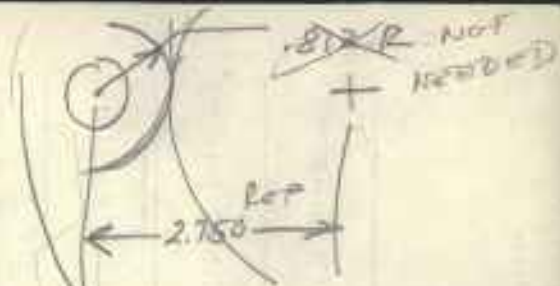


①

$\frac{3.375}{.250}$
3.500

$\frac{1.687}{3.375}$

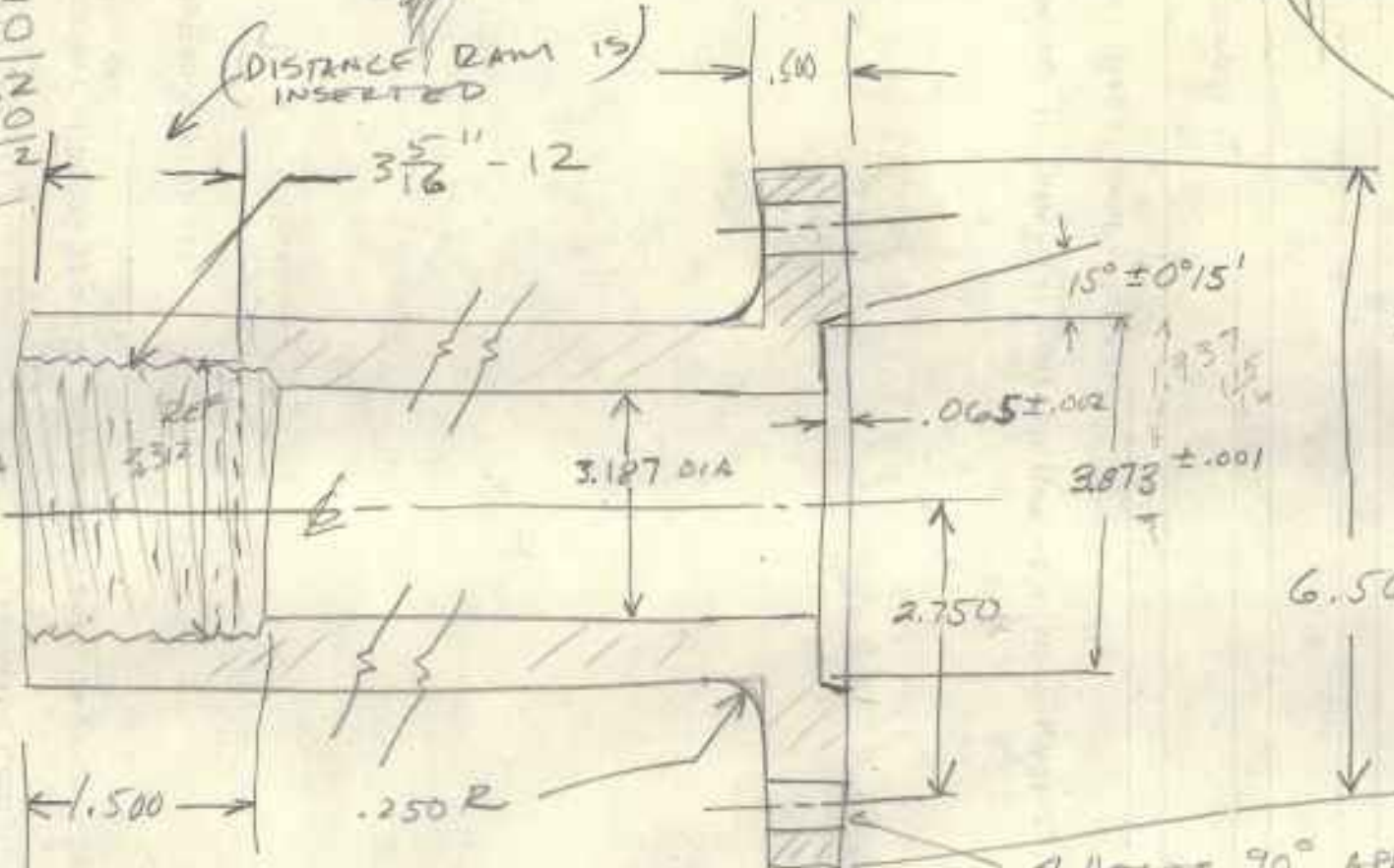
3.812



$\frac{3.312}{.250}$
3.562
250
3.812

(DISTANCE RAM IS INSERTED)

$3\frac{5}{16}'' - 12$



$\frac{2.750}{2.750}$
5.500
3.812
2 1.678
3.812
3.812
3.812
.004

$\frac{1.901}{2 3.812}$
 $1\frac{3}{32}$

$\frac{4.33}{1.066}$
1.593
2 3.187

4340 STL
R 28-32 RAM SUPPORT
FOR

HYDRO-STABIL PRESS

TOL $\pm .005$ UNLESS OTHERWISE SPECIFIED

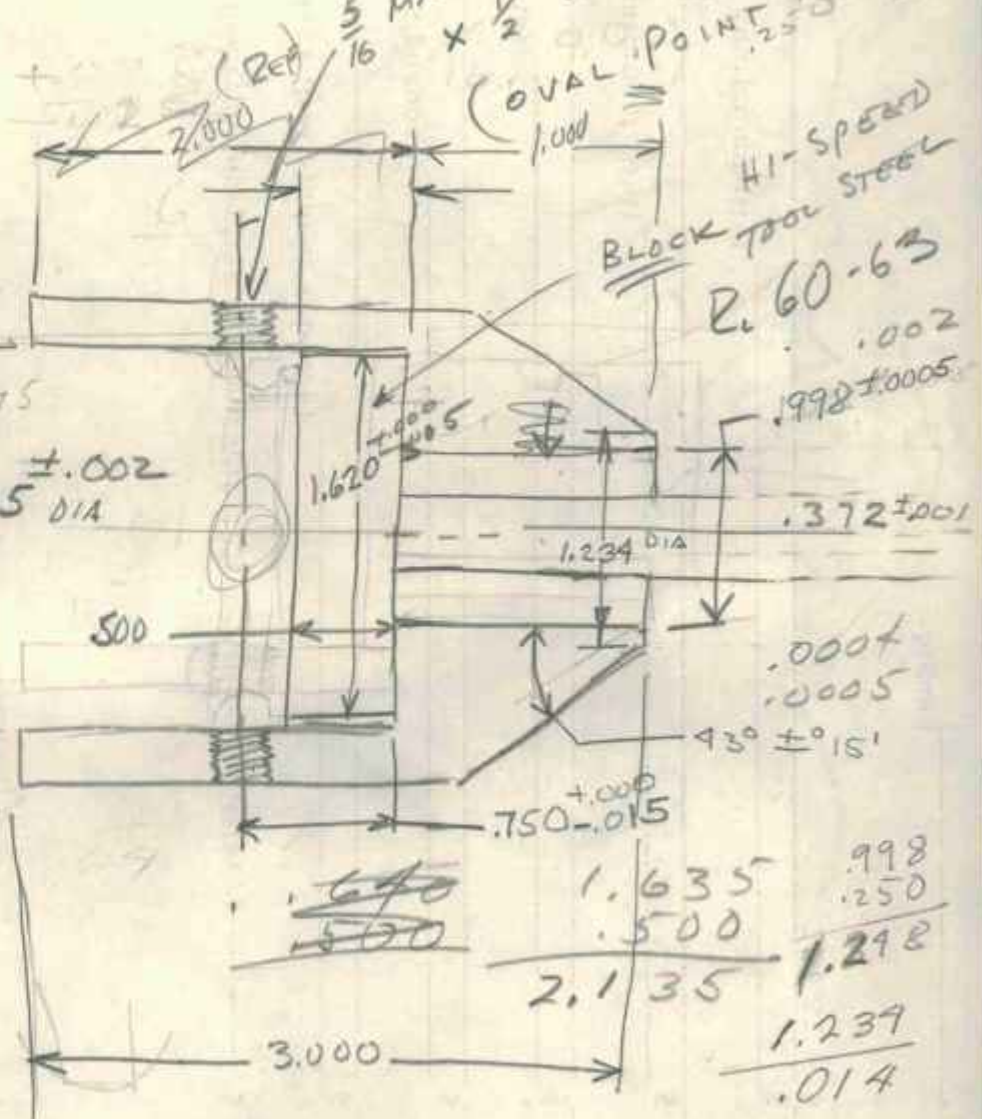
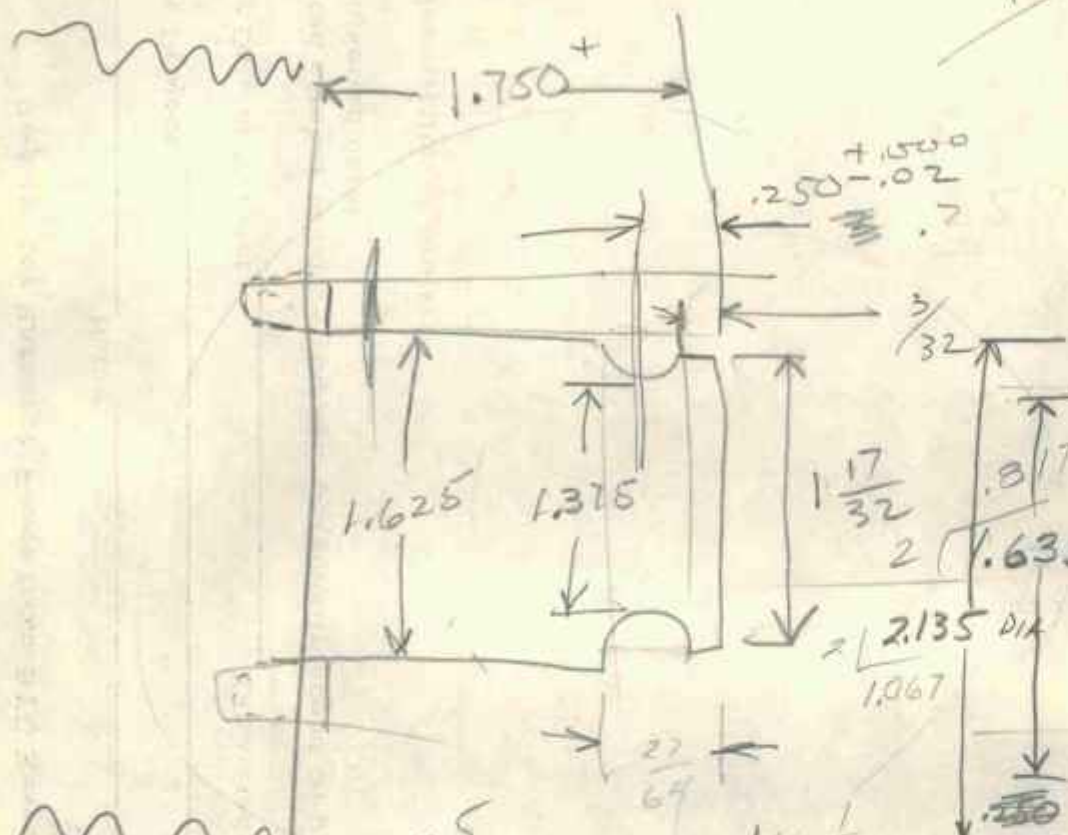
$\frac{1.687}{2 3.312}$

$\frac{1.935}{2 3.812}$

(2)

1.500
150

1/24 NF-UNF
HEADLESS SLOTTED
5 MAJ DIA SET SCREW
x 1/2" long (4 REQ'D @ 90°'s)



HI-SPEED
BLOCK TOOL STEEL
R. 60-63

$$\frac{1.625}{1.375} = .250$$

$$\frac{1}{32} \frac{1}{64} = .24$$

$$\frac{20}{64} \frac{10}{32} = .24$$

$$\frac{3}{8} \frac{5}{16} = .24$$

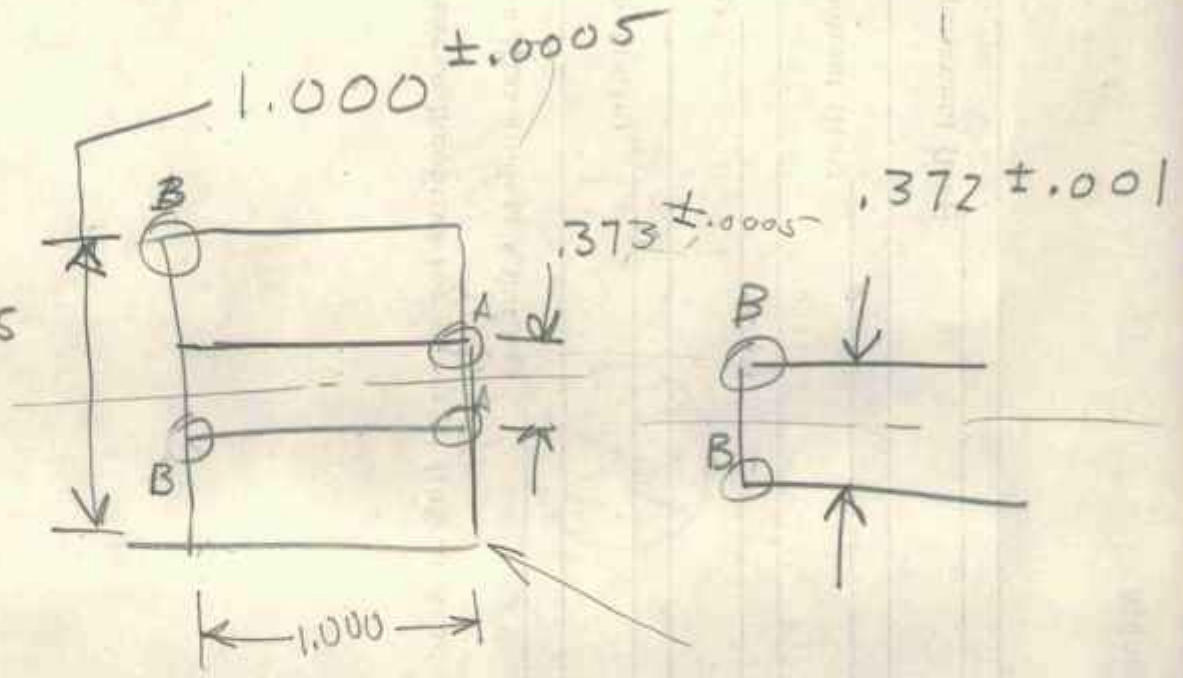
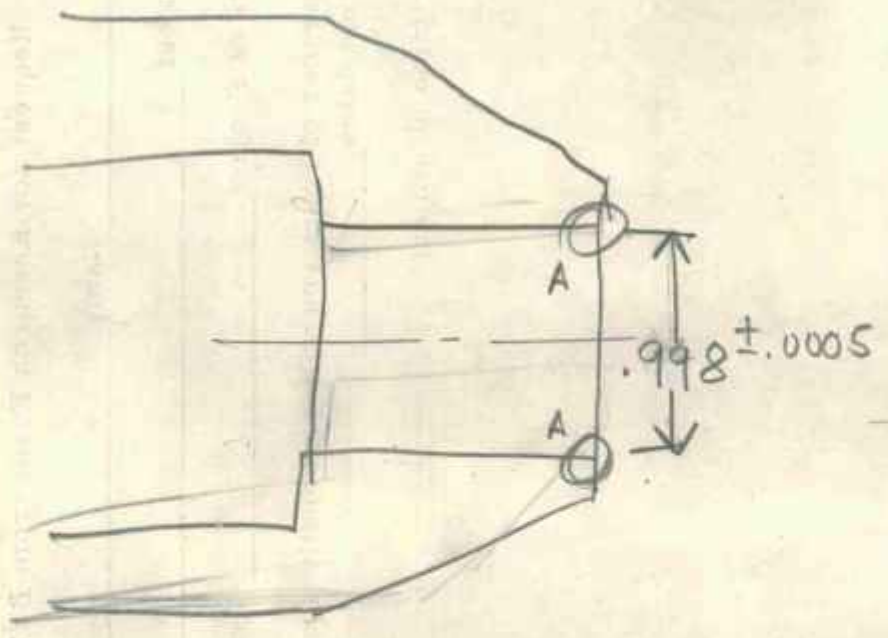
1.640	1.635	.998
1.500	.500	.250
	<u>2.135</u>	<u>1.248</u>
		1.239
		<u>.014</u>

MATL 4340 STEEL

TOL ± .005 ± NOTED

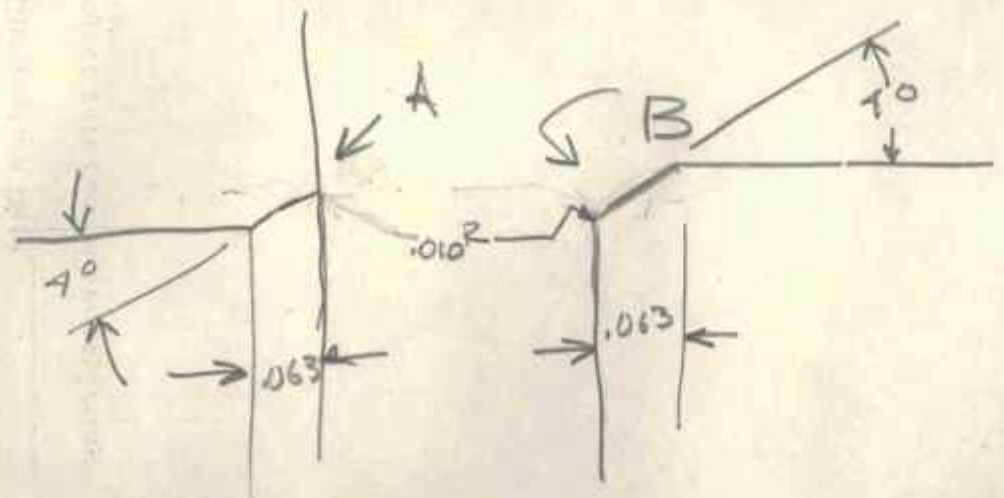
G3

3



H1 SPEED TOOL STEEL

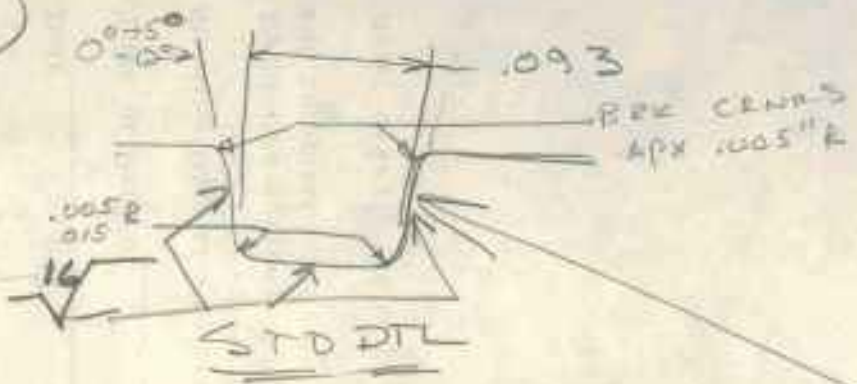
RC 60-63



4

MATERIAL: HI-SPEED TOOL STEEL

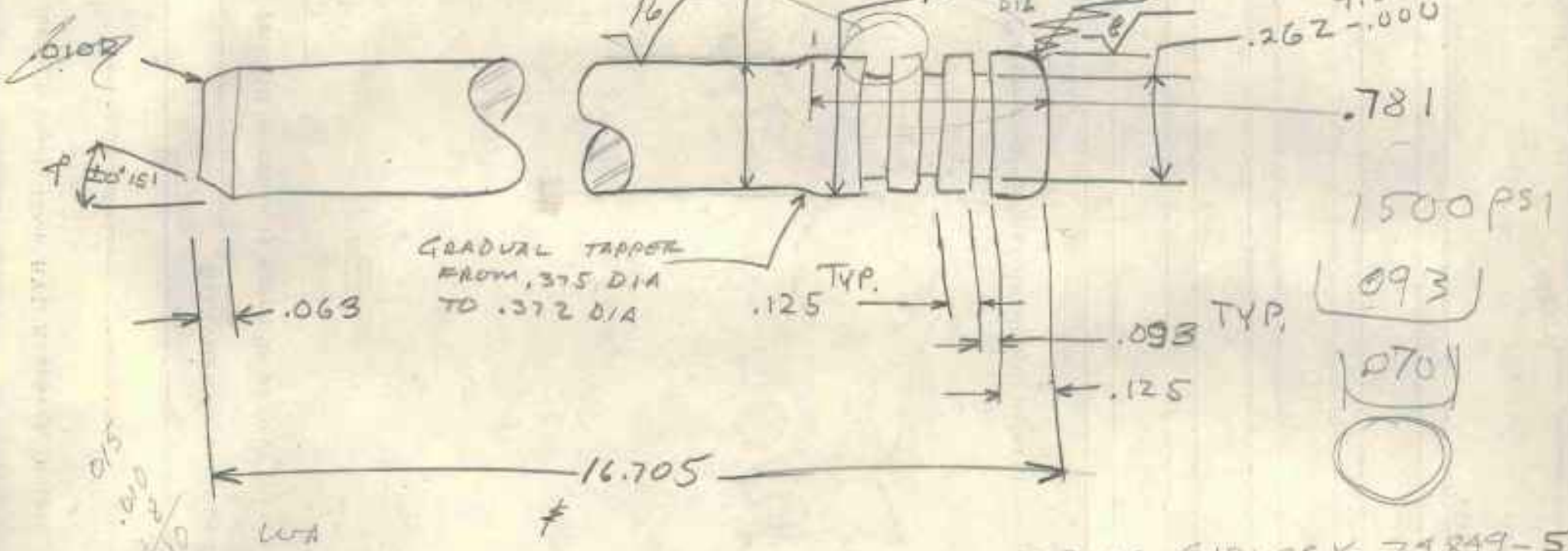
Rc 60-63



.070
.070
TO .239
.379

.372 ± .001 DIA

MACHINED TO FIT HOLE IN PART NO. ---
TO FIT HOLE -.0002 to -.0004



O-RING - GARLOCK 29849-5

NOTE
BREAK ALL SHARP CORNERS

TOL ± .005

WALD & MINOR DIA OF O-RING GROOVES TO HAVE $\sqrt{16 \times 2.5}$

PARTS LIST

5

TITLES

1000 - FINAL ASSEMBLY

~~1001 - RAM~~

1002 - RAM - SUPPORT

1003 - ~~RAM~~ → BACK UP DISC
1004 - ~~RAM~~ PISTON ADAPTER

1005 - ~~PISTON & PLUG~~ HOLDER & INSERT

1006⁻¹/₋₂ ~~RAM~~ PISTON & SEALING PLUG DTLS

1007 - SUPPORTING RING CLAMP

1008 - PRESSURE CYLINDER

1009 - COMPRESSION RING

10010⁻¹/₋₂ TENSION RING
HOLE FOR THERO COUPLE

1011 - SAFETY RING

1012 - UPPER ~~RAM~~ RING CLAMP

~~1013 - SEALING PLUG~~

~~1014 - SEALING PISTON BACKUP DISC~~

1013 - ~~SEALING PISTON~~ PLUG ADAPTER PLATE

1014 - ~~BACK UP DISC~~ closure

1015 - HANDLE

11.37
.187
- .125

11.245

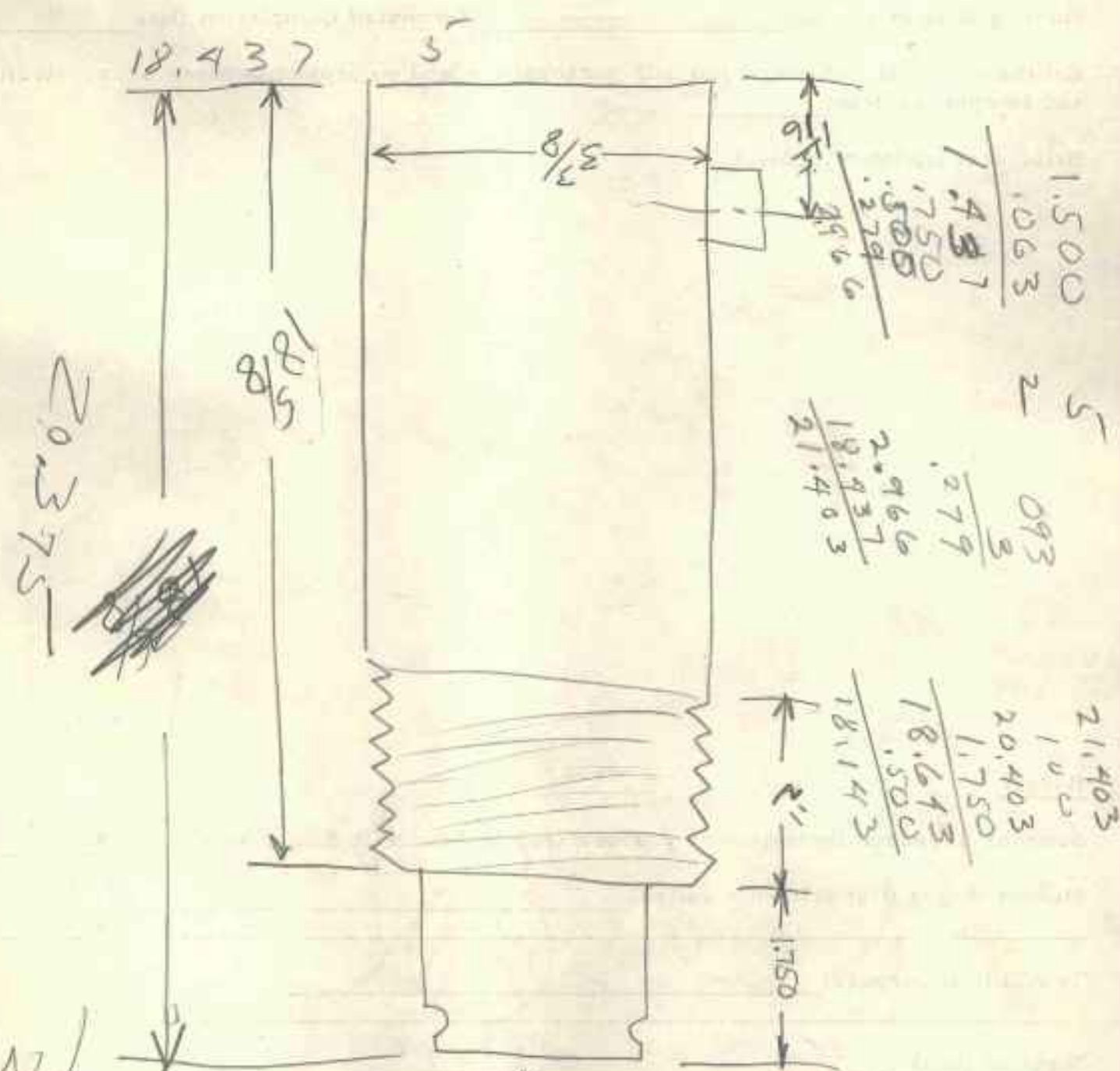
11.343
4

11.347
11.372

11.372
3" LG
458

LENGTH OF RAMMING PISTON

16



~~18.437~~
20.375

1.500
+ .063

1.563
+ .279

1.842
+ .500

2.342

2.1403
+ .093

2.2333
+ .279

2.5123
+ 1.842

4.3543

FOR
DETAILS
SEE SHK 2

18.625
+ 1.750

20.375

$\frac{3}{8}$ $\frac{1}{2}$ $\frac{3}{32}$

Request for Research Funds from BYU Research Division

Date _____ Name _____ Dept. _____

Title of Project _____

Starting Date of Project _____ Estimated Completion Date _____

Estimated number of hours you will personally spend on project between above starting and completion dates _____

Brief description of project:

LENGTH RAM ROD - PISTON

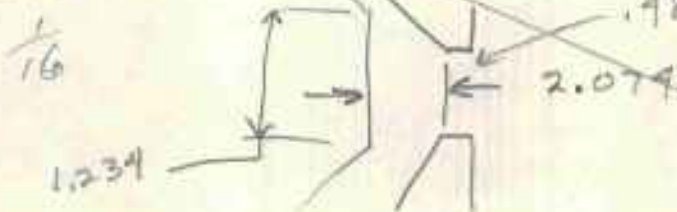
18.437 5
 3.250 45 - 0.0 TH
 15.187 50
 1.500 5

1.000 20
 1.750 20
 1500 5
 3,230

16.687 55
 .063 2
 16.624 57
 .750 5
 .781 5

1.000 5
 .781 5
 .750 5
 .050 -5
 13.500 2
 18.155
 16.081 +17
 -22
 16.081
 .480 ± .001 DIA - 2.074

18.155 ± .067 LENGTH OF PISTON



Budget

Summer Research Incentive for yourself (10% of Academic Salary)----- \$ _____

Student Wages (list student's duties) _____ \$ _____

Travel (list purpose) _____ \$ _____

Supplies (list) _____ \$ _____

Capital Equipment (list) _____ \$ _____

Operating Equipment (list) _____ \$ _____

TOTAL \$ _____

Signed _____

.06

1.75 20
 5
 5
 5

.125 35 $\frac{1}{32}$ $\frac{1}{16}$

.250

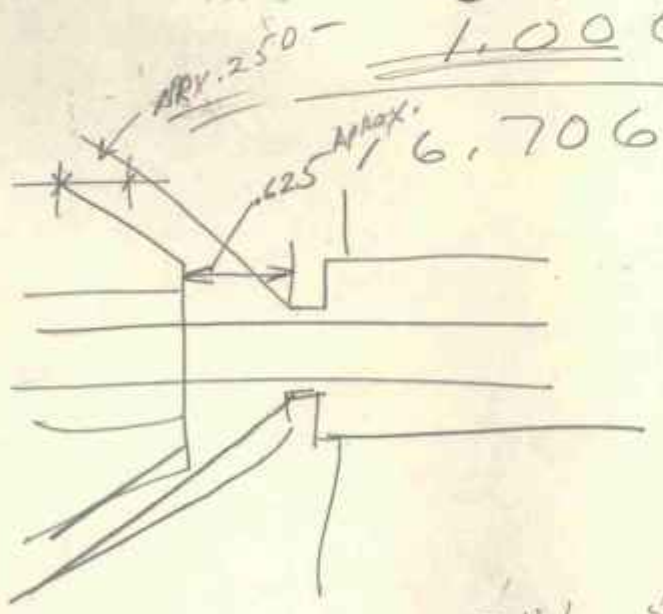
22
 .781
 .750 2
 .781

.625

.050
.625
13.500

15.706

1.000
13,500 5-10-64



1.000

16.706 ← LATHT OF PISTON

16.706

16.706

.500 5
1.750 20
1.000 ~~20~~

.781 5
.750 5

1.531
.050

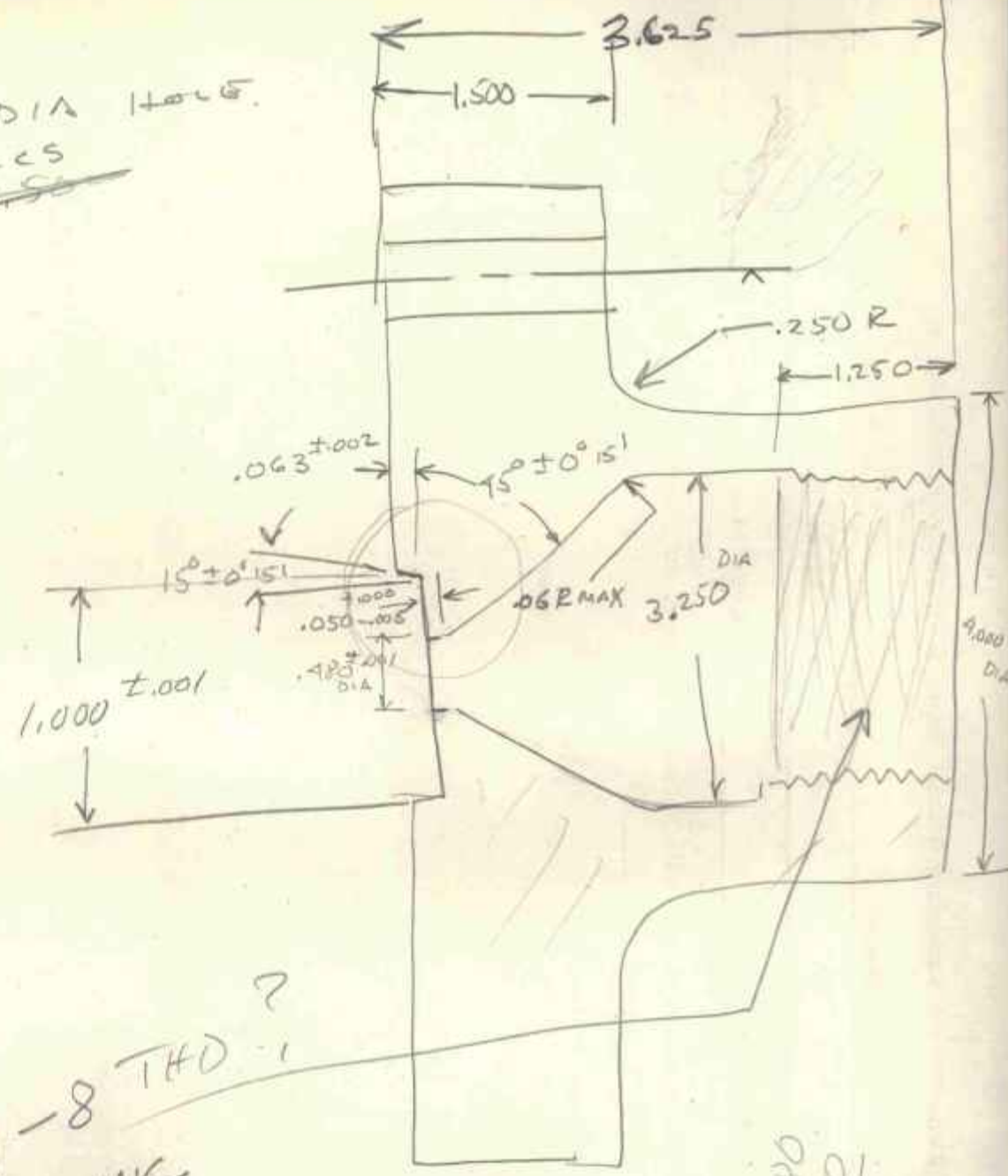
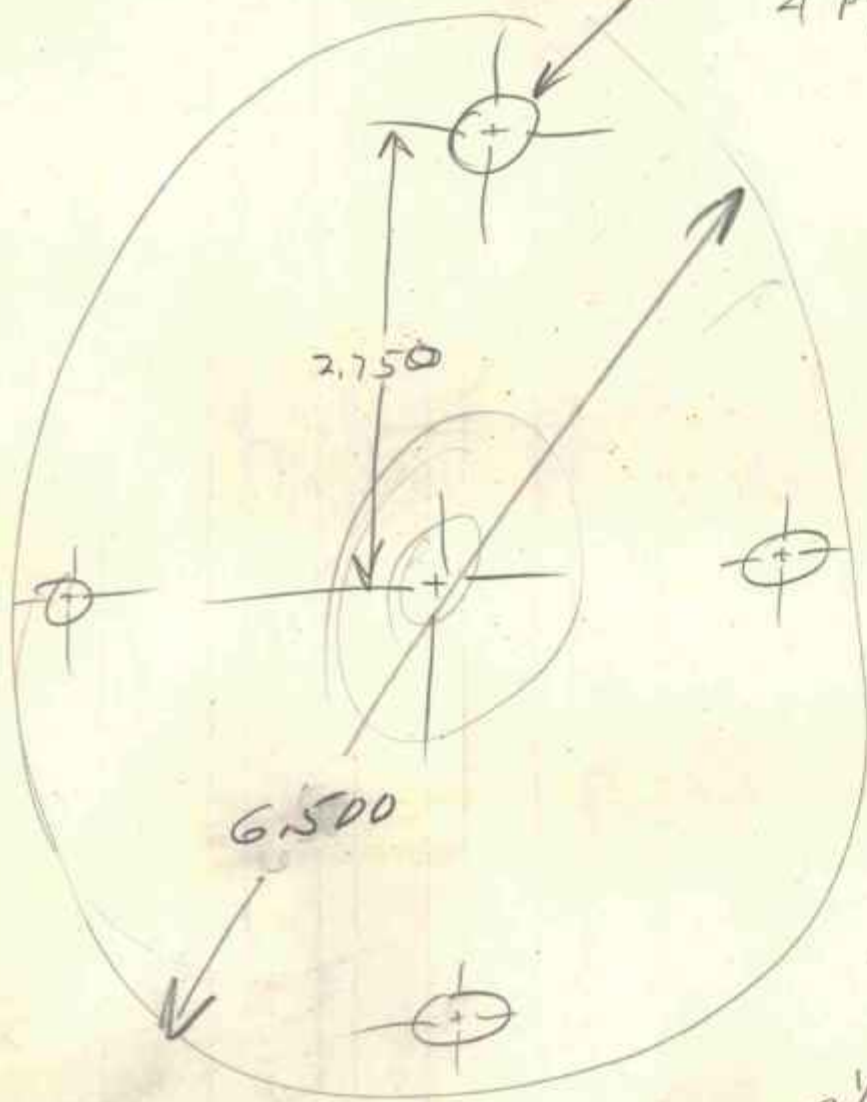
1.481

18,956

1.481

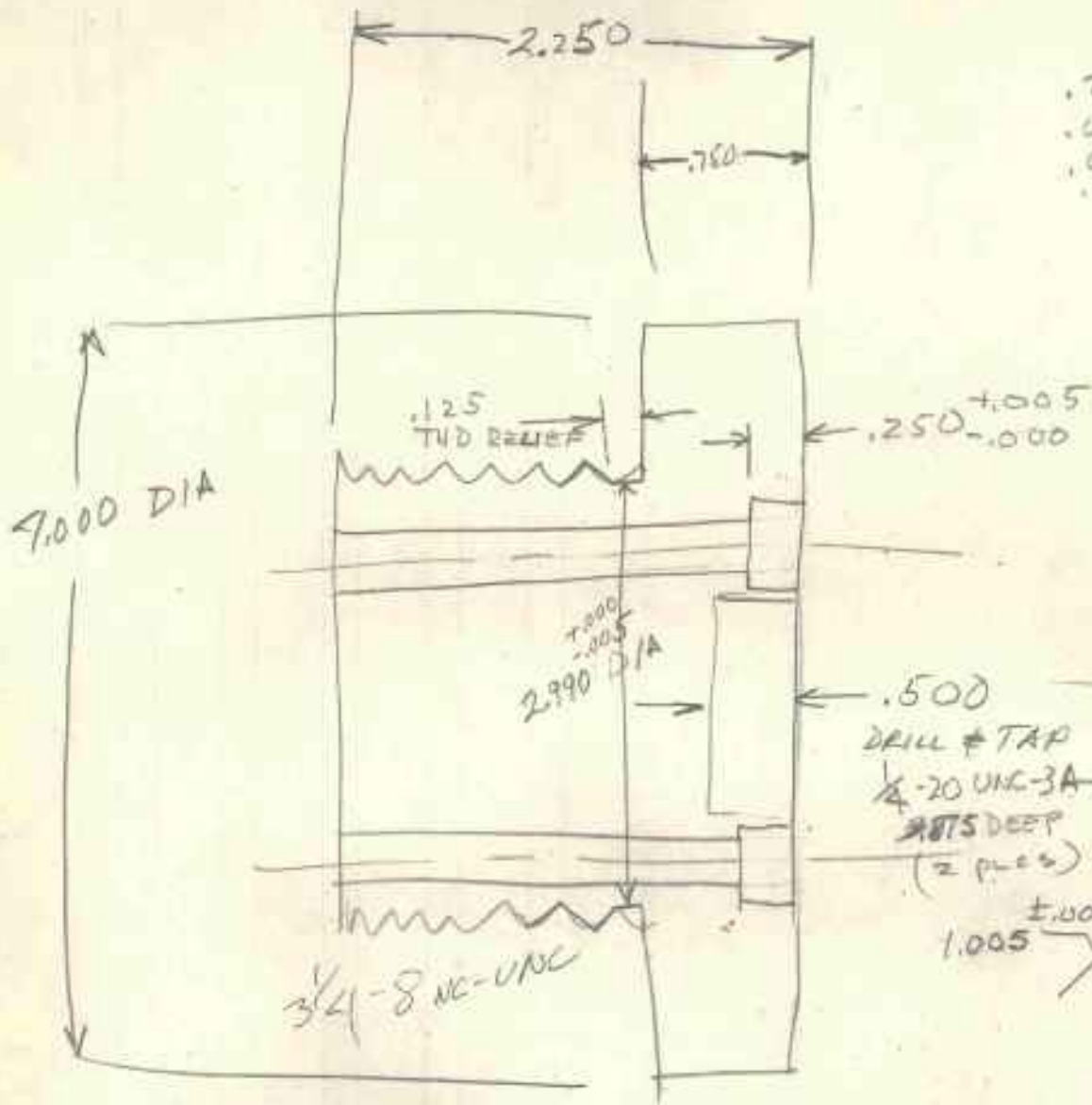
17.475

18.956

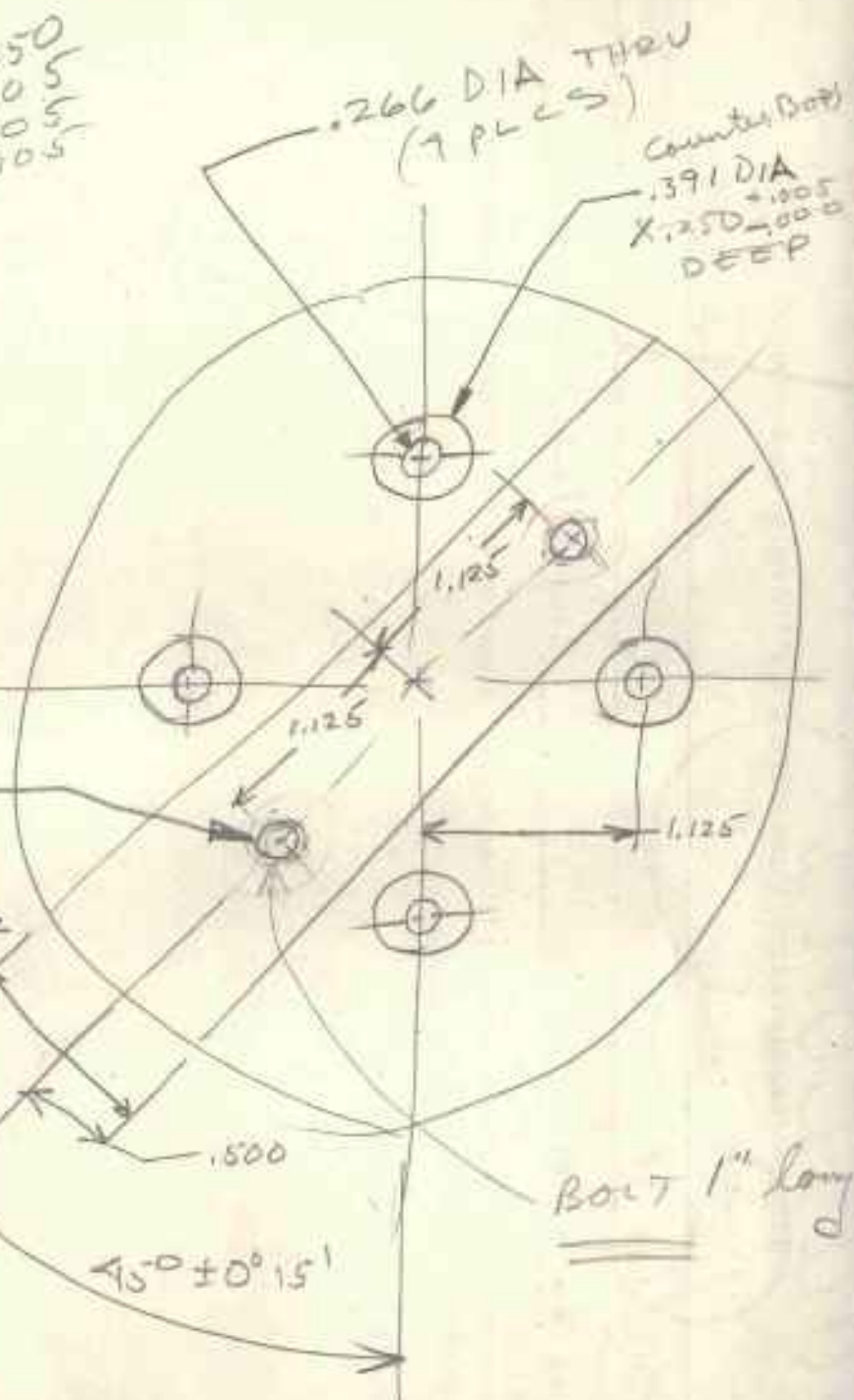


3/4 - 8 THD ?
NC-UNC

480
480
960



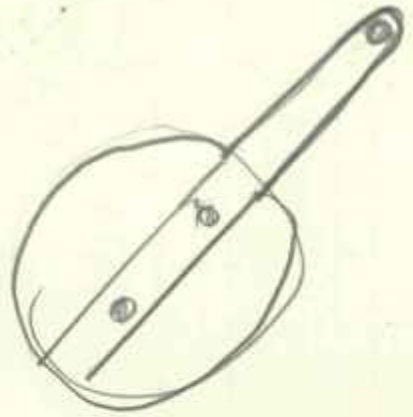
$.250$
 $.005$
 $.005$
 $.005$



145
 $2 \overline{) 290}$

290
 $2 \overline{) 480}$

$3/4-8$ NC-UNC THD



1.500

2.100 R

1.266 DIA HOLE

.500

.500

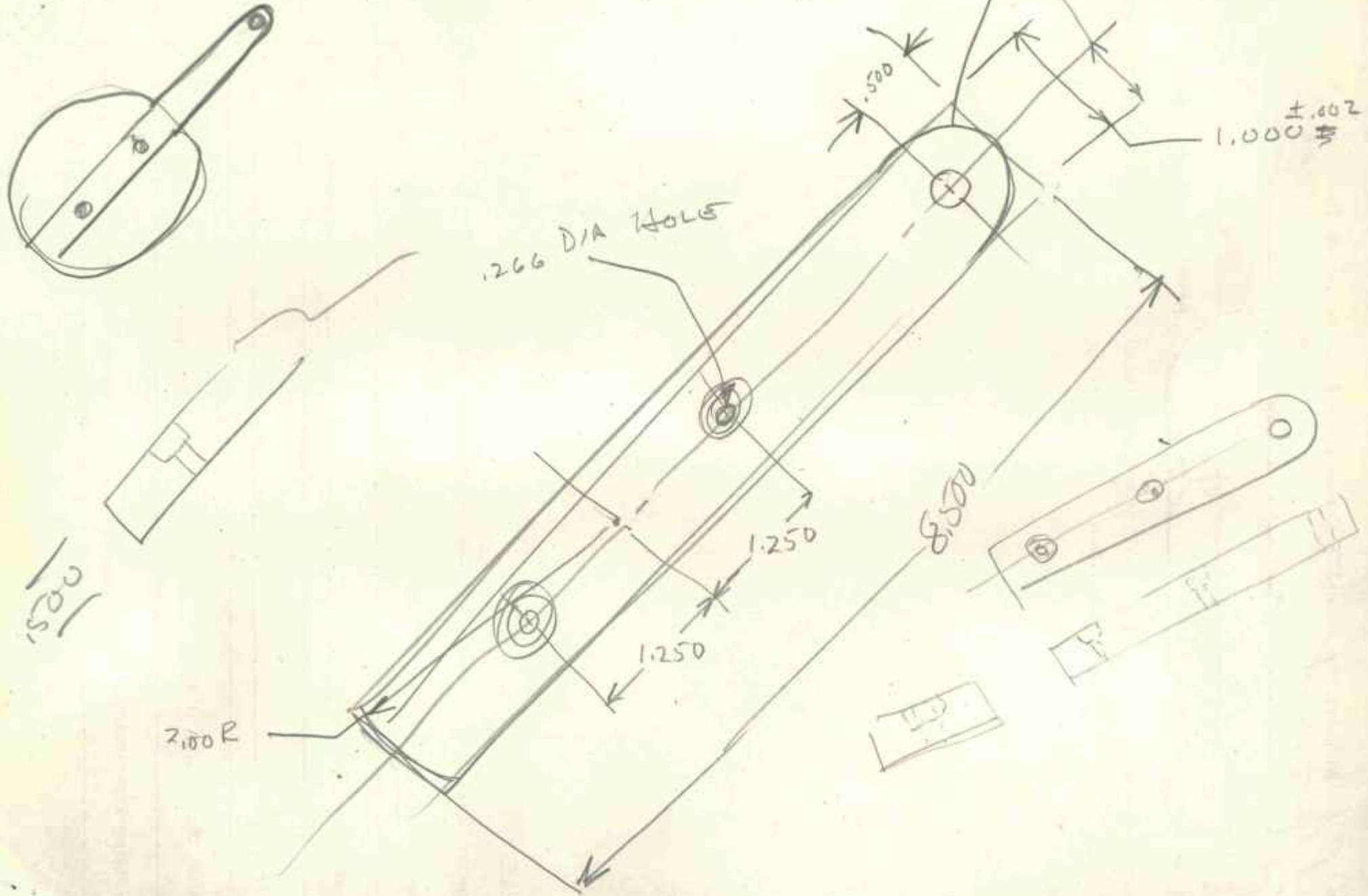
Full R.

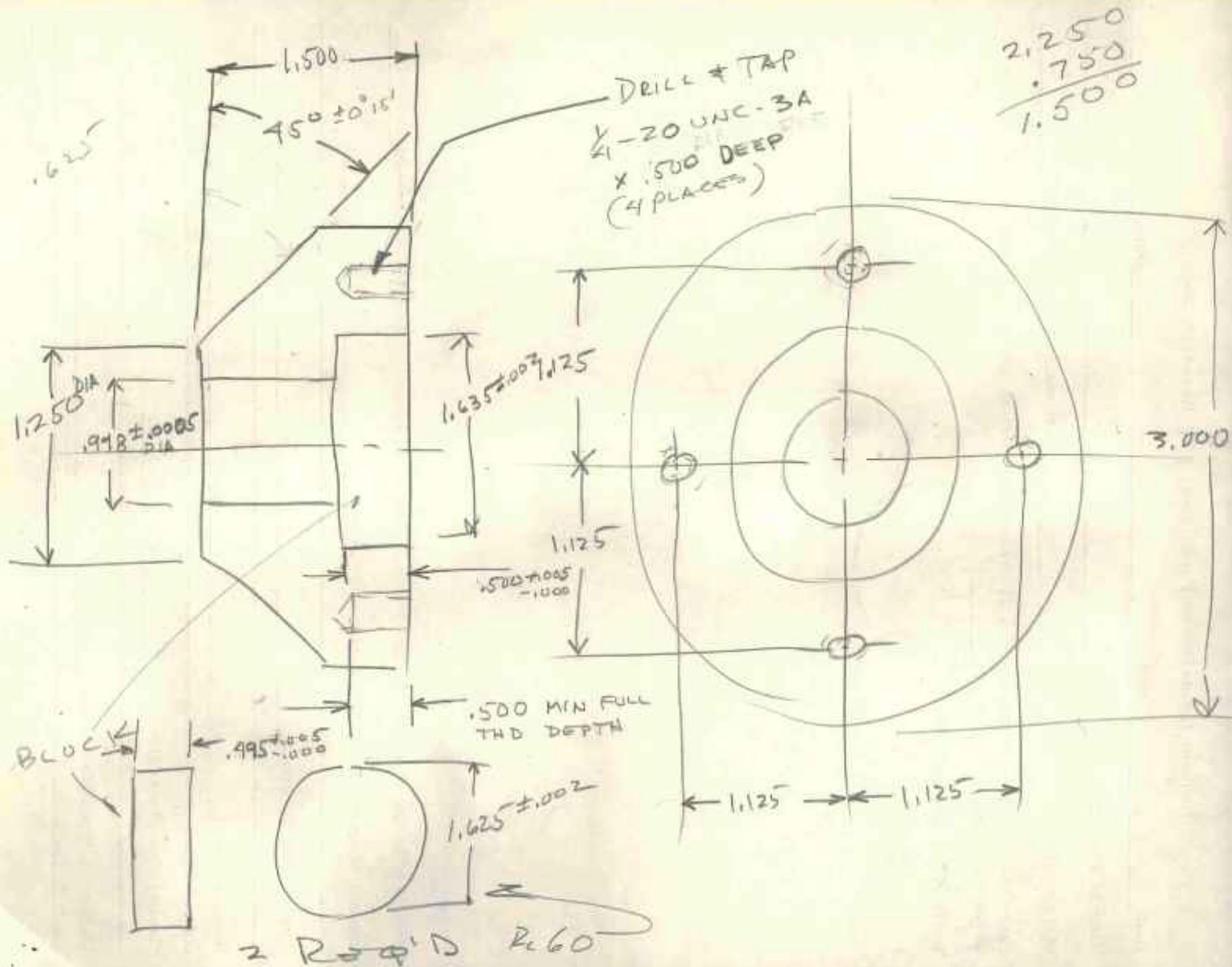
1.000 ± .002

1.250

1.250

8.570







CALIFORNIA *Metal Enameling* COMPANY

6904 EAST SLAUSON AVE.
LOS ANGELES 27, CALIF.
RAYMOND 3-6351

Sept 5, 1958

Brigham Young University
Provo, Utah

Attn: Mr. H. Tracy Hall
Director of Research

Gentlemen:

We are enclosing with this letter a larger sample of the one mil stainless steel foil which you requested, coated with A418 ceramic material.

This type of job can also be done with less refractory glasses on aluminum foil, but has not been done on plain carbon steel foils.

You are welcome to experiment with the sample enclosed. Please let us know if we can be of further assistance, and if any of the information concerning your experiment is published, we would appreciate receiving a copy.

Very truly yours ,

A handwritten signature in blue ink, appearing to read "H. V. Penton".

H. V. Penton
Vice President

HVP/mp