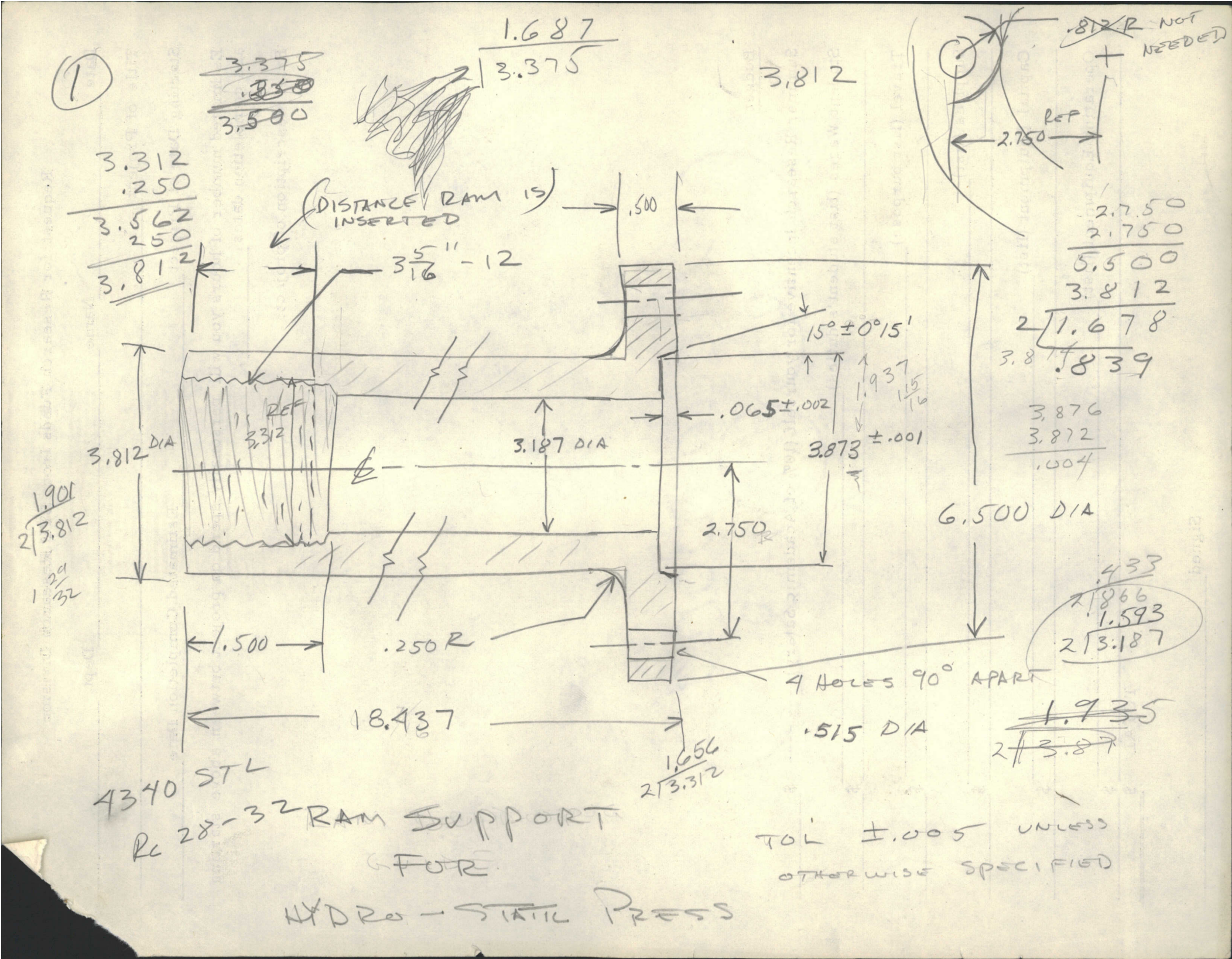
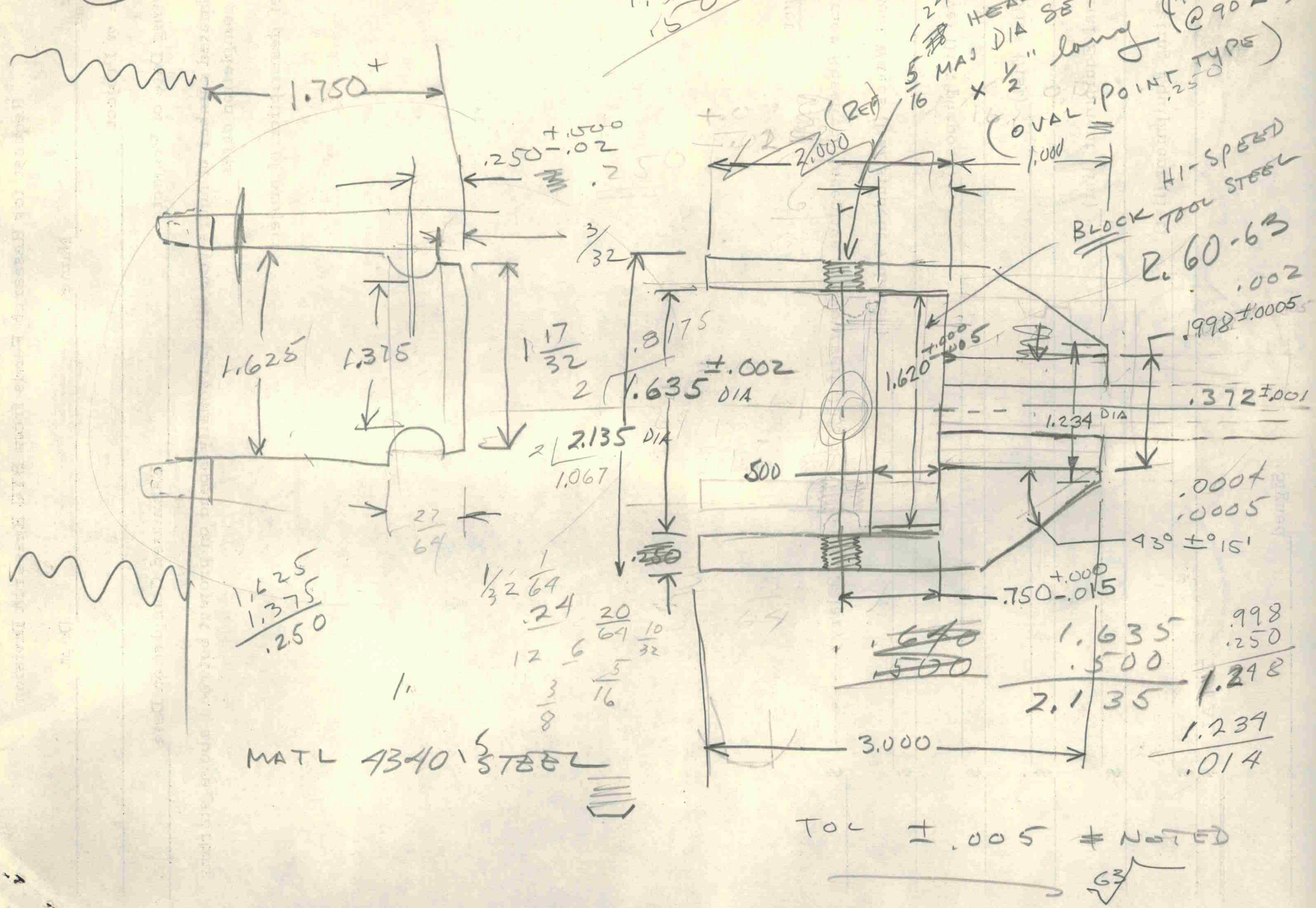
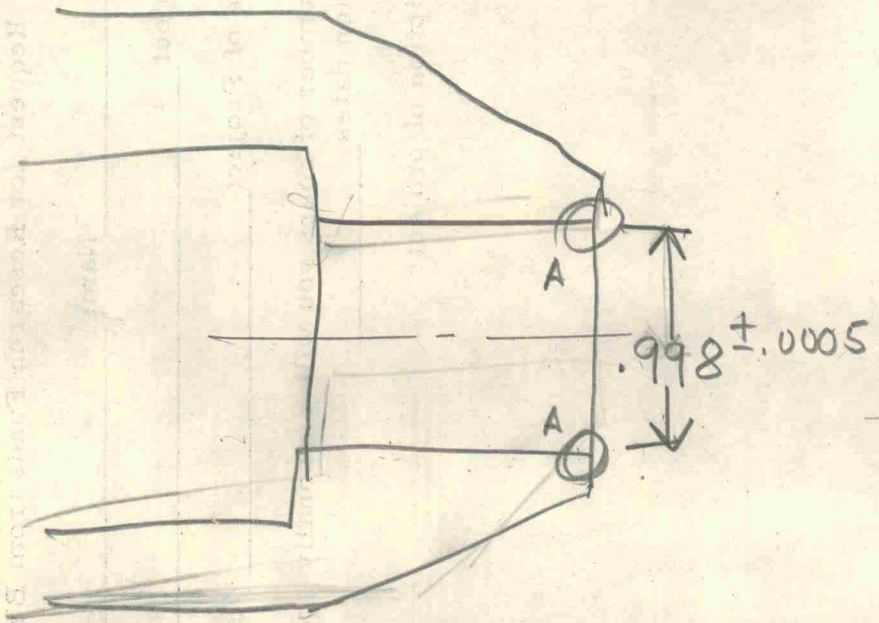
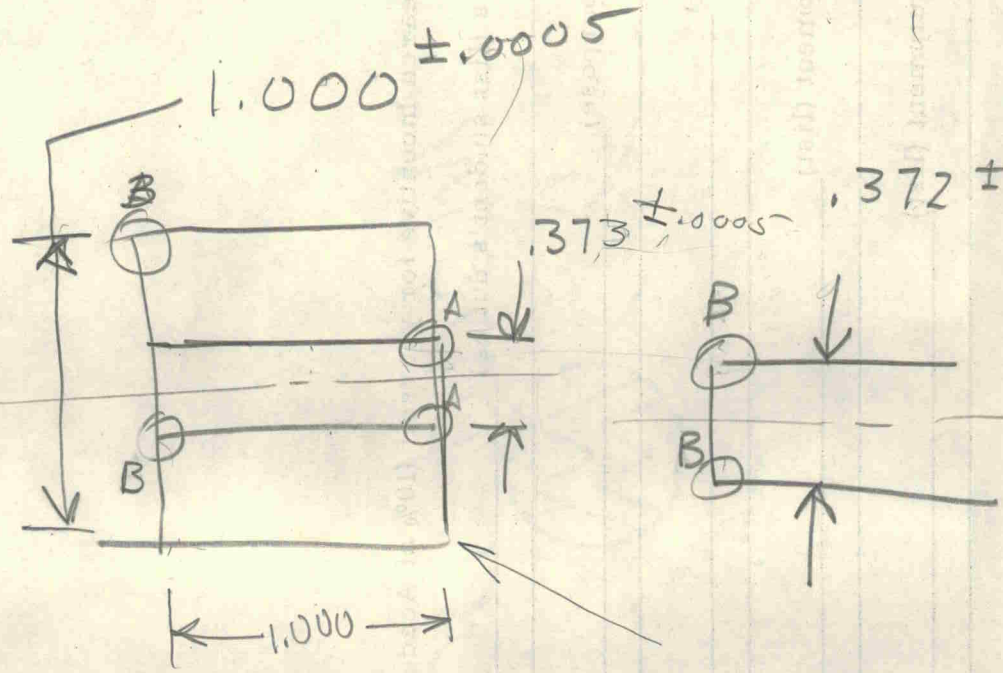

1
3.375
.250
3.500
1.687
3.375
3.812
.812 R NOT NEEDED
REF
2.750
3.312
.250
3.562
250
3.812
DISTANCE RAM IS INSERTED
.500
3 5/16" - 12
15° ± 0°15'
2.750
2.750
5.500
3.812
2 1.678
.839
1.937 1 15/16
.065 ± .002
3.873 ± .001
3.876
3.872
.004
3.812 DIA
REF 3.312
3.187 DIA
2.750 R
6.500 DIA
1.901
2 3.812
1 29/32
.433
.866
1.593
2 3.187
1.500
.250 R
4 HOLES 90° APART
.515 DIA
18.437
1.656
2 3.312
1.935
2 3.87
4340 STL
Rc 28-32
RAM SUPPORT
FOR
HYDRO - STATIC PRESS
TOL ±.005 UNLESS OTHERWISE SPECIFIED


1.500
150
1/4 -24 NF-UNF
HEADLESS SLOTTED
5/16 MAJ DIA SET SCREW
x 1/2" long (4 REQ'D @ 90° ∠'s)
(OVAL POINT TYPE)
(REF
2.000
1.000
1.750+
.250 +.500 -.02
3/32
1.625
1.375
1 17/32
2
.8175
1.635 ±.002 DIA
2.135 DIA
1.067
27/64
1.620 +.000 -.005
1.234 DIA
500
.250
BLOCK
HI-SPEED TOOL STEEL
Rc 60-63
.002
.998 ±.0005
.372 ±.001
.0004
.0005
43° ±0°15'
.750 +.000 -.015
1.625
1.375
.250
1/32 1/64
.24
20/64
10/32
5/16
3/8
1.635
.500
2.135
.998
.250
1.248
1.234
.014
3.000
MATL 4340 STEEL
TOL ±.005 ∓ NOTED
63

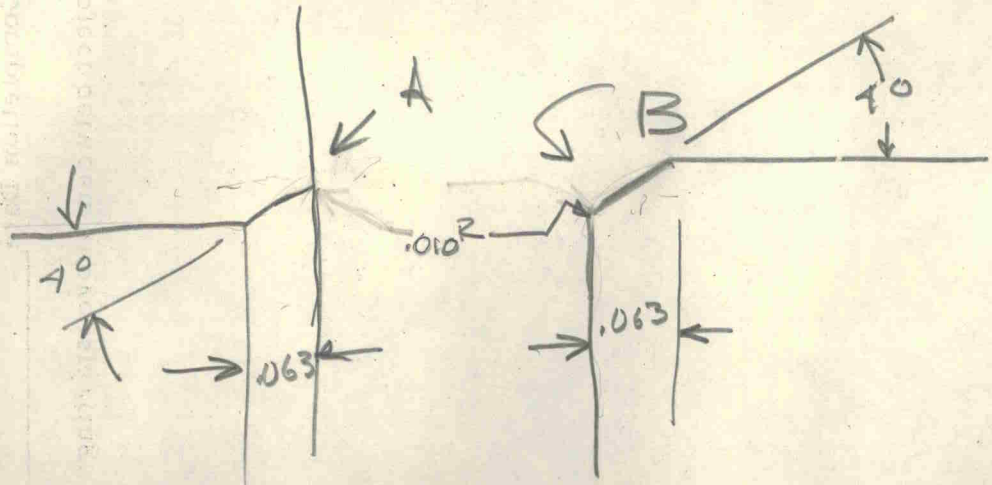
(3)



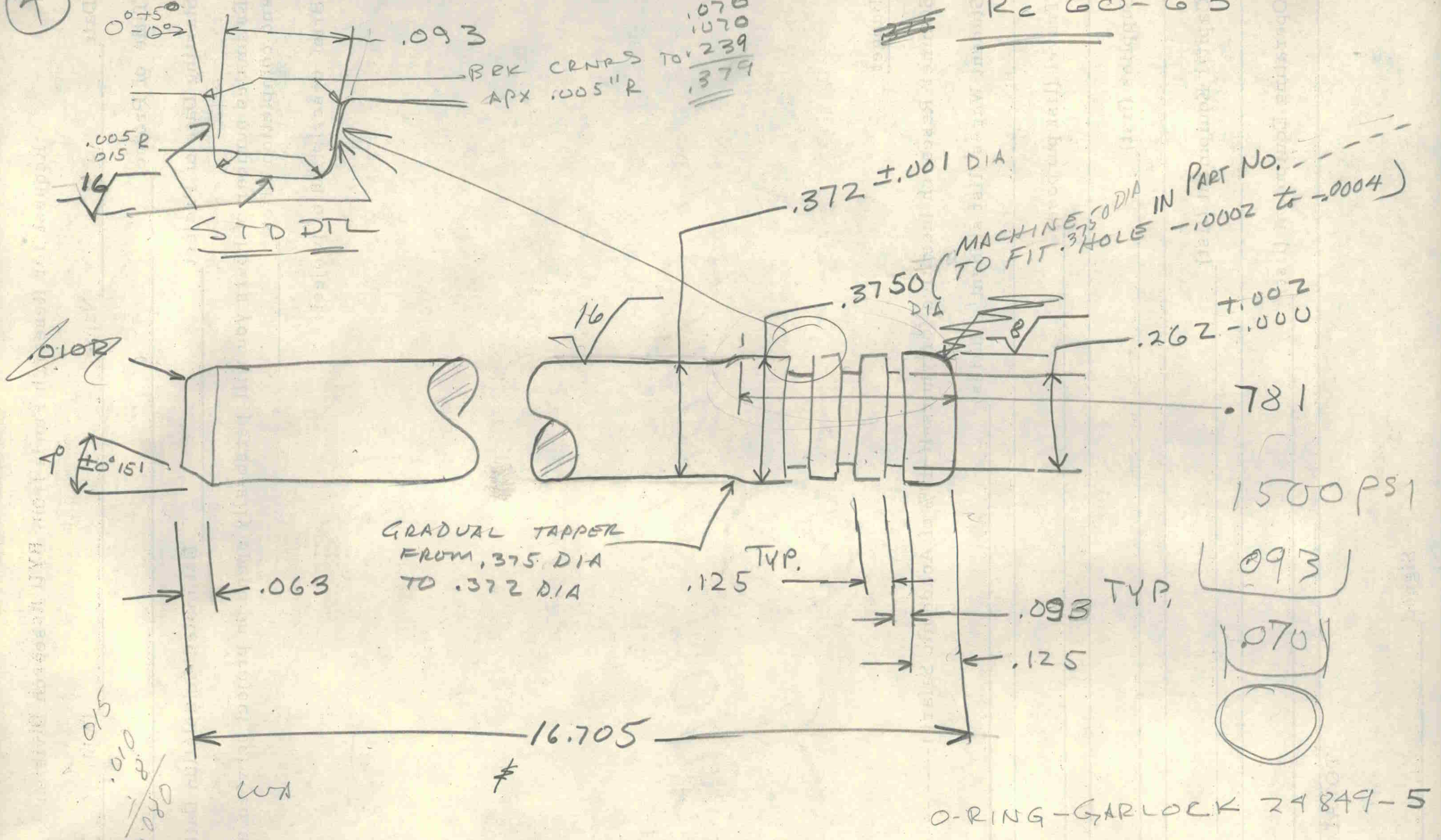


HI SPEED TOOL STEEL

RC 60 – 63



MAT'L: HI-SPEED TOOL STEEL
Rc 60-63



NOTE
BREAK ALL SHARP CORNERS

TOL ±.005

WALLS & MINOR DIA OF O-RING GROVES TO HAVE 16/8

(5)

PARTS LIST

TITLES

1000 - FINAL ASSEMBLY

~~1001~~ RAM ~~CON~~

1002 - RAM - SUPPORT

1003 - BACK UP DISC

1004 - ~~RAM~~ PISTON ADAPTER

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

1006-1, -2 RAM ~~—~~ PISTON & SEALING PLUG DTLS

1007 - SUPPORTING RING CLAMP

1008 PRESSURE CYLINDER

1009 - COMPRESSION RING

1010-1, -2 TENSION RING
-2 HOLE FOR THERO COUPLE

1011 - SAFETY RING

1012 - UPPER ~~20~~ RING CLAMP

~~1013 - SEALING PLUG~~

~~1014 - STATIC PISTON BACK UP DISC~~

1013 - ~~STATIC PISTON~~ PLUG ADAPEER PLATE

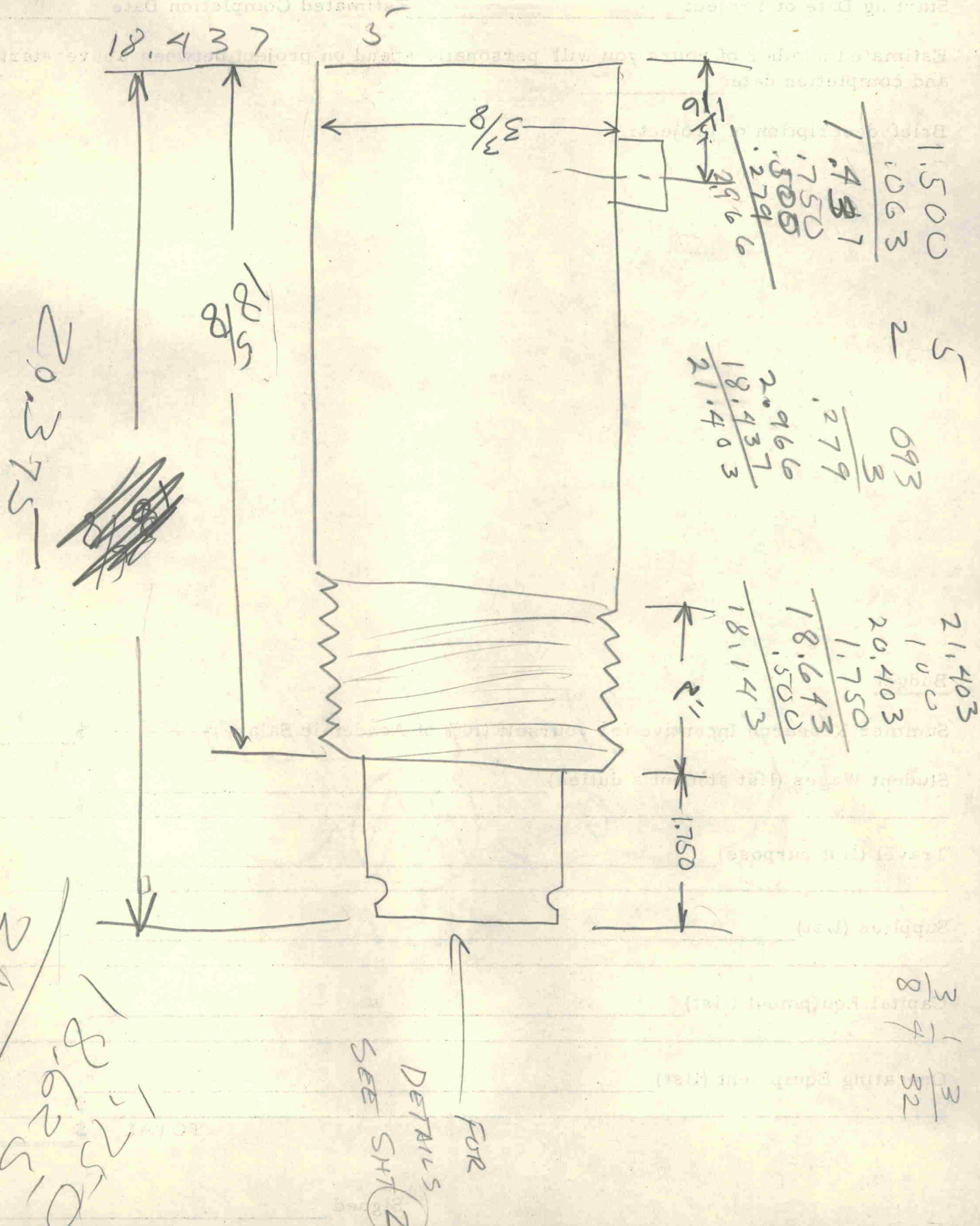
1014 - ~~" " BACK UP CAP~~ closure

1015 - HANDLE

11.343
A
A 5.372
11/32
3" LG
4/8

.437
.187
.125
.750

LENGTH OF RAMMING PISTON (6)



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~~ – O.D. TH
15.187 50
1.500 5
16.687 55
.063 2
16.624 57
.750 5
.781 5
18.155 ±.067

1.000 20
1.750 20
.500 5
3.230
2
1.000 5
.781 5
.750 5
.050 -5
13.500 2
16.081 +17 -22

18.155
16.081
2.074

LENGTH OF PISTON

1/16

.480 ± .001 DIA

2.074

1.234

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
35 — 1/32 — 1/16

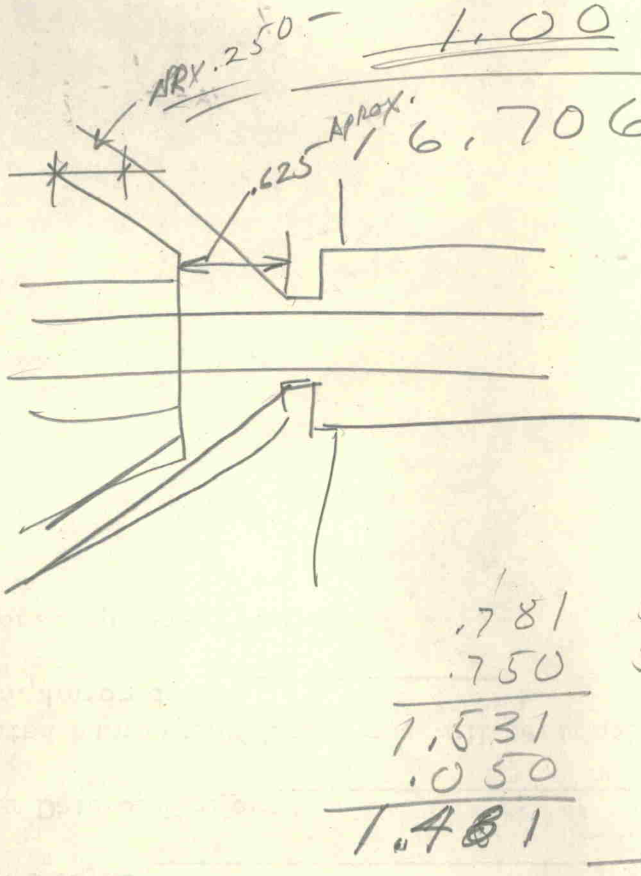
.125

.250

.625

2 2	2
.781	.781
.750	2 .750
.050	050
.625	.625
13.500	1.000
15.706	13,500
1.000	16,706 ← LGTH OF PISTON
16.706	

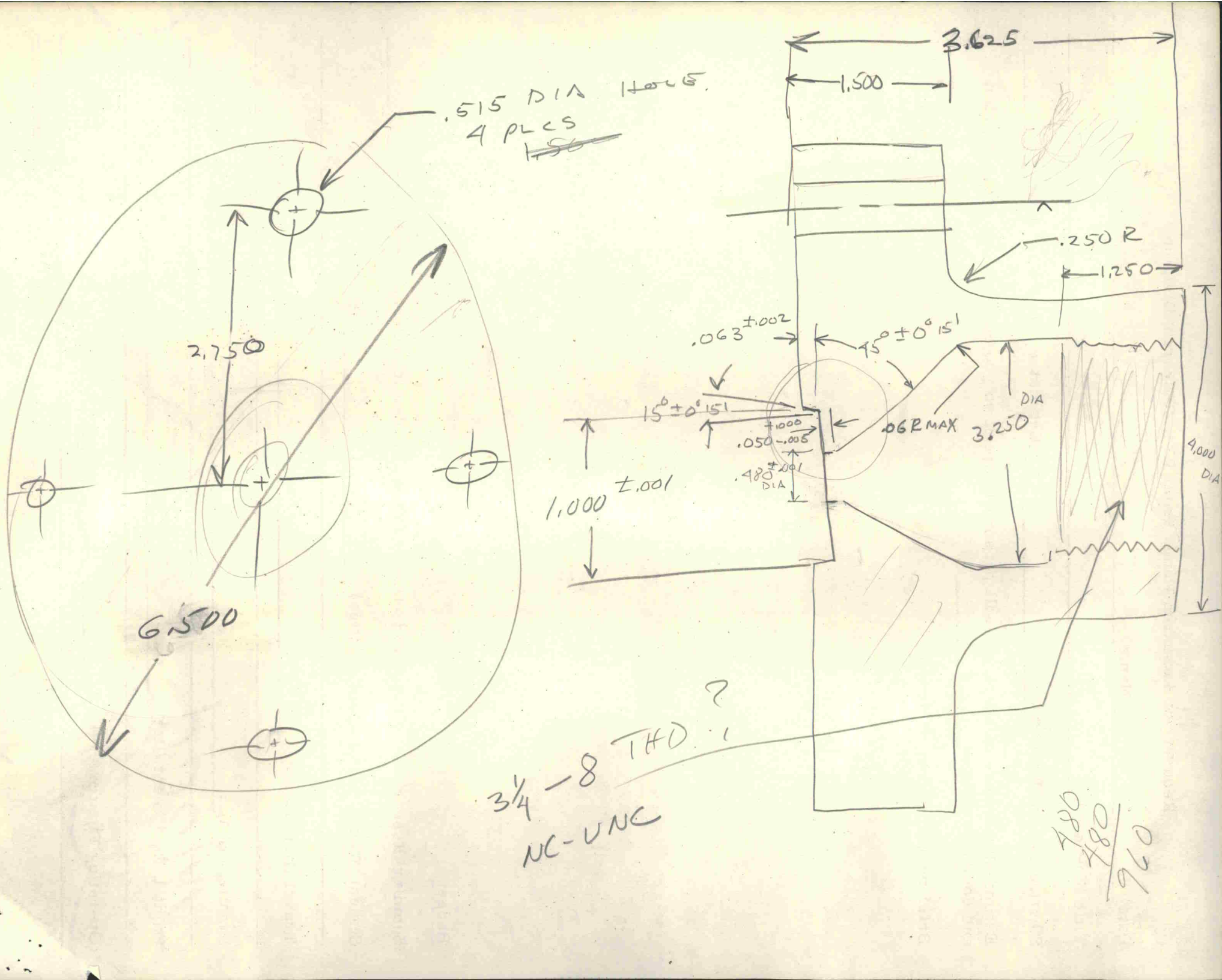
5-10-64

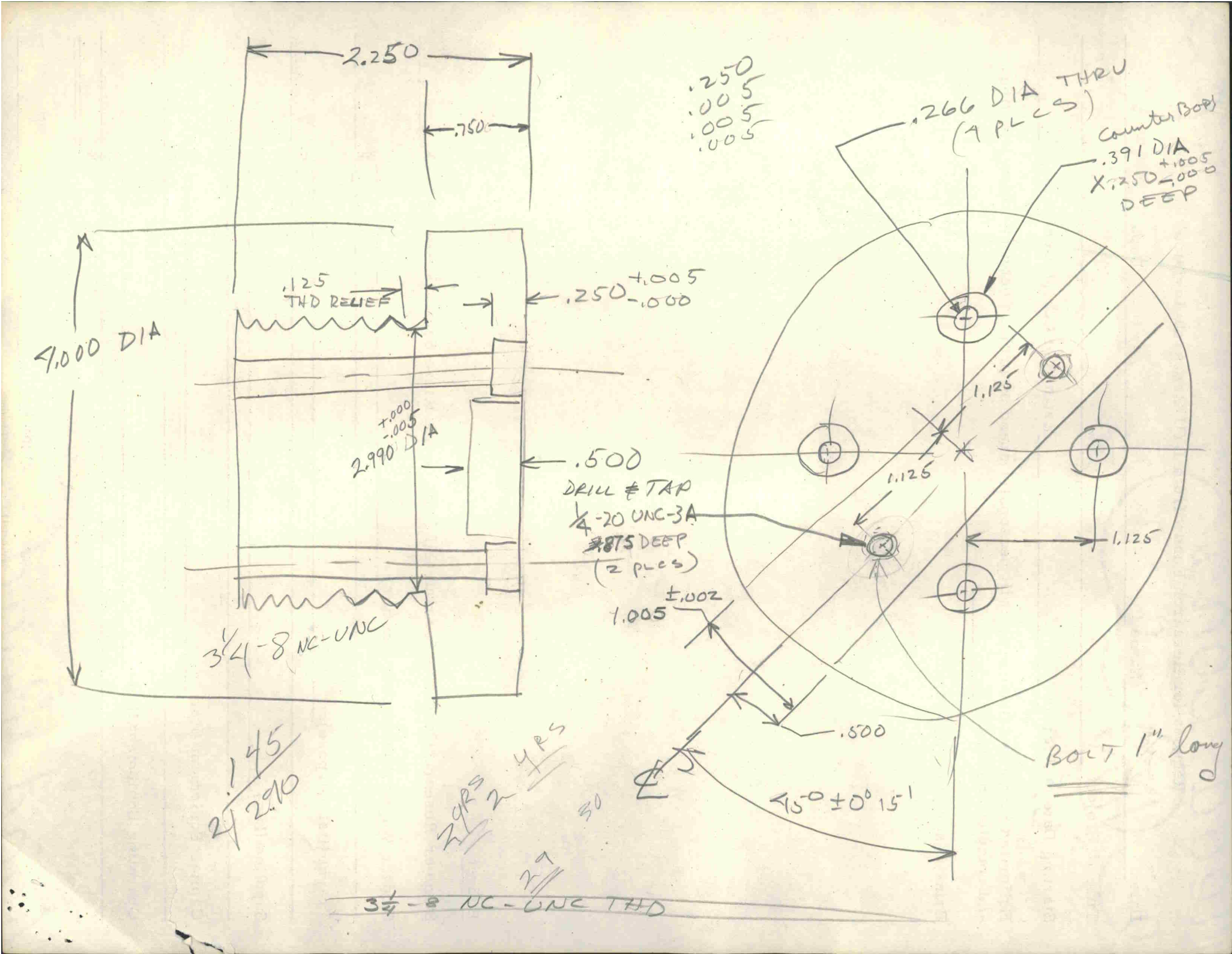


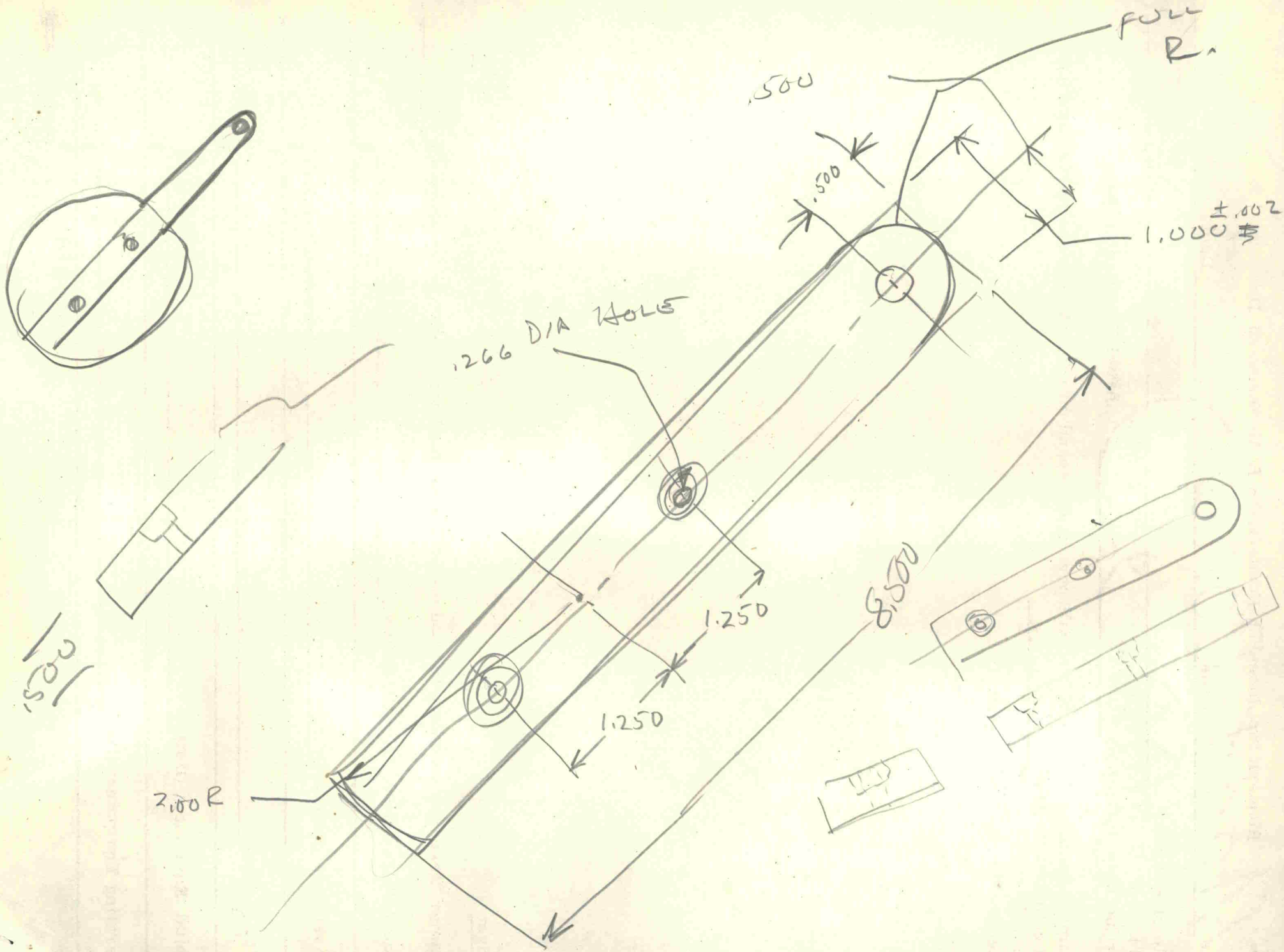
16.706
.500 5
1.750 20
1.000 ~~10~~
18.956

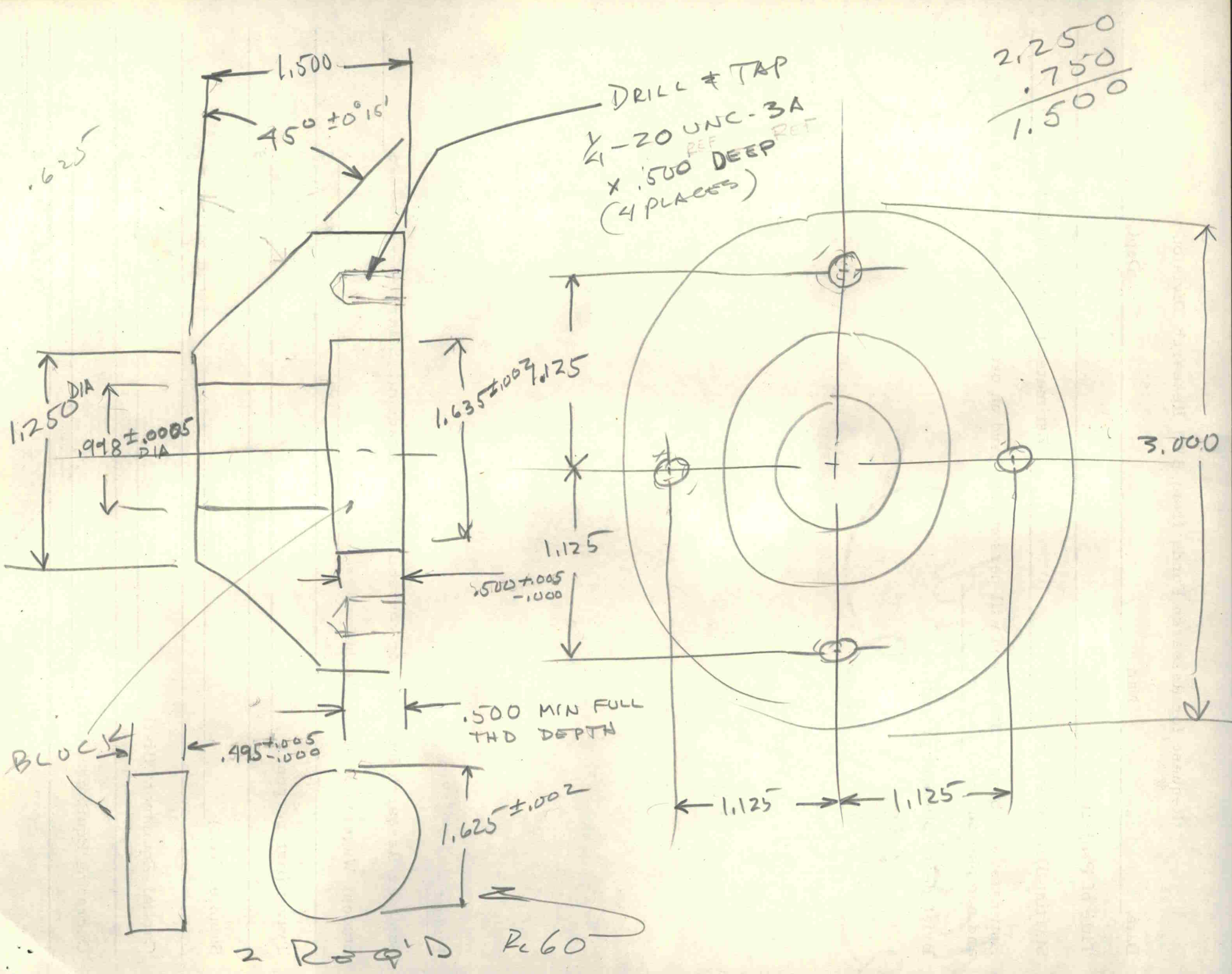
.781 5
.750 5
1.531
.050
1.481

18.956
1.481
17.475


.515 DIA Holes
4 PLCS
2.750
6.500
3.625
1.500
.250 R
1.250
.063 ±.002
15° ± 0° 15'
15° ± 0° 15'
.062 MAX
3.250
DIA
1.000 ±.001
.050 +.000 -.005
.480 ±.001 DIA
4.000 DIA
3¼ - 8 THD ?
NC-UNC
A80
A80/960


2.250
.750
.250
.005
.005
.005
.266 DIA THRU
(4 PLCS)
Counter Bore
.391 DIA
X .250 +.005 -.000
DEEP
4.000 DIA
.125
THD RELIEF
.250 +.005 -.000
2.990 +.000 -.005 DIA
.500
DRILL & TAP
1/4-20 UNC-3A
.875 DEEP
(2 PLCS)
3 1/4-8 NC-UNC
1.125
1.125
1.125
±.002
1.005
.500
45°-0 ±0° 15'
BOLT 1" long
.145
2.990
3 1/4 - 8 NC - UNC THD


FULL R.
.500
.500
1.000 ±.002
.266 DIA HOLE
1.250
1.250
8.500
.500
2.100 R


1.500
45° ±0°15'
.625
DRILL & TAP
1/4-20 UNC-3A
x .500 DEEP REF
(4 PLACES)
2.250
.750
1.500
1.250 DIA
.998 ±.0005 DIA
1.635 ±.002 ±.125
1.125
.500 +.005 -.000
3.000
.500 MIN FULL THD DEPTH
BLOCK
.495 +.005 -.000
1.625 ±.002
1.125
1.125
2 Req'd R.60

CAMEO SINCE 1911 Genuine PORCELAIN ON METAL LIFETIME FINISH

CALIFORNIA *Metal Enameling* COMPANY

6904 EAST SLAUSON AVE.
LOS ANGELES 22, 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,

H. V. Penton
Vice President

HVP/mp