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22 August 1966

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Subject: [Redacted] Progress Report - July 1966
Project [Redacted]

Gentlemen:

Enclosed is a copy of [Redacted] Progress Report
on Project [Redacted] for the period covered July 1966.
Also included is a copy of our Financial Report for this
period.

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Very truly yours,

[Redacted]

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Encl: (1) P.R.
(2) F.R.

[Redacted]

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Declass Review by NIMA / DoD

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PROGRESS REPORT

Period Covered: July 1966

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Document No.:



Dated: 12 August 1966

PRESENT STATUS

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Manufacturing drawings have been updated with exception of a few electrical schematics and wiring diagrams.

WHEN DELIVERED?

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Mechanical assembly is complete and electrical wiring is essentially complete with only trouble shooting left. Unit was shown to the customer's representative in its nearly completed form on June 20, 1966.

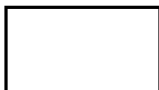
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Fabrication of parts is complete with exception of a few items required for the high intensity light sources. Electrical assembly is approximately 50% complete.


PROBLEM AREAS

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It is understood from conversations with the customer's representative that there are certain characteristics  which he believes are objectionable. One of these is the noise level of the instrument during operation in various modes. This noise is objectionable because it is loud relative

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to the "Approved For Release 2002/08/20 : CIA-RDP78B04747A003000050030-1"  found in the photo interpretation cubicle. There appears to be three sources of noise;

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the light source, the film drive motors, and the nylon film rollers. With respect to the light source, there is a source of 60 cycle hum which is undoubtedly associated with the SCR dimming circuit. This hum is present only when there is a particular sequence of control operation. It may be eliminated by operating the "loading switch" momentarily. The cause of this trouble is, at present, still a mystery, however, there is no reason we can now see why this noise could not be eliminated with electrical noise filters, or perhaps shielding of sensitive leads. The cause of this noise is currently being investigated.

In regard to motor noise, the writer sees no ready solution to the problem. The motors used were selected because of their small size to fit within the available instrument envelope. It is doubted whether vibration isolation or acoustical insulation would appreciably affect the noise level.

With respect to the nylon rollers, the problem exists only because in certain modes of power assisted or automatic slew the linear velocity of the film over the rollers is rather high and causes them to chatter or "sing" due to vibration of the roller on its shaft. This we are sure can be remedied, but there is a question as to whether this can be done without exceeding the target cost of the contract. Our latest cost to complete estimate shows that we shall spend funds to the target cost level. There is not much allowance left for changes or improvements. This necessitates close scrutiny of any further changes or improvements deemed desirable either or by the customer. 25X1

Another characteristic deemed worthy 25X1
of mention by the customer's representative was the variation in film speed during slew, and in particular the laboriously slow speed obtained when approaching the end of a 500 foot spool of


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9 inch film. The variation in speed is a characteristic of the type of drive employed. The overall speed of transport could be increased somewhat by the replacement of the motors with those wound for higher power operation. Motors like these have been ordered just in case it is found necessary to make this improvement.

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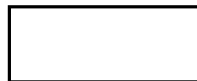
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The Product Engineer intimately associated with the fabrication, assembly, and mechanical trouble shooting of the  instruments will not be available for the duration of the contract due to a sudden serious illness. Although the instruments are essentially complete there is still a considerable amount of work in perfecting their operation. This type of effort, found commonly in prototype development, requires a talent for suggesting and executing the small but necessary design modifications to make the unit operational. This responsibility will be assigned to another product engineer, however, there will undoubtedly be some delay caused by this occurrence.

A problem has arisen in the tracking of the film during transport. This we feel is due to the more complicated path the film must travel. It is believed that more careful alignment of the roller axes will remedy this.

PROJECTED WORK FOR AUGUST

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Changes to  reduce noise and increase slew speed will be investigated, an estimate of their cost of incorporation made, and a decision on whether they can be done within the budget of the present contract arrived at.

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[redacted]

Assuming that there is a relatively efficient recovery of our manufacturing section from the sudden loss of the cognizant product engineer, [redacted] will be finished and made ready for final inspection.

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[redacted]

The sequence of operations [redacted] will be practically the same as that [redacted] with an interval of approximately 3 weeks.

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SUMMARY OF CORRESPONDENCE

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Meeting [redacted] 20 July 1966 between [redacted] (Customer's technical representative).

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The nearly assembled [redacted] instrument was displayed. Customer's representative had the following comments.

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1) He found the noise of the nylon guide rollers objectionable during rapid film transport. This is the same type of noise that he recently objected to [redacted] indicated that this would be investigated.

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2) Customer's representative asked if the noise of raising and lowering the platen could be reduced [redacted] indicated that this would be difficult to do.

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3) Customer's representative would like to have protective covers over the platen raising solenoids similar to those

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[redacted]

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Meeting at customer's facility [redacted]
(customer's representative) on 21 July 1966.

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The writer [redacted] visited the customer's facility
to investigate problems customer's representative was having [redacted]

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[redacted] The left front handwheel was found to be sticking on its
shaft and was not free to rotate in the disengaged position. This
was quickly remedied by removing the handwheel and cleaning the
shaft and bushing. A minor interference restricting the proper
operation of the shade was also corrected.

In addition to these obvious problems, customer's rep-
resentative expressed concern over:

1) Noise level during operation due to lamp, motors,
and guide rollers.

2) Variation of film speed during slew, and in particu-
lar the slow slew speed when approaching the end of a 500 foot
spool of film.

A more detailed description of these problems is given
above under Problem Areas.

Financial Status

A financial report for the month of July is enclosed.

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