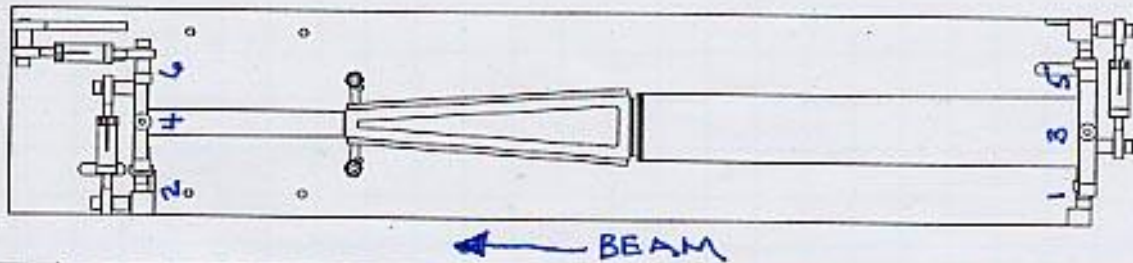


SSRL  
BL 12-2 MØ 1<sup>ST</sup> PIVOT MASK

7-06  
C.B., L.G.



	X	Y	Z
1	+3.801	+ .175	-31.700
2	+3.162	- .028	+9.665
3	+ .004	+3.949	-31.665
4	- .021	+3.132	+9.673
5	-3.809	+ .160	-31.702
6	-3.169	- .041	+9.650

VALUES FROM  $\epsilon$  OF U/S & O/S APERTURES  
Z<sup>S</sup> FROM O/S APERTURE

	X	Y	Z
1	+4.143 ✓	+ .175	-31.727 ✓
2	+3.803 ✓	- .028	+9.642 ✓
3	+ .347 ✓	+3.949	-31.664 ✓
4	+ .620 ✓	+3.132	+9.673 ✓
5	-3.467 ✓	+ .160	-31.674 ✓
6	-2.528 ✓	- .041	+9.673 ✓

VALUES TO 12-2 LINE

SSRL  
BL 12-2 MØ 1<sup>ST</sup> PIVOT MASK

7-25-06  
C.B., L.G.

$$\begin{array}{r} \textcircled{X} \ 9.924 \text{ LOS} \\ \underline{8.000} \\ 17.924 = \epsilon \end{array}$$

u/s APER.

O/S APER.

(+)	(-)
17.924	17.924
.944	.944
<hr/>	<hr/>
16.980 s/r	18.868 s/r
+0.002	+0.002
16.978	18.866
$\epsilon = 17.922$	

(+)	(-)
17.924	17.924
.158	.158
<hr/>	<hr/>
17.766 s/r	18.082 s/r
+0.005	+0.005
17.761	18.077
$\epsilon = 17.919$	

USED O/S APERTURE  $\epsilon$  AS  $\phi$   
 $17.919 = d$   
 $\frac{1.400}{17.919}$  Burks  
 $+ 16.519 \text{ LOS}$

$$\begin{array}{r} 1) \ 11.718 \\ \underline{1.000} \\ 12.718 \\ 16.519 \\ \boxed{+3.801} \end{array}$$

$$\begin{array}{r} 2) \ 12.357 \\ \underline{1.000} \\ 13.357 \\ 16.519 \\ \boxed{+3.162} \end{array}$$

$$\begin{array}{r} 3) \ 15.515 \\ \underline{1.000} \\ 16.515 \\ 16.519 \\ \boxed{+0.004} \end{array}$$

$$\begin{array}{r} 4) \ 15.540 \\ \underline{1.000} \\ 16.540 \\ 16.519 \\ \boxed{-0.021} \end{array}$$

$$\begin{array}{r} 5) \ 11.457 \\ \underline{8.871} \\ 20.328 \\ 16.519 \\ \boxed{-3.809} \end{array}$$

$$\begin{array}{r} 6) \ 10.817 \\ \underline{8.871} \\ 19.688 \\ 16.519 \\ \boxed{-3.169} \end{array}$$

CB

BL12-2 MØ 1<sup>st</sup> SSRL  
PIVOT MASK

7-24-06  
C.B., L.G.

Y) 27.825 REF.  
11.985 =  $\cancel{L}$   
+15.840 HI

1) 14.665  
+1.000  
15.665  
15.840  
+0.175 ✓

2) 14.868  
+1.000  
15.868  
15.840  
-0.028 ✓

3) 10.891  
+1.000  
11.891  
15.840  
+3.949 ✓

4) 11.708  
+1.000  
12.708  
15.840  
+3.132 ✓

5) 14.680  
+1.000  
15.680  
15.840  
+0.160 ✓

6) 14.881  
+1.000  
15.881  
15.840  
-0.041 ✓

C.B.

(Z)

SSRL  
BL 12-2 MØ 1<sup>ST</sup> PIVOT MASK

7-25-06  
C.B., L.G.

$$\begin{array}{r}
 2.783 \\
 (+) 1.750 \text{ D/S FACE TO D/S APERTURE} \\
 \hline
 + 3.533 \text{ LOS}
 \end{array}$$

D/S APERTURE  
IS Z = Ø

$$\begin{array}{r}
 1) 34.233 \\
 \quad 1.000 \\
 \hline
 -35.233 \\
 \quad 3.533
 \end{array}$$

-31.700 ✓

$$\begin{array}{r}
 2) 5.132 \\
 \quad 1.000 \\
 \hline
 +6.132 \\
 \quad 3.533
 \end{array}$$

+9.665 ✓

$$\begin{array}{r}
 3) 34.198 \\
 \quad 1.000 \\
 \hline
 -35.198 \\
 \quad 3.533
 \end{array}$$

-31.665 ✓

$$\begin{array}{r}
 4) 5.140 \\
 \quad 1.000 \\
 \hline
 6.140 \\
 \quad 3.533
 \end{array}$$

+9.673 ✓

$$\begin{array}{r}
 5) 34.235 \\
 \quad 1.000 \\
 \hline
 -35.235 \\
 \quad 3.533
 \end{array}$$

-31.702 ✓

$$\begin{array}{r}
 6) 5.117 \\
 \quad 1.000 \\
 \hline
 6.117 \\
 \quad 3.533
 \end{array}$$

+9.650 ✓

CB

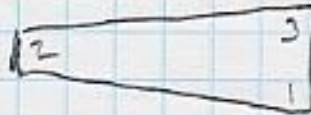
SSRL  
 BL12-2 MØ 1ST PIVOT MASK  
 SETTINGS

7-24-06  
 C.B., L.G.

27.830 READ TO TOP OF TABLE

12.000 to BL

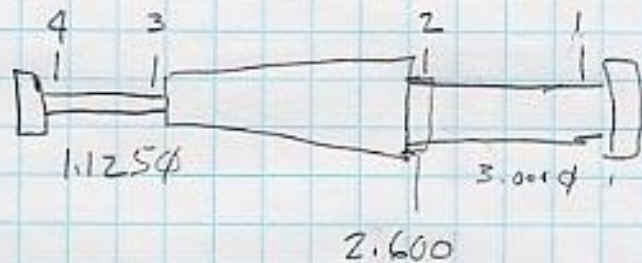
$$\begin{array}{r} 27.830 \\ -12.000 \\ \hline 15.830 \text{ Hz} \end{array}$$



$$\begin{array}{r} 1.685/2 = \\ .843 \end{array}$$

- 1)  $\begin{array}{r} 15.830 \\ .843 \\ \hline 14.987 \\ 1. \text{ --- ft} \end{array}$      2)  $\begin{array}{r} 13.9875/R \\ 13.994 \\ \hline -007 \end{array}$      3)  $\begin{array}{r} 13.9875/R \\ 13.994 \\ \hline -007 \end{array}$

$$\begin{array}{r} 13.9875/R \\ 13.994 \\ \hline -007 \end{array}$$



- (X)  $\begin{array}{r} 4.125 \\ 4.125 \\ 9.000 \\ 7.943 \\ 3.000 \\ 3.924 \\ 5.799 \\ 5.799 \\ 9.924 \text{ LOS} \end{array}$

- 1)  $\begin{array}{r} 9.924 \\ 1.500R \\ \hline 8.424 S/R \\ 8.410 \\ \hline +014 \end{array}$      2)  $\begin{array}{r} 9.924 \\ 1.300 \frac{1}{2} \\ \hline 8.624 S/R \\ 8.624 \\ \hline \emptyset \end{array}$      3)  $\begin{array}{r} 9.924 \\ .563R \\ \hline 9.361 S/R \\ 9.361 \\ \hline \emptyset \end{array}$      4)  $\begin{array}{r} 9.924 \\ .563R \\ \hline 9.361 S/R \\ 9.368 \\ \hline -007 \end{array}$

SSRL  
BL12-Z MØ 1<sup>st</sup> PIVOT MASK  
CHECKING APERTURES u/s & d/s

7-24-06  
L.B., L.G.

Y

$$\begin{array}{r}
 13.994 \text{ READ} \\
 .843 \text{ } \frac{1}{2} \text{ MARK BODY} \\
 \hline
 14.837 \\
 1.000 \text{ FT} \\
 \hline
 + 15.837 \text{ HI}
 \end{array}$$

$$\begin{array}{r}
 27.825 \text{ REF} \\
 15.837 \\
 \hline
 11.988 = \phi
 \end{array}$$

u/s APERT.

d/s APERT.

TOP		BOT.		TOP		BOT	
11.988		11.988		11.999		11.988	
.487 $\frac{1}{2}$		.487 $\frac{1}{2}$		.118		.118	
<u>12.475</u> s/r		<u>11.501</u> s/r		<u>12.106</u> s/r		<u>11.870</u> s/r	
		+	-	(+)	(-)	(+)	(-)
<del>12.475</del>		<del>11.501</del>		<del>12.106</del>		<del>11.870</del>	
-003	-005					-003	-008
$\bar{A} = -.004$							
12.471 = TOP		11.501 = Bot		12.106 = Top		11.862 = Bot	
11.986 = $\phi$				$\bar{M} = 11.985 = \phi$		11.994 = $\phi$	

CHECKING PIPES

u/s 3"

d/s 1.125

u/s) 15.837	d/s) 14.337 s/r	u/s) 15.837	u/d) 15.274 s/r
1.500 R	14.300	.563 R	15.309
<u>14.337</u> s/r	<u>14.300</u>	<u>15.274</u> s/r	<u>15.309</u>
14.179	- 623	15.277	- 035
+ 158		<u>15.277</u>	
		- 603	

Measure pressure drops at 3 flow rates:

Pressure drop at 2.0GPM 150 2.6GPM 230 <sup>2.7</sup> ~~3.0~~GPM 245

**Weld assembly SA-451-065-72, according to tree layout**

5 JP <sup>7-1206</sup> AZ Weld parts and subassemblies. Respect dimensions and geometrical tolerances as per SA-451-065-72. The weld set up must be inspected by Dan Harrington or Tim Hickey before proceeding.

6 \_\_\_\_\_ Fiducialize US and DS apertures of the Mask (US aperture is understood as the biggest window on the glidcop body of the mask assy. DS aperture is understood as the smallest defining aperture on the glidcop body of the mask assy.)

**Installation on site: drawing ID-451-055-90**

The M0 1st pivot mask is attached to the bellows just downstream of the M0 mirror tank drift tube as shown on ID-451-055-90.

Position of the center of US aperture relative to 12-2 beam line source and center line

X= +12.3 ± 0.5mm

Y= 0 ± 0.5mm

Z= -16107 ± 5 mm

Position of the center of DS aperture relative to 12-2 beam line source and center line:

X= +14.5 ± 0.5mm

Y= 0 ± 0.5mm

Z= 16412 ± 5 mm