25X1A

[redacted]

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[redacted]

Fort Davis Station
Washington, D. C. 20020

April 24, 1964

Gentlemen:

Reference: [redacted]

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Three Advanced Photointerpretation Light Tables

[redacted] is pleased to submit this proposal to design several advanced photo interpretation light tables in response to your proposal request. These light tables will represent an improvement over the tools presently employed by photointerpretation personnel and emphasize the following factors:

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1) Ease of viewing and use by a stylized human engineered package.

2) Increased packaged illumination and a light level control by utilizing a special high quality fluorescent lamp and high frequency excitation.

3) Elimination of stroboscopic or flicker effect by high frequency pulse duration modulation.

4) A simple but rugged mechanical design.

5) An easy loading system having positive support and eliminating the adapters previously required to handle various types of spools.

6) A superior mechanical film drive with magnetic clutches for directional control and maintenance of the film tension.

7) Elimination of film scratching by clamping the film against the table only when not in motion, the film being transferred directly from roll to roll when it is in motion.

8) Automatic masking of the light in the unused portion of the table to reduce eye strain.

Our proposal describes the design details of the following light tables

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GROUP 1

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which have been assigned an item number to make it easy to associate them with our cost figures.

Item I	An advanced Tilt Top Light Table
Item II	An advanced Film Viewing Light Table with a Translating Microscope Carriage
Item III	An advanced Film Viewing Light Table with Translating Microscope Carriage and High Intensity Tracking Light Sources

A cost analysis breakdown is attached which considers the Items I, II, and III outlined above, as a combined design problem and each as a single independent design problem. You have requested two costs; those for the feasibility study and those for an operational prototype. It is our opinion that the specifications outlined in your technical exhibit are entirely feasible. Thus, our costs are for the engineering design and fabrication of an operational prototype of each light table. The cost for fabricating additional tables or a large quantity of the tables after the design is completed would be much less than those provided because the initial tables include the engineering labor.

The proposed light tables will be delivered over a seven months period. Item I will be delivered at the end of five months; Item II at the end of six months; and Item III at the end of seven months. As an independent design problem, any one of them could be supplied in five months.

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25X1A In addition to 13 years of experience in developing [redacted] and electro-optical equipments [redacted] has an active interpretation section, performing data collection and evaluation studies. Thus, we believe we are particularly well qualified to comprehend and solve the problems associated with the proposed advanced film viewing equipments. A few biographical sketches representative of personnel presently available to accomplish this work are attached. Exact assignments, however, are contingent on the contracts received during this proposal evaluation period.

25X1A We believe you will find the personnel employed [redacted] are particularly well qualified to conduct the proposed program. The varied education and experience of our staff of engineers, photointerpreters, human factors, and industrial design personnel will permit us to produce an equipment that will be far superior contemporary tables.

Our intense interest in the field of improved equipment for interpretation personnel can be best illustrated by the company sponsored program for a

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portable light table. This unit, illustrated in the attached brochure, was designed to solve the requirement for a simple lightweight interpretation kit for field operations.

We will be happy to discuss this proposal further with you at your convenience and suggest you contact [redacted] for technical discussion. The undersigned, who will act as negotiator [redacted] will be happy to answer such financial or administrative questions as may arise. We may be reached by calling [redacted]

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Very truly yours,

25X1A [redacted]

Assistant Secretary

JFK:im
Enclosures-
Technical Proposal, 2 cys, CONFIDENTIAL
Cost Quotation, 2 cys
Brochures, 2 cys

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25X1A [redacted]

Next 5 Page(s) In Document Exempt

Approved For Release 2002/06/17 : CIA-RDP78B04747A001400040010-2

HIGH INTENSITY CONDENSER LIGHT SOURCE

General and Electrical

This specification covers the design and development of two High Intensity Condenser Type Light Sources to be used in conjunction 25X1A with the [redacted] Advanced Light Table. The sources will operate from 110v 60 cycle power and draw no more than 150 watts. Should power conversion equipment be required, this will be furnished by the vendor. A potentiometer will be furnished with each source by the vendor.

Mechanical Packaging

Each unit will be packaged by the vendor in a housing similar to 25X1A that shown in Sketch [redacted] No dimension will exceed that shown on the sketch. Provision will be made in the optical housing to allow for ventilation. The housing skin temperature shall not exceed 100°F above 70°F ambient over a 30-minute period of operation.

Intensity Range

At full intensity the high intensity light source must provide adequate illumination of a film area of 2.6mm with an average density of 2.0 units as viewed through the optical system of the [redacted] stereoscope 25X1A microscope (with rhomboids) operating at a magnification of 100X. The required 40mm diameter spot will be equally well illuminated over its entire area. The sources shall operate at a color temperature between 3,500° and 5,500°K.

Variability and Intensity

Means shall be provided for continuously varying illumination from 50% to 100% at full intensity on each light source. Such reduction shall not reduce the Kelvin temperature below 3,500°K.

Heat

With film at 2.0 density placed on the top surface of the viewing glass, as shown on Drawing 78711-35, the temperature of the film shall not exceed 100°F above 70°F ambient after being stationary for 30 minutes in the high intensity light path under maximum illumination.

Acceptance

Acceptance tests based on these requirements will be made by [redacted] personnel at the vendor's plant. All test equipment will be furnished by the vendor. Should a [redacted] Stereoscope be required, this unit will be furnished [redacted]

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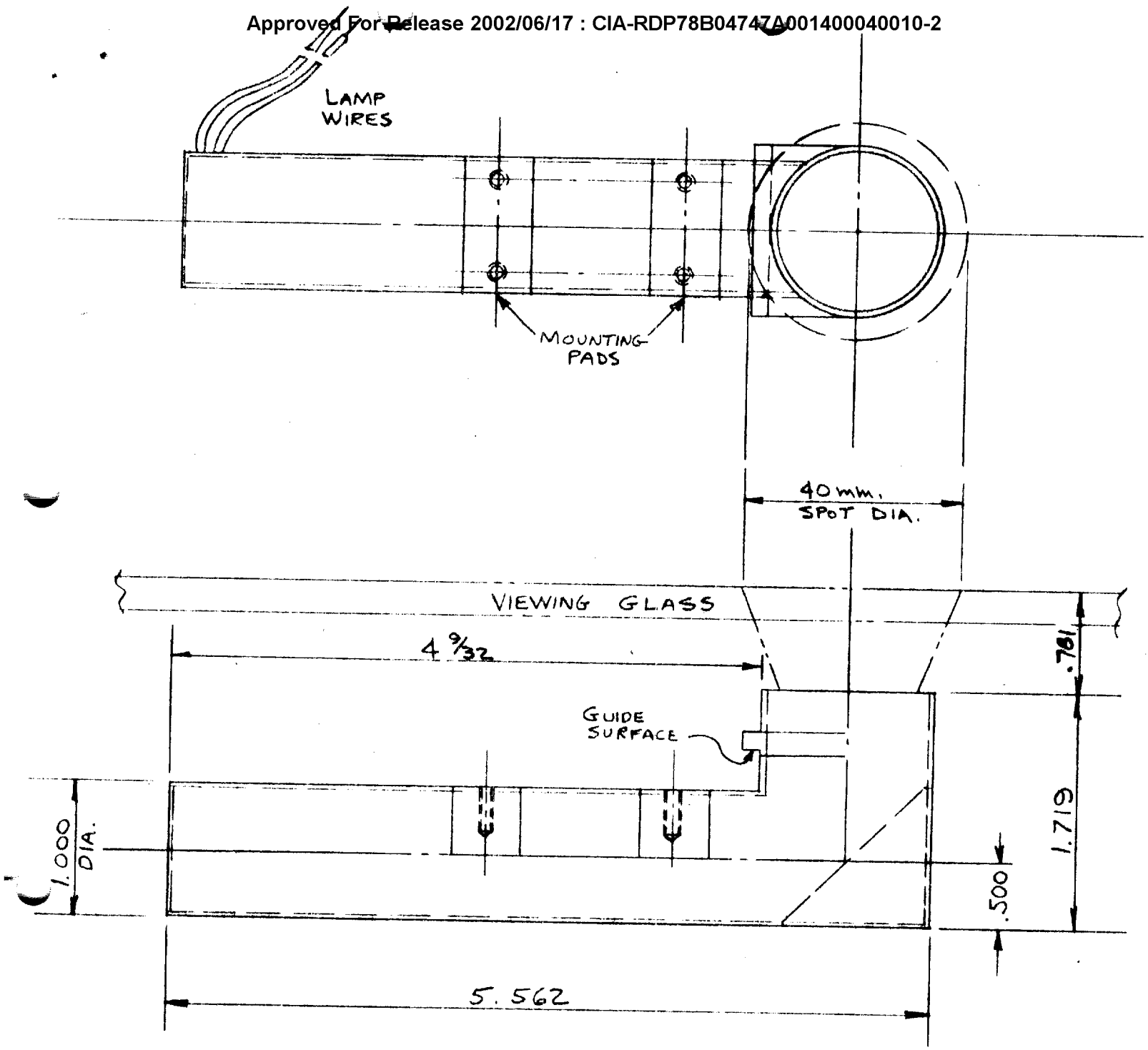

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OUTLINE DIMENSIONS—
HIGH INTENSITY LIGHT SOURCE.