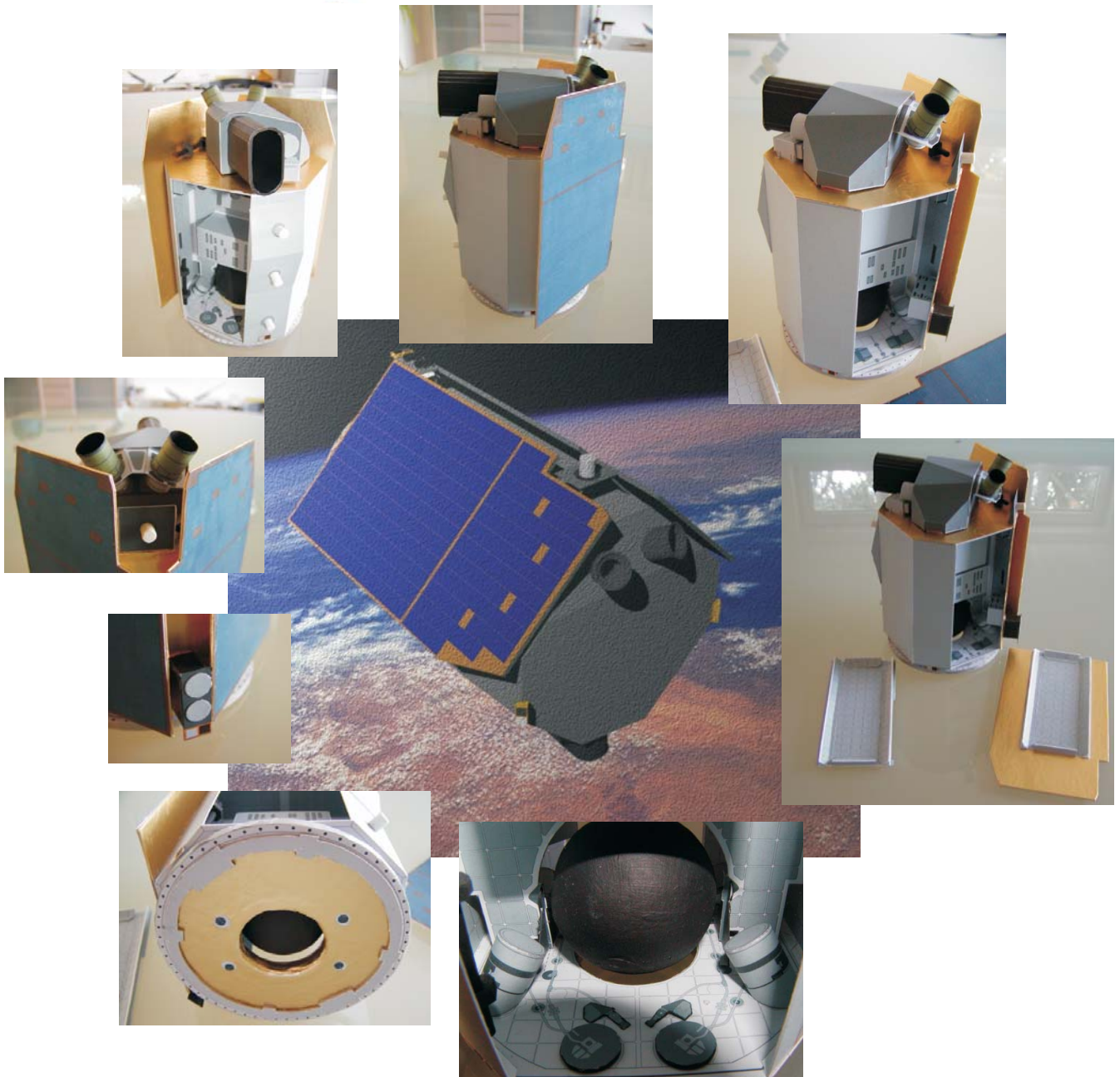


NSPO ARGO Spacecraft



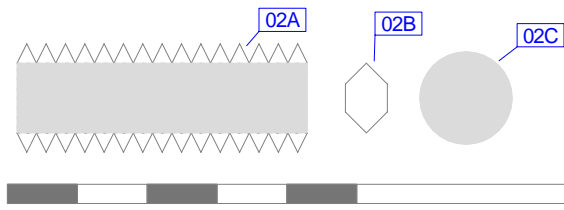
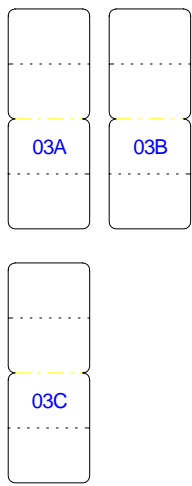
Paper Fold Model (PFM)
STI-CGS Proposal Reference

Scale = 1:10.87

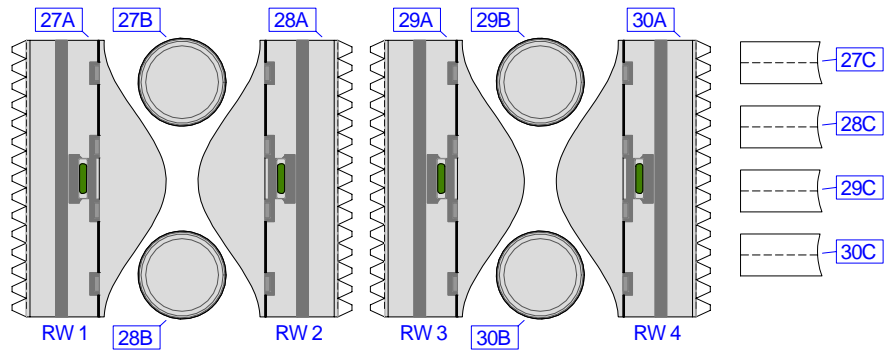
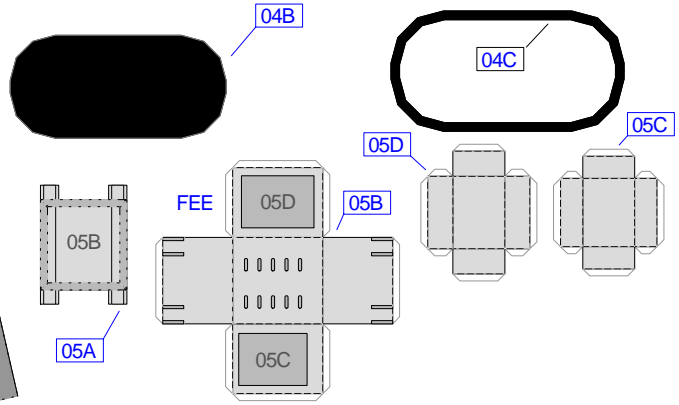
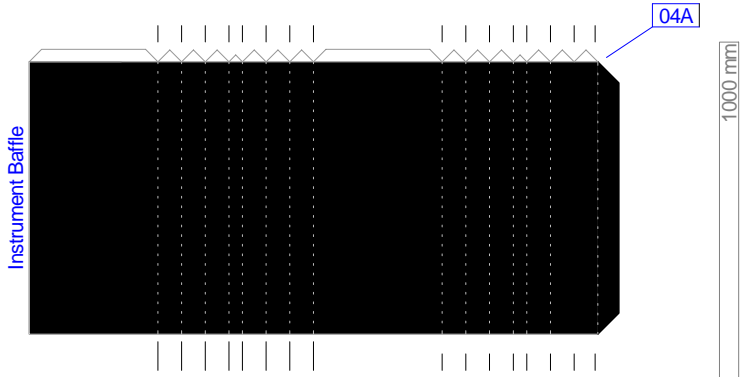
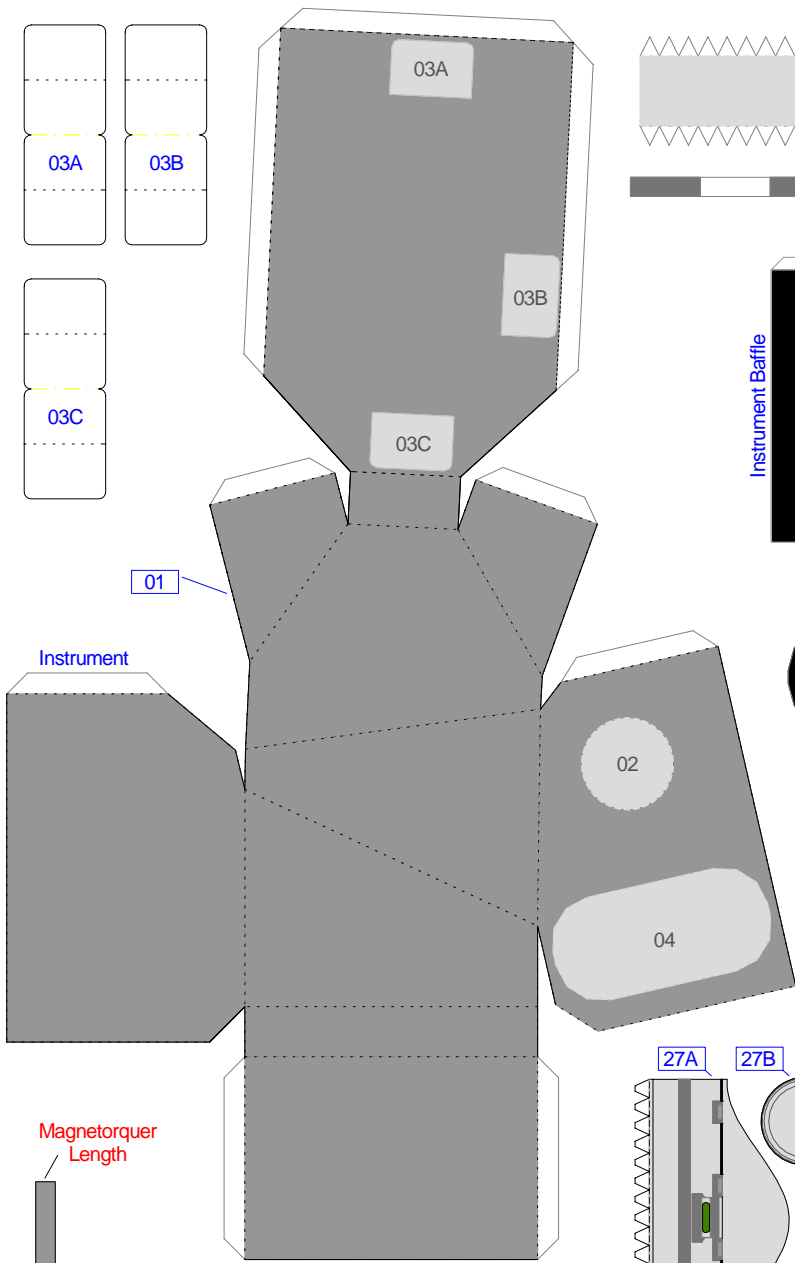
ARGO Paper Model

Summary of Elements

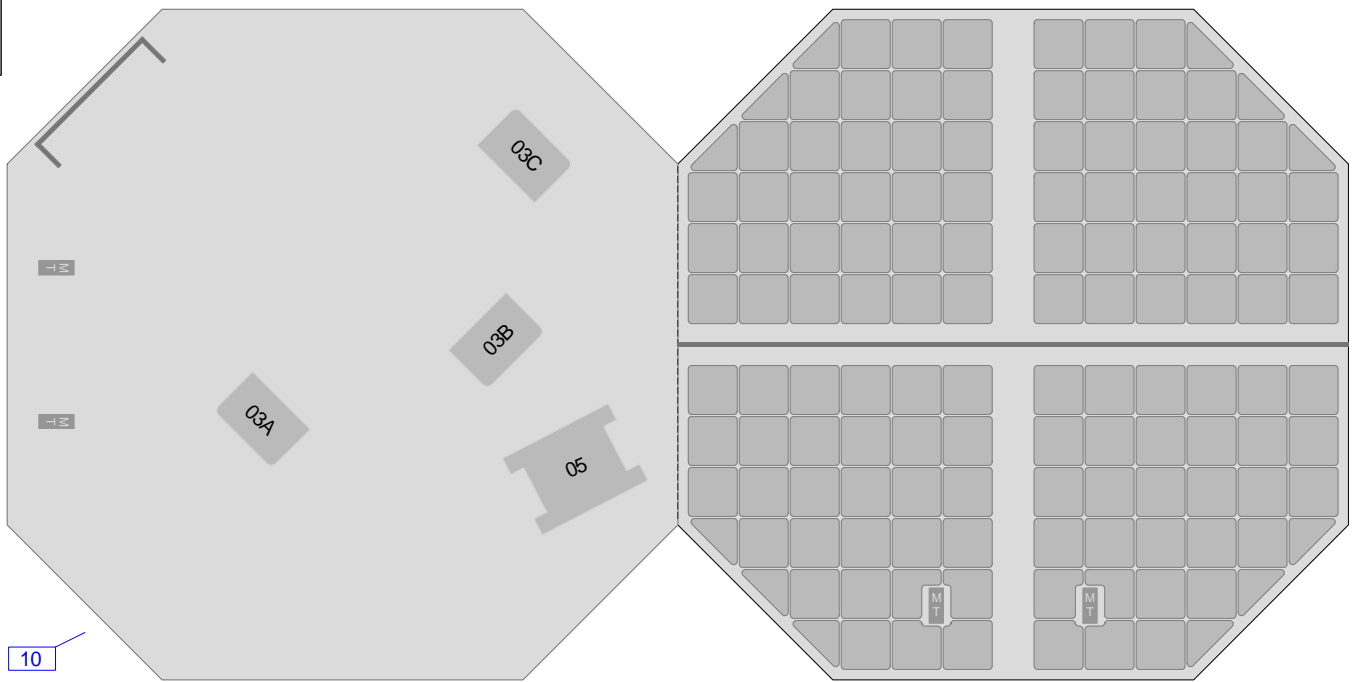
Part Number	Parts Description	Page	Part Number	Parts Description	Page
<hr style="border-top: 1px dashed black;"/>					
01	- Optical Instrument	01	15	A Central Panel Front	04
02	A Focal Plane Cylinder	01	B	Central Panel Back	04
	B Focal Plane Glue Junction	01	C	Tank Support	04
	C Focal Plane Cover Plate	01	D	Tank Support	04
03	B Instrument Foot 1	01	E	Tank Support	04
	C Instrument Foot 2	01	F	Tank Support	04
	D Instrument Foot 3	01	16	A Propulsion Module (Upper Part)	05
04	A Instrument Baffle Main	01	B	PM (Central Part Up)	05
	B Instrument Baffle Rear Plate	01	C	PM (Central Part Down)	05
	C Instrument Baffle Front Edge	01	D	PM (Lower Part Up)	05
05	A FEE Bottom Plate	01	E	PM (Lower Part Down)	05
	B FEE Main Box	01	F	Launch Adapter Ring (Upper Part)	06
	C FEE Appendix A	01	G	Launch Adapter Ring (Lower Part)	06
	D FEE Appendix B	01	17	A Solar Generator -Z/?X	06
06	- Star Camera Interface Frame	07	B	Solar Generator -Z/?X	07
07	- Star Camera Support Frame	07	18	- Zenith Antenna Platform Up	02
08	A Star Camera 1 Front Tube	07	19	A Zenith Ant. Platform Down, Frame	07
	B Star Camera 1 Front Tube Bottom	07	B	Zenith Ant. Platform Down, Dish	07
	C SC 1 Front Tube Glue Junction	07	C	GPS Antenna 1	07
	D Star Camera 1 Rear Tube	07	D	GPS Antenna 2	07
	E Star Camera 1 Rear Tube Bottom	07	20	A ICU Bottom Plate	04
	F SC 1 Rear Tube Glue Junction	07	B	ICU Main Box	04
09	A Star Camera 2 Front Tube	07	C	ICU Annex	04
	B Star Camera 2 Front Tube Bottom	07	21	A S-Band RFEA Bottom Plate	02
	C SC 2 Front Tube Glue Junction	07	B	S-Band RFEA Main Box	02
	D Star Camera 2 Rear Tube	07	22	- STE 1	02
	E Star Camera 2 Rear Tube Bottom	07	23	- STE 2	02
	F SC 2 Rear Tube Glue Junction	07	24	- Battery	03
10	- Top (Instrument) Platform	01	25	A PDMU 1 Bottom Plate	04
11	A Inner Panel Set 1 (-X, -Z/+X, -Z)	02	B	PDMU 1 Main Box	04
	B Outer Panel -Z/+X	02	C	PDMU 1 Side Panel A	04
	C Outer Panel -Z	02	D	PDMU 1 Side Panel B	04
	D Outer Panel +X	02	26	A PDMU 2 Bottom Plate	04
12	A Inner Panel Set 2 (-X, +Z/-X, +Z)	03	B	PDMU 2 Main Box	04
	B Outer Panel +Z/-X	03	C	PDMU 2 Side Panel A	04
	C Outer Panel -X	03	D	PDMU 2 Side Panel B	04
	D Outer Panel +Z	03	27	A Reaction Wheel 1 Cylinder	01
	E +Z X-Band Antenna Panel	03	B	Reaction Wheel 1 Cover Plate	01
13	A Access Panel -X/-Z	02	C	Reaction Wheel 1 Glue Junction	01
	B AP -X/-Z Frame Upper Part	02	28	A Reaction Wheel 2 Cylinder	01
	C AP -X/-Z Frame Lower Part	02	B	Reaction Wheel 2 Cover Plate	01
	D AP -X/-Z Frame Left	02	C	Reaction Wheel 2 Glue Junction	01
	E AP -X/-Z Frame Right	02	29	A Reaction Wheel 3 Cylinder	01
14	A Access Panel +X/+Z	03	B	Reaction Wheel 3 Cover Plate	01
	B AP +X/+Z Frame Upper Part	03	C	Reaction Wheel 3 Glue Junction	01
	C AP +X/+Z Frame Lower Part	03	30	A Reaction Wheel 4 Cylinder	01
	D AP +X/+Z Frame Left	03	B	Reaction Wheel 4 Cover Plate	01
	E AP +X/+Z Frame Right	03	C	Reaction Wheel 4 Glue Junction	01
			31	A X-Band Transmitter Main Box	03
			B	X-Band Transmitter Bottom Plate	03



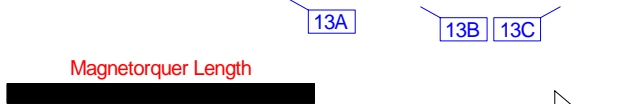
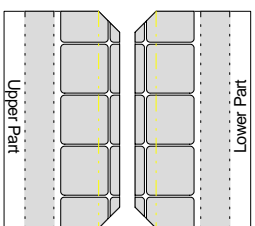
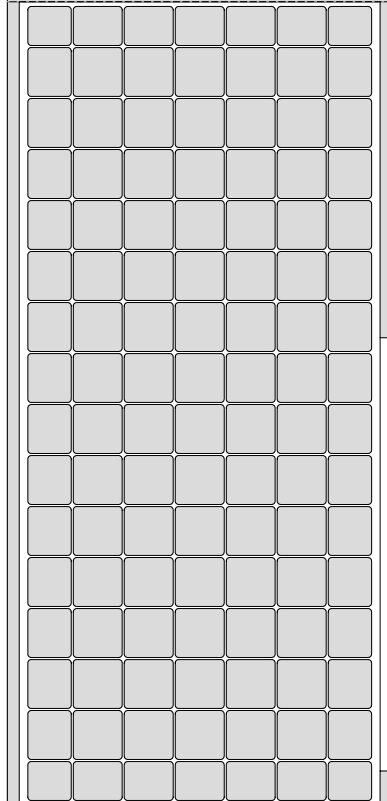
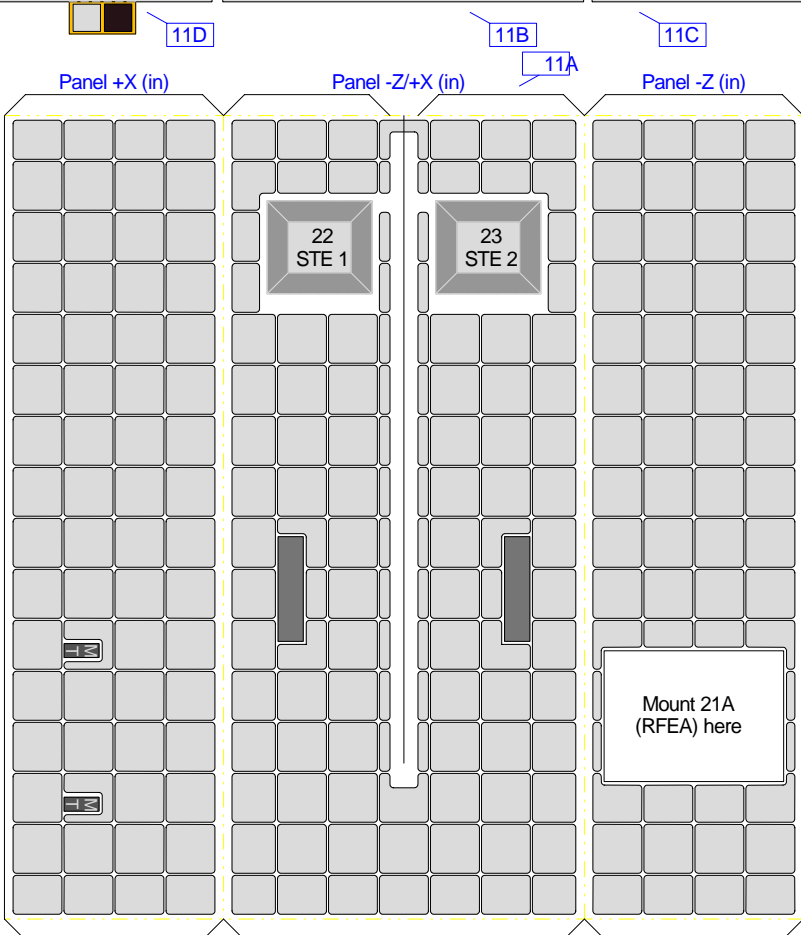
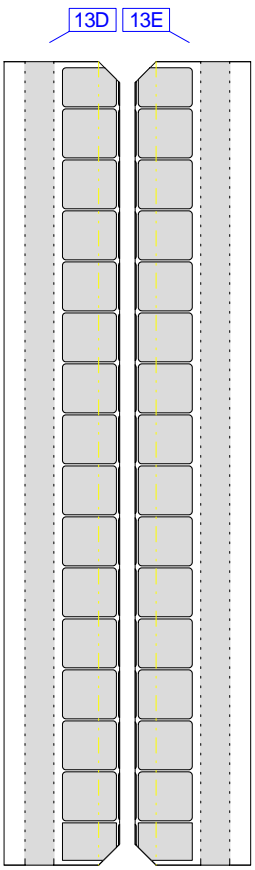
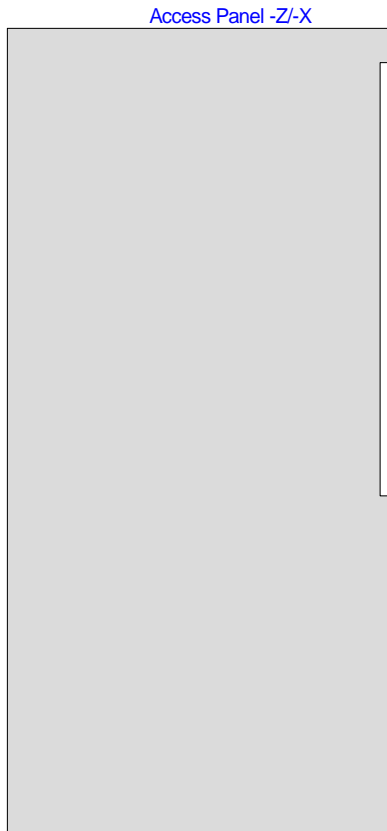
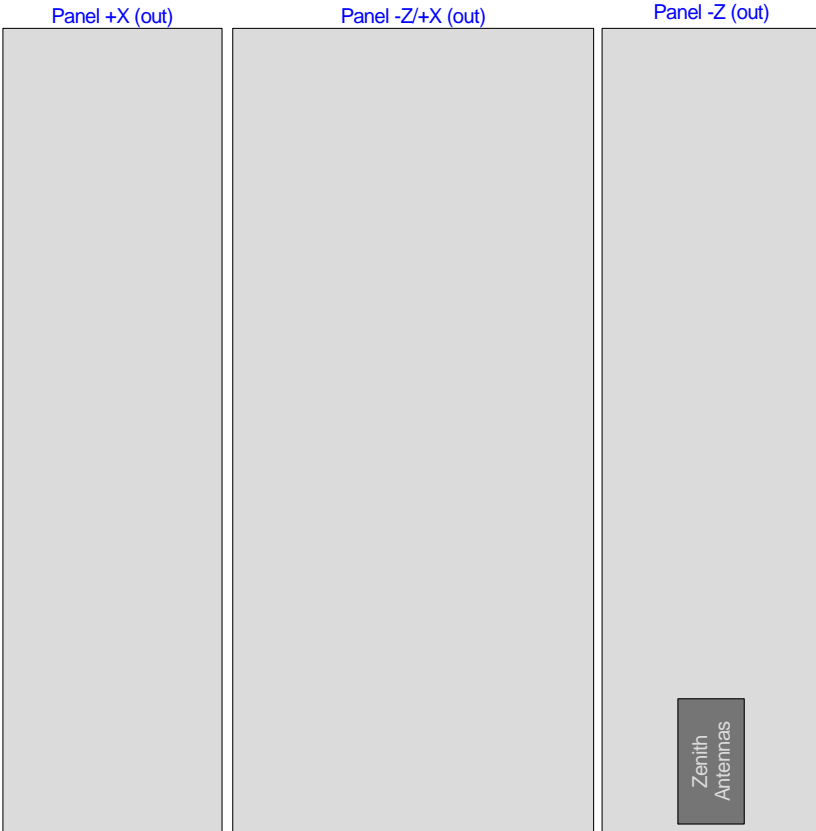
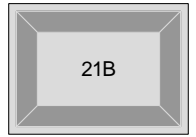
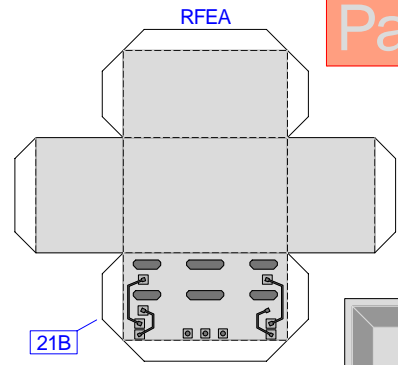
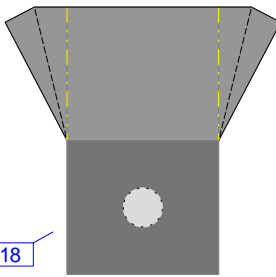
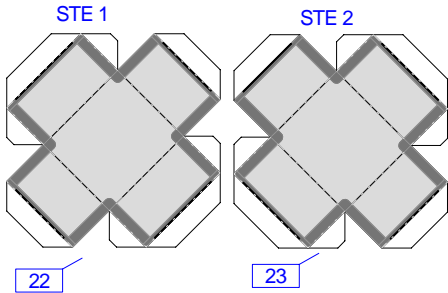
1000 mm



Magnetorquer Length







Panel +Z (out)

Panel +Z/-X (out)

Panel -X (out)

Access Panel +Z/+X

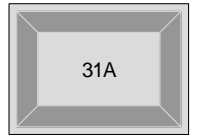
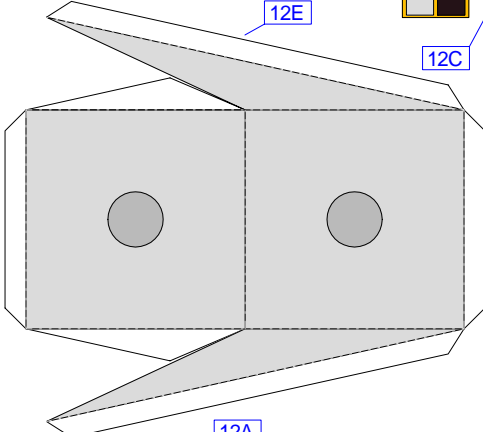
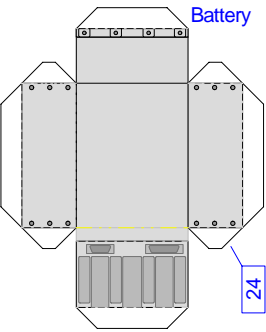


12D

12B

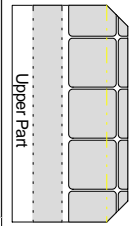
12E

12C



31B

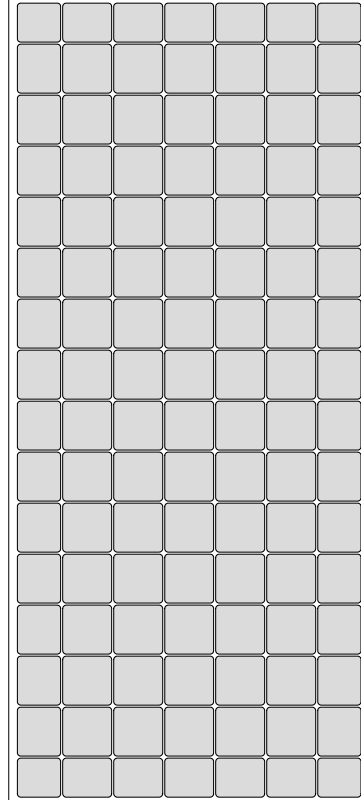
1000 mm



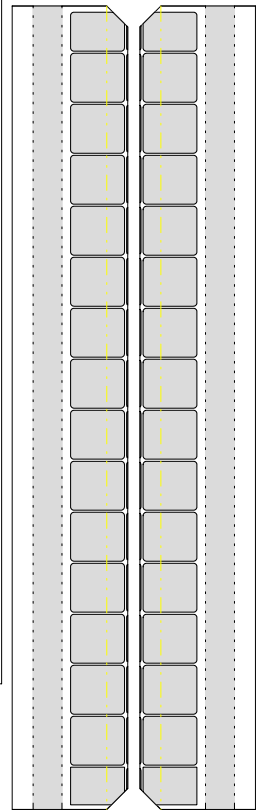
14B

14D

14E



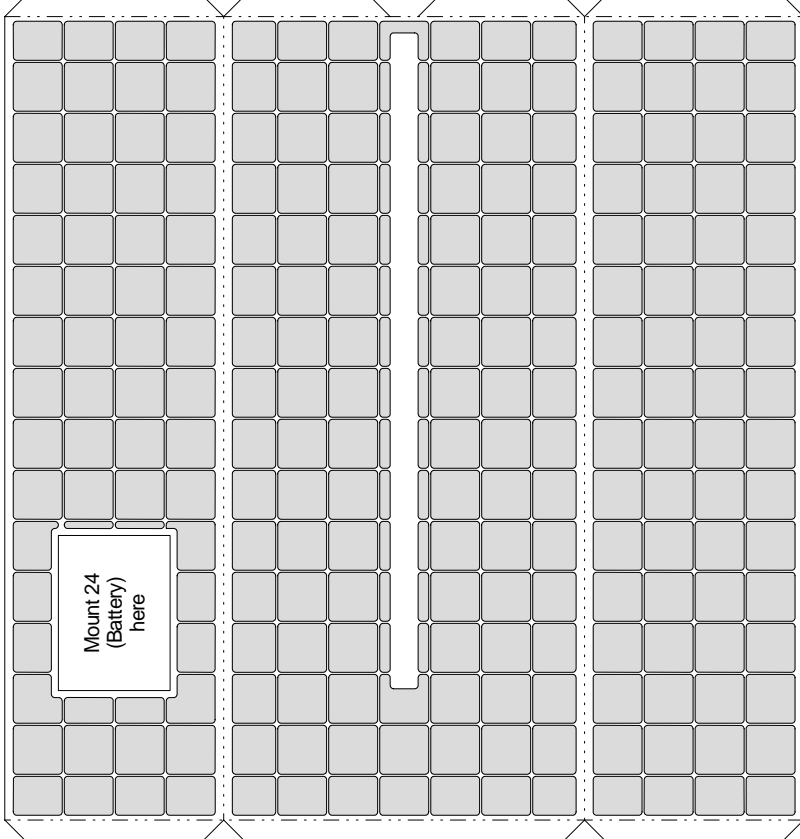
14A



Panel -X (in)

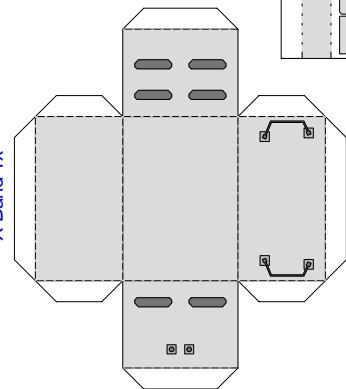
Panel +Z/-X (in)

Panel +Z (in)

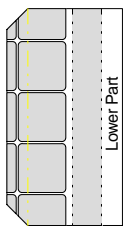


X-Band Tx

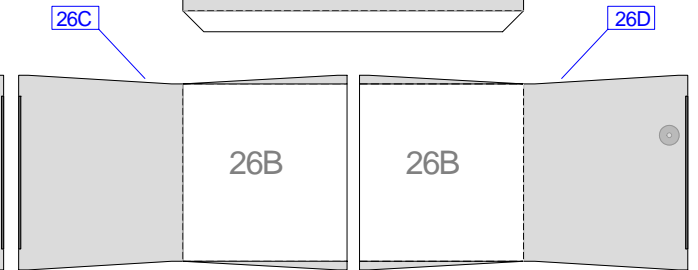
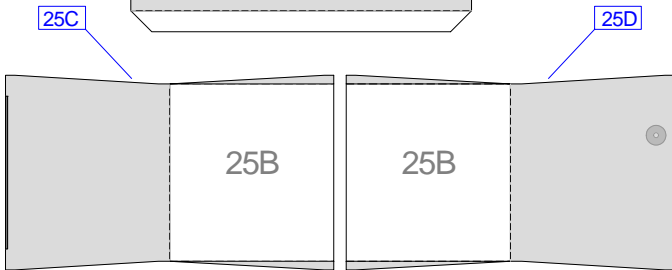
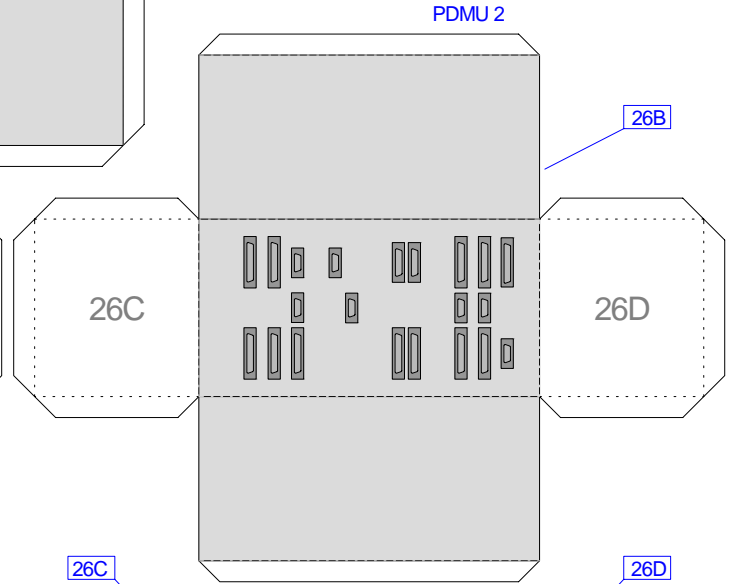
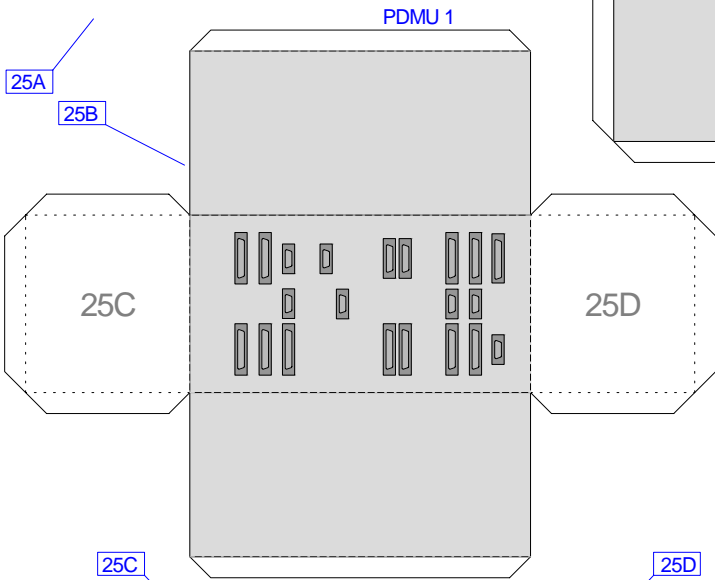
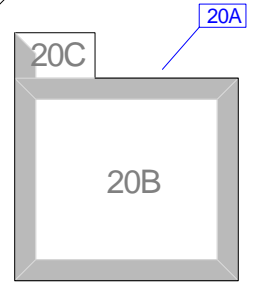
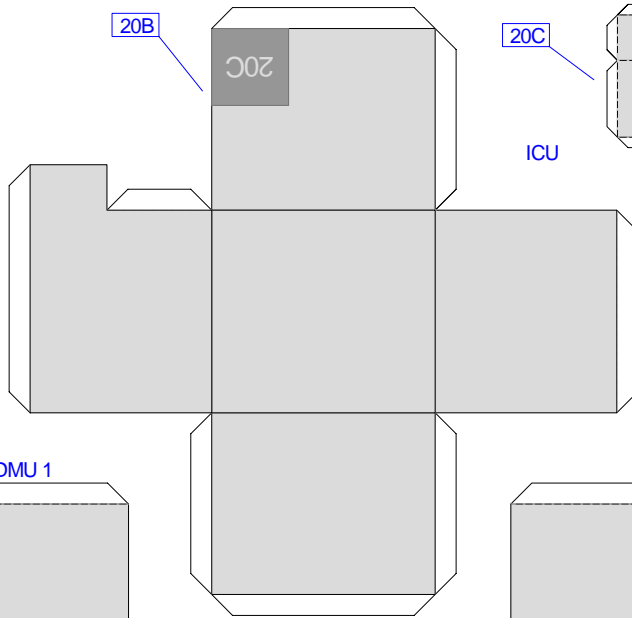
31A



14C

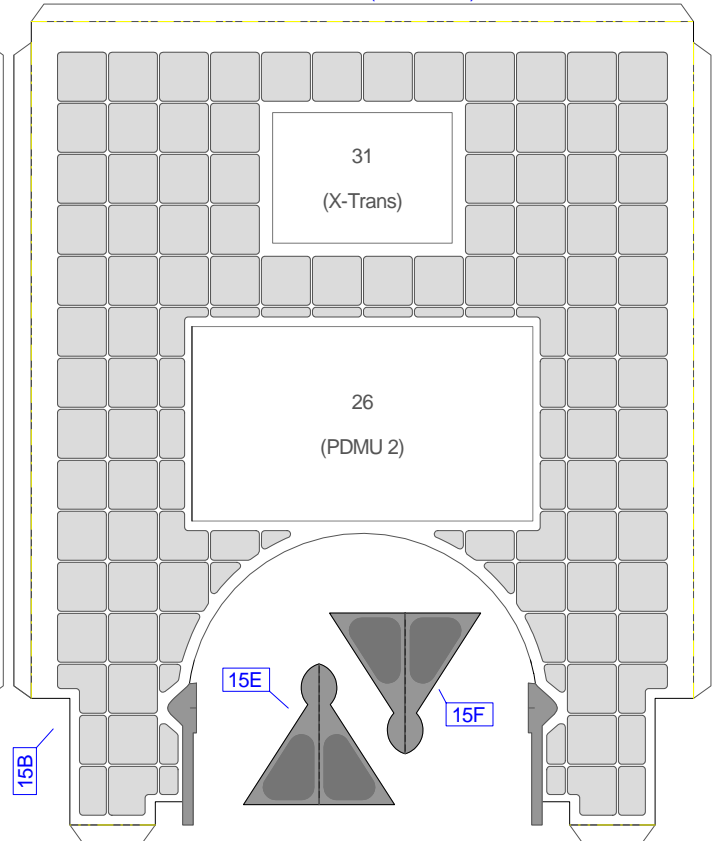
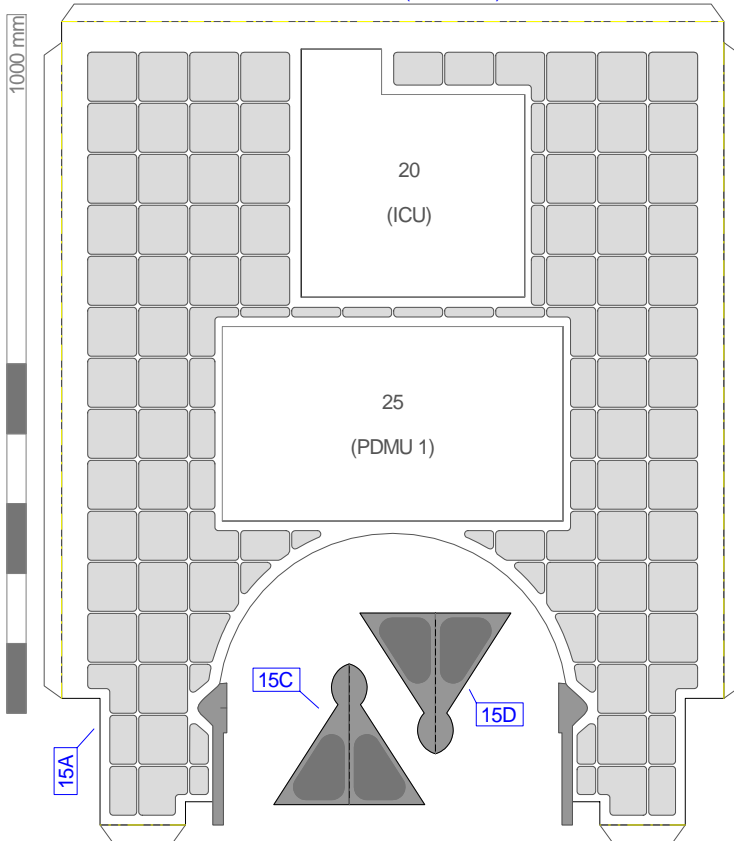


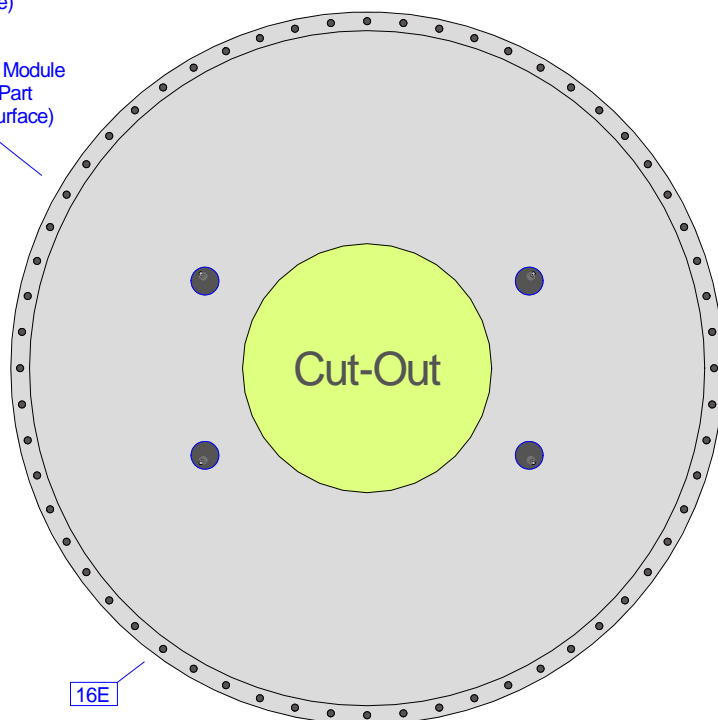
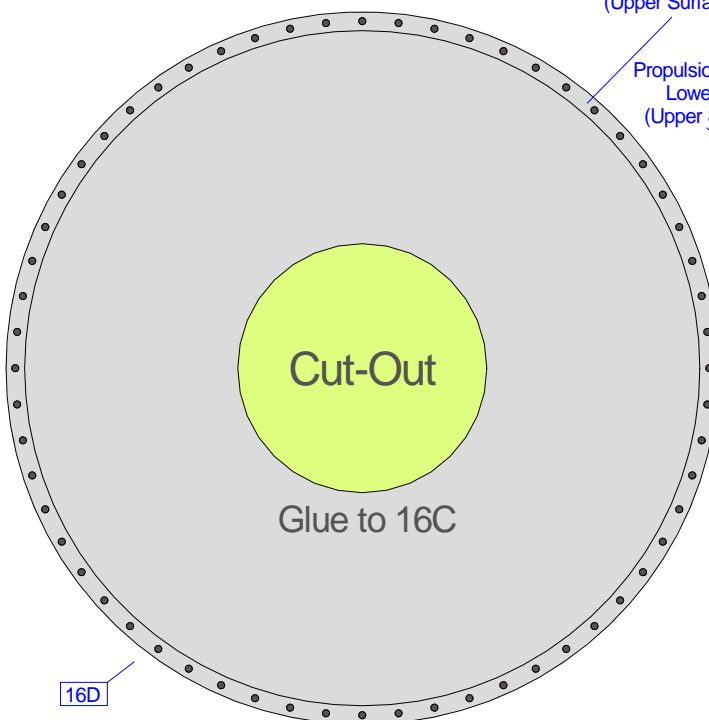
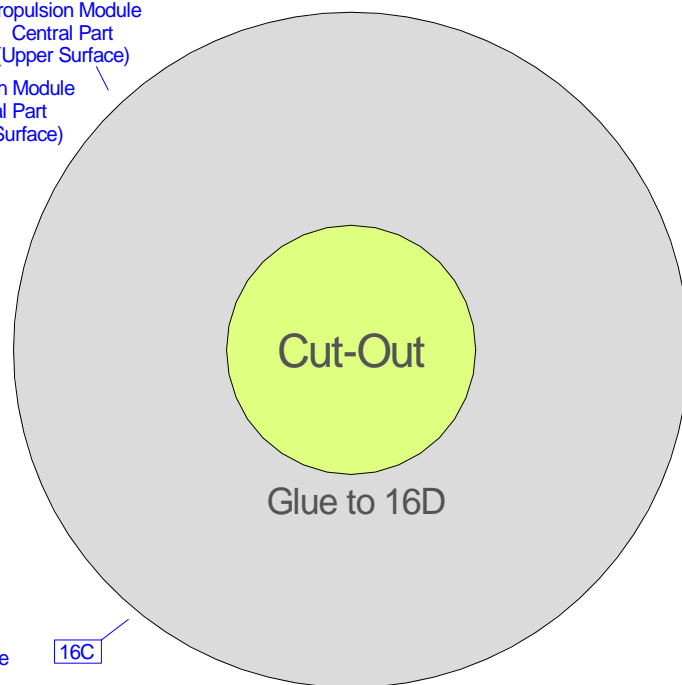
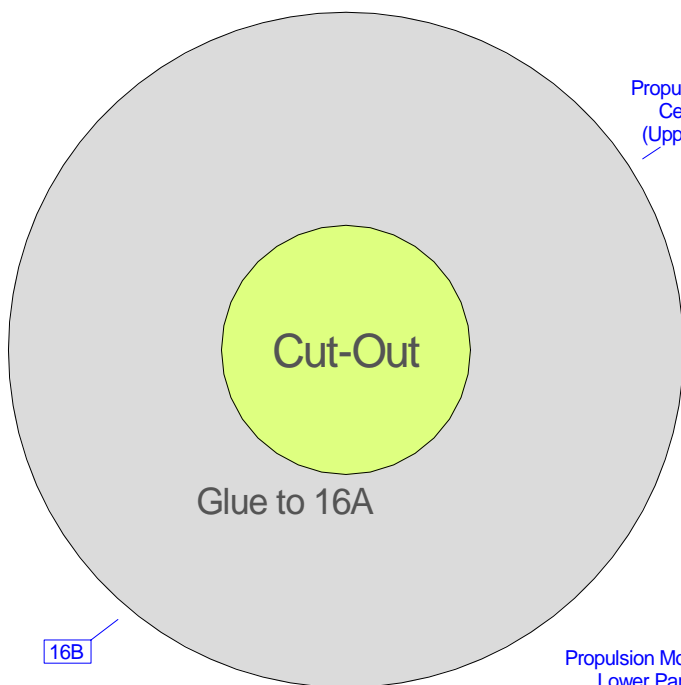
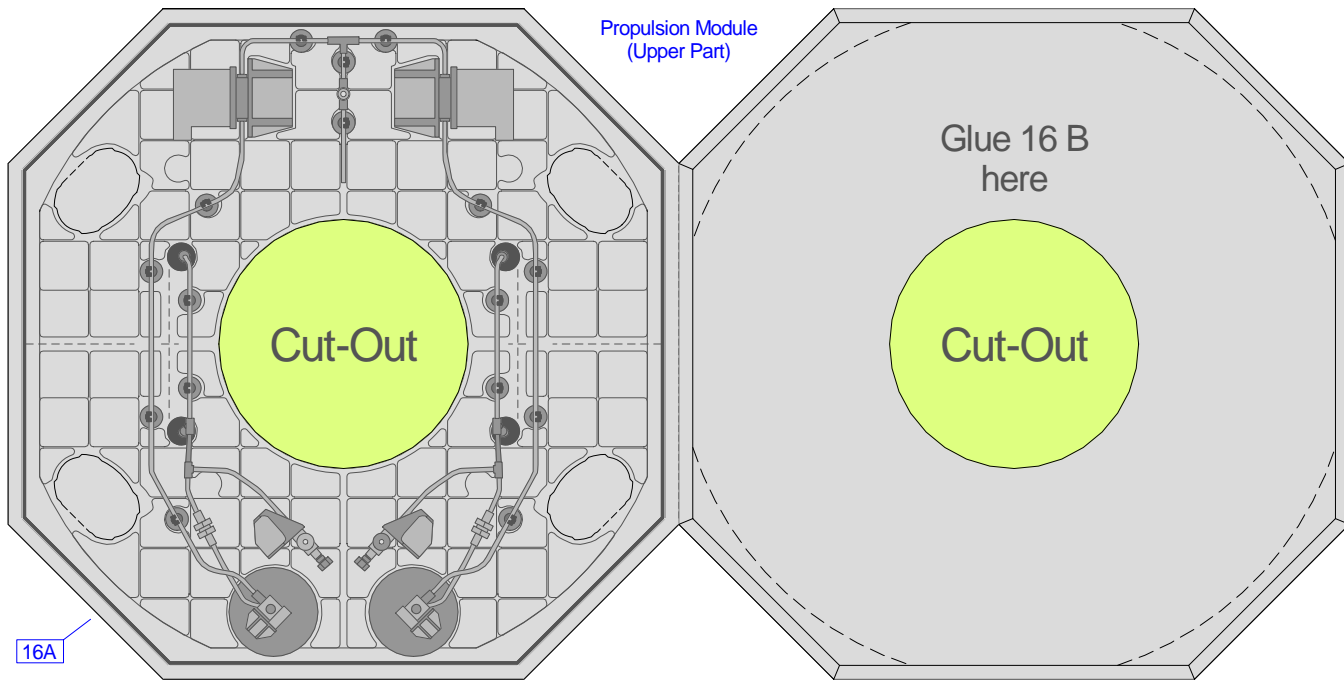
Lower Part

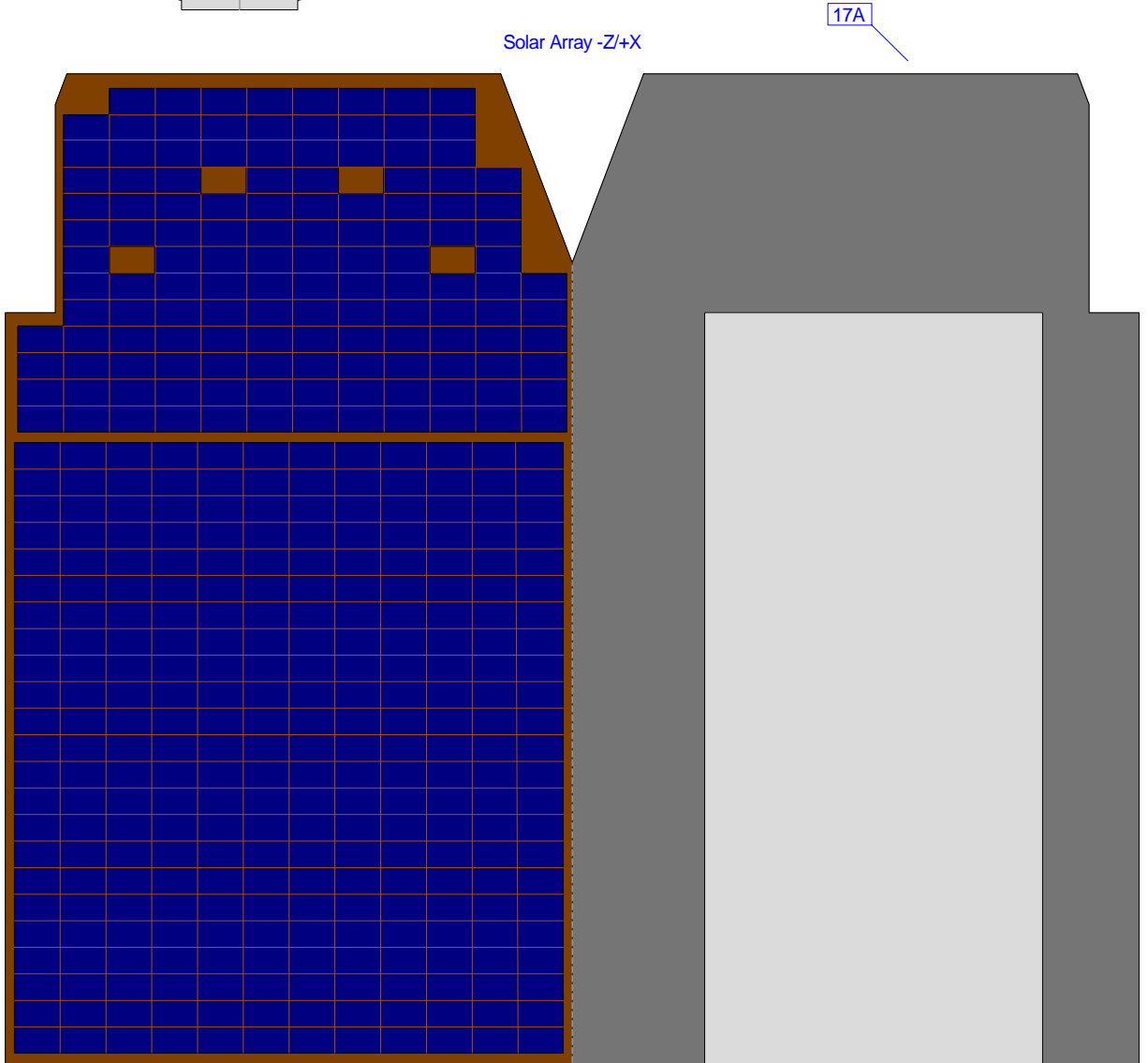
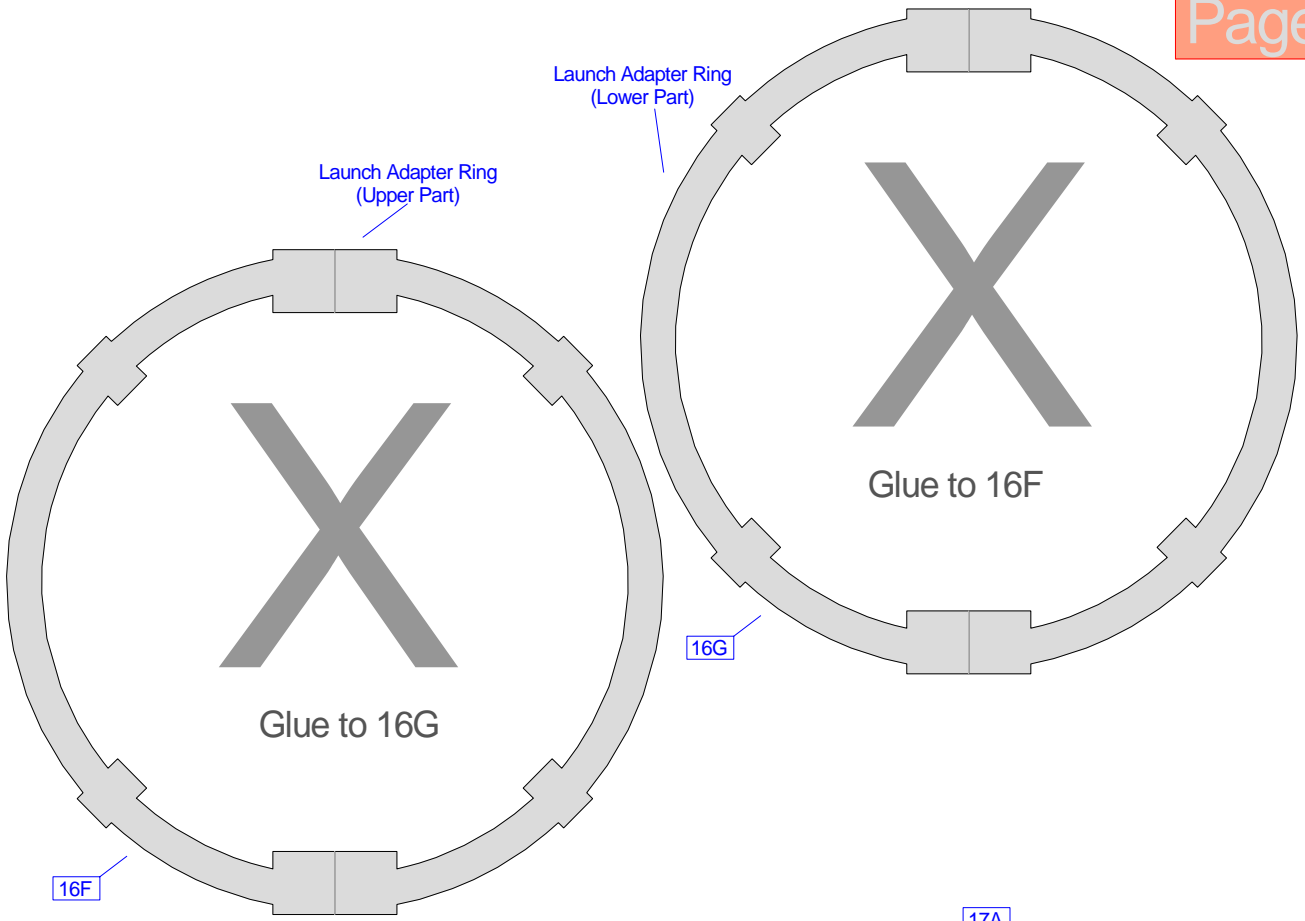


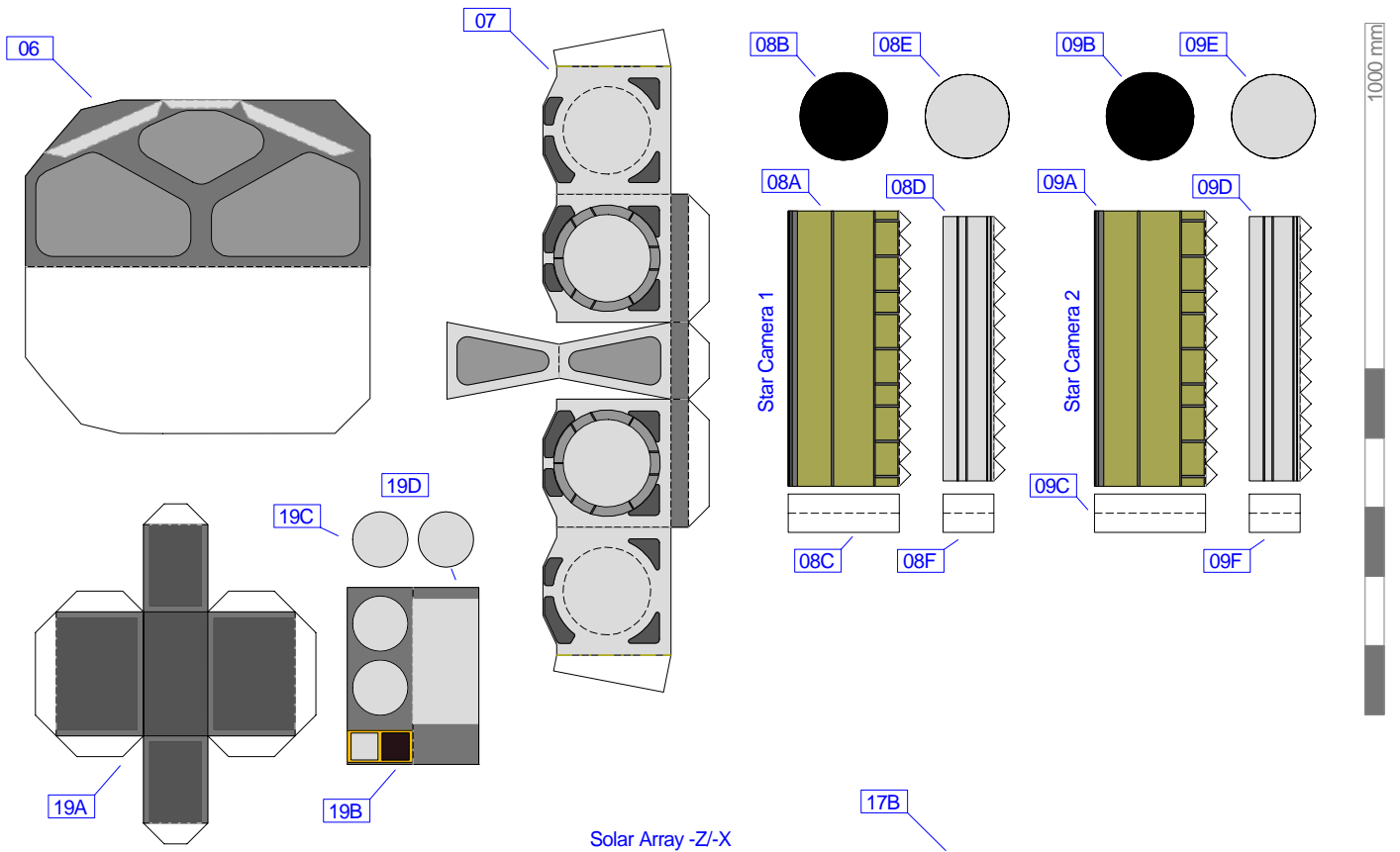
Central Panel (-Z/-Y Side)

Central Panel (+Z/+Y Side)

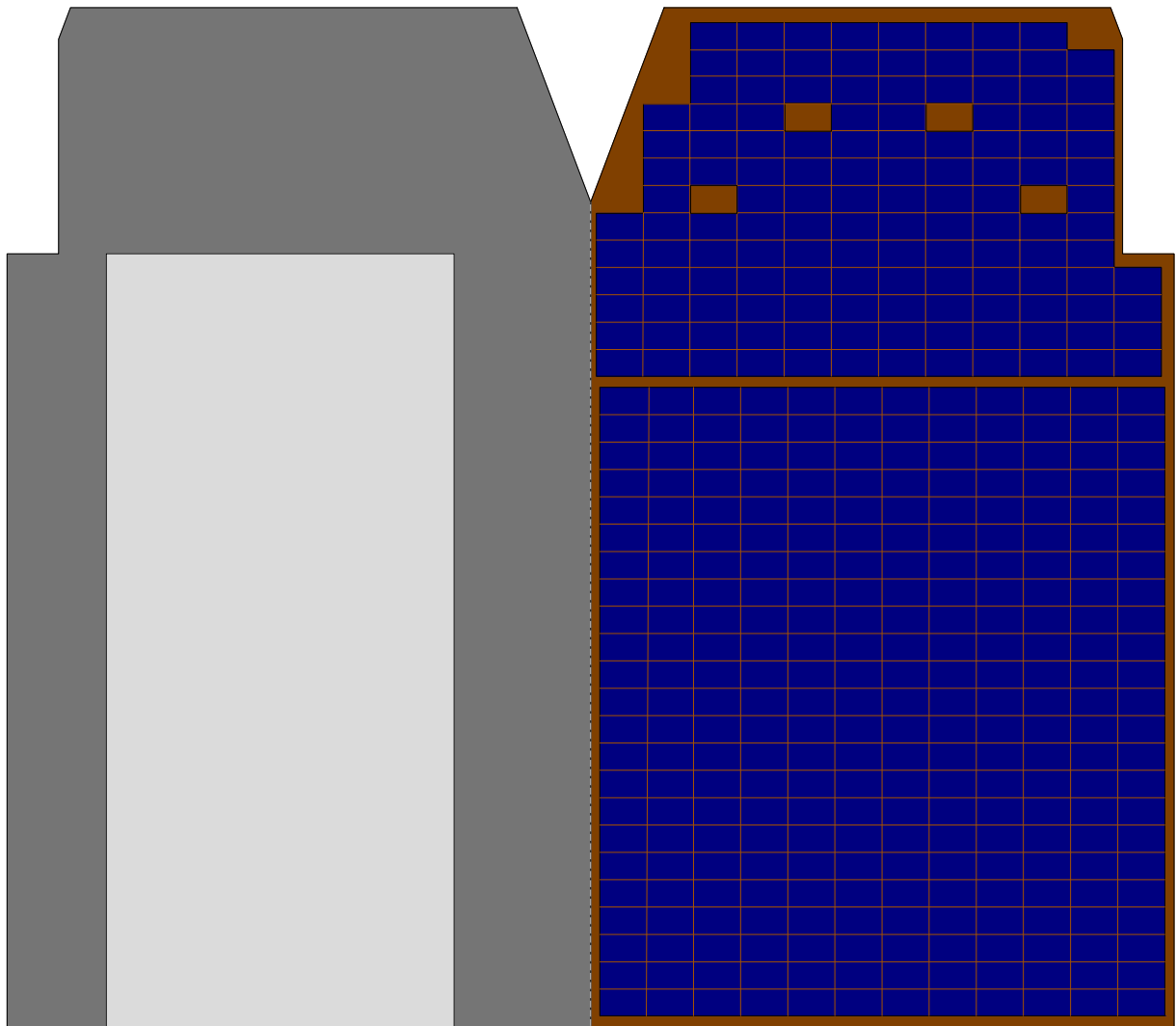








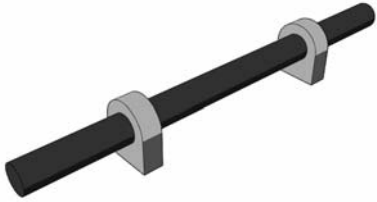
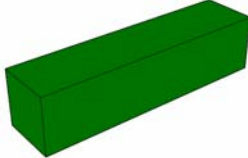
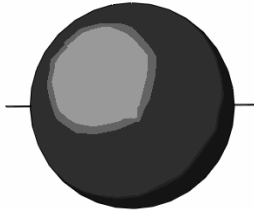
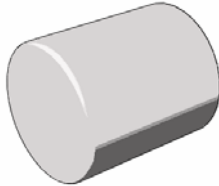
Solar Array -Z/-X





Customer Furnished Equipment

The following items are difficult to produce by paper because of size and form. We recommend building it in a different way:

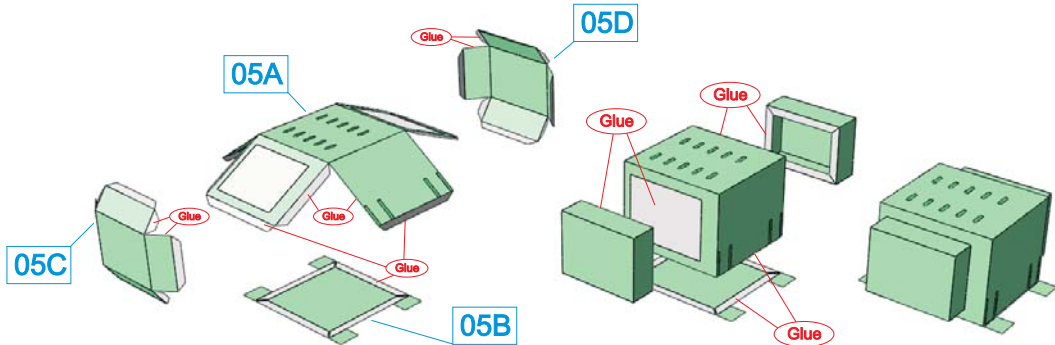
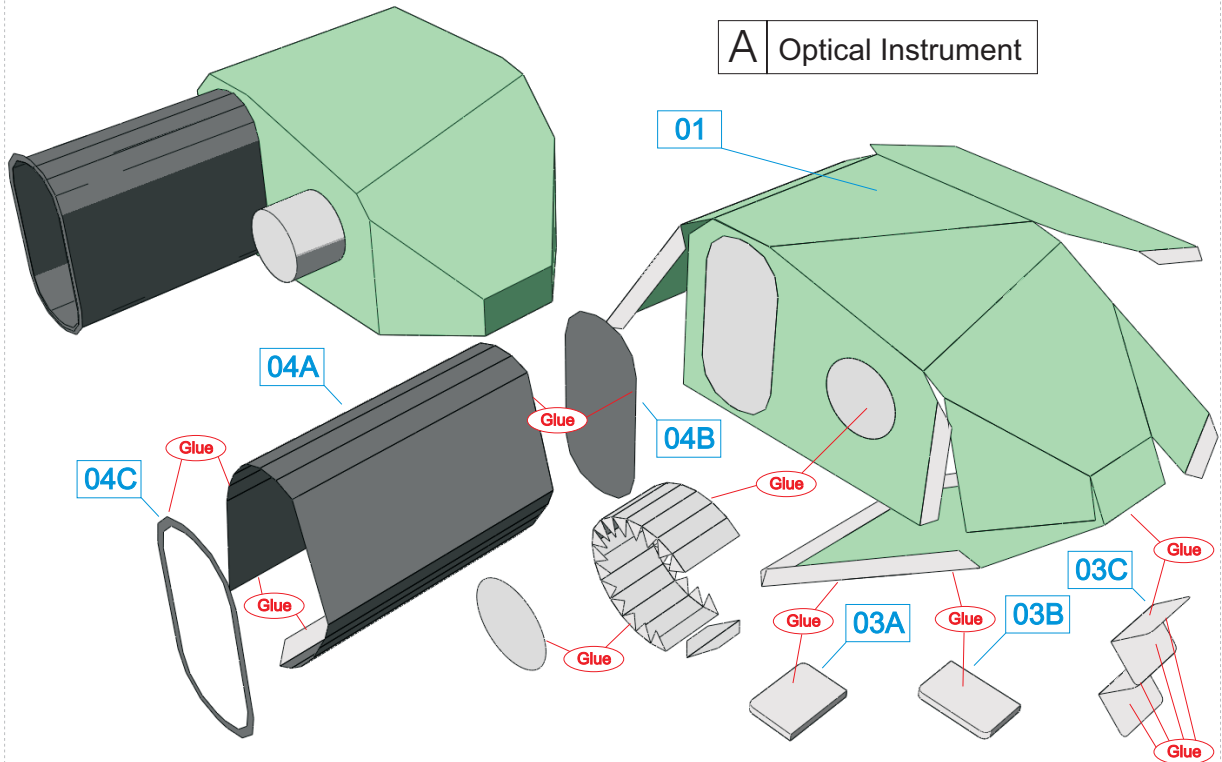
V	<p><u>Magnetorquer (3x):</u></p> <p>Rod: Use wood or plastic stick (length = 41 mm; $\varnothing = 3$ mm);</p> <p>Support: Plastic or sponge foam (length = 5 mm, width = 2 mm; height = tbd mm)</p>	
W	<p><u>Magnetometer (2x):</u></p> <p>Body: Wood or plastic (length = 14 mm, width = 4 mm; height = 4 mm)</p>	
X	<p><u>Tank (1x):</u></p> <p>Body: Styrofoam (black-painted); $\varnothing = 40$ mm</p> <p>Support: Metall wire (stiff)</p>	
Y	<p><u>X-Band Antenna (2x):</u></p> <p>Body: Wood or plastic (length = 5 mm, $\varnothing = 6$ mm)</p>	
Z	<p><u>S-Band Antenna (2x):</u></p> <p>Body: Wood or plastic (length = 7 mm, $\varnothing = 8$ mm)</p>	

Ground Support Equipment

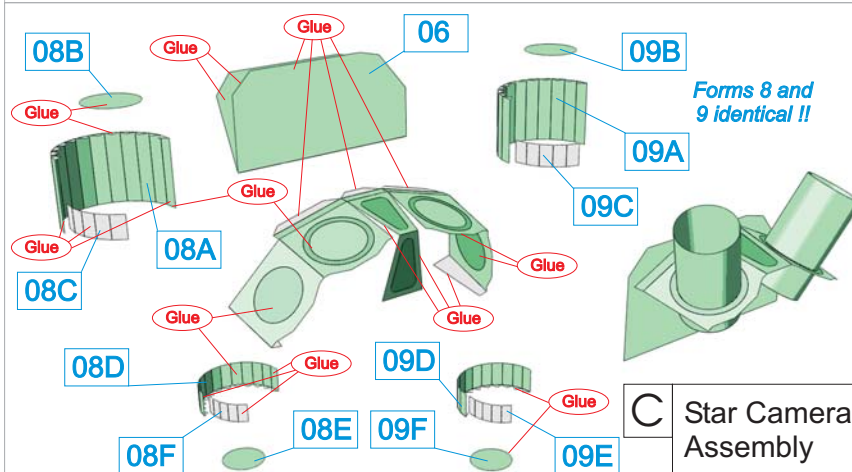


Construction Instructions

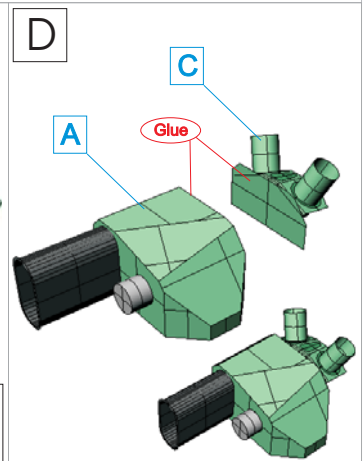
Recommended Paper: 160 g/m² ; smooth surface

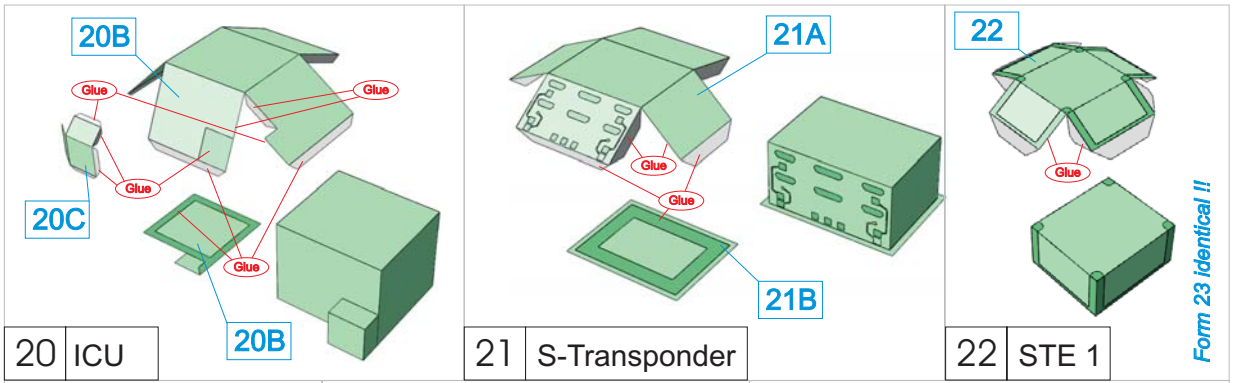


B Focal Plane Electronics



C Star Camera Assembly



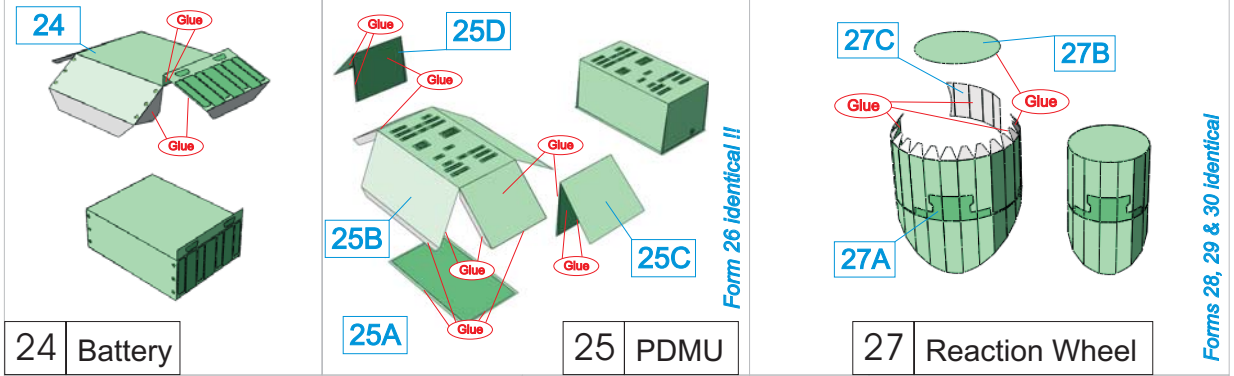


20 ICU

21 S-Transponder

22 STE 1

Form 23 identical !!



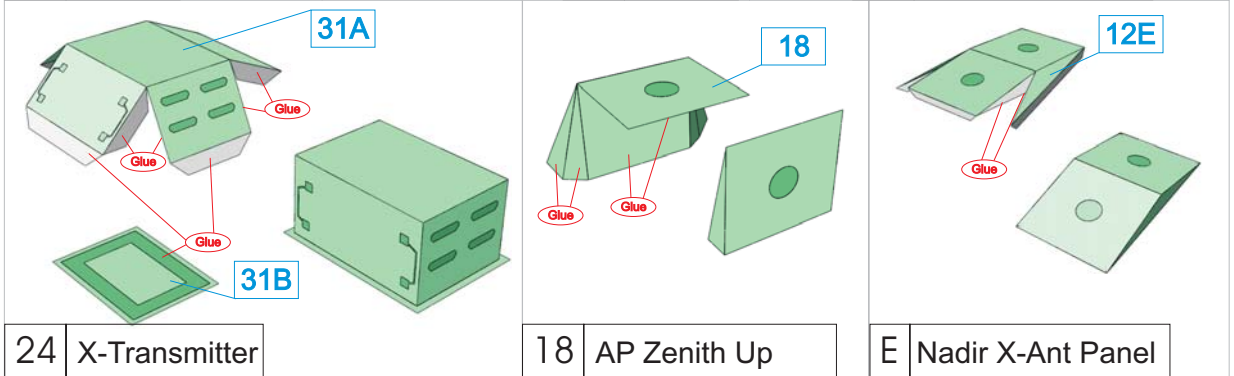
24 Battery

25 PDMU

27 Reaction Wheel

Form 26 identical !!

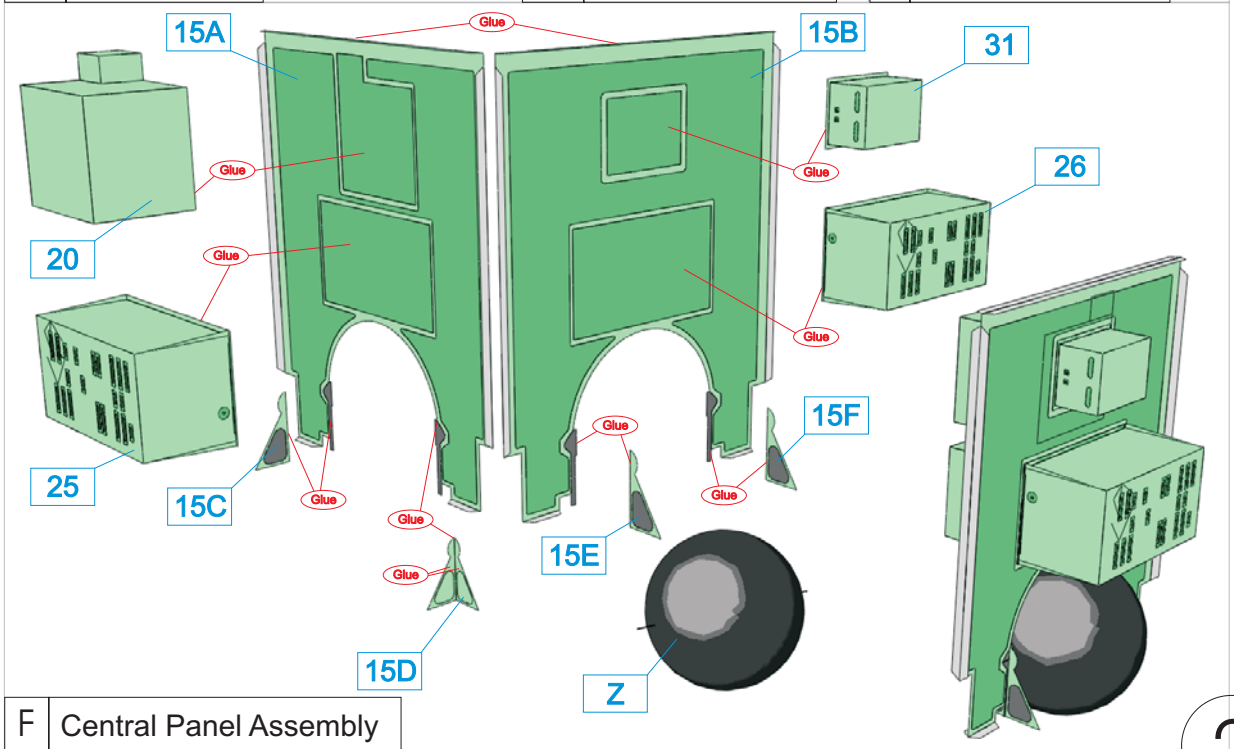
Forms 28, 29 & 30 identical



24 X-Transmitter

18 AP Zenith Up

E Nadir X-Ant Panel



F Central Panel Assembly

