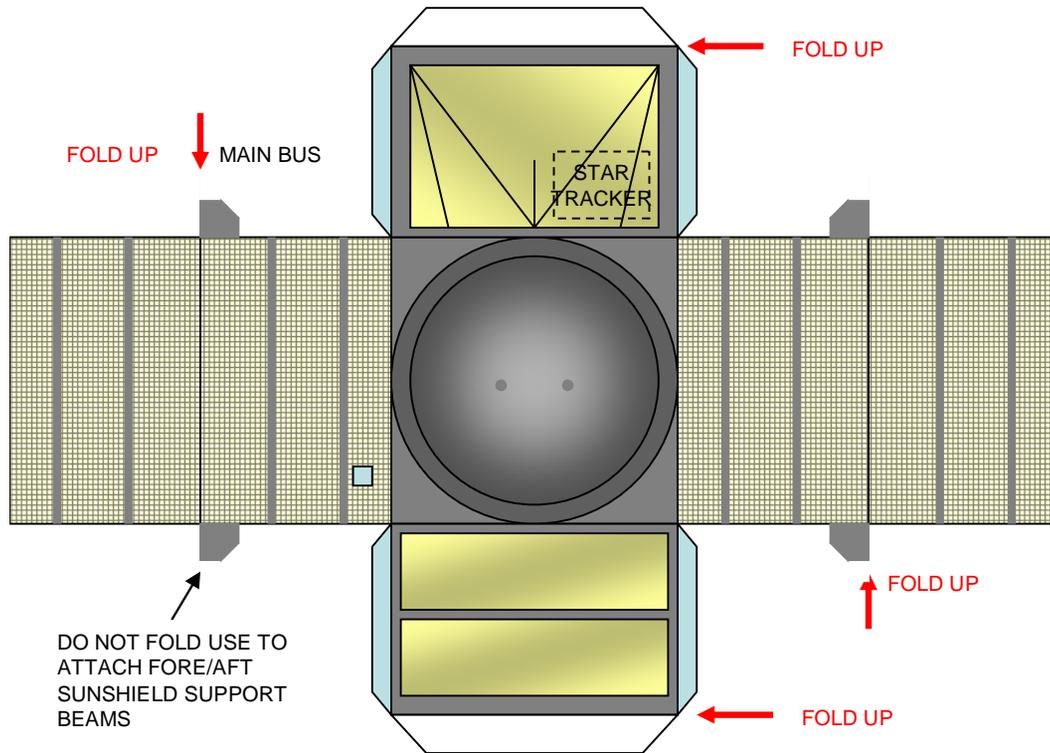
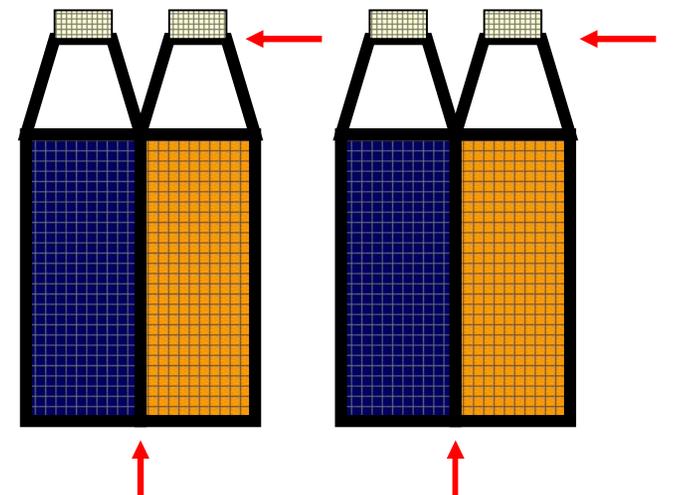
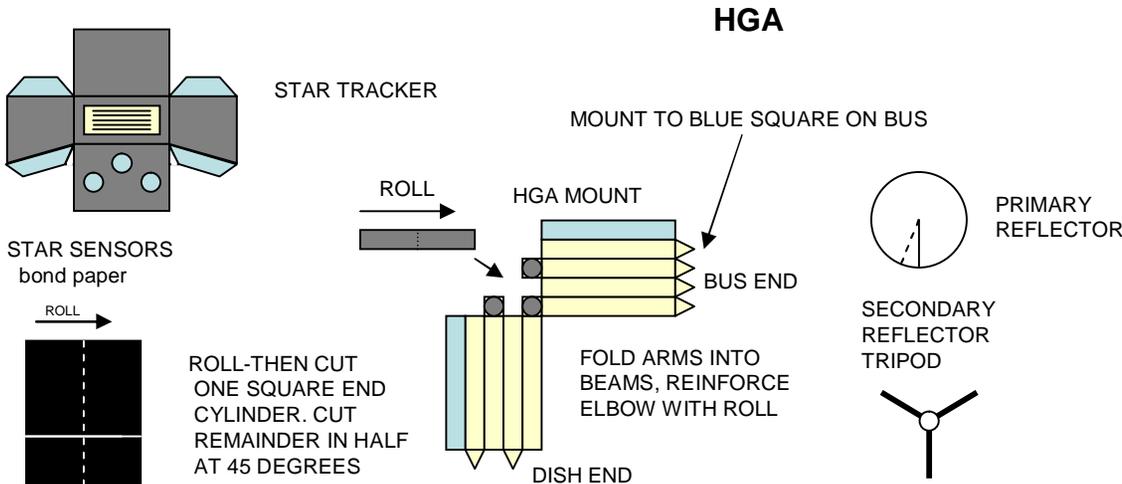
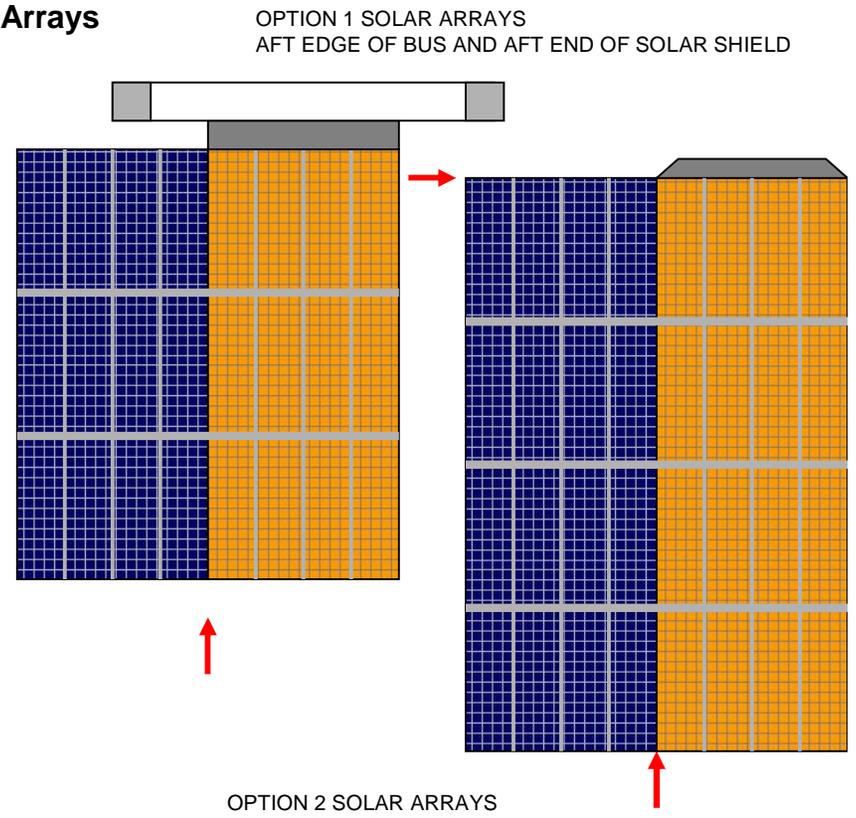


# James Webb Space Telescope – 1:48 scale

## 1-Spacecraft Bus Assembly



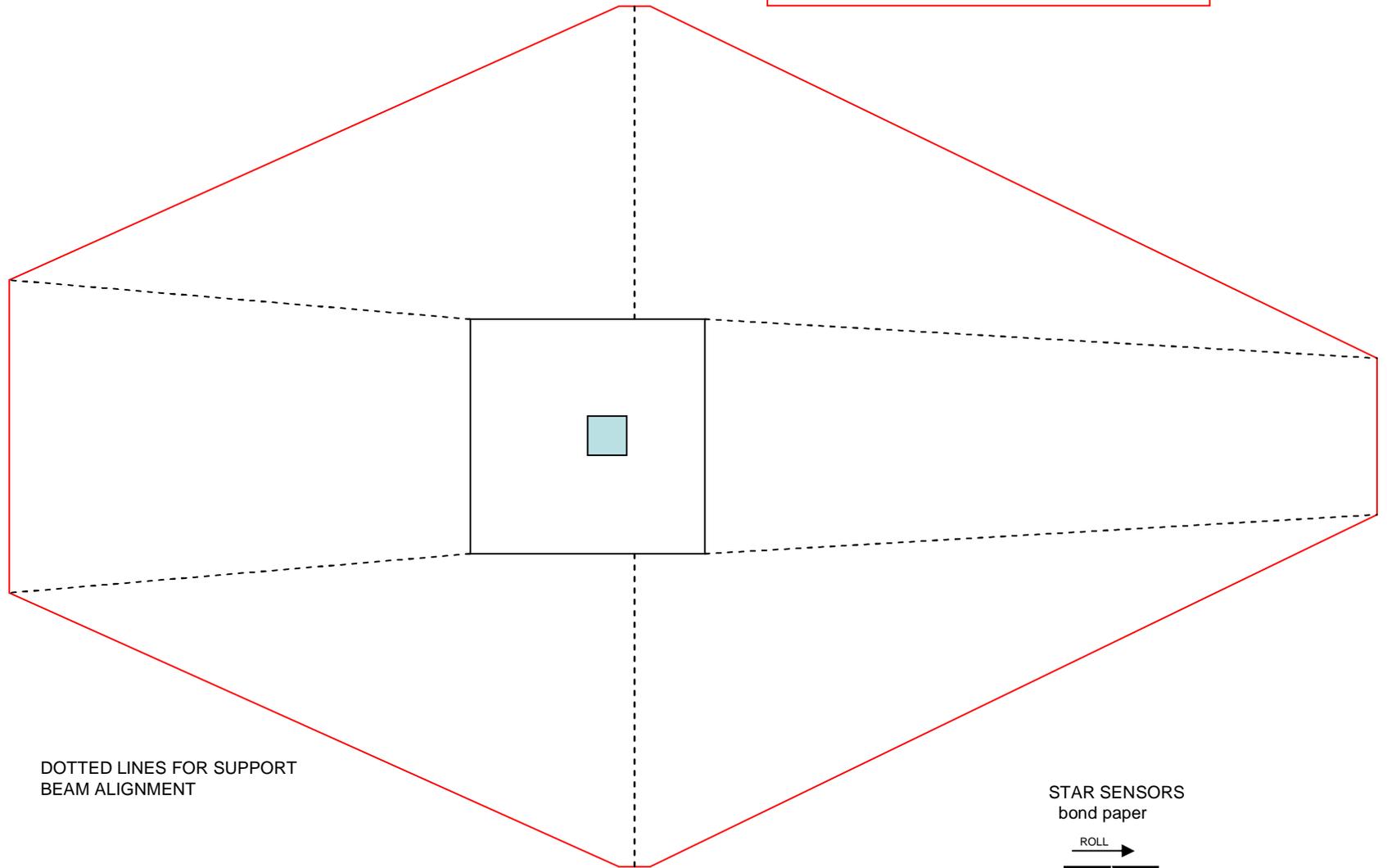
## 2-Solar Arrays



# James Webb Space Telescope – 1:48 scale

3-Sunshields  
#5 bottom

**NOTE: can increase the step size  
between layers by another tic**



DOTTED LINES FOR SUPPORT  
BEAM ALIGNMENT

STAR SENSORS  
bond paper

ROLL →



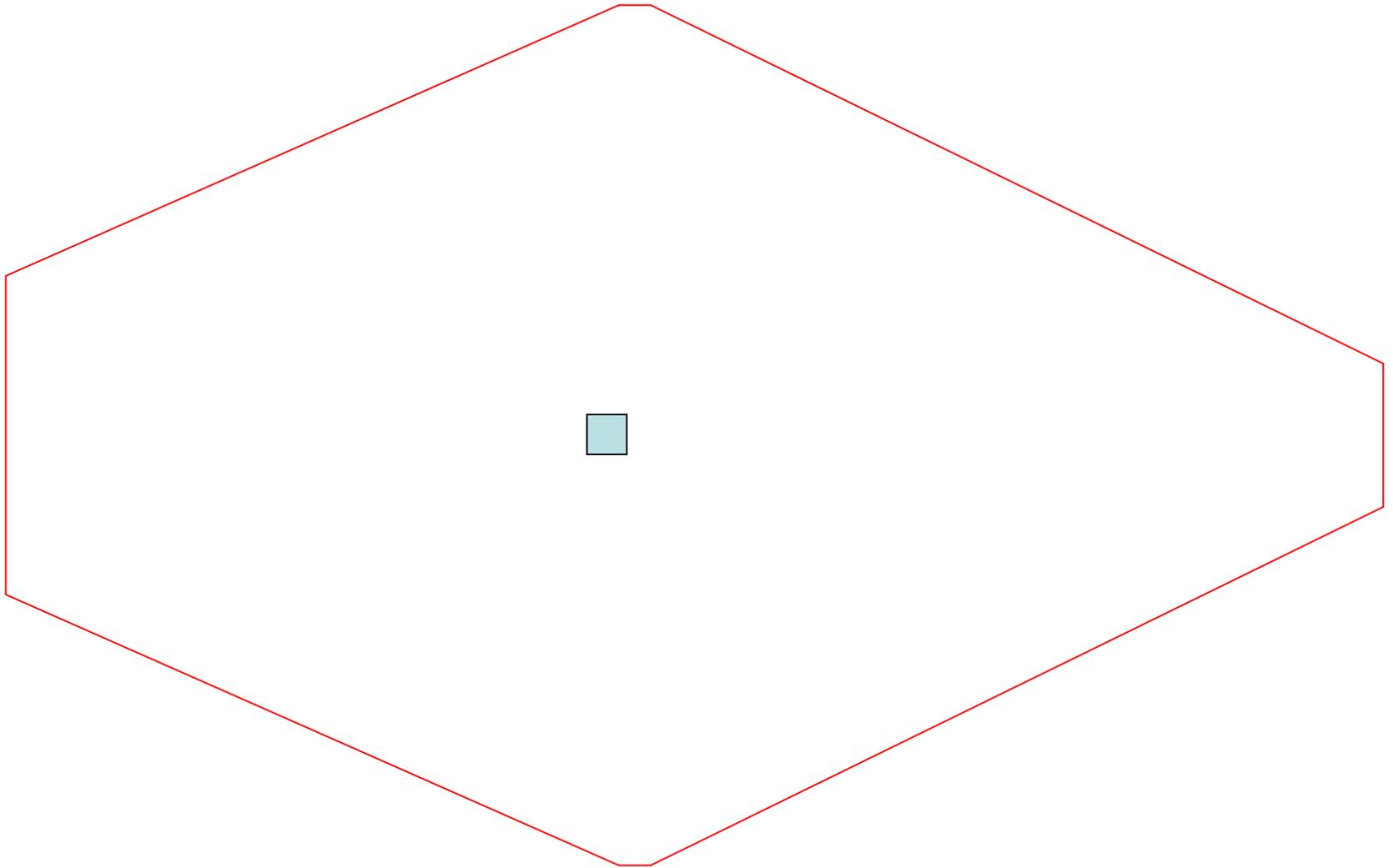
ROLL-THEN CUT  
ONE SQUARE END  
CYLINDER. CUT  
REMAINDER IN HALF  
AT 45 DEGREES

PRINT THIS ON BOND PAPER

# James Webb Space Telescope – 1:48 scale

3-Sunshields

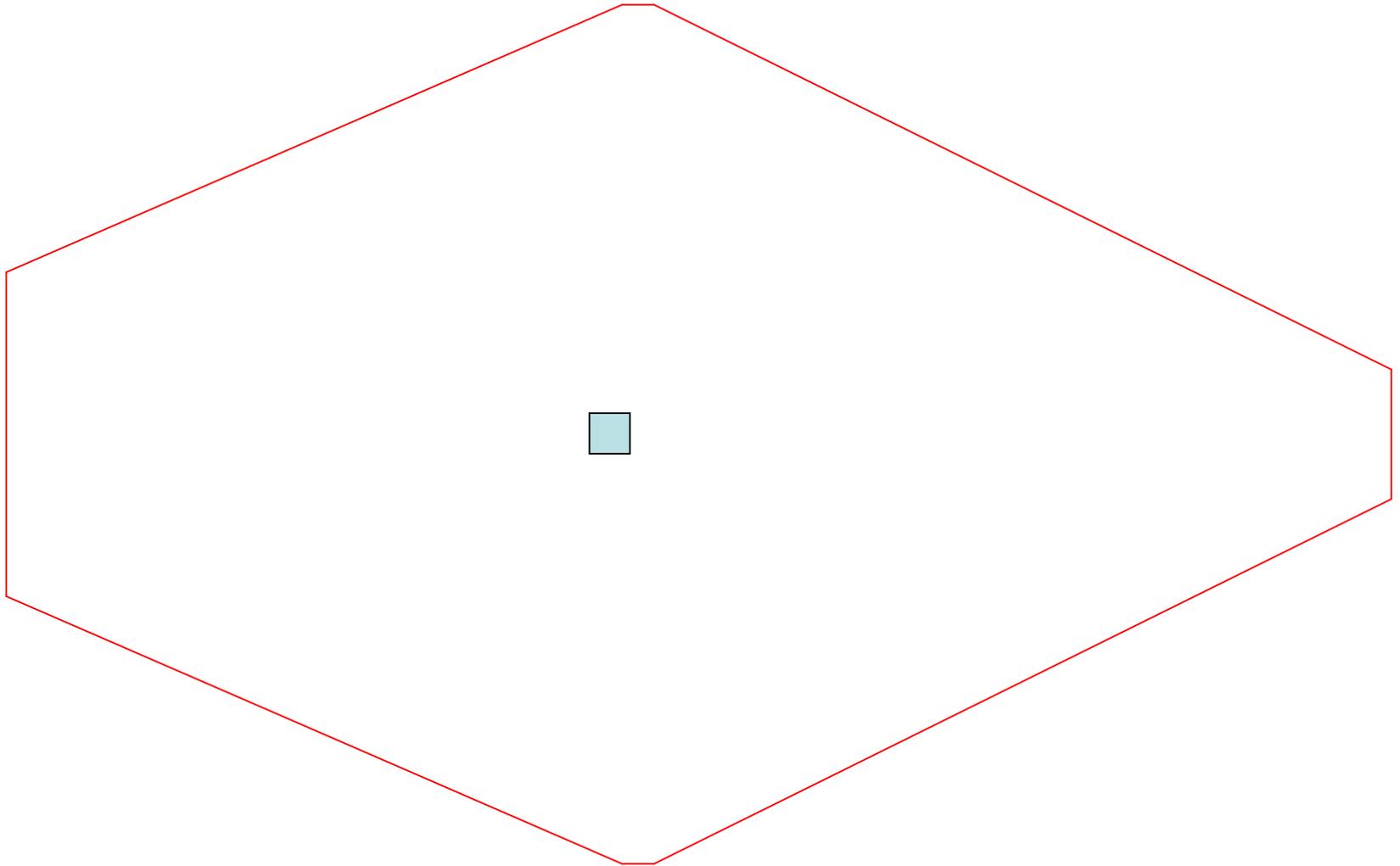
#4



PRINT THIS ON BOND PAPER

# James Webb Space Telescope – 1:48 scale

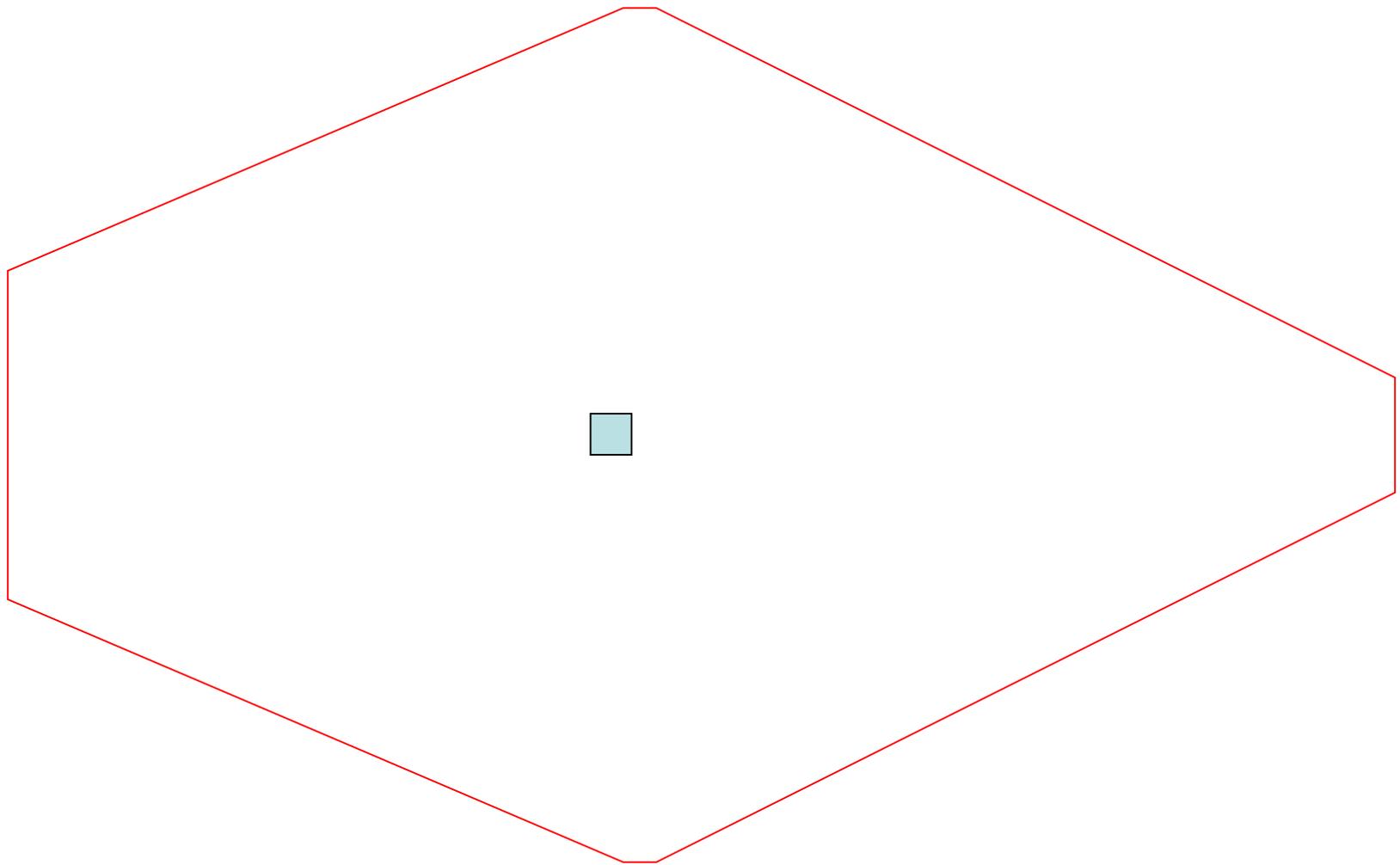
**3-Sunshields**  
**#3 mid-stack**



PRINT THIS ON BOND PAPER

# James Webb Space Telescope – 1:48 scale

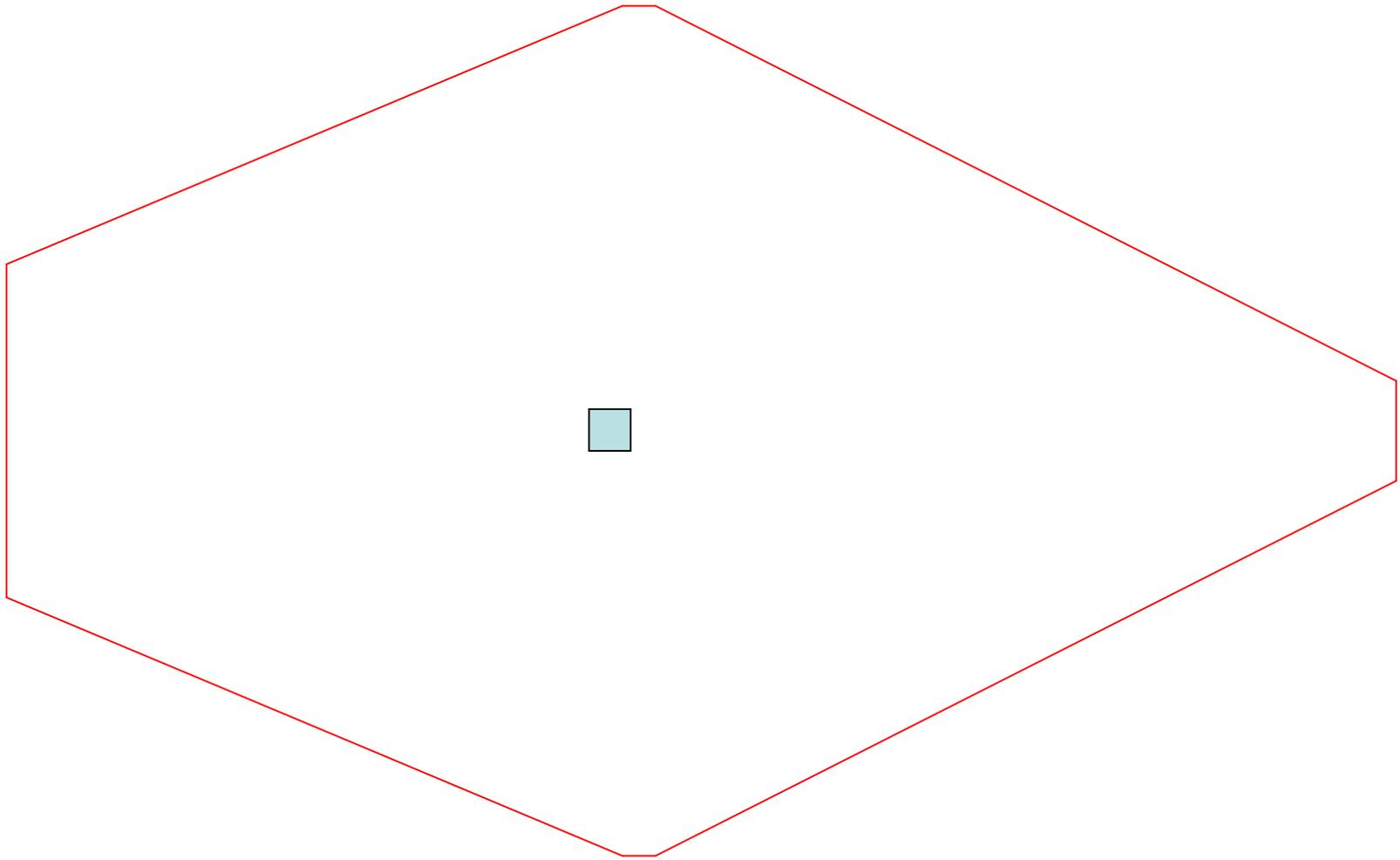
**3-Sunshields**  
**#2**



PRINT THIS ON BOND PAPER

# James Webb Space Telescope – 1:48 scale

**3-Sunshields**  
**#1 top**

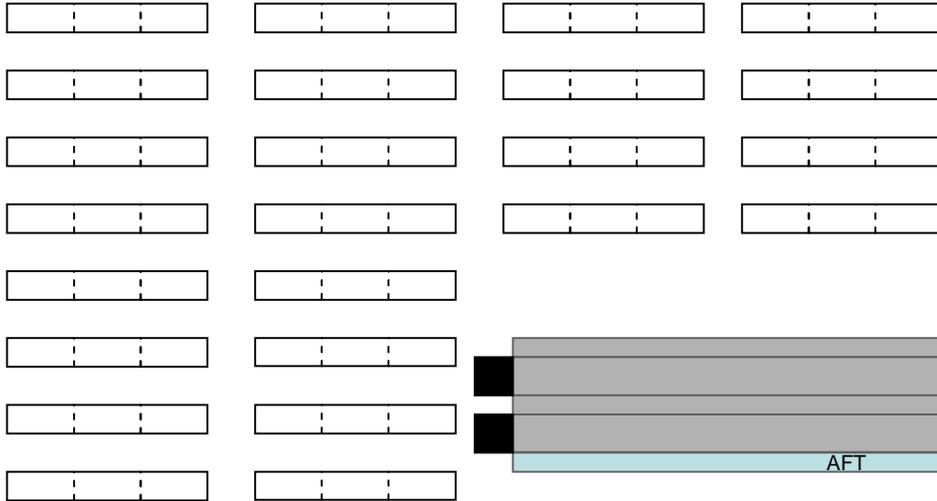


**PRINT THIS ON BOND PAPER**

# James Webb Space Telescope – 1:48 scale

## 3-Sunshields

### MOUNTING TABS



## 4-Sunshield support beams – trim ends to butt with spacecraft bus assembly



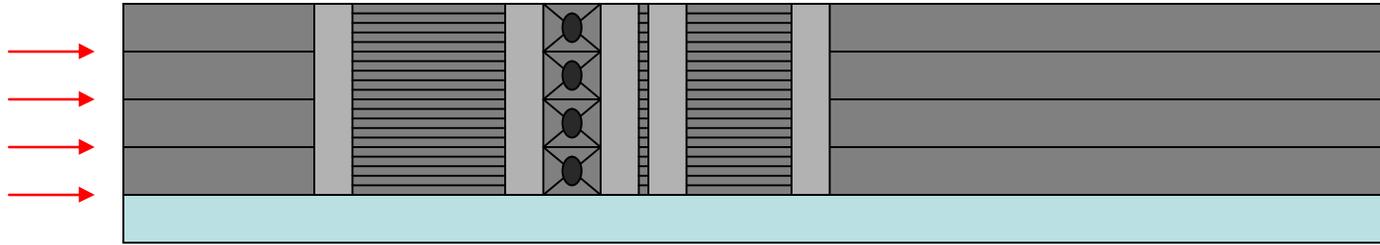
### SPREADER BARS – cut cross beam bars short to achieve angle of sunshade



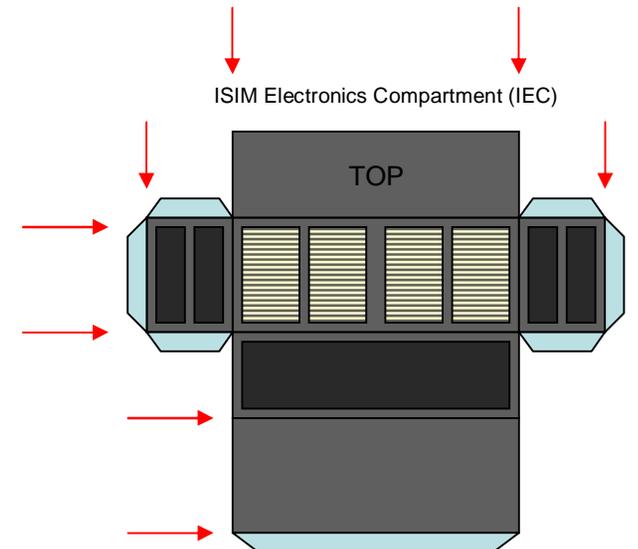
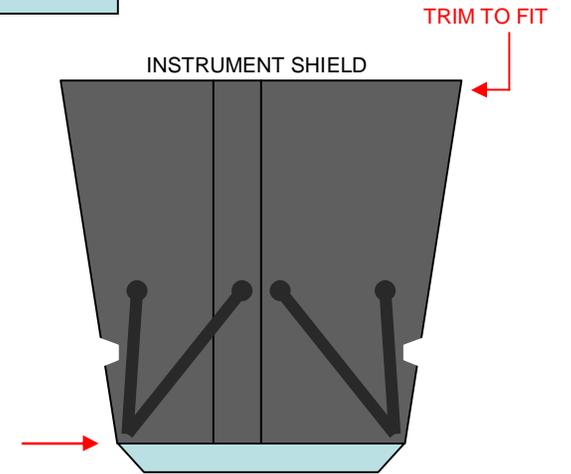
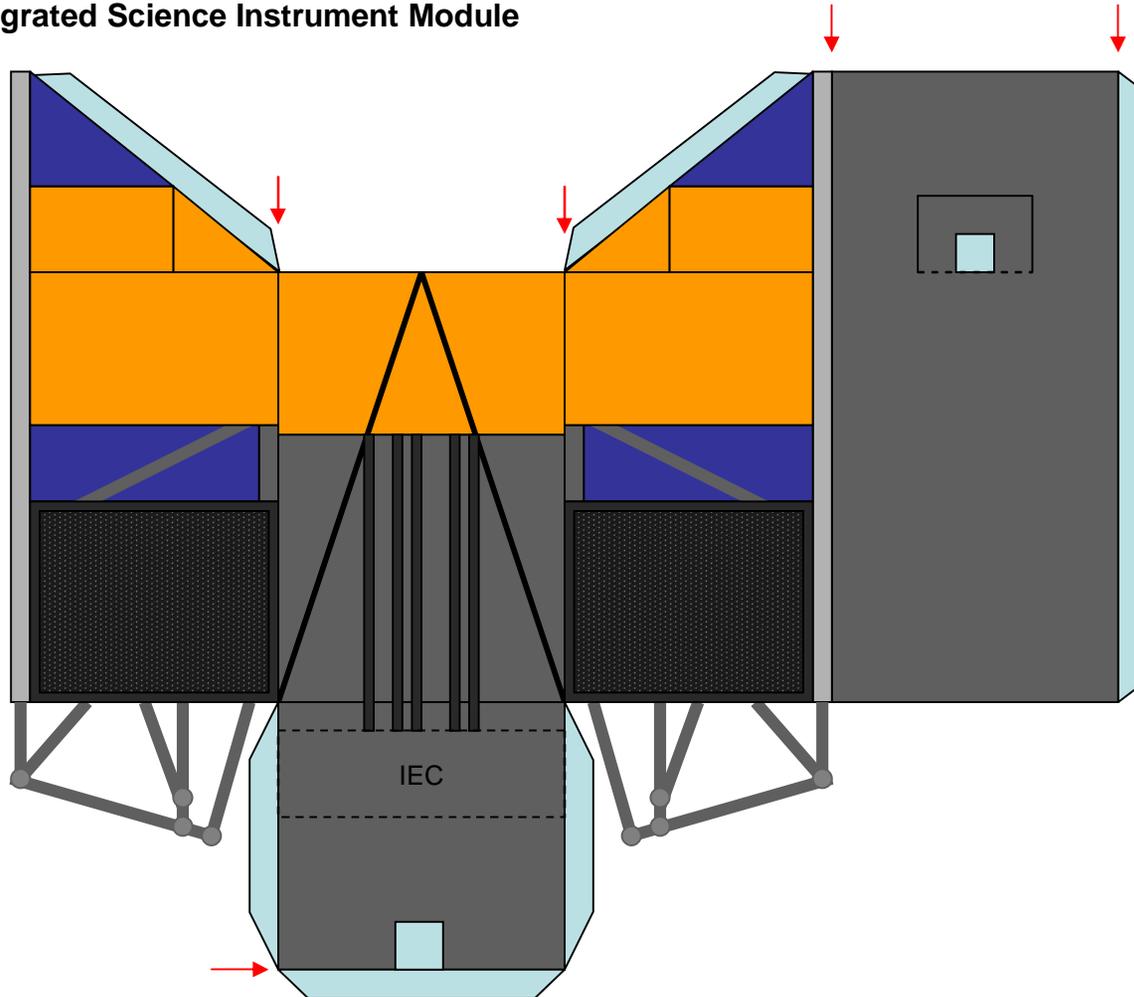
NEED TO TEST BUILD TO SEE IF 2x4 SUPPORT BEAMS WILL ATTACH TO 3x3 SPREADER BARS OTHERWISE REDUCE SPREADERS TO 2x2.

# James Webb Space Telescope – 1:48 scale

## 5-Center Support Boom

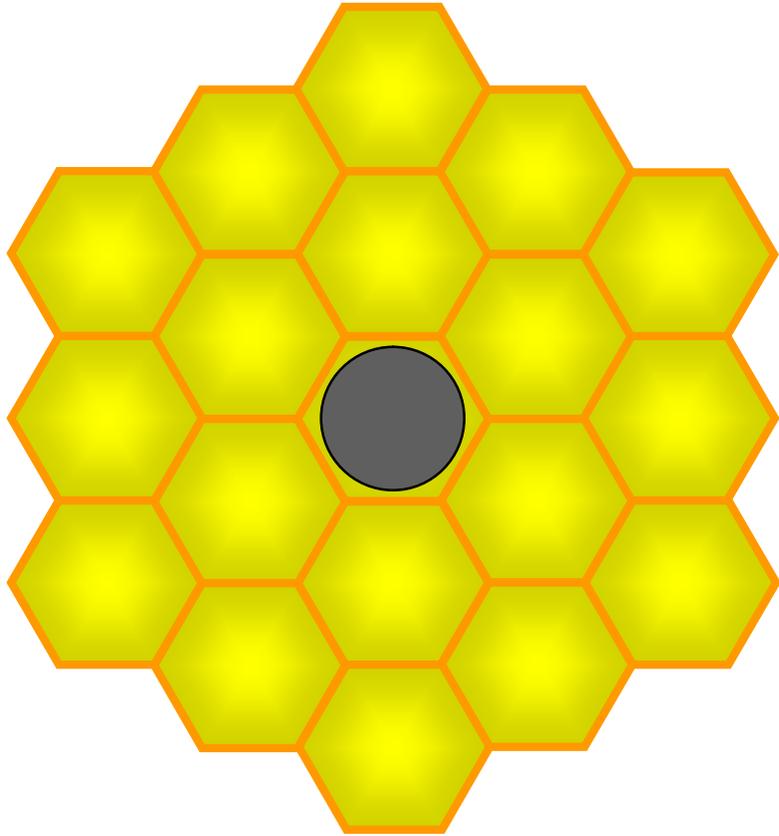


## 6-Integrated Science Instrument Module

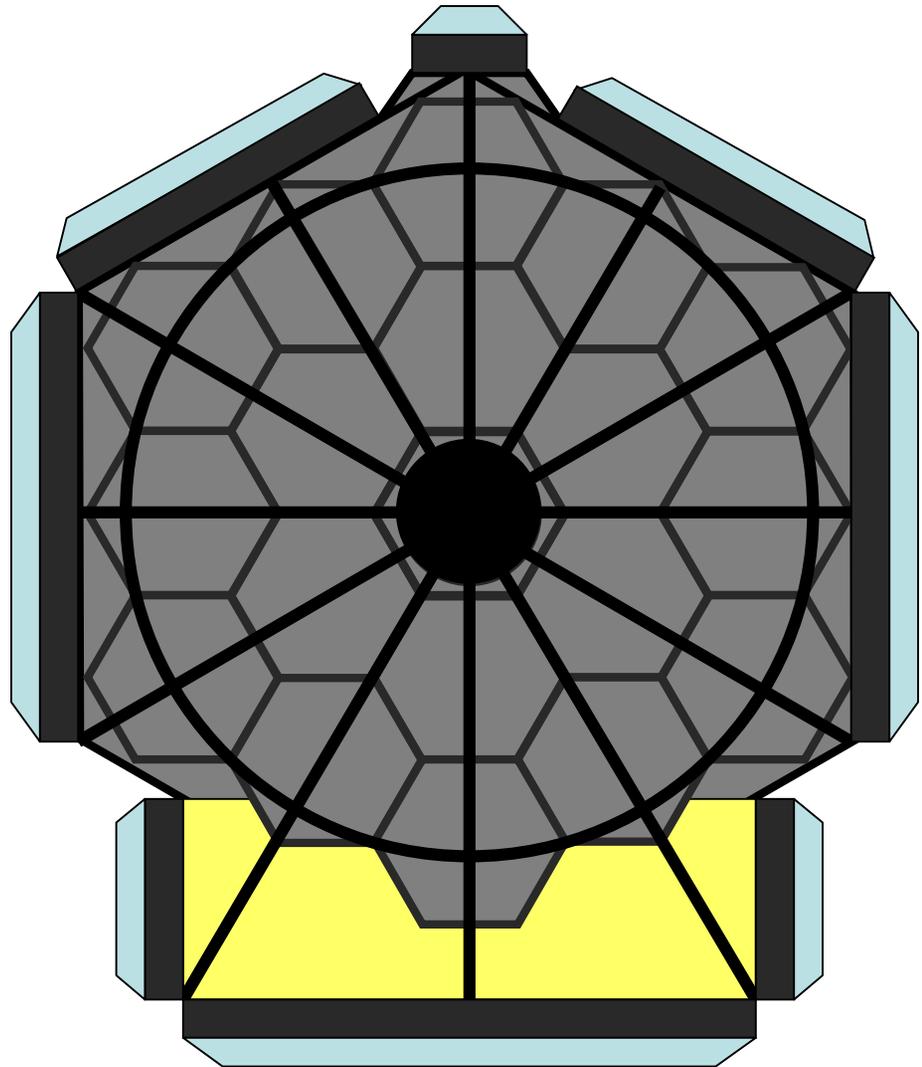


# James Webb Space Telescope – 1:48 scale

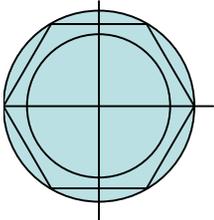
## 7-Primary Mirror



PRIMARY MIRROR

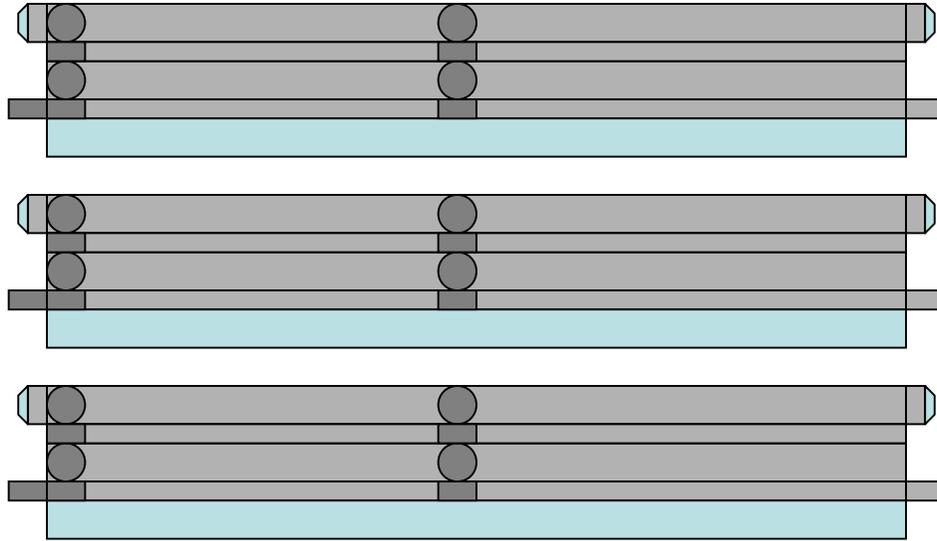


FRONT OF BACKPLANE

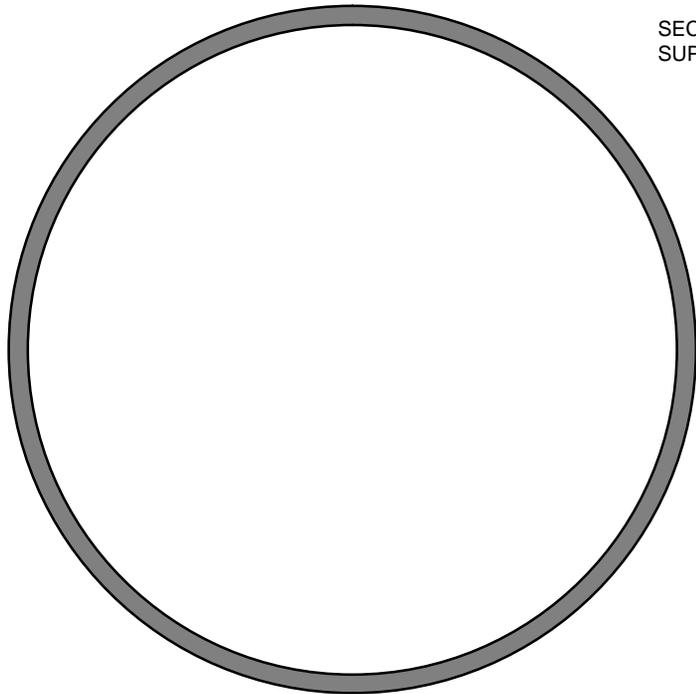


# James Webb Space Telescope – 1:48 scale

## 7-Primary Mirror

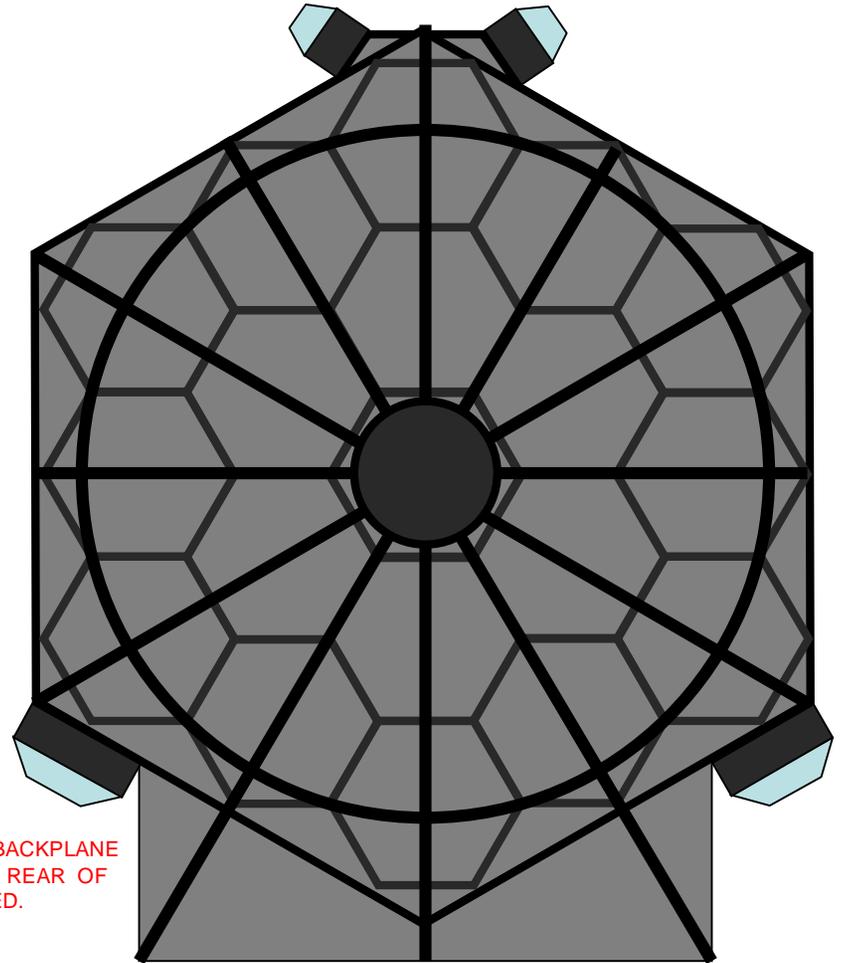


SECONDARY MIRROR  
SUPPORT STRUTS



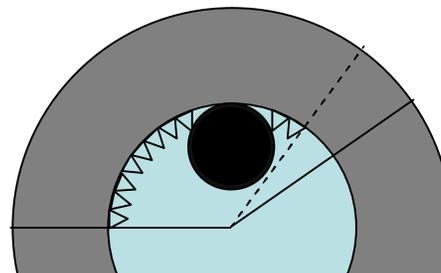
PRIMARY MIRROR SUPPORT RINGS – GLUE TO THICK CARD (3/16" total)

ASSEMBLE USING TABS ON BACKPLANE  
FRONT FIRST, TRIM TABS ON REAR OF  
BACKPLANE TO FIT IF NEEDED.

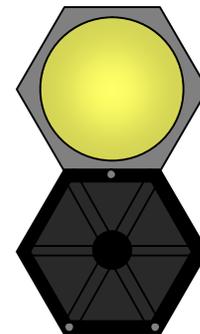


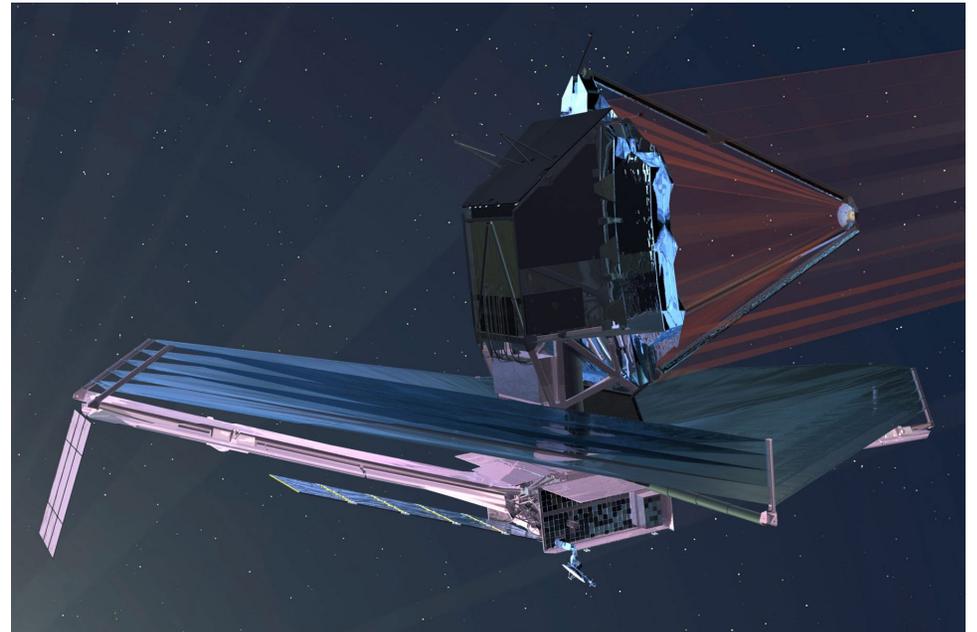
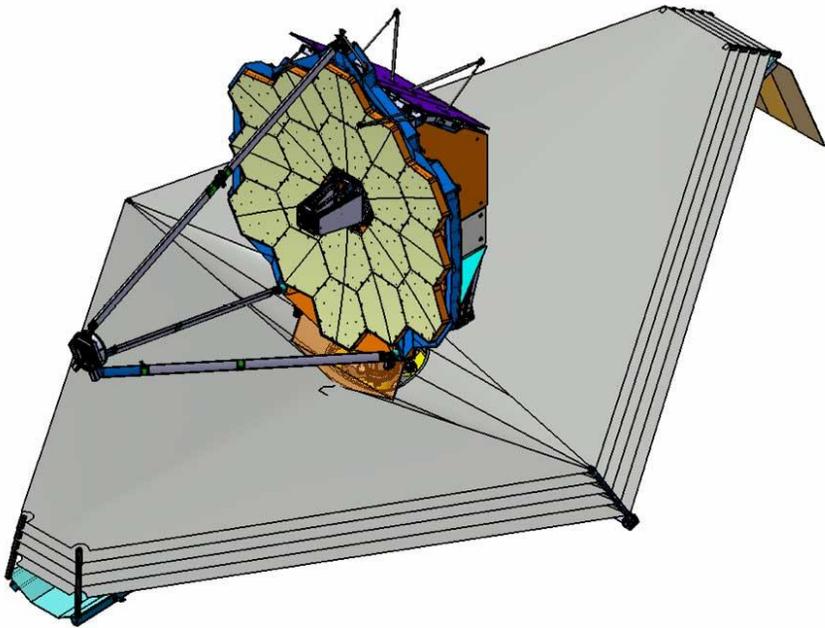
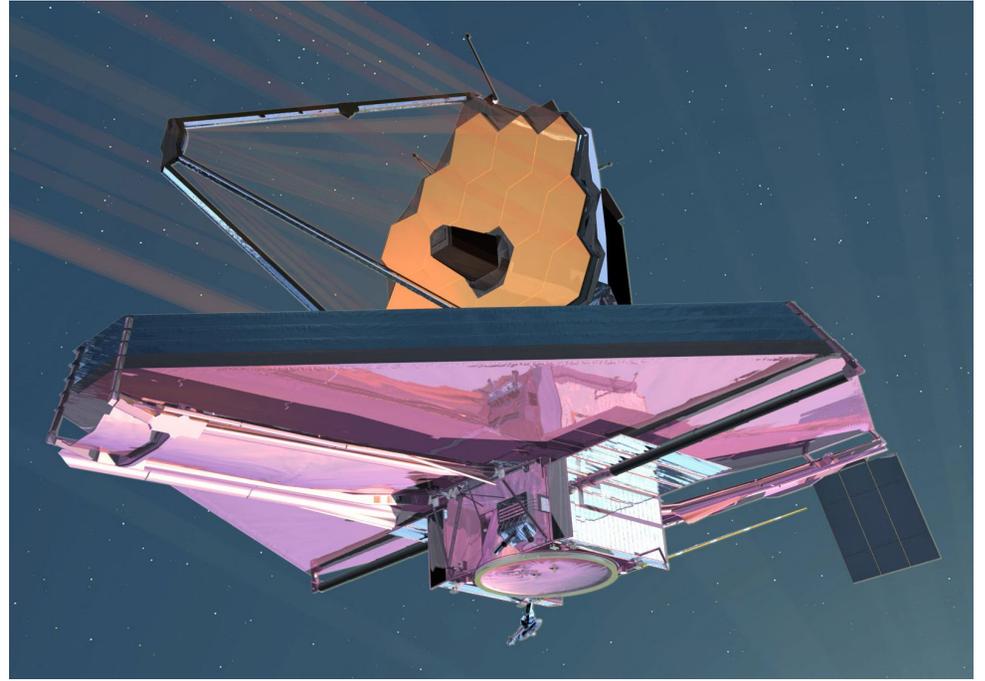
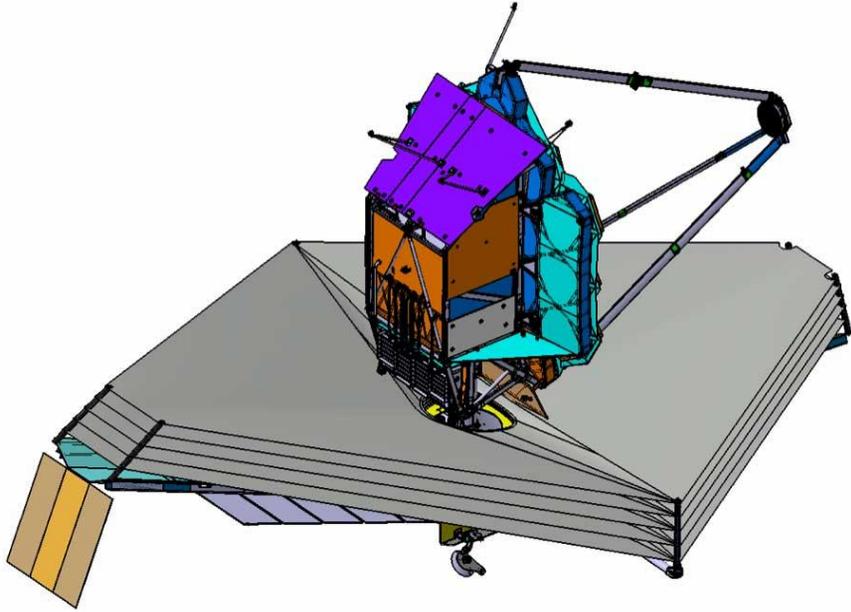
REAR OF BACKPLANE

AFT OPTICS – CENTER ON  
FACE OF MIRROR

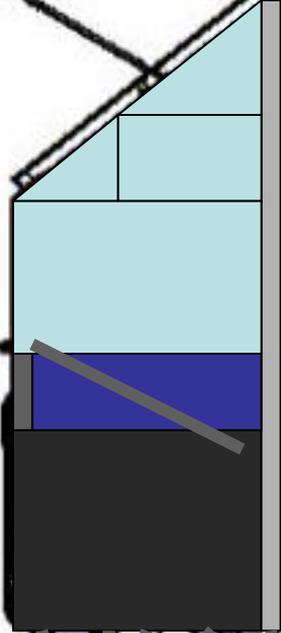
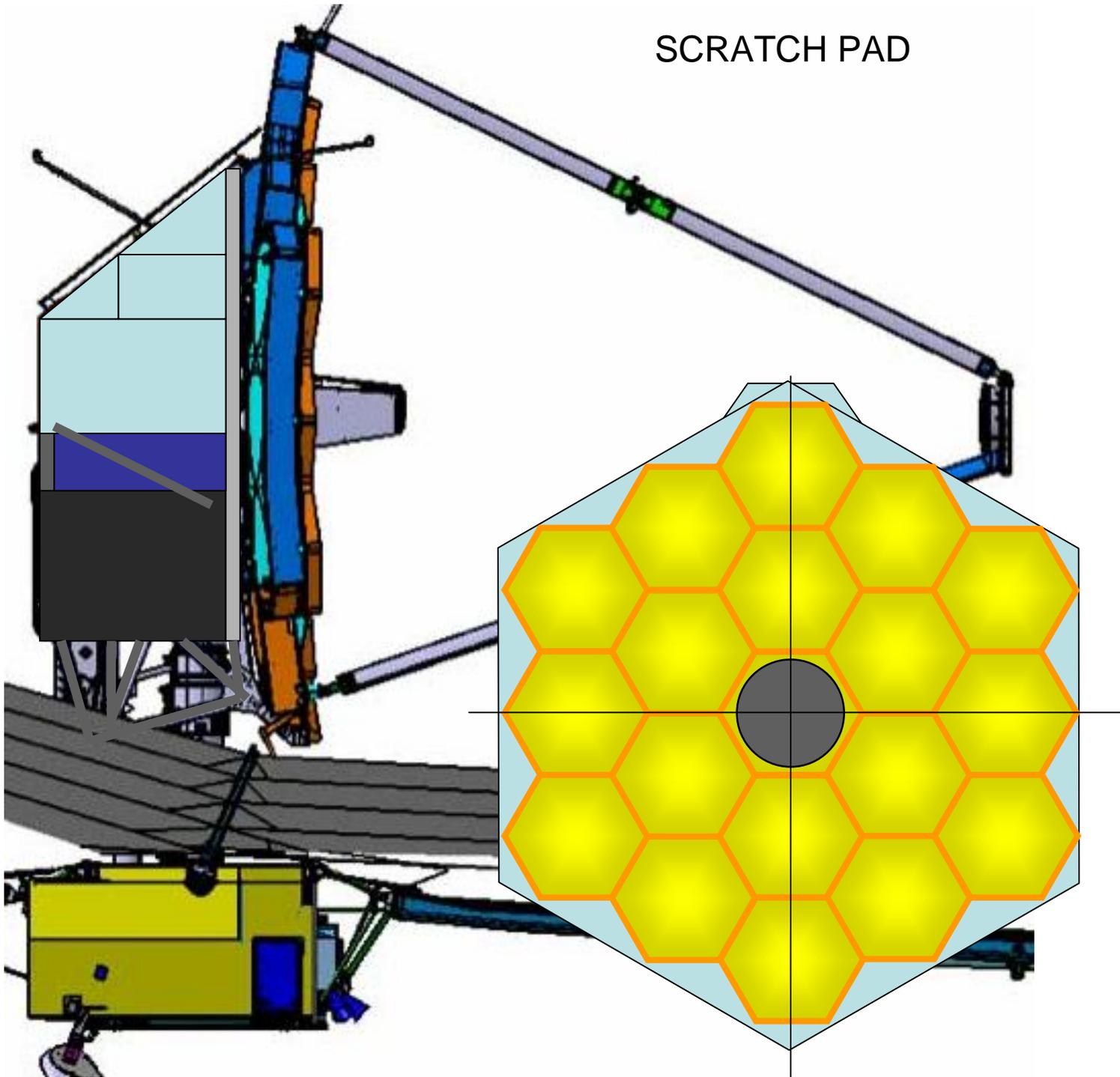


SECONDARY MIRROR





# SCRATCH PAD



# James Webb Space Telescope – 1:48 scale

SCRATCH PAD

3-Sunshields  
#5 bottom  
Master Pattern

