Taiwan participates in US space shuttle's swan song

Taiwan's maiden step in space exploration, touted as a major breakthrough on the island, is part of the last mission flown by U.S. space shuttle Endeavour.

Taiwan's Chung-Shan Institute of Science and Technology (CSIST), a government-funded organization under the Armaments Bureau of the Country's Ministry of National Defense (MND), was involved in the development of the Alpha Magnetic Spectrometer-2 (AMS) to be flown into space on board Endeavour, Jinchi Hao (荊溪暠), director of the CSIST's Electronics Department who was put in charge of the development of AMS's electronics in 2001, said yesterday.

The spectrometer was developed as part of a project, called the AMS Experiment, overseen by Taiwan-born Nobel Prize winner for physics and Academia Sinica member Dr. Samuel C.C. Ting (丁肇中).

Development of Phase I of the electronic system for the spectrometer, which Ting referred to as the device's "brain," had been in the hands of a European country, while the system being developed by CSIST was considered a backup, because it was generally assumed that European technology was more advanced, Jinchi said.

But the European's backlogs forced Ting to return to Taipei and give CSIST a try, Jinchi said, adding his organization and the European contractor succeeded in turning out their systems in 1998.

But the European system did not work out in integrated systems tests, while the CSIST system was instantaneously found to be successful, he recalled.

But Jinchi was modest about it, saying Taiwan has learned a lot from its involvement in the project, adding the country is now capable of developing and manufacturing materials, parts, and components for satellites.

According to the AMS webpage, the purpose of the AMS experiment is to search in space for dark matter, missing matter and antimatter on the international space station. Endeavour's liftoff is scheduled for Friday, April 29, at 3:47 p.m., U.S. Eastern Daylight Time.