

## Europe

European Space Agency (ESA)



### EUROPEAN SPACE RESEARCH AND TECHNOLOGY CENTRE (ESTEC)

The European Space Research and Technology Centre, the largest site and the technical heart of the ESA, is in Noordwijk, in the Netherlands. Most ESA projects are developed here by more than 2,000 specialists.

### COLUMBUS CONTROL CENTRE (COL-CC) AND AUTOMATED TRANSFER VEHICLE CONTROL CENTRE (ATV-CC)

Two ground control centers are responsible for controlling and operating the European contribution to the ISS program. These are the Columbus Control Centre and the Automated Transfer Vehicle Control Centre. The COL-CC, located at the German Aerospace Center (DLR), in Oberpfaffenhofen, near Munich, Germany, will control and operate the Columbus Research Laboratory and coordinate European experiments (payload) operations. The ATV-CC, located in Toulouse, France, on the premises of the French space agency Centre National d'Etudes Spatiales (CNES), will control and operate the ATVs.

### GUIANA SPACE CENTRE (GSC)

Europe's Spaceport is situated in the northeast of South America in French Guiana. Initially created by CNES, it is jointly funded and used by both the French space agency and ESA as the launch site for the Ariane 5 vehicle.

### EUROPEAN ASTRONAUT CENTRE (EAC)

The European Astronaut Centre of the European Space Agency is situated in Cologne, Germany. It was established in 1990 and is the home base of the 13 European astronauts who are members of the European Astronaut Corps.

### USER CENTERS

User Support and Operation Centers (USOCs) are based in national centers distributed throughout Europe. These centers are responsible for the use and implementation of European payloads aboard the ISS.

<http://www.esa.int>

