

Hello, and welcome to another day in our world "As It Is." I'm Jim Tedder in Washington. Today we have two stories that should make you happy. First, a young man returns to his African home to help his family and others. He left an unknown, but now he is famous. Then, you won't believe what someone is building in his back yard in Kampala, Uganda. Ten minutes together is such a short time. Let's get started.

South Sudan's most famous athlete, runner Guor Marial, has returned home for the first time in 20 years to be with his family. He is bringing attention to other refugees of the world's newest country. He returned after a civil war that killed two million people.

Twenty years ago, bomber planes and soldiers came to Guor Marial's village at the height of Africa's longest-lasting civil war. He was kidnapped as a child and taken to Sudan's capital, Khartoum. Later he fled to Egypt, and after a time, sought refuge in the United States, a country he says he loves. He used his abilities to become a competitor in marathon races. He was the only South Sudanese competitor in the Olympic Games last year.

As Marial was winning races, his homeland sought peace with the north of Sudan before winning independence two years ago. Now the young runner is an ambassador for the United Nations refugee agency. As part of that job, he was brought home to raise the spirits of other refugees and help them pull themselves out of poverty.

He recently visited camps holding more than 260,000 refugees from new conflicts in Sudan's South Kordofan and Blue Nile states. Guor Marial says that, during the time, he re-lived his own experiences as people told him of always being on the run. He says many young refugees are being pushed into early adulthood because of war and military service. Or they are being left with nowhere to go and nothing to do.

"Girls are facing early marriage and boys as well are facing early marriage, and also recruitment from outsiders in terms of taking them back to the military. And some of them are just sitting there (with) no education. They came from Arabic-speaking and came from Arabic schools. But here it's very hard for them as they want to change to English."

Marial lost 28 family members to war and neglect. He says his heroes are Ethiopian runner Gabriel Selassie and Kenyan Peter Target. But he says his own ability to run came from his father. Even in his old age, the father still walks 100 kilometers between villages.

Guor Marial was taken from his family at age eight. He says returning to his home village and to his parents was an especially emotional experience.

"My dad was jumping around. My dad was singing, my mum, my other sibling, and just very happy in the end."

He hopes other refugees will share similar reunions with their loved ones. His rural village in South Sudan's Unity State still bears the evidence of so much war in a poorly developed nation. The nearest place to get water is more than 10 kilometers away, and the houses are made of mud and bricks.

Now that Guor Marial has seen his homeland and family, he is awaiting another great event. He is looking forward to the sight of other South Sudanese athletes at the 2016 Olympics.

This past May, Ghana launched its first, tiny satellite. Thousands of kilometers to the east, in Uganda, a 28-year-old scientist is working hard to get his country into the space race. Caty Weaver has our story.

Chris Nsamba's neighbor, Lawrence Okello, could tell that something unusual was happening. But when he first visited Mr. Nsamba's backyard in Kampala, it was hard to believe what he saw.

"I was so shocked. I couldn't believe that, in Uganda, we can have a kind of achievement so impressive".

Chris Nsamba is head of an organization called the African Space Research Program. He established it in 2009 after studying astronomy in the United States. Now he is working with a team of student volunteers in his mother's backyard. They are trying to build and launch Uganda's first space observer. Neighbors like Lawrence Okello have been watching the space probe take shape.

"There is a small project I saw him making. He called it a space observer. I heard him saying it's going to capture a picture of Uganda from space. He showed me that it's going to work. They are just preparing to launch it. But I know it will fly. It will fly."

The probe is about the size and shape of a beach ball. Its equipment includes a camera and solar panels. Mr. Nsamba also plans to send a passenger on the first trip – a rat.

He says the reason the probe is called an observer is because it has a camera on it for sending live pictures and video back to the control center. The rat, he says, is for testing skills at keeping something alive in space.

Chris Nsamba and his team have received a financial grant from Ugandan President Yoweri Museveni. But except for that, they have had to depend on private donations from supporters.

Chris Nsamba says he does not have a technical team to assist with the finer points of aerospace engineering. In fact, he says he developed the project all by himself. The other people helping him are his students. He says he is training them how to develop such projects.

The launch itself would involve a helium weather balloon. The plan is for the balloon to carry the observer up more than 36 kilometers. At that point, thruster rockets would fire.

Chris Nsamba says he and his team have been working up to 18 hours a day on the project. He says the thrusters have been tested and the rocket fuel is ready. He says the president has given permission to launch the observer, but wants to inspect it himself first.

The project may be small compared to space programs in other countries. But the head of the physics department at Makerere University in Kampala thinks Chris Nsamba's efforts should not be dismissed. Professor Florence D'ujanga says, for science to develop, you have to start somewhere. I'm Caty Weaver.

And I'm Jim Tedder in Washington. It's a very special day here in the States ...because ...it's our birthday! We became an independent nation on this date in 1776. Small towns and large all across the country are celebrating this national holiday with parades, food, music, and fireworks.

