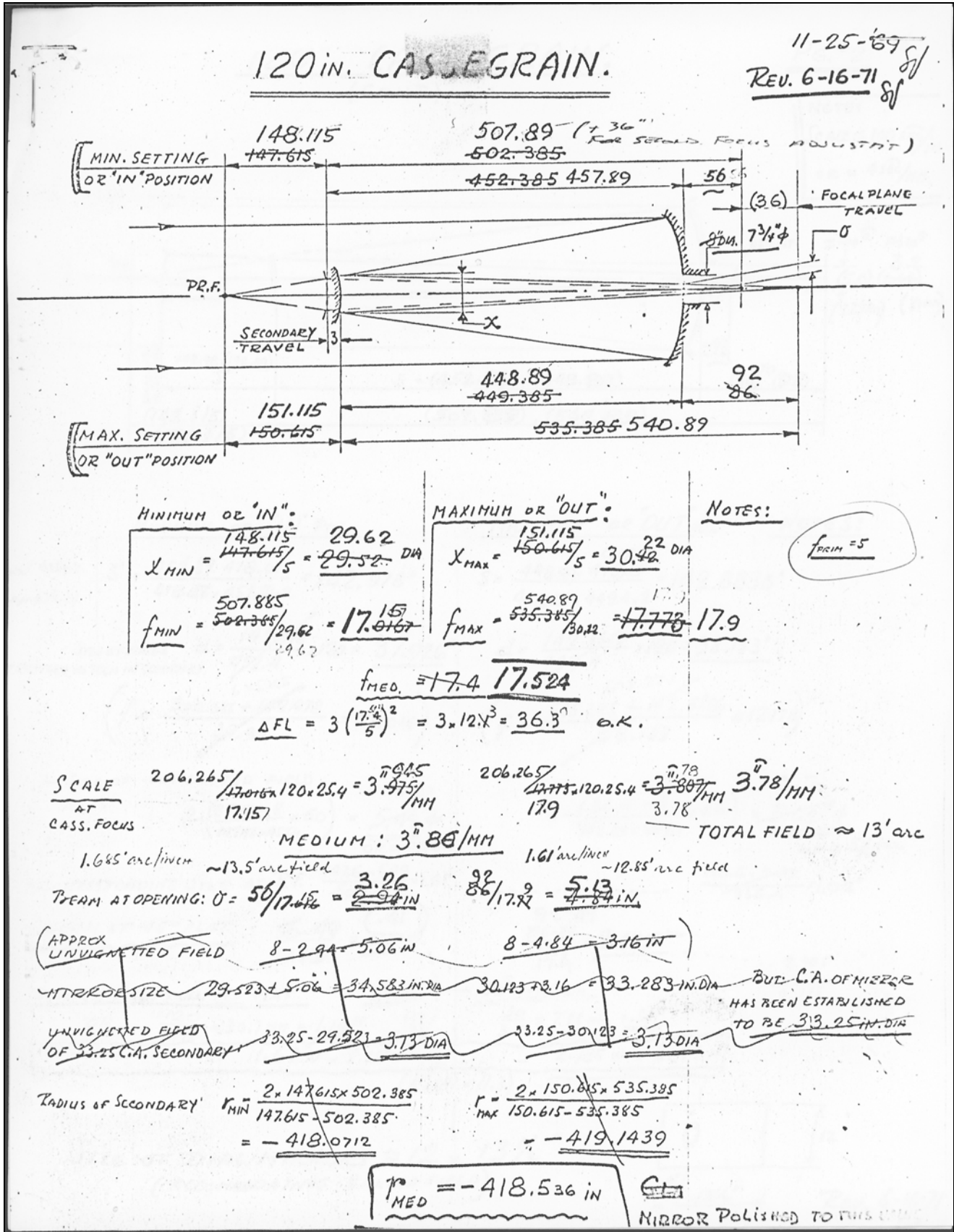


120" OPTICAL FOCUS DRAWINGS

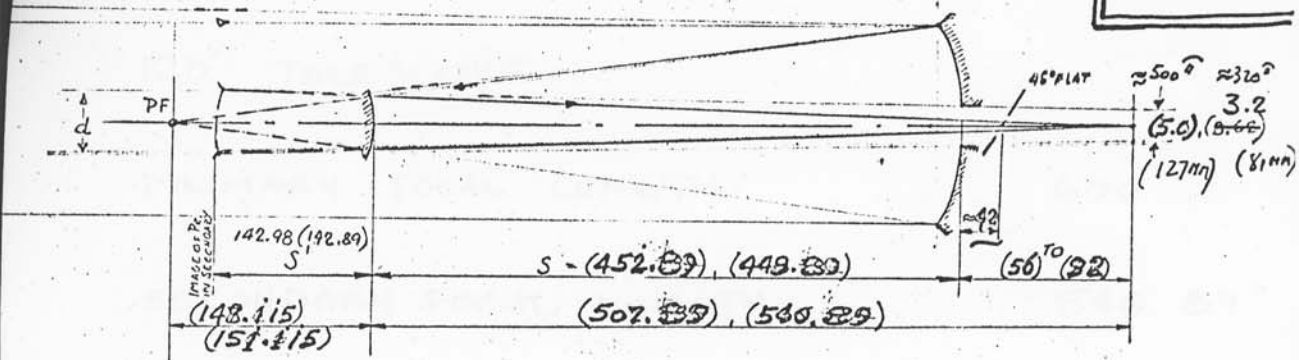


120" OPTICAL FOCUS DRAWINGS

120 CASSEGRAIN. (CONT.)

Pg. #2 of

NOTE:
SCALE $\approx 100 \text{ SEC}/\text{IN}$
OR $\approx 4 \text{ SEC}/\text{MM}$.



MINIMUM OR "IN" POS.

$f = 418.07$
 $f = 419.14$

$$S' = \frac{452.89 \cdot 418.07}{418.07 + 452.89} = 142.978"$$

SIZE OF IMAGE $d = \frac{142.978}{452.4} \times 120 = 37.926"$
PRIMARY AS SEEN IN SECONDARY

$$f = \frac{502.385 + 142.978}{37.92} = 17.016$$

SIZE OF UNVIGNETED FIELD:

$$8 - \left(\frac{37.9 - 8}{142.98 + 452.4} \times 50 \right) = 5.49 \text{ in } \phi$$

OR $\approx 9 \frac{1}{4}$ ARC

CORRESPONDING SIZE AT P.F. $\frac{147.6 \times 5.49}{502.4} = 1.61"$

BEAM AT 45° FLAT $\frac{50.49}{17.016} = 2.97$

DESIRED FIELD THRU 45° FLAT $\frac{120}{3.98} = 30.7 \text{ MM} = 1.19 \text{ IN}$

OR ... $\frac{120}{3.98} = 30.7 \text{ MM} = 1.19 \text{ IN}$

APPROPRIATE HOLE 1.67 W x 2.35 H

MAXIMUM OR "OUT" POS.

$f = 418.5$
 $f = 419.4$

$$S = \frac{449.4 \cdot 418.5}{418.5 + 449.4} = 142.8886"$$

$d = \frac{142.8886}{449.4} \times 120 = 38.153"$

$$f = \frac{535.385 + 142.8886}{38.153} = 17.778$$

8 - $\left(\frac{38.15 - 8}{142.89 + 449.4} \times 86 \right) = 3.62 \text{ in } \phi$

OR $\approx 5 \frac{1}{4}$ ARC

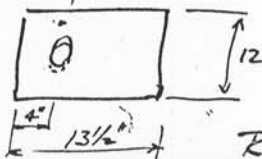
$\frac{150.6 \times 3.62}{535.4} = 1.02"$

$\frac{92.49}{17.778} = 5.19$

30" MINIMUM $\frac{30}{3.81} = 7.88 \text{ MM} = .31 \text{ IN}$

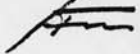
APPROPRIATE HOLE 2.785 W x 3.49 H

SIZE OF DIAG. MIRRORS $\approx 12 \times 13 \frac{1}{2}"$
(ACCOMMODATING 8 IN. DIA FIELD)

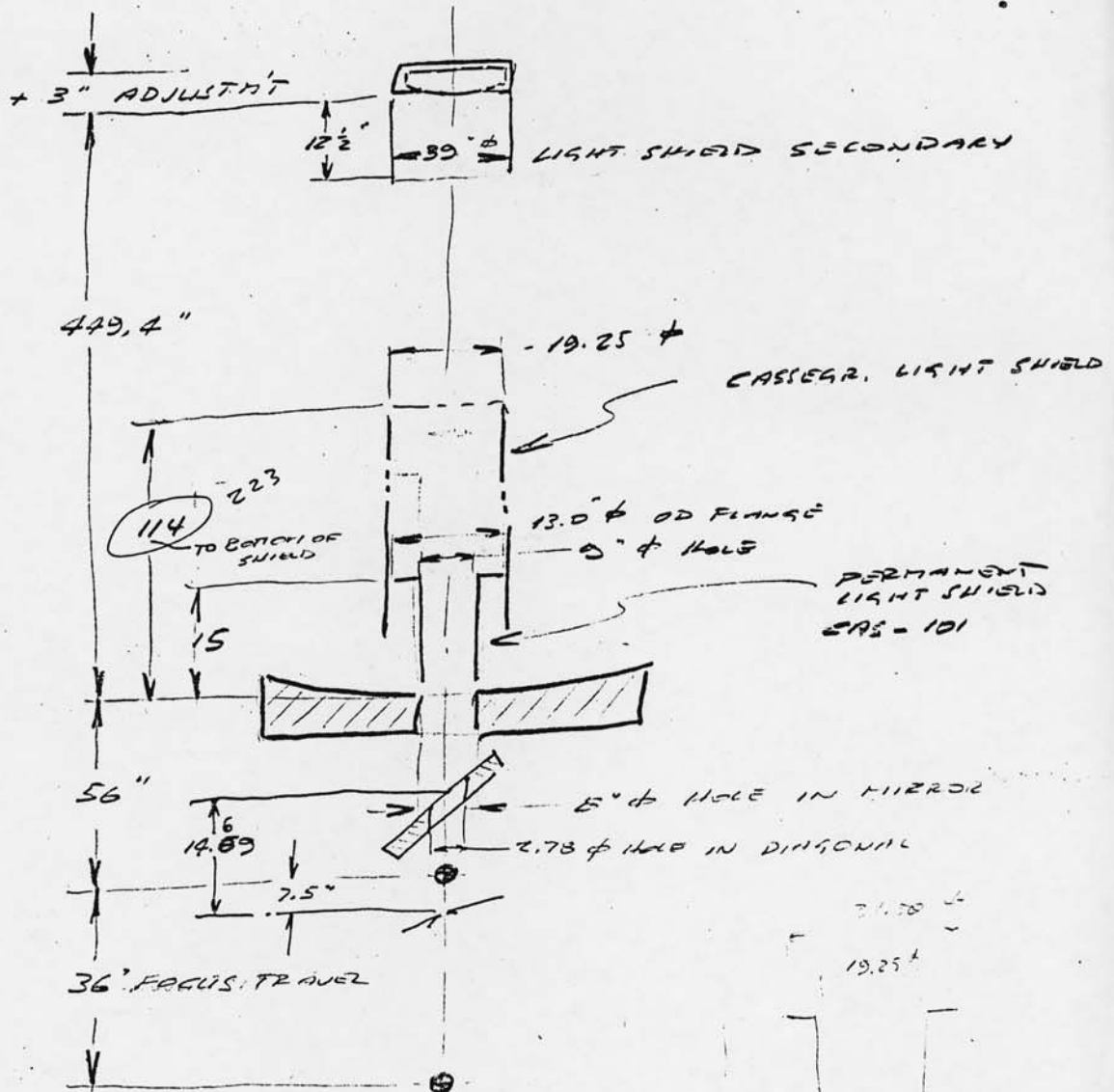


REV. 6-16-71

120" OPTICAL FOCUS DRAWINGS

3-12-85


120" TELESCOPE



109

1029

3.150
 19.25"

120" OPTICAL FOCUS DRAWINGS

