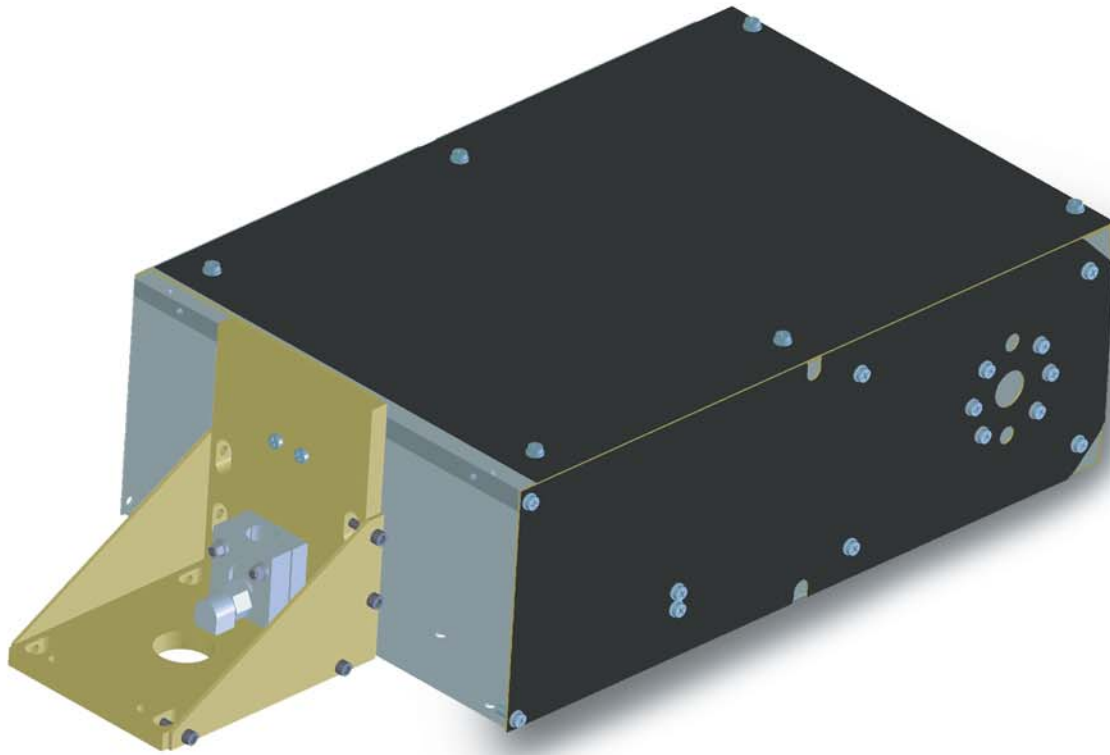


## **MICROSAT GRAVITY GRADIENT BOOM**



# MICROSAT GRAVITY GRADIENT BOOM

## Description:

The MICROSAT Gravity Gradient Boom utilizes unique STEM™ technology produced at Astro. Custom lengths are available.

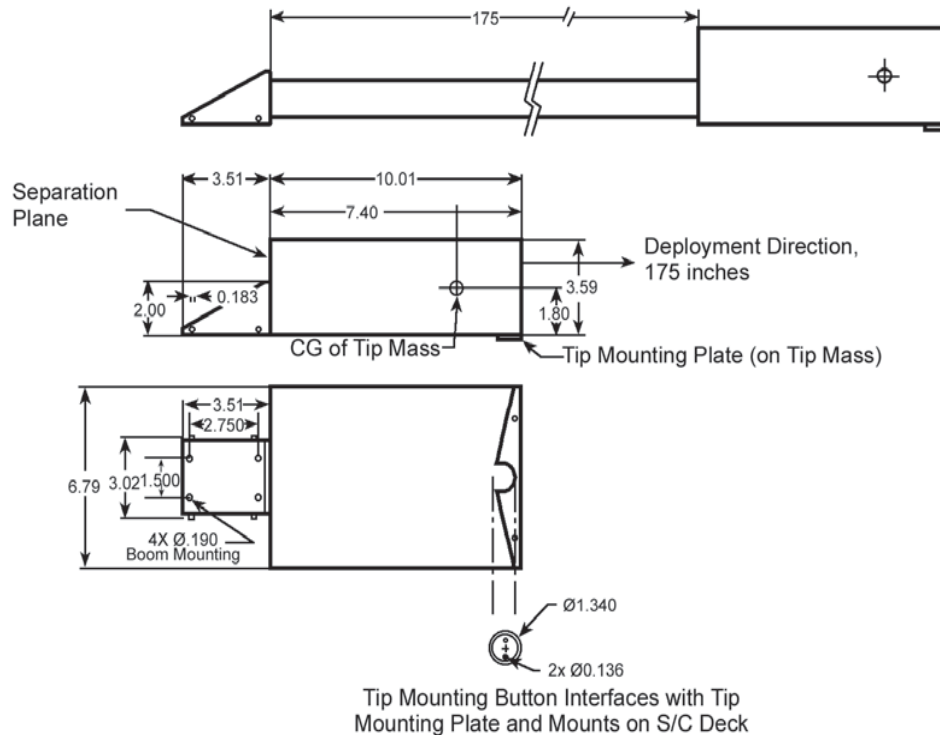
## Space Applications:

- Has Flight Heritage
- Since 1962, many have flown with 100% record of mission success
- Deploys itself on initiation of a pyrotechnic command from the spacecraft using its own stored energy
- Deployment energy is regulated by a centrifugal clutch

## Performance

## Units

Total Weight:	6.75 lb
STEM weight	2.40 lb
Tip Mass:	4.35 lb
EI	144,500 (lb-in <sup>2</sup> )
Fn First Mode	0.36 (Hz)
Boom Bending Strength	437 (in-lb)
Boom Length	182+/-1 in to CG of deployed mass
Stowed Envelope	See attached sketch
Boom Material	Beryllium copper
Boom diameter	1.34 in
Typical Time to Deploy	<4 Sec
Release Initiation	Pyrotechnic cutter
Release Power	All fire current 1.0 A for 10ms No fire current 0.1A for 5 min



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