

IAF HUMAN SPACEFLIGHT SYMPOSIUM (B3)
Commercial Human Spaceflight Programmes (2)Author: Mr. Taichi Yamazaki
ASTRAX, Inc., JapanZEROG-NAUT AND MISSION COMMANDER TO SUPPORT COMMERCIAL SPACE MISSIONS
AND CUSTOMER ACTIVITIES INSIDE CABIN**Abstract**

When civilian spaceships begin to fly, the same needs as the zero-gravity flight services will be created to cater different customer needs. In other words, the needs of space travelers are not just to see the Earth from space or to experience zero-gravity, but to realize their individual requests such as wanting to have a wedding in space, film movies and commercials, etc. Therefore, the mission support astronaut which we define as a “Mission Commander” will be an important role. This is not only an astronaut who controls the spaceship or experimental equipment, but also the same as our ASTRAX mission support zero-gravity astronauts, who travel together with the customer(s) on the cabin side to experience what they want to do in the spacecraft, since the trained support astronauts’ job is to make the customer’s dream come true in space. Pre-flight preparation and training are also required in the customer’s country, especially in the cases where language barrier can potentially impact the mission outcome.

In this way, at ASTRAX, we provide total production service to our customers who have arranged a spaceflight contract through our company, from listening to their individual needs, selection of appropriate spacecraft, space flight contracting, preparation, and training until rehearsal and actual flight. As part of this, we have the ASTRAX Mission Support Control Center to support missions (not only scientific experiments but also various needs) performed by passengers in the spacecraft cabin, Mission Commander who flies into space with passengers and supports and moves behind the scenes and a spaceship simulator for training and rehearsals are available. ASTRAX operates a private space flight support educational institution called ASTRAX ACADEMY in addition to such facilities. We provide training for Mission Commanders to support space missions (focusing on what ordinary customers want to do in space), education and training for space both travelers (passengers) and operators who support space travelers.

It is important to have astronauts and zero-g astronauts who support the passengers and perform missions on behalf of the passengers inside the cabin. Here, we introduce the roles of zero-g astronauts and mission support astronauts and preparation and training systems for each mission.