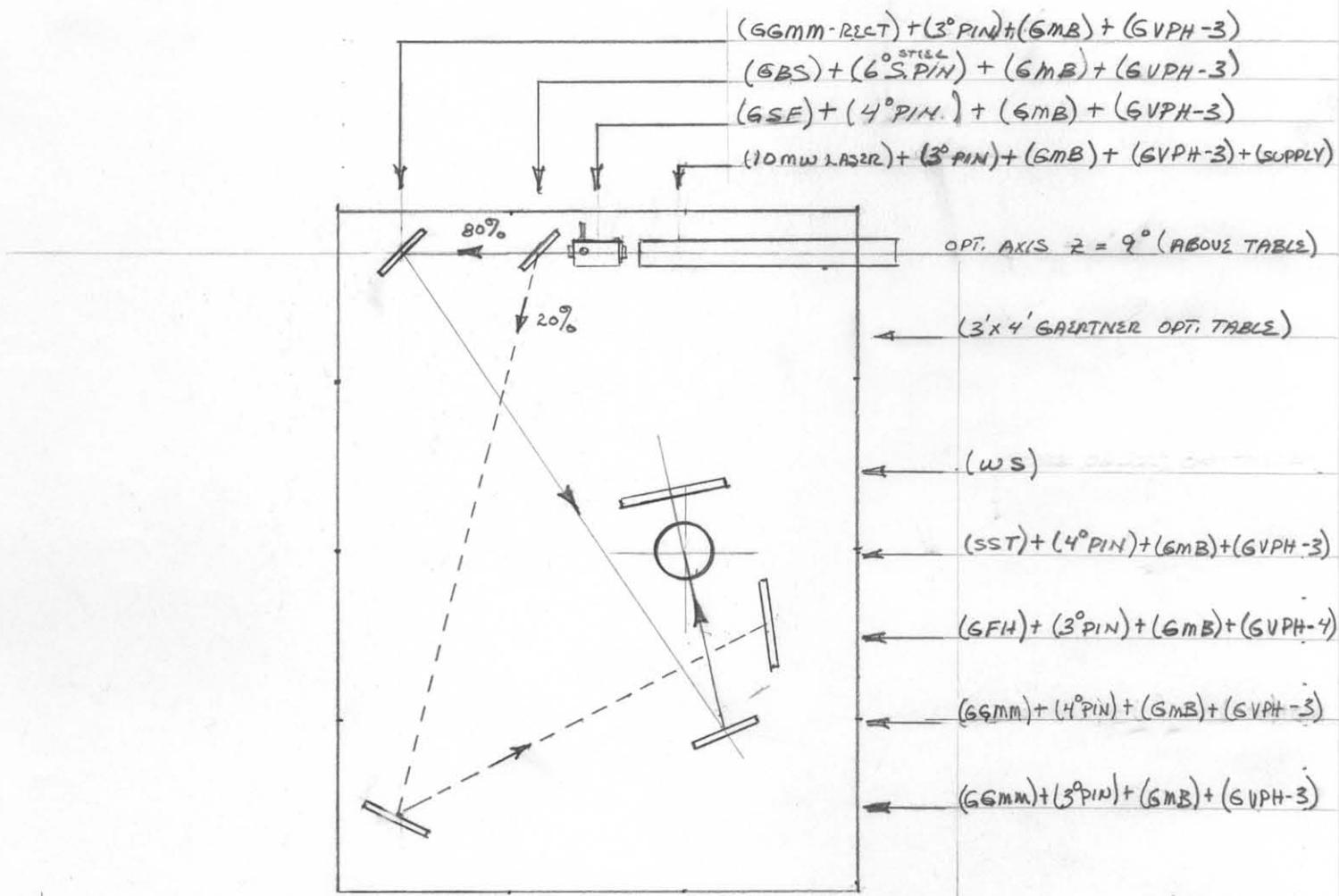


HOLOGRAPHY (3'x4' TABLE) [2-BEAM TRANSMISSION]

NOTES

1. (GMB) + (GVPH-3) = (GAERTNER MAGNETIC BASE) + (GAERTNER VERTICAL POST HOLDER - 3^{7/16}" HIGH)
2. (GBS) = (GAERTNER BEAM SPLITTER / ~3^{1/2}" OD + VARIABLE 0 - 8 { 0 = 100% T & 0% R } { 8 = 20% T & 80% R })
3. (GSF) = (GAERTNER SPATIAL FILTER) CAN USE WITH OR WITHOUT (LESS DIFFICULT) PINHOLE.
4. (GGMM) = (GAERTNER GIMBAL MOUNT MIRROR / 2 = 3^{1/2} OD / 1 = 2" x 3")
5. (SST) = (STAINLESS STEEL TABLE / 4" OD x 1/2" THICK)
6. (GFH) = (GAERTNER 0.060" x 4" x 5" GLASS HOLOGRAPHIC FILM HOLDER)
7. (WS) = (WHITE SCREEN - NEUTRAL BACKGROUND)
8. INFLATE TABLE TIRES (VIBRATION ISOLATION)
9. COULD REPLACE (GSF) w/ 60X OBJECTIVE w/ OBJ. RING MODUL
10. BEAMSPLITTER SETTINGS = #2 (\Rightarrow 20% = REF. BEAM, 80% = OBJECT BEAM)
11. EXPOSURE: 2-3 SEC w/ 10mW LASER.
12. HOLOGRAPHIC PLATE: EMULSION SIDE NEAREST OBJECT
13. SHUTTER: 3x5 INDEX CARD / BLACK CLOTH COVER { BEFORE/AFTER EXPOSURE } { TRANSPORT TO DARKROOM } { INSURES BOTH BEAMS }
14. TOTAL REFERENCE PATH = TOTAL OBJECT PATH \pm (1) LASER LENGTH. { COHERENT @ OBJECT }

SET-UP #2

SPRING 94
(5-11-94)

HOLOGRAPHY [2-BEAM TRANSMISSION]
[WI DBL EXPOSURE] (2'x3' TABLE)

(10 mW LASER + SUPPLY) + (3° PIN) + (B)

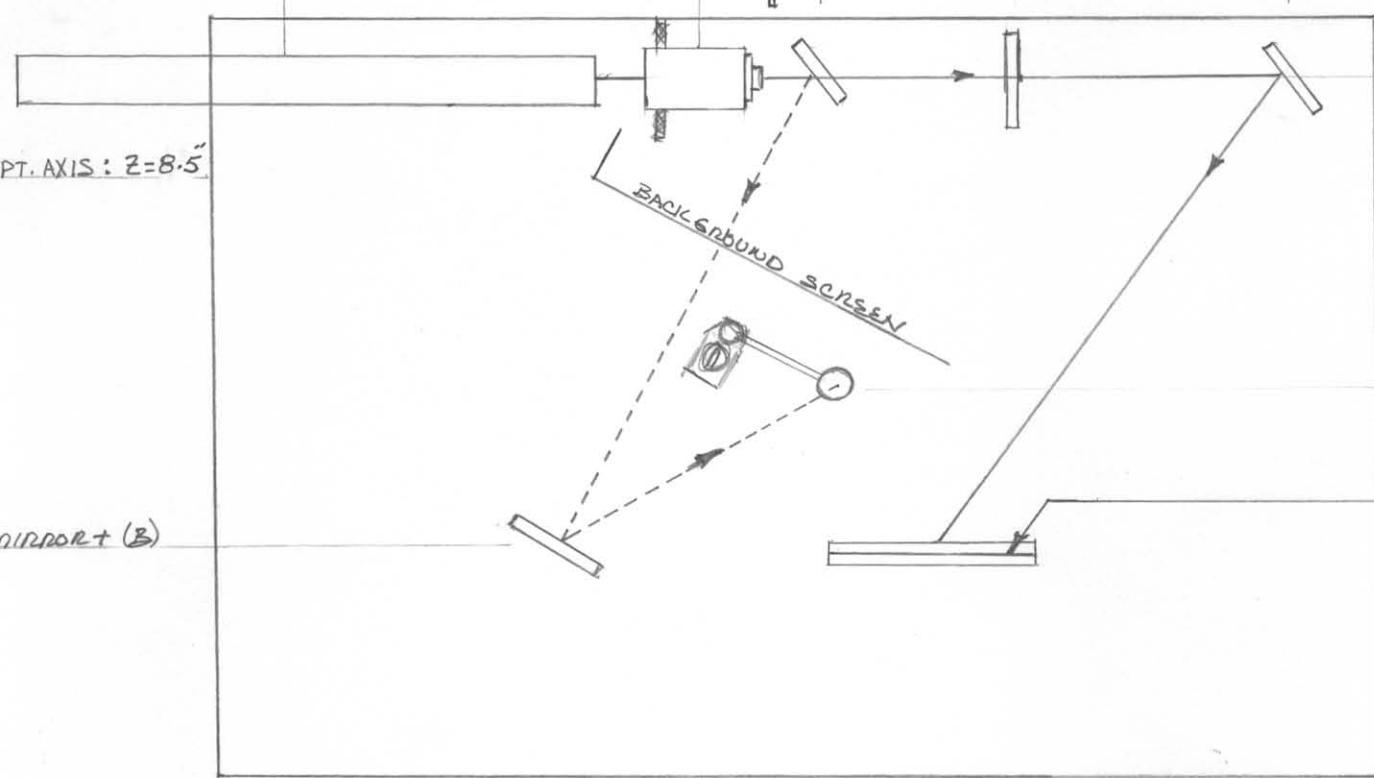
(GSF) + (3° PIN) + (B) / OR (60X) + (4° PIN) + (B)

SHUTTER (BLK VELVET CARD) + SUPPORT.

BEAMSPLITTER (NEWPORT FIXED OR GAERTNER VBL) + SUPPORT

FILTER + SUPPORT

MIRROR + (B)



(B) = (TV PH-2) + (AC) + (EM B) = (THORLABS VERT. POST HOLDER-2") + (ADAPT. CYL) + (ENCO MAS. BASE)

(GSF) = (GAERTNER SPATIAL FILTER)

(60X) = (60X MICROSCOPE OBJECTIVE + OMR)

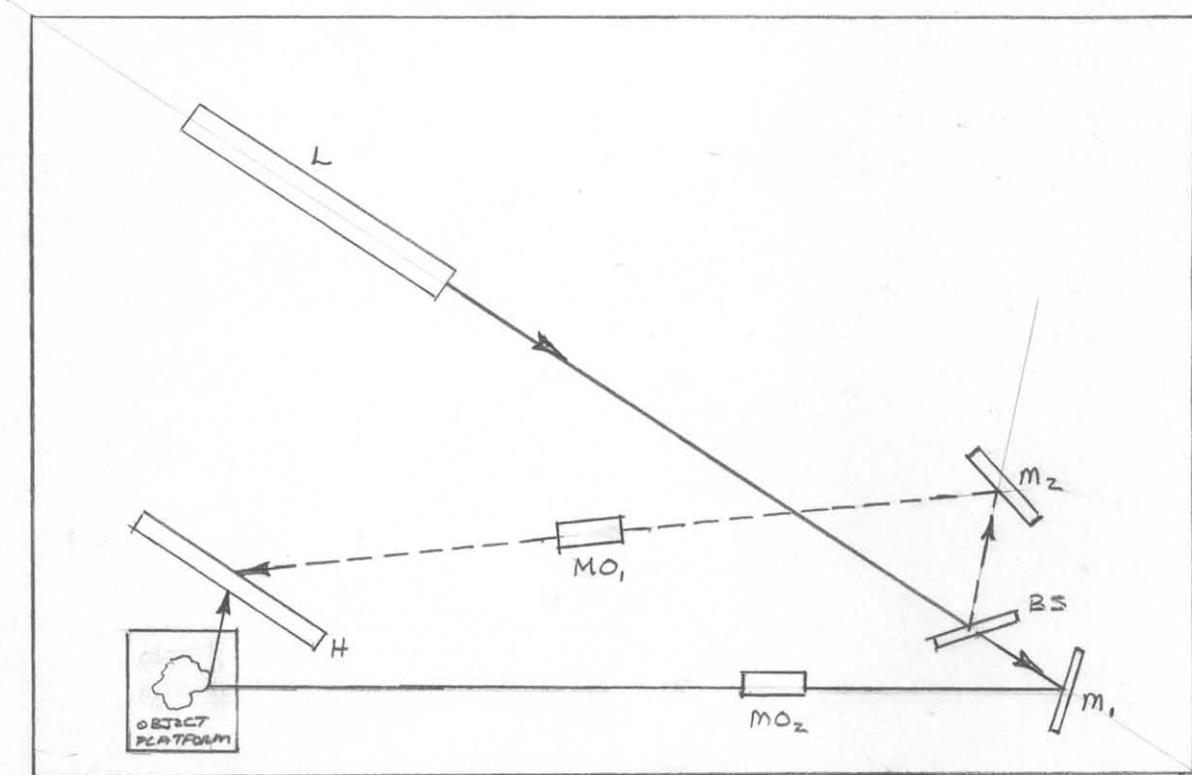
SEE SET-UP #1 FOR ADDITIONAL DETAILS.

SET-UP #3

SPRING 94
(5-12-94)

HOLOSYNTHY (2'X3' TABLE) [REFLECTION HOLOGRAM] / NEWPORT MANUAL P-8,9

OPT. AXIS: $Z = 3^\circ$ (ESTAB. BY NEWPORT COMPONENTS)



$$L = (2 \text{ MW LASER + SUPPLY}) + 2[(AC-2) + (RB-LM2-2) + (EB-1) + (\text{BOBBY PIN + SCREW})]$$

$$BS = (5\% \text{ BEAM SPLITTER}) + (AC-1) + (RB-LM1-2) + (EB-1) + (\text{BOBBY PIN + SCREW}).$$

$$M_1 = (2'' \times 2'' \text{ MIRROR} + 4'' \text{ PIN}) + (CA-2) + (3'' \text{ PIN INTO TABLE})$$

$$M_2 = (1'' \text{ RD MIRROR} + MM2-1A) + (RB-MM2-2) + (EB-1) + (\text{BOBBY PIN + SCREW})$$

$$MO_1 = MO_2 = (60 \times \text{OBJ}) + (\text{NESTING LM-1}) + (RB-LM1-2) + (EB-1) + (\text{BOBBY PIN + SCREW})$$

H = HOLOGRAPHIC PLATE HOLDER.

EXPOSURE: ~

SEE SET-UP #1 + NEWPORT MANUAL FOR ADDITIONAL DETAILS.

NOTE: NEWPORT NUMBERS FROM HL-1A KIT.