

19.10.2016

Chinese astronautics counts on CNAP[®] technology made in Austria

China launched its sixth manned space flight yesterday. Two Taiconauts have made their way to the space laboratory Tiangong 2. CNSystems' CNAP[®] technology supports the mission on board of the Chinese space station.

"CNAP[®]", this is the name of the device by CNSystems that will monitor the cardiovascular parameters of the two Taiconauts Mr. Jing Haipeng and Mr. Chen Dong in the Chinese space lab Tiangong 2. The space lab was already brought into space in September. Yesterday the two Taiconauts made their way to there and are supposed to spend 30 days in space to make experiments and perform maintenance work. As soon as the International Space Station ISS has ceased service, China will actually be the only country worldwide to maintain a space station.

The Chinese space experts are not the first ones who count on the innovative technology "made in Austria". "The American Space Agency NASA has already used the first 'Task Force[®] Monitors' by CNSystems in 1999 to study the vital functions of their astronauts. The Johnson Space Center in Houston was actually our first customer", says Dr. Juergen Fortin, CEO and co-founder of CNSystems. Three years later, the German Aerospace Center (Deutsches Zentrum für Luft- und Raumfahrt) also used the system in cooperation with the Russian Space Agency.

This was the beginning of a success story. Meanwhile more than 4,000 devices are used in daily clinical routine in various fields of application. CNSystems further developed the expert system "Task Force[®] Monitor" for the use in anesthesia and emergency care. These new systems, called CNAP[®] Monitors, are used for cardiovascular monitoring during surgeries. The CNAP[®] technology significantly contributes to the detection of critical and sometimes life-threatening conditions of the cardiovascular system at a very early stage, which helps avoiding 40% of the complications.

This is made possible through the "CNAP[®]" double finger sensor, which detects the blood pressure in the finger and displays it continuously, which means heartbeat to heartbeat. Due to the easy handling, the doctor immediately receives a complete and comprehensive picture of the patient's cardiovascular condition. This pioneering method is protected through 80 patents worldwide and was validated by numerous clinical studies with more than 1,000 patients.

CNAP[®] stands for "Continuous Non-invasive Arterial Pressure", i.e. the continuous blood pressure curve, from which all other essential vital parameters can be derived. This method is completely noninvasive, which means that there is no need to sting an arterial catheter during monitoring the patient.

In cooperation with the CNES (Center National D'études Spatiales), CNAP[®] has now been integrated into the CARDIOSPACE program, which was brought on board of the Chinese space station in September this year. "We are very proud to see that so many years after our first mission in space, the circle finally closes," says Juergen Fortin.