 1969 is as follows:

Total amount available	<input type="text"/>
Expended Invoice 1 through 19	
Funds Remaining	

25X1A

\*Note: This amount does include Voucher 16 in the amount of  which your technical monitor has declined to sign off on. There must necessarily be further discussion on this matter, but it will be covered under separate correspondence.

25X1A

Two copies of the Monthly Progress Report and one copy of this letter have been forwarded to the technical monitor under separate mailing.

I apologize for the delay in forwarding this report but the financial information has just become available as a result of our mid-month closing and year end closing falling at the same time. Future submissions will be on a more timely basis.

I trust this meets all of your requirements. If you have any questions, please contact me.

25X1A

GROUP - 1  
Excluded from automatic  
downgrading and  
declassification

REW/dt

PROGRESS REPORT NO. 2

COLOR IMAGE ASSESSMENT

Project 6619

Period: December 1 through December 31, 1968

PROGRESS DURING THE PERIOD

On the dates of November 22 and November 27, 1968, two sets of output data, program documentation and listings were sent to the customer's facility. The first mailing from [ ] contained the ALPHAF, ALPHAT subroutines and five copies of the final report generated under the previous effort. Contained in the mailing on November 27 was the program listing, documentation and example output from the polynomial fit color exposure table generator. Both packages were returned to [ ] because of incorrect addressing. The packages were remailed via registered mail and the return receipts were received by [ ] thus indicating customer's receipt. On December 18, 1968 both packages were again returned to [ ] mailed to the attention of [ ] It had appeared as though the outer wrapping were removed and the packages rewrapped and returned. The packages were remailed immediately. It is assumed that they were received by the customer.

Also during this time, five computer tapes were hand carried to the customer, and a separate consignment of five computer tapes was mailed to the customer.

On January 2, 1969 four tapes were received by [ ] from the customer's facility. On these tapes were recorded micro step wedge traces for S.O. 151, 8443, S.O. 121, S.O. 155 and 8442 and a complete set of desaturated wedge traces on S.O. 121 and 8443. These tapes are currently being utilized in testing the tape decoding program for [ ] IBM 360 computer.

The following programs have been made totally operational during the reporting period.

- (1) ensemble averaging program
- (2) characteristic vector program and computation of scalar multiples

The following new programs and techniques have been generated during the reporting period:

- (1) computation of regression coefficients
- (2) generation of correct color exposure tables for incoming tri-chromatic densities and utilization of the generated tables to yield effective exposures.

A major effort during the last month was the generation of the techniques and program listed under (2) above. The completed program has not been tested, but must await the characteristic vector output to be generated from the desaturated step wedge exposure tables. Testing and utilization of the program should be initiated during the next reporting program.

Complete spectrophotometric information was generated for the 8443 dye set and the direction cosines for this dye set were computed. The 8443 dye set obeys Beer's law as confirmed by the polar plot of the direction cosines as a function of visual density.

#### WORK PLANNED FOR NEXT PERIOD

Upcoming work includes the operational testing of the ensemble averaging, characteristic vector, regression, and color exposure table generator and utilization programs. Also, experimental design of the MTF phase of the program will be initiated. Generation of the edge and comb function targetry for the MTF program will also be started in the upcoming reporting period.

No major problems exist at the present time.