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NAVAL  
POSTGRADUATE  
SCHOOL

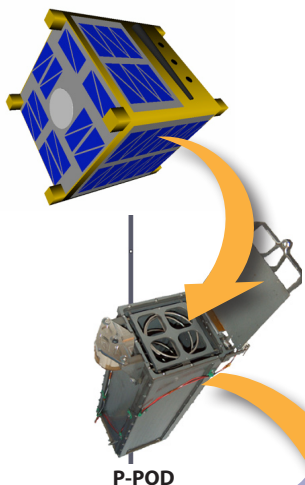


# NPSCuL

## (Naval Postgraduate School CubeSat Launcher)

### Coach Class To Orbit

Single Unit CubeSat

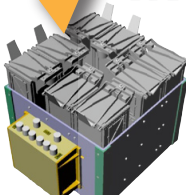


The development of the Naval Postgraduate School CubeSat Launcher (or NPSCuL) is an innovative solution to the challenge of student and university payload access to space. To date, most CubeSats have been launched on foreign rockets due to the high cost and lack of availability of secondary payload space on U.S. launch vehicles.

The NPSCuL launcher has the ability to deploy multiple CubeSats on a single launch and is designed to be compatible with the Evolved Expendable Launch Vehicle (EELV) Secondary Payload Adapter (ESPA) ring, attaching directly to one of the six slots on any EELV launch. The NPSCuL also has the ability to be reconfigured and qualified for launch on other secondary payload adapters currently in development for U.S. launch vehicles. One NPSCuL launch per year could provide a substantial increase in worldwide CubeSat launch volume.

NPSCuL P-PODs and ESPA

8 Cal Poly P-PODs  
attach to NPSCuL-Lite

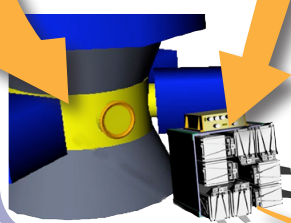


The ESPA ring has six  
slots for small satellites.



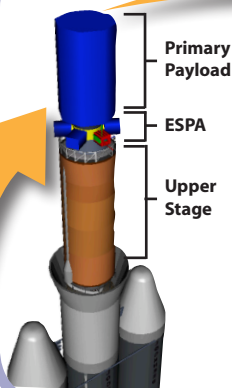
Current activities are focused on qualification testing and verification of a flight article that could be used to demonstrate launch capability as early as 2010. Any universities interested in utilizing the capability, tracking progress, or contributing to further development, are urged to contact the California Space Authority and the California Space Education and Workforce Institute: [csa-info@californiaspaceauthority.org](mailto:csa-info@californiaspaceauthority.org).

ESPA ring (with  
6 small secondary  
payloads)



NPSCuL will attach to  
a secondary payload  
slot.

ESPA shown (left),  
but NPSCuL is also  
compatible with  
other adapters.



Atlas V or Delta IV  
payload area with fairing  
removed (left)

NPSCuL will attach to a  
secondary payload slot.  
(ESPA shown here, but  
NPSCuL is also compatible  
with others.)

The ESPA ring is located  
below the primary payload  
and above the centaur  
(upper stage).

Evolved Launch  
Vehicle (EELV)

Atlas V heavy  
shown (left)



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