



Research Drones

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Several students this year have carried on the Drone independent science research project that was first started by Hiro Ueno and Bo Bleckel in 2013. Abe Binder and Jackson Solomon (class of 2015) first began working with DJI Phantom 2 and Phantom 2 Vision drones to shoot aerial images of the Kohala coastline in order to differentiate between

historical and modern trails in the lava field. The project then evolved when the team began using the drones in conjunction with a 3D modeling computer program called Pix4D, which compiles aerial images and GPS/Altitude data to create 3D models of any site or construct. Jack and Abe also created an aerial video of the lower school conducting a

beach clean-up at Spencer Beach and Kawaihae Harbor. At the end of first quarter, Juan Miche (class of 2016) joined the team. 3D models were then created of the Energy Lab and Kohala Coastline. In the second semester the team moved on from the Phantom drone to the new Inspire 1 drone (also from DJI) and Nicky Palleschi (Class of 2015) joined the team. This new drone provided the capability to create 3D

models with much higher resolution due to an upgraded camera and GPS/Altitude sensor. The team then used the new drone to create an updated model of the Energy Lab, and began working on a 3D model of the orchard and bamboo classroom/garden. The new drone also allowed the team to create extremely professional videos due to an upgraded gimbal with 2-way panning. The end of the year was spent creating videos for various projects including a promotional video of the Energy Lab, the Cross-country course, the bamboo classroom and orchard, and an English class hiking in the beautiful scenery that surrounds the HPA campus.



Libero purus sodales mauris, eu
vehicula lectus velit nec velit.