

## **Students in Ghana launch mini-satellite**

## May 15 2013, by Robbie Corey-Boulet



In this photo dated Tuesday, May 14, 2013, students prepare the balloon that will be used to conduct a test launch of a Coke-can sized satellite, at All Nations University in Koforidua, Ghana. Ghanaian college students plan Wednesday to launch a model of a satellite the size of a Coke can 200 yards (meters) into the air. Organizers hope that it will be the start of this West African country's space program.(AP Photo/Christian Thompson)

Their project might not sound like much: The college students on Wednesday launched a tiny model of a satellite the size of a soda can on a big yellow balloon.



It went aloft to a height of 165 meters (yards) and then came back down attached to a parachute.

Yet in this developing West African country, ambitious organizers, —who recently launched the Ghana Space Science and Technology Center—see the test as a sign of bigger things to come.

"We hope that this practical demonstration of what can be done by students like them will generate more enthusiasm, fire up their imagination to come up with more creative things, and show that it's possible that they'll one day be able to launch their own real satellite into orbit," said Prosper Kofi Ashilevi, director of the space center that marked its one-year anniversary earlier this month.

The effort has drawn some skepticism, acknowledged Samuel H. Donkor, the president of All Nations University.

"They think it is a pipe dream, a waste of money," said Donkor, who has directed \$50,000 to the program.

But Ashilevi, the space center director, said it was essential for local universities to train students with a passion for space.

"Some wonder why we couldn't concentrate on our problems of water, sanitation, health, all those things. I categorically disagree," he said. "Space will help African countries who are very serious with it to leapfrog their development because it cuts across all sectors of the economy."





In this Tuesday, May 14, 2013 photo, students prepare the balloon that will be used to conduct a test launch of a Coke-can sized satellite, at All Nations University in Koforidua, Ghana. Ghanaian college students plan Wednesday to launch a model of a satellite the size of a Coke can 200 yards (meters) into the air. Organizers hope that it will be the start of this West African country's space program.(AP Photo/Christian Thompson)

Experts say Ghana is probably a good five years or more from developing its own operational satellites, which could one day be used to confront everything from natural disasters to the smuggling of natural resources.

Wednesday's project, though, started at All Nations University with just a big balloon to carry aloft the miniature model of a satellite, known as a



Deployable CanSat. The device reached a height of about 165 meters, just shy of their 200-meter goal.

Owen Hawkins, business development manager for Surrey Satellite Technology in the United Kingdom, called Wednesday's project "very, very exciting."

"Ghana is quite a small country and they're already punching above their weight by doing things like that," Hawkins said.

It was the first time Ghana has sent a Deployable CanSat into the air, said Manfred Quarshie, director of the Intelligent Space Systems Laboratory at All Nations University College in Koforidua.





In this Tuesday, May 14, 2013 photo, students prepare a Coke-can sized satellite for a test launch the following day, at All Nations University in Koforidua, Ghana. Ghanaian college students plan Wednesday to launch a model of a satellite the size of a Coke can 200 yards (meters) into the air. Organizers hope that it will be the start of this West African country's space program.(AP Photo/Christian Thompson)

Six students spent three months preparing the model, outfitting it with sensors, cameras and Global Positioning System technology, Quarshie said.

It was not without its fair share of challenges. The students initially hoped to launch the CanSat with a rocket, but discovered authorities would not give them permission to import one.

"They think you are going to use it as a missile, like a terrorist," said Benjamin Bonsu, the lab's 29-year-old project manager.

They eventually settled on lifting the CanSat with a balloon.

As it floated back to the ground, the device recorded temperature and air pressure readings that were read aloud to the cheering crowd of about 100 students and local officials. The descent lasted less than 30 seconds.

A second device failed to deploy, but Donkor, the university president, said that hitch had not detracted from the event.

"The students are quite excited and very happy," he said. "There is a lot of enthusiasm throughout the country that we are even daring to do something like this."



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