SANTA BARBARA NEWS-PRESS

Students explore atmosphere with balloon-equipped camera

ERICA WENIG, NEWS-PRESS CORRESPONDENT

May 25, 2011

The Anacapa School's Near Space Exploration Club successfully launched and recovered their high-altitude balloon -- and the students have some amazing pictures to show for their work.

The high school students, sophomores through seniors, launched the balloon Saturday from Shandon, in a remote part of eastern San Luis Obispo County, to gain photographs and environmental data.

The balloon was outfitted with a Canon camera modified to take photographs every 10 seconds.

When the camera came back to Earth on a parachute specifically designed for high-altitude balloons, club members discovered their experiment in near-space exploration worked perfectly. For there in digital color were 1,319 pictures taken as the balloon ascended and descended, showing the coastline from San Luis Obispo to Vandenberg Air Force Base.

Gordon Sichi, founding headmaster, dubbed the project a crowning achievement and his proudest moment ever in his 30 years with the school.

Four students began the project in December.

According to Mr. Sichi, when faculty advisor Levi Maaia came to him with the idea, he responded, "Are you kidding? Of course!"

"It's clearly the first of any school in this area," Mr. Sichi said.

High winds could have postponed the flight.

"We were lucky to get a low wind weekend," Mr. Maaia told the News-Press.

Launched at 9:43 a.m., the balloon climbed to reach a height of 91,122 feet. At that height, the Earth appears curved and the sky black, allowing for spectacular photographs.

Above, Anacapa School students work with the weather balloon Saturday.

A photo of San Luis Bay taken from a weather balloon launched by Anacapa School students.

After reaching its highest point, the balloon popped and a parachute opened, floating down a Styrofoam capsule containing a camera, GPS satellite, and

other equipment. The capsule landed in rural Kings County, two hours and 10 minutes after launch, Mr. Maaia said.

Dr. Philip Lubin, professor of physics at UCSB, was not involved with the school's balloon launch, but is familiar with similar balloon launches as a tool in measuring atmospheric profile and making predictions.

"I think it serves a wonderful educational role," Dr. Lubin told the News-Press.

ANSEC's four-person team was chosen by Mr. Sichi, on the advice of faculty -- not solely based on aptitude, but also on the ability to be a team player.

"If somebody had huge talents but wasn't able to work on a team, I didn't choose them. There were no big egos. I didn't need anybody disrupting the enterprise by not being a team player," Mr. Sichi told the News-Press.

Connor Proctor, a senior, programmed the temperature, humidity and pressure sensors.

"We didn't have much of an idea of how to build it. There was no tutorial on the Internet," Connor told the News-Press. "We looked at what other people had done and came up with our own ideas."

Connor plans to major in electrical engineering at UCLA.

The team included students Julio Bernal, Aubrey Cazabat and Christian Eckert.

The future of the project is certain.

"We will be doing this again. This is a new tradition in the school," Mr. Sichi told the News-Press.

email: ewenig@newspress.com