Morehead in **CF**

Did you know that Morehead State University students are involved in a number of space exploration projects? They have been instrumental in engineering, building and launching satellites for purposes ranging from educational outreach to exploring the origins of the universe.

active satellites in orbit

U.S. satellites in orbit MSU satellites in orbit

NASA funded

1,459

593

8.



Small satellites, miniaturized satellites, or smallsats, are satellites of low mass and size, usually under 500 kg (1100 lbs). While all such satellites can be referred to as "small", different classifications are used to categorize them based on mass.





CXBN

Launched: 13 September 2012 Mass: 2.4 kg Mission: increase the precision of measurements of the Cosmic X-Ray Background

UNISat-5

Launched: 21 November 2013 Mass: 12 kg Mission: collaboration on a new class of satellites with the Sapienza group at the University of Rome, the Italian Space Agency and led by the European Space Agency





Eagle1

Launched: 21 November 2013 • Mass: 0.5 kg Mission: designed to provide a component testbed for various spacecraft technologies, primarily among them being a de-orbit system that also increases the spacecraft radar cross section.



KySat-2 Launched: 19 November 2013 Mass: 1 kg Mission: 2nd satellite entirely designed (Ky-1 was lost in a launch failure), built and tested by university students in KY. KySat-2 was relaunched as KySat-3 on 18 April 2017 aboard an Atlas V rocket



UNISat-6

Launched: 19 June 2014 Mass: 26 kg Mission: data collected from UNISat-6 has provided researchers data useful to better understand satellite behavior when in orbit



DM-7

Launched: April 2017 Mass: > 6 kg Mission: the Honeywell-Morehead-DM-7 investigation validates Dependable Multiprocessing (DM), a new type of computer software system that uses several commercially available processors working together to increase computing speed and reduce computing errors in a space environment



CXBN-2

Launched: 18 April 2017 Mass: 2.6 kg Mission: refines critical measurements for explaining the origin of the Universe

The Lunar IceCube

With plans to launch in 2019, the Lunar IceCube mission, led by MSU, is one of several public-private partnerships chosen under NASA's Next Space Technologies for Exploration Partnerships (NextSTEP). Lunar IceCube will be one of the first small satellites to explore deep space and could help lay the foundation for future small-scale planetary missions.

For more information on how the students of Morehead State University are aiming for the stars please visit www.moreheadstate.edu