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Panoptes Systems Launches eBumper4 Obstacle Avoidance Product; Kicks Off Order Campaign

Cambridge, MA March 18, 2015– Panoptes Systems is excited to introduce the eBumper4, the first commercially-available, sonar-based, small drone obstacle avoidance system. Running into obstacles is one of the biggest hurdles to overcome for effective drone operation. eBumper4 helps solve this problem.

eBumper4’s four sonar sensors provide the drone with information about the physical environment to the front, right, left, and above it. When eBumper4 senses an obstacle in its field of view, it prevents the drone from getting too close to the obstacle. It “bumps” off the object, keeping the drone at a safe distance. The pilot can then navigate the drone safely away from the obstruction.

eBumper4 is effective at operating speeds up to 8 ft/sec (2.5 m/sec), encompassing much of the operating envelope for industrial inspection and cinematography drone flights. “eBumper4 holds great promise for enabling safer and more efficient commercial drone activities in the areas of industrial inspection and cinematography, both indoors and out,” highlighted Panoptes CEO Annalisa Weigel.

 <p>FLY</p>	 <p>DETECT</p>	 <p>CORRECT</p>
<p>With eBumper4 installed, flight in open areas is unchanged. The pilot can switch to Precision Mode which scales back control inputs, allowing for more precise aircraft control.</p>	<p>The eBumper4 continuously monitors its environment for obstacles. If one is detected, eBumper4 responds to reduce the likelihood of a collision.</p>	<p>As the aircraft moves away from the obstacle, normal control is returned to the user, and operations can continue as before.</p>

“Robust integration of the eBumper4 sonar sensors required a significant development and testing effort to understand the very noisy environment of a quadcopter,” said Panoptes CTO Fabrice Kunzi. “Our solution ultimately combined a mix of precise sensor placement and triggering, clever filtering, as well as smart physical integration.” eBumper4 is currently being offered for the Phantom 2 line of drones from DJI, and the Iris+ drone from 3D Robotics. Future eBumper4 offerings on other drone platforms are planned.

Orders are being taken now through April 11 for the eBumper4 through the Kickstarter platform at <http://kck.st/1aYglz6>, with delivery anticipated in summer 2015. “Much of the commercial drone innovation revolution is being led by start-ups and passionate individual entrepreneurs,” said Weigel.

“We’ve chosen to launch our eBumper4 order campaign on Kickstarter as a way to share our story with

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this vibrant group, engage prospective eBumper4 users, and build the community of people who will use eBumper4 to do some amazing things we haven't even thought of yet." Panoptes will also release a Software Development Kit for the eBumper4, enabling users to create custom eBumper4 apps for their individual needs.

About Panoptes Systems

Panoptes Systems Corporation, founded in 2014 as a subsidiary of Aurora Flight Sciences, is focused on the singular mission of giving small drones "all-seeing" awareness of their flight environment, enabling their safe and efficient operation for any application. Panoptes is headquartered in Cambridge, MA. www.PanoptesUAV.com

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