



## Spacecraft Operations Training Centre A complex software suite designed to provide high-quality, hands-on training in satellite operations

### Space

#### Software Suite: STC

**The STC combines training courses with real-time simulation of a satellite and ground system. Together they provide an effective method of understanding the complexities of satellite operations, satellite engineering, spacecraft attitude and orbit dynamics.**

#### BENEFITS

The STC approach goes further than a conventional training course, encouraging a real transfer of knowledge to space agencies, universities and spacecraft operators world-wide.

**Pre-Console training** – Before allowing your operations team to work on a real satellite or complex simulation, the STC helps to familiarize with the general functionalities of a spacecraft,

learn the basic protocol rules and how to work in a large team of colleagues who need to know their exact tasks, roles and responsibilities. Pre-console training with the STC saves time and cost on the real system and helps to avoid severe mistakes.

**Independent Training Environment** – Fluctuation within teams is normal, however training for newcomers is important. Through a set of complete documentation and a train-the-trainer programme, our clients have the possibility to train new employees before allowing them on real console, independent of the availability of the real hardware.

**Scenario Management** – Following a train-the-trainer course, the STC allows trained instructors to configure scenarios to their needs, including configuring many different failure cases.

# Spacecraft Operations Training Centre STC

## BENEFITS

**Training & assessment** - When controlling a spacecraft, measuring the performance of your team is essential. No matter if your operations team consists of newcomers or experienced staff; with the STC you can train small and large teams and perform initial training or regularly check the performance of your team, e.g. through scenario management, technical failures or communication skills assessment.

## OUR OFFER

Our offer includes an interactive demonstration or training in operations with team members selected by you at your preferred premises. For long-term, independent training, we offer the complete software STC package, including:

- Satellite simulation configured to your needs
- Realistic TM/TC ground control
- 3D animation of the satellite
- 2-weeks train-the-trainer course
- Complete documentation

Tailored scenarios can be added to your training and software package. This approach enables you to work on your satellite operations experience on a long-term basis and develop your knowledge for your individual purposes.

## FLEXIBLE APPROACH

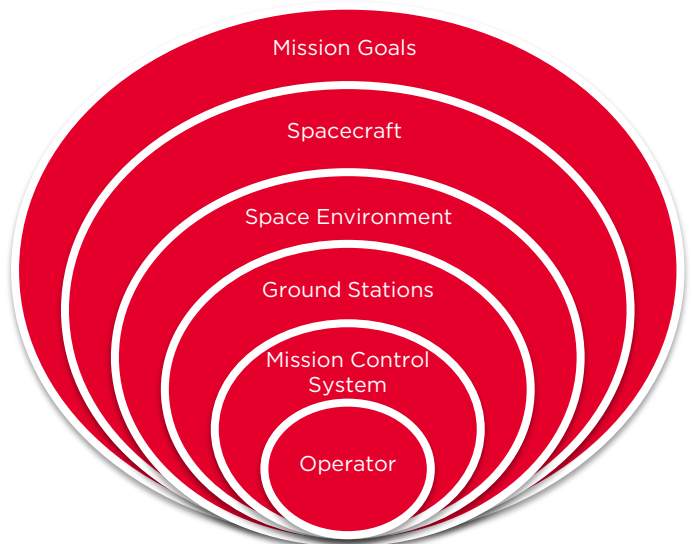
- **Instructor Training** - The STC training package can be adapted to train future satellite operators or operations engineers, providing a high level of technical knowledge for training instructors who will take over the training activities.
- **Remote Training** - Through a web interface, the STC has the capability to support remote training through the internet. This allows for trainees to access training sessions anywhere in the world.
- **Team Training** - The STC can be installed in a classroom at the client's site. It consists of a main operations screen, a generic Mission Control System (MCS) and a satellite simulator. Each trainee workstation is separately connected to the central system on a local area network. The instructor has a workstation to drive the course material and monitor the student progress.

## OUR HERITAGE

The STC is derived from existing software and technology developed by Telespazio VEGA for several clients, including the European Space Agency (ESA). With a track record of more than 40 years in operations and building highly-complex satellite simulators, Telespazio VEGA is perfectly positioned to deliver this solution. The STC represents the basic, but very first step to enter the space operations world.

## LICENCE

The complete software package is a licensed product (software and hardware) by Telespazio VEGA that comes with a tailored training course, technical support, bug fix and update service as well as various consultancy features. Contact us for an individual offer for your company, institution, university or space agency.



## ABOUT TELESPAZIO VEGA DEUTSCHLAND

Telespazio VEGA Deutschland GmbH is an aerospace company for IT and Engineering Solutions and Services. We are passionate about space and proud of the 40 years of trusting relationships with our core clients in this domain.

With our more than 350 people, we enable our clients to complete their mission - and take it one step further. The experience we gather in high-tech markets drives us to continuously evolve and to create pragmatic solutions, adapt to our clients' needs and become more excellent in our performance.