

# Japanese Ministry of Self-Defense shows off a flying sphere robot (w/ video)

June 10 2011, by Katie Gatto



(PhysOrg.com) -- Researchers working with the Japanese Ministry of Self-Defense have created what they claim is the worlds first completely spherical flying robot. The robot, which has roughly the same dimensions as a soccer ball, is able to travel at speeds of up to 40 miles per hour, or hover in the general area of a stable spot such as a hallway.

If the robot is tumbled to the ground, or swatted by someone with wants to toy with it, the bot will roll to absorb the impact and prevent as much damage as possible. This same trick works on other surfaces, should the

robot bounce into walls, fixtures on the walls or anyone who happens to be in the room. Though, at this stage the robot cannot apologize for this breach of etiquette, which in Japan is an important detail.

Navigation for this robot is achieved with a single [propeller](#) that gives the device thrust. The device also features a set of eight wings that give the sphere its control and directionality. The [robot](#) cannot currently any extra weight, but it does have spaces where a camera or other [sensors](#) could be mounted. The robots do not have autonomy protocols at this time, but that may happen in the future.

The robots cost about \$1000 to produce per unit, which is extremely inexpensive when you consider that some robotics programs can cost thousands or even millions of dollars. If you want to find one on your own, you are going to have to take the trip to Japan and find the bots yourself.

**More information:** via [IEEE Spectrum](#), [Dvice](#)

© 2010 PhysOrg.com

Citation: Japanese Ministry of Self-Defense shows off a flying sphere robot (w/ video) (2011, June 10) retrieved 2 May 2024 from

<https://phys.org/news/2011-06-japanese-ministry-self-defense-sphere-robot.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--