IAF HUMAN SPACEFLIGHT SYMPOSIUM (B3)

Commercial Human Spaceflight Programmes (2)

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ASTRONAUT TRAINING - THE NECESSITY TO TAILOR CURRENT TRAINING FOR AGENCY ASTRONAUTS TO PRIVATE ASTRONAUTS

Abstract

The introduction of the 6 crew rotations phase in 2009 (Expedition 20) and the completion of its assembly in 2010 (Node 3 and cupola installations with STS-130) resulted in greater availability of crew time and functional modules for usage on-board the International Space Station: the ISS entered a new "utilization phase". After more than 10 years of well-oiled machinery, 2021 marked the official start into a cohabitation phase on-board ISS, with the arrival of private astronauts. In 2021, the ESA Instructor Team welcomed 3 private crews at the European Astronaut Centre (EAC) for training implementation: Axiom-1, Soyuz MS19/18, and Soyuz MS20. With more than 15 years of experience in agencies' astronaut training, the instructor team was excited to deliver training to this new category of astronauts, but what about the training content and the training method? Indeed, private astronauts constitute a new generation of ISS visitors who must receive training, but adapted to the characteristics of this population. Different to agency astronauts, private astronauts build a heterogeneous group with different characteristics and potential discrepancies not only in academic background and prior involvement in space business, but also in vocation, motivation and expectations; preliminary training, culture and ecosystem; investment/readiness to make sacrifices; media coverage; medical/psychological background/mindset. Tailoring the training for most efficient results requires a team having a comprehensive background in institutional space business requirements and the capability to translate complex space business expertise into simple and smart training modules.