Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

STAT [redacted]

Dear Bill:

Enclosed is a design concept of the twin path light table prepared by [redacted] incorporating your suggestions and comments. As is apparent, to accomodate the large 1,000' reels, he has made some rather drastic modifications. We would appreciate your review and comments. Also enclosed are comments by John. STAT

Please let us hear from you soon.

Reese

Encls.

Declass Review by NGA.

Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

September 21, 1962

STAT [redacted]

Dear Bill:

The first light table was shipped Railway Express on Wednesday, September 19. You will find that the G. F. E. rolls and arms are not included. This is for the following reason.

At the end of assembly of the first unit, it was found that contrary to original design the location of Apel arms could be changed to your greater advantage with some minor modifications to the table; and, also, that the guide rolls and shaft could be utilized without modification with some changes to the light box. Therefore, in the interest of your utilization of arms and rolls without change, I made the table changes at the expense of late shipment, and am keeping the sets of arms and rolls until all retrofit on the balance of eleven boxes is complete. They will be shipped attached to a subsequent box.

Enclosed is a picture of the box with arms, rolls and microscope attached. The additional arm and frame with reticle glass is a checking and mensuration device we use in inspection of the table and also for counting purposes in P. I. work for raisin trays in our survey work for the Department of Agriculture. This attachment is, of course, extraneous as far as you are concerned.

You will find two sets of adapter bushings in an envelope which, upon insertion into the ends of the G. F. E. guide roll shaft, will permit the socket head pivot screws to fit the shaft when adjusted with an Allen wrench. The two lengths of bushings are included in the event that the rods differ in depth.

You will also find an adapter block attached to the top of the microscope pedestal with a socket head screw. Remove this block from the locating pins and attach to [redacted] Stand 31-26-90 with screws from stand inserted through bottom (counterbored) side. STAT

Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

STAT [redacted]

Replace on pins, raise rack and insert and tighten down socket head screw with Allen wrench. Put arm with pin in stand and microscope in hole in arm. Tighten tension screws to suit. Screw brass rod into pivot block on pedestal with Teflon cushioned head down. Block up table to do this latter assembly.

I shall be on vacation from October 1 to October 8 inclusive. However, I shall call when I get back to see how everything is going.

You can understand that the G. F. E. retrofit may make the delivery on October 1 of the balance of tables a bit late. However, notice will be given.

We hope everything will be well and the table meets your needs.

[redacted] STAT

JSM:gg

Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

WORK STATEMENT

X a. Design and fabricate a light table suitable for mounting the following government furnished equipment: A standard [redacted] stand (cat. # 31-26-95, without base), 360° rotatable arm (cat. # 31-26-90) and Zoom power pod (cat. # 53-70-02, Model 2), Aeronautical Photographic Experimental Laboratory film reel brackets and [redacted] segmented nylon rollers. STAT STAT

b. Provide a slide between the table and the [redacted] stand to allow the microscope to be quickly positioned over the viewing area of the light box. STAT

c. Provide a transverse feed screw and slide to move the light box in relation to the microscope a minimum of 1½" each side of the table centerline.

d. Provide a rotational movement of the whole light table on its base ~~and tilting mechanism~~ a minimum of 90° in each direction from the nominal position.

e. Provide a tilting mechanism with integral braking safety device to allow tilting the light table and microscope through a minimum range of 0° to 45° of inclination toward operator.

f. Provide a light table with at least 9½" on a side of lighted surface but no more than 11½" on a side. The viewing surface of the table is to be glass with an opalescent plastic diffuser immediately beneath the glass surface.

g. The design goal for table lighting should be sufficient to view transparencies with 2.0 density comfortably through a stanard zoom microscope pod at 60X magnification. Switches or voltage regulation devices are to be provided for at least 4 levels of illumination over the entire viewing surface at least 2 levels in each of the four quadrents of the viewing surface.

h. Provide mounting arrangments and necessary hardware to mount government furnished accessory equipment, listed in para. 2. on the light table at the customer's facility.

i. Height of the table and over-all dimensions of the base are to be held to a minimum commensurate with good engineering design and proper balance in all possible positions expected in an operational environment.

Government Furnished Equipment

The Government shall furnish the Contractor for use in performance of this contract the following Government Furnished Equipment:

One set of APEL brackets and two sets of [redacted] nylon rollers for fitting on the nylon prototype models. Additional sets of APEL brackets and nylon rollers and [redacted] nylon rollers for installation on the light tables under Item 1 above. Also standard [redacted] stands and zoom power pods will be furnished the Contractor in the performance of this Contract. STAT STAT ILLEGIB STAT

[redacted] Manufacturing and assembly drawing

Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

November 14, 1962

STAT [redacted]

Dear Bill:

Your letter of 29 October received, preceded by the lists of objections. Your criticisms and suggestions are appreciated. We were disappointed to a degree but have given a lot of thought to ways of functionally meeting the objections.

Enclosed are three sketches. Number 1 shows your suggestion carried as far as your notes indicate. I believe that the cantalever action on the plates when the microscope is extended would entail considerable binding and require an extra hand to hold up the microscope while tightening the screws. The microscope at seven pounds (including ring) exerts a 35-pound force when extended five inches, which is considerable on two screws and bearing load washers as you can see from the sketch diagram.

Sketch number 2 suggests a more rigid scheme but does not provide for lateral motion (not requested in original Work Statement).

Sketch number 3 suggests a tilt mechanism scheme which we arrived at prior to receiving your letter. You will note that the second member provides a fulcrum for the prime moving link, thus reducing the screw load.

Since in our mind there are some further minor questions on rotation and lighting, and since we feel that we should be in complete agreement on all design features of the instrument as well as delivery dates and additional costs which might occur, we feel that it would be most advantageous if you could (as you suggest) spend a couple of days at our facility at your earliest convenience before we resume work on the instrument.

Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

STAT [redacted]

We are giving notification through normal channels that a time extension will be requested subsequent to our mutual agreement as to the disposition of the design changes requested.

[redacted] STAT

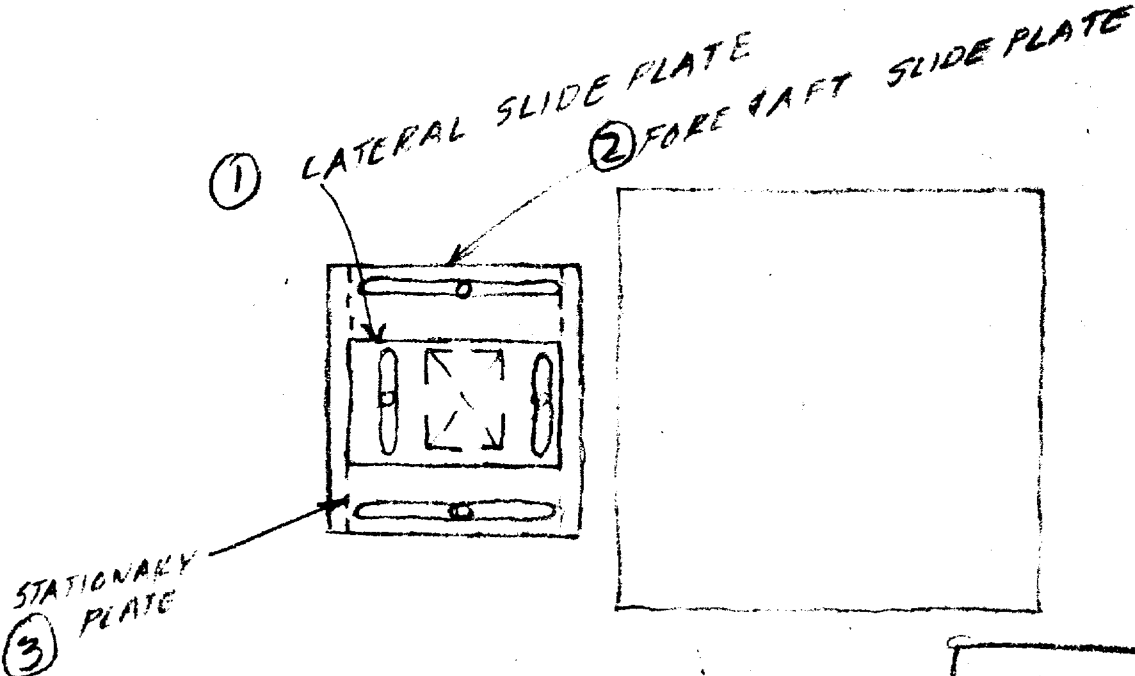
JSM:gg

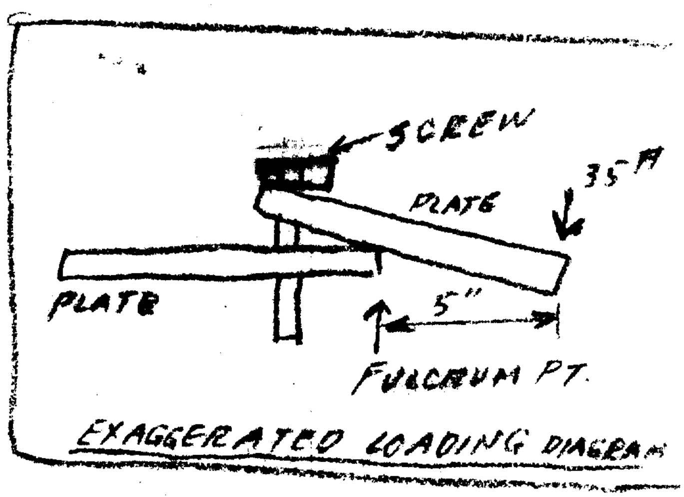
Encl. 3

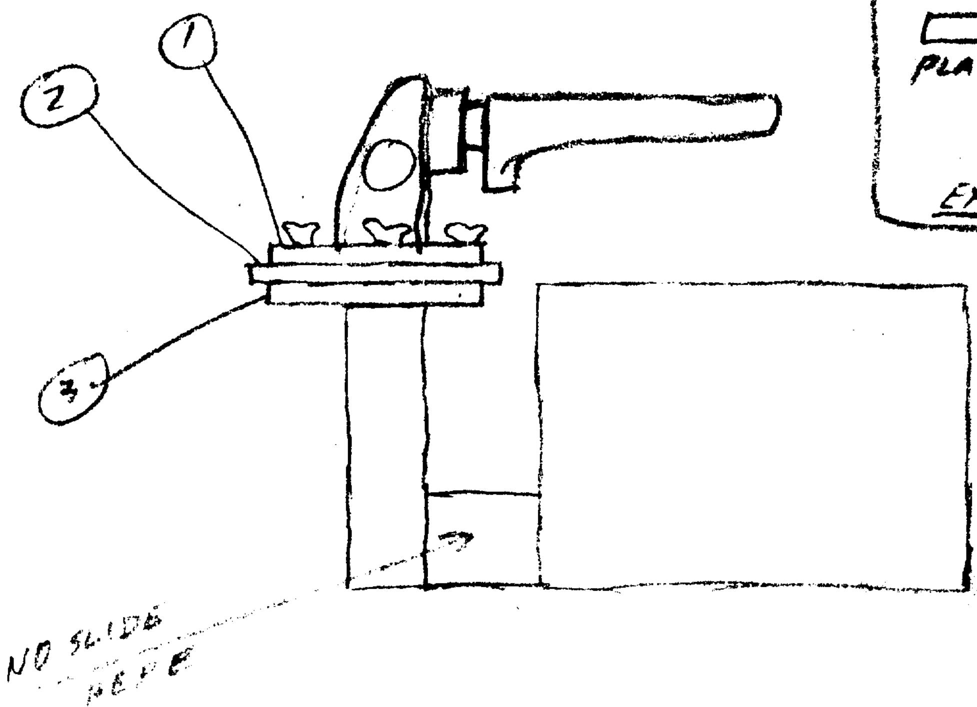
Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

MICROSOPE ADJUST
SCHEME #1 (PER W.G.M)



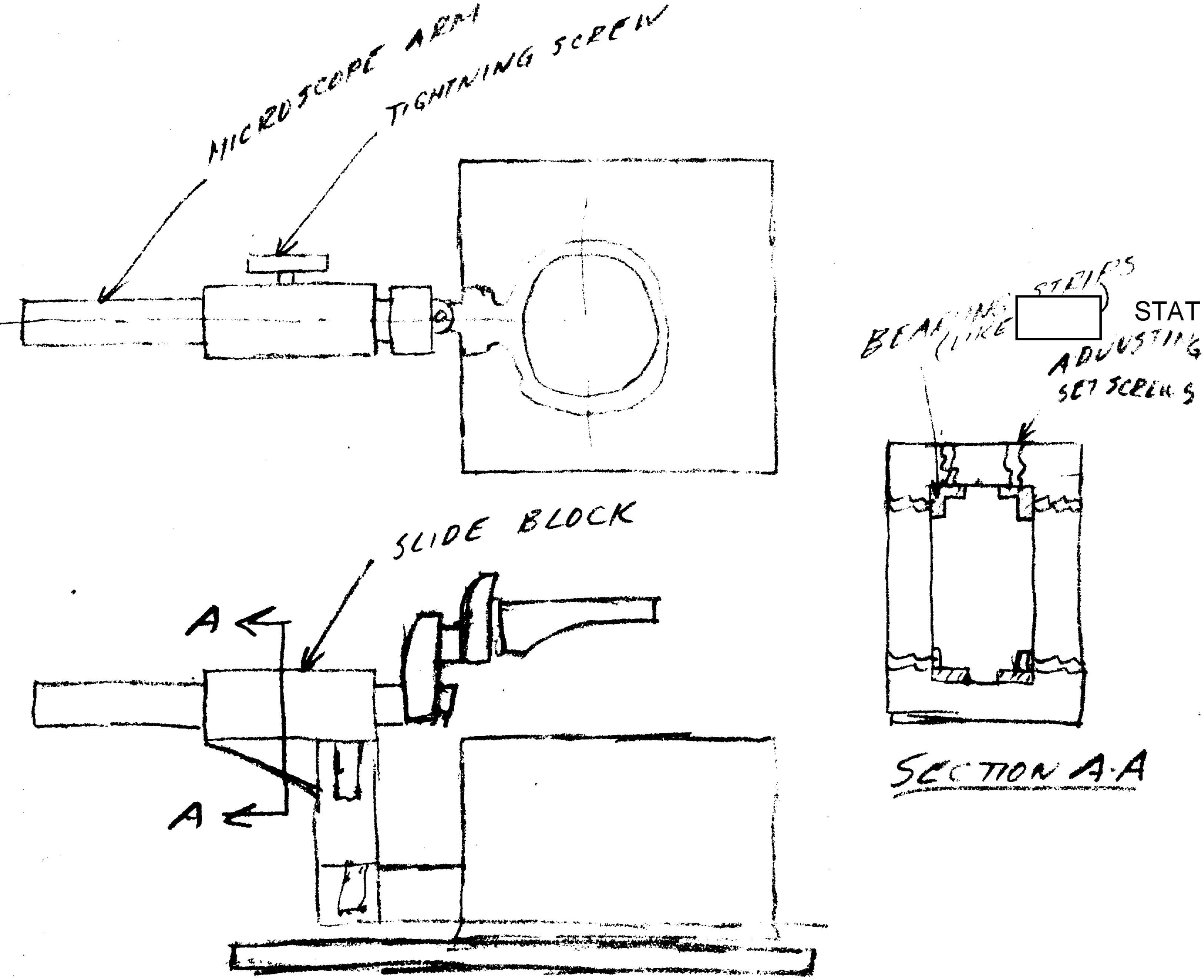




Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

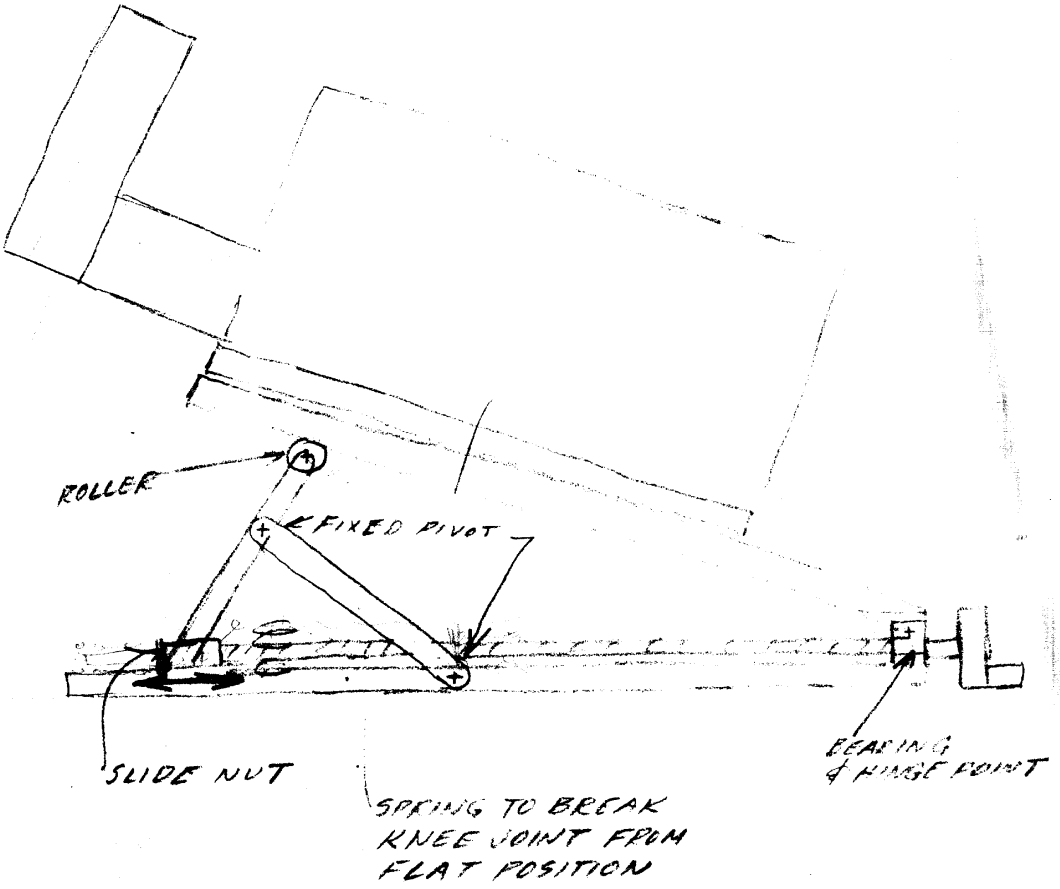
MICROSCOPE ADJUST
SCHEME #2 (ARM)



Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0

SHEET NO. 3 OF 3
JOB NO.
SUBJECT LIGHT TABLE
TILT MECHANISM
DATE 11-12-62
BY
CHKD. BY
DATE



Approved For Release 2005/02/17 : CIA-RDP78B04770A001500010015-0