

# High-Power Rocketry Tote and Lent Parts

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MN Space Grant Consortium

U of MN – Twin Cities

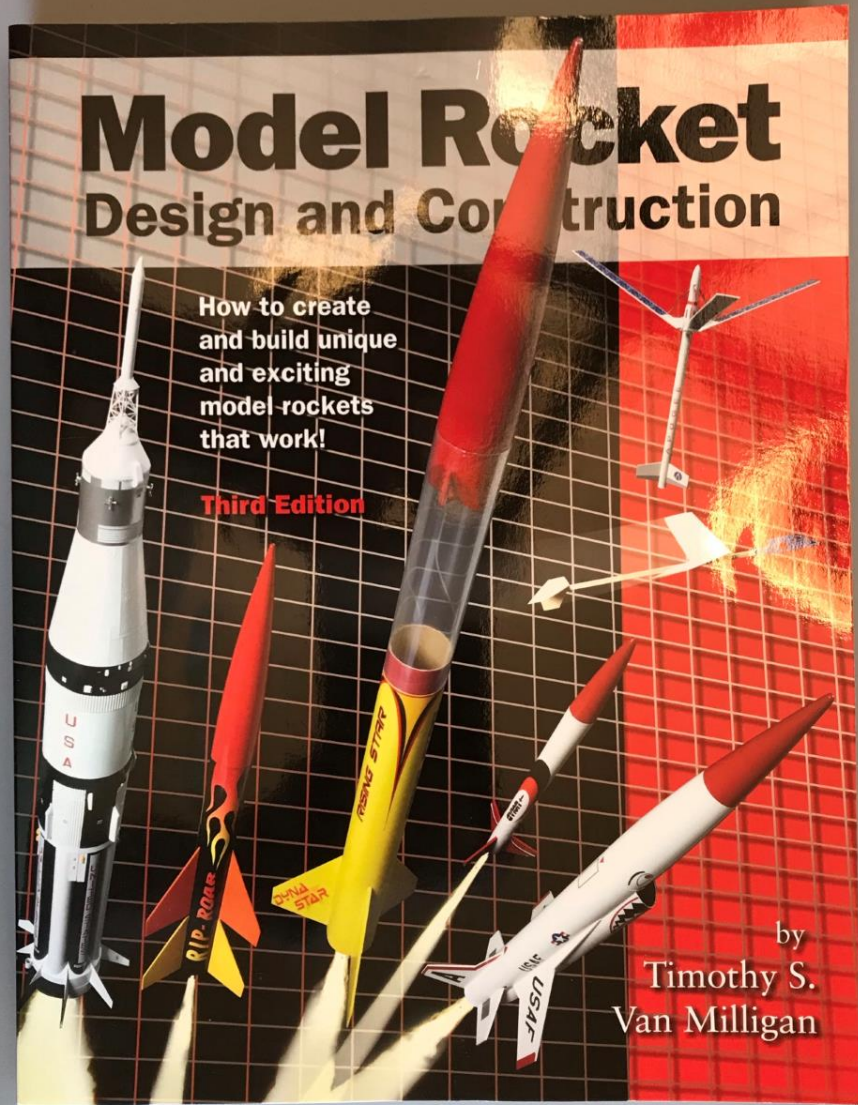
Fall 2021





tote





# Model Rocket Design and Construction

How to create  
and build unique  
and exciting  
model rockets  
that work!

**Third Edition**

by  
Timothy S.  
Van Milligan

model rocketry book

07026

Completely Revised

# MODERN HIGH-POWER

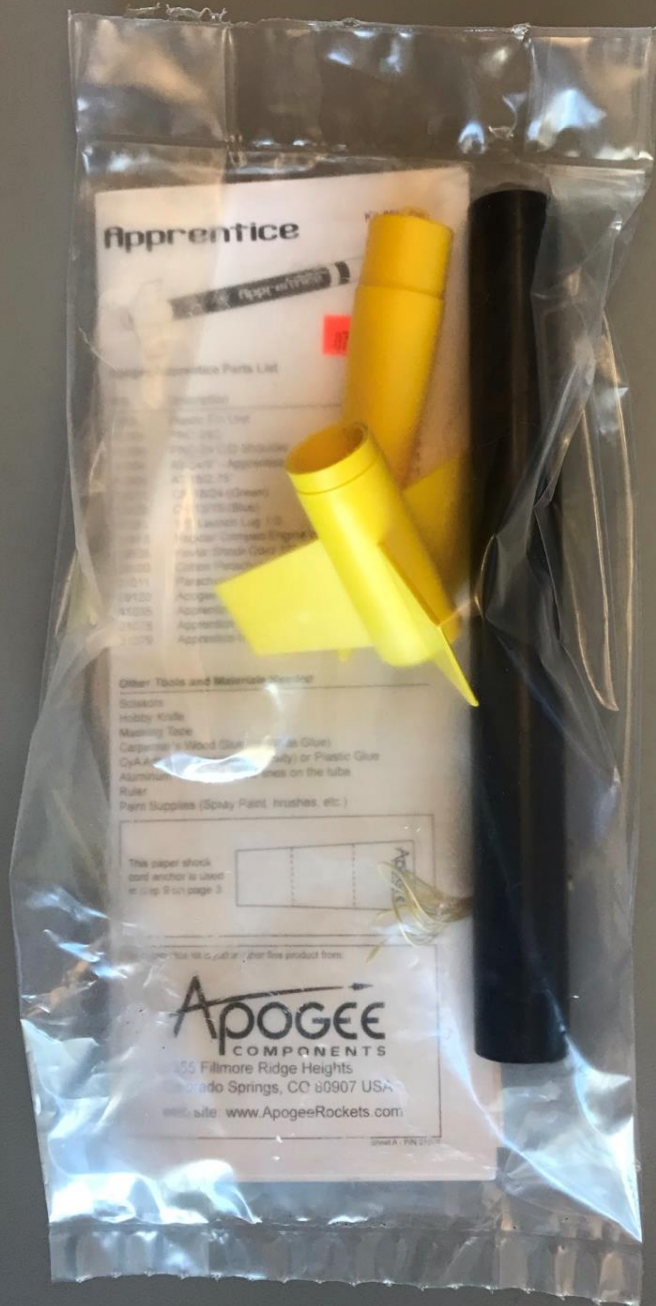
# ROCKETRY

2

A COMPREHENSIVE  
ILLUSTRATED GUIDE  
TO BUILDING,  
LAUNCHING, AND  
RECOVERING  
HIGH-POWER  
ROCKETS

MARK  
CANEPA

high-power rocketry book



model rocket

not provided:  
superglue,  
A8-3 Estes motor,  
launch pad





4' parachute  
(what I had around  
- not necessarily  
the perfect size)



flame protectors  
(2 sizes)





forged eye-bolts,  
nylon-insert lock-nuts,  
quick-links





rivets and  
shear pins



terminal blocks  
(to wire  
ejection charges)





zip ties (2 sizes)



battery for altimeter





1/2" CPVC caps  
(ejection charge  
Cannisters)



AltimeterTwo  
data logger  
(cannot fire  
ejection charges)





audio siren



sandpaper (3 grits)



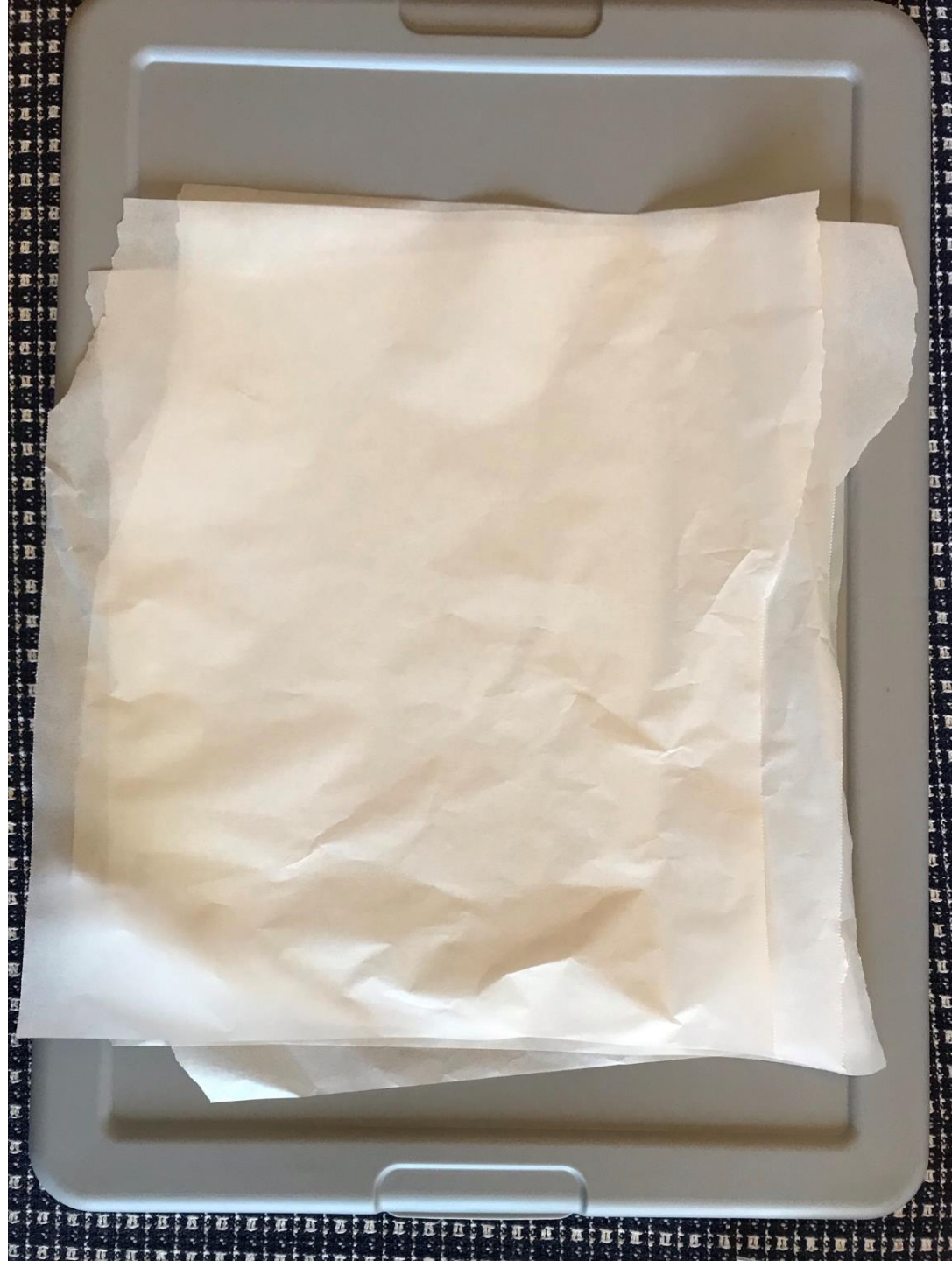


Tack cloth for  
general cleaning  
and dusting after  
sanding



painter's tape  
for masking





non-stick parchment paper  
(protect surfaces from epoxy)



Rocketpoxy  
G 5000  
2-component epoxy  
1-to-1 mixing ratio





mixing cups,  
mixing sticks,  
gloves



spoons  
(for forming  
epoxy fillets)





JB Weld (epoxy)  
For high-temp. locations  
1-to-1 mixing ratio



box cutters (2 sizes)





screwdriver with  
8 sizes of tiny tips

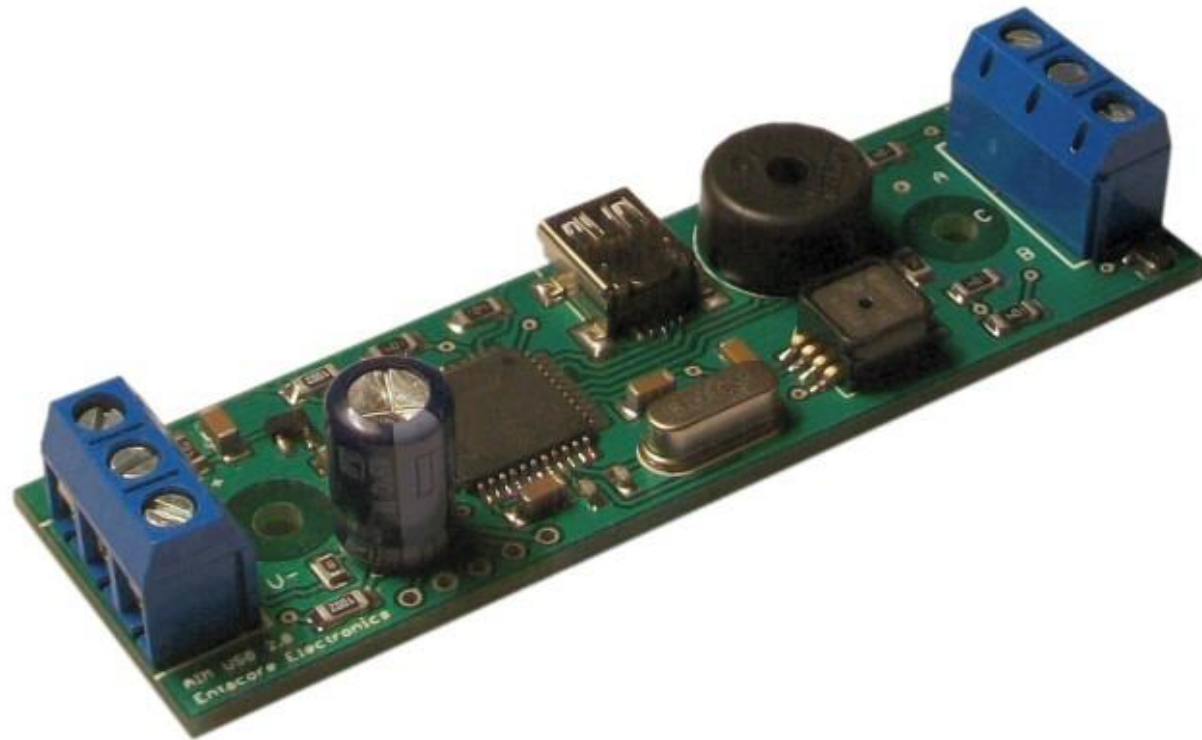


6' tape measure





scissors



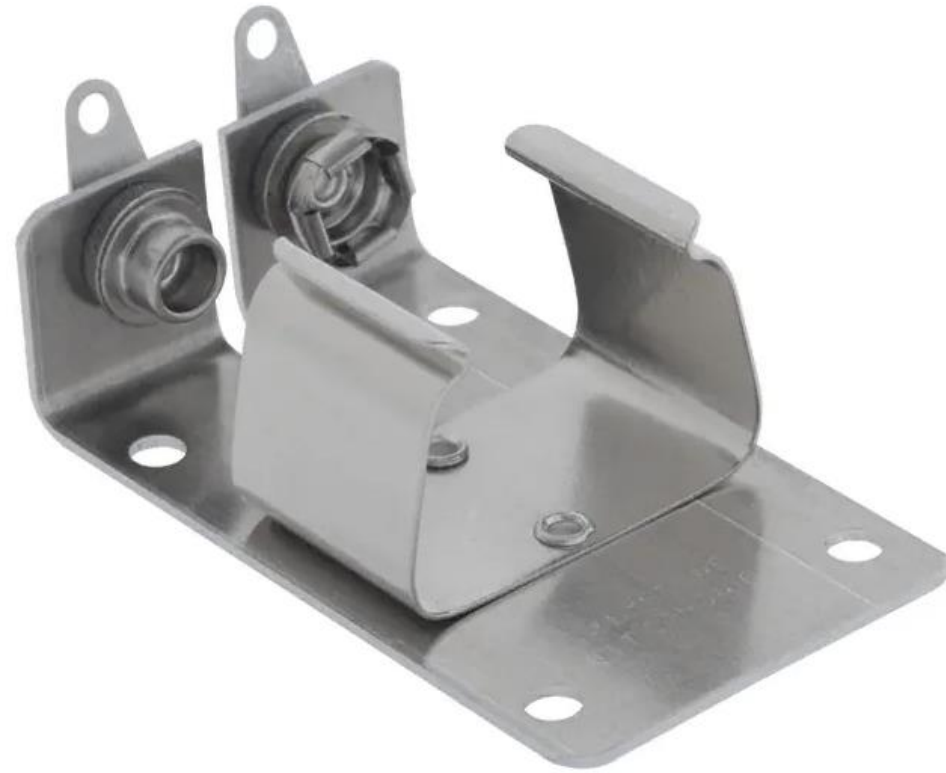
AIM USB altimeter  
(coming soon)

<http://entacore.com/electronics/aimusb>





wire for  
av-bay  
(coming  
soon)



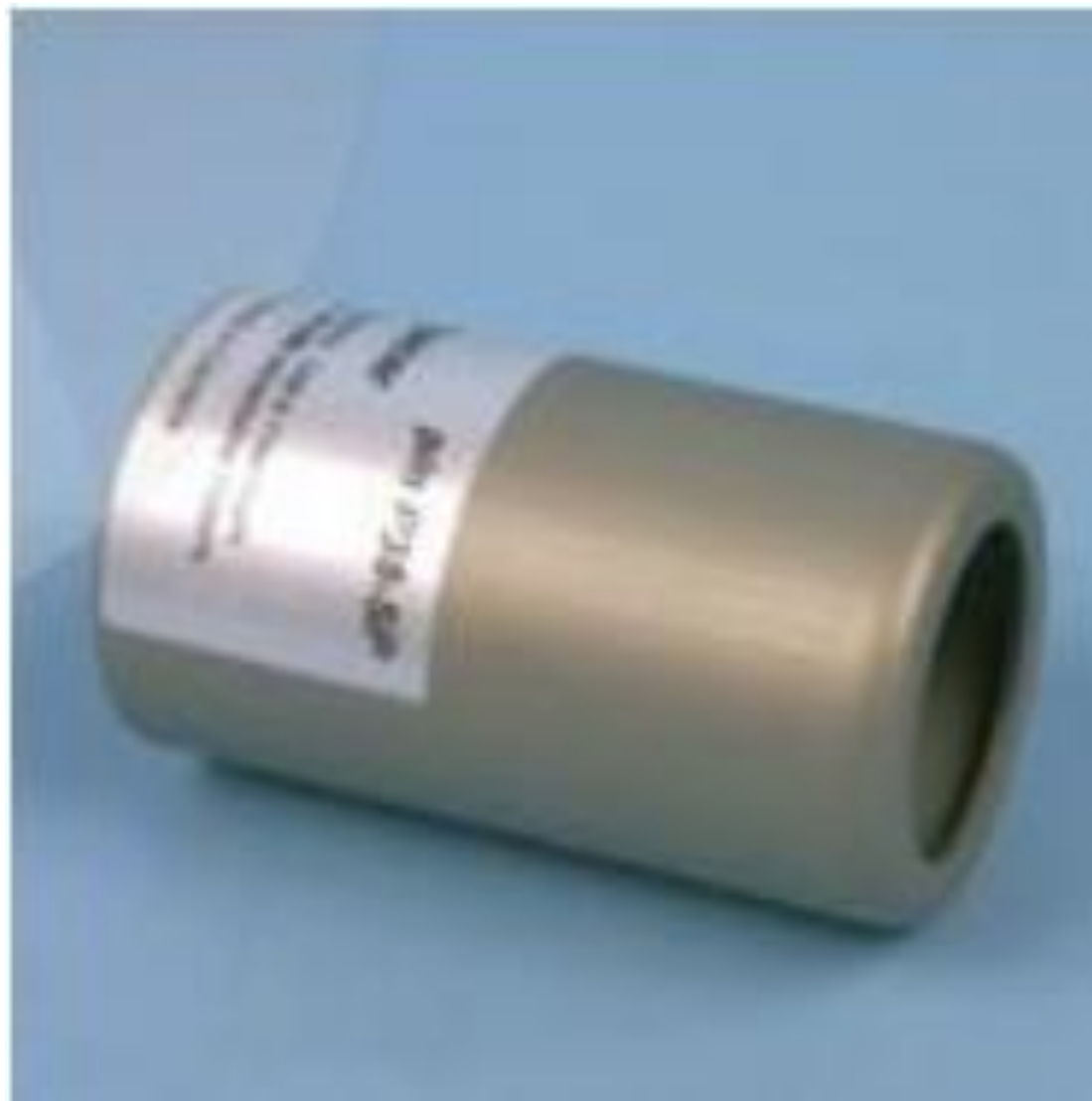
9 volt battery holder  
(coming soon)





Cesaroni 38 mm  
3 grain case  
(coming soon)

[https://www.apogeerockets.com/bmz\\_cache/f/f9dc5ee0f399381220da0904bbd81eb5.image.640x400.jpg](https://www.apogeerockets.com/bmz_cache/f/f9dc5ee0f399381220da0904bbd81eb5.image.640x400.jpg)



Cesaroni 38 mm  
1 grain spacer  
(coming soon)

[https://www.apogeerockets.com/Rocket\\_Motors/Cesaroni\\_Accessories/Pro38\\_Spacer](https://www.apogeerockets.com/Rocket_Motors/Cesaroni_Accessories/Pro38_Spacer)



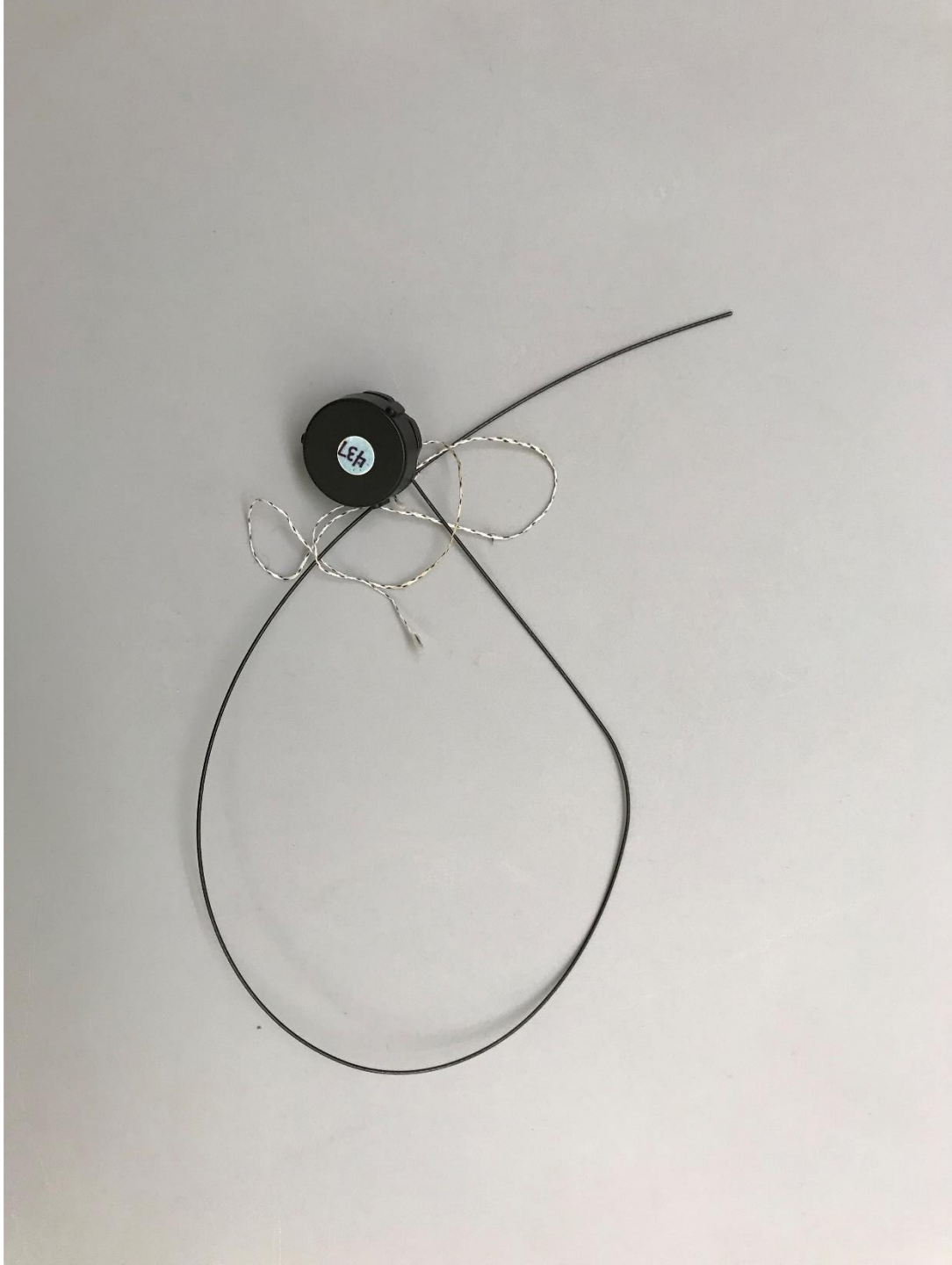


provided at launch:  
Cesaroni 38 mm 2-grain  
H225 White Thunder motor

[https://www.apogeerockets.com/Rocket\\_Motors/Cesaroni\\_Propellant\\_Kits/Cesaroni\\_Certification\\_Special/38mm\\_Certification\\_Propellants/Cesaroni\\_P38-2G\\_White\\_Thunder\\_H225](https://www.apogeerockets.com/Rocket_Motors/Cesaroni_Propellant_Kits/Cesaroni_Certification_Special/38mm_Certification_Propellants/Cesaroni_P38-2G_White_Thunder_H225)



provided at launch:  
e-matches and ejection  
charges (made to order)



lent at launch:  
radio beeper





provided at launch:  
styrofoam packing peanuts



not provided but  
CAD file provided  
upon request  
(optional):  
3D printed  
camera mount



lent at launch  
(optional):  
Mobius camera  
with SD card

<https://www.mobius-actioncam.com/>



# Colors

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Metallic



Gold & Rose Gold



Chrome & Silver



Bronze & Copper



Black



White

not provided:  
spray paint



Red



Yellow



Green



Blue



Gray

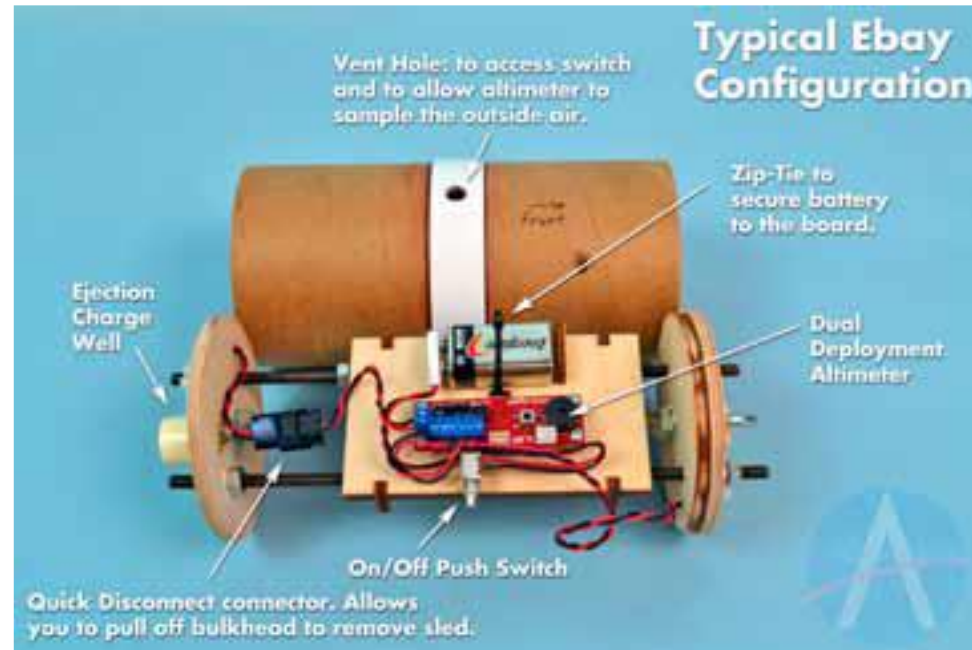


Orange

<https://www.homedepot.com/b/Paint-Spray-Paint/N-5yc1vZapz5>



not provided:  
pvc rocket cradle  
(make your own,  
if desired)



not provided:  
av-bay "sled"  
On which to  
mount altimeter  
and battery  
(make one out  
of thin wood)

<https://www.apogeerockets.com/education/downloads/Newsletter389.pdf>



tools not provided, but useful to have access to:

- fine tip permanent marker
- pliers
- wire stripper
- multimeter
- safety glasses
- Dremel-type tool with cutting and grinding bits
- drill with bit set that goes down to 1/16" diameter
- scale that reads down to gram resolution
- soldering equipment (to wire av-bay)