**Training Astronauts**

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| Image | Text |
| 10:00:00:00  10:00:08:00   * GV’s Archive footage of ESA missions in the 1980’s Ulf Merbolt, Wubbo Ockels, Claude Nicollier ©ESA/NASA (6Shots) * ESA astronaut announcement event; Berlin, Germany – Nov 2022 ©ESA (1 shot) * ESA candidate astronauts at EAC: first day of Basic training; Cologne, Germany – April 2023 ©ESA (4 shot) | **ESA INTRO + TITLE: Training astronauts**  **VO:**  **Since the 1970’s the European Space Agency ESA has held selections to find new astronauts, expand its astronaut corps and send them into space. Only last year the latest class of ESA astronaut candidates was selected. And now they have been welcomed to the European Astronaut Center in Cologne to start their training.** |
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| 10:00:29:06 | **CAPTION: 1: Basic training** |
| 10:00:29:06   * ESA candidate astronauts at EAC: first day of Basic training; Cologne, Germany – April 2023 ©ESA (8 shots) * Soundbites Luca Anniciello: Increment traininglead for increment 70 - EAC - Cologne, Germany – March 2023 ©ESA * GV’s Paolo Nespoli training at EAC – Cologne, Germany – Feb 2017 ©ESA (2shots) * GV’s Alexander Gerst training at EAC – Cologne Germany – unknown date ©ESA * GV Raphaël Liégeois photo-op – Paris, France – Nov 2022 ©ESA * Mathias Maurer in the Neutral Buoyancy Facility at EAC – Cologne, Germany – 2020 ©ESA * GV’s Thomas Pesquet training at EAC – Cologne Germany – Feb 2021 ©ESA (2shots) | **Luca Anniciello: Increment training lead for increment 70, ESA**  The skillset that an astronaut should have is looked at since the selection phase. The selection criteria make sure that the candidate astronaut that then started the basic training have the proper broader skill set that we are looking for.  //Basic training makes this candidate astronaut up to the same level of knowledge. You know, that they can be engineer, medical doctor, pilot. We need to bring them at the same level of knowledge. And this is done and achieved through the basic training. Basic training covers a lot of aspects, cover all orbital mechanics, space engineering, history of spaceflight, for example, media relations. We start training EVA, giving them already a lot of knowledge on the on what is the science on the ISS, what type of science we do. |
| 10:01:18:15  Graphic Overlay timeline   * GV’s Thomas Pesquet training at Johnson Space Center – Houston, USA – 2015 ©ESA * GV’s Paolo Nespoli training at EAC – Cologne, Germany – Feb 2017 ©ESA (2shots) * ESA candidate astronauts at EAC: first day of Basic training; Cologne, Germany – April 2023 ©ESA * GV’s Thomas Pesquet and Andreas Mogensen training with JAXA – Tsukuba, Japan – 2014 ©ESA (2shots) | **VO: This basic training takes 12 months after which the astronaut candidate graduates as an ESA astronaut. They can then start the next part of his or her training, the pre-assignment training.** |
| 10:01:31:06   * GV’s Thomas Pesquet training at Johnson Space Center – Houston, USA – 2015 ©ESA | **CAPTION 2: Pre-assignment training** |
| 10:01:33:06   * Soundbites Ruediger Seine: Lead of the Space Training Team at EAC - EAC - Cologne, Germany – March 2023 ©ESA | **Ruediger Seine: Lead of the Space Training Team at EAC, ESA**  So depending on when the assignment happens for the astronaut, we continue with training activities until they're assigned for a mission. |
| 10:01:40:10   * GV’s Thomas Pesquet training at Johnson Space Center – Houston, USA – 2015 ©ESA (2shots) * GV’s Thomas Pesquet Crew Dragon training at SpaceX– Hawthorne CA, USA – July 2020 ©SpaceX * GV’s Thomas Pesquet Robotics training at EAC – Cologne Germany – Spring 2020 ©ESA * Mathias Maurer and Andreas Mogensen in the Neutral Buoyancy Facility at EAC – Cologne, Germany – 2020 ©ESA * GV’s Thomas Pesquet EVA training at Neutral Buoyancy Laboratory Johnson Space Center – Houston, USA –December 2020 ©ESA/NASA (2shots) * GV’s Johnson Space Center – Houston, USA ©ESA/NASA | **VO: This includes further systems training, vehicle training, robotics and EVA-training. Not just in Cologne, but also across international partner sites like the Johnson Space Centre in Houston.** |
| 10:01:52:09  Graphic Overlay timeline   * Soundbites Ruediger Seine: Lead of the Space Training Team at EAC - EAC - Cologne, Germany – March 2023 ©ESA | **Ruediger Seine: Lead of the Space Training Team at EAC, ESA**  And once they are assigned to a mission, they go into the assigned crew training, which takes another two years. |
| 10:01:57:23   * Exterior shot ISS ©ESA/NASA | **CAPTION 3: Mission-specific training** |
| 10:01:59:17   * GV’s Andreas Mogensen Columbus Systems training at EAC – Cologne Germany – Spring Jan. 2023 ©ESA (2shots) * GV’s Thomas Pesquet training at EAC – Cologne Germany – Spring 2020 ©ESA * GV’s Paolo Nespoli training at EAC – Cologne, Germany – Feb 2017 ©ESA * GV’s Thomas Pesquet training at EAC – Cologne Germany – Spring 2020 ©ESA * GV’s Andreas Mogensen POGO EVA training at Johnson Space Center – Houston, TX, USA –May 2022 ©ESA/NASA (2shots) * GV’s Andreas Mogensen EVA training at Neutral Buoyancy Laboratory - Johnson Space Center – Houston, USA –September 2022 ©ESA/NASA * GV’s Mathias Maurer EVA training at Neutral Buoyancy Laboratory - Johnson Space Center – Houston, USA –September 2022 ©ESA/NASA | **Ruediger Seine: Lead of the Space Training Team at EAC, ESA**  The mission specific training is really specific to the tasks of every individual astronaut. So that means we have different trainings for each astronaut depending on the specificities of the mission. They do a certain set of experiments of payloads. They have certain tasks in repairing and maintaining the vehicle. They may go on an extravehicular activity. All that drives what we're training for. |
| 10:02:27:04   * GV’s Thomas Pesquet Crew Dragon training at SpaceX– Hawthorne CA, USA – July 2020 ©SpaceX * GV’s Alexander Gerst training at Johnson Space Center – Houston, USA ©ESA/NASA (2shots) * GV’s SpaceX Dragon Crew-4 Emergency Scenarios Training with Samantha Cristoforetti at Johnson Space Center – Houston, USA – May 2021 ©ESA/NASA * Exterior shot ISS ©ESA/NASA * ISS fly Though by Samantha Cristoforetti – Sep. 2022 ©ESA/NASA * Biofilm installation by Samantha Cristoforetti at ISS Columbus lab – August 2022 ©ESA/NASA * SpaceX Dragon Crew-3 during flight – 2021 ©ESA/NASA/SpaceX * SpaceX Dragon Crew-3 capsula approaching ISS – 2021 ©ESA/NASA | **VO: During this phase the astronauts will also train as often as possible with their mission crew members, learning how to work together, sharing roles and responsibilities.**  **Today astronaut training is still mostly geared towards a six month stay at the ISS but with challenging ambitions for human spaceflight, training will change as well.** |
| 10:02:48:14   * Animation Artemis II ESM – nov 2022 ©ESA | **CAPTION: 4 to infinity - or at least the moon - and beyond** |
| 10:02:53:07   * Soundbites Luca Anniciello: Increment traininglead for increment 70 - EAC - Cologne, Germany – March 2023 ©ESA * Animation: European Large Logistic Lander on the moon – unknown date ©ESA * Mathias Maurer and Andreas Mogensen in the Neutral Buoyancy Facility at EAC – Cologne, Germany – 2020 ©ESA (2shots) * GV’s Pangaea training, geology with Luca Parmitano – Canary Islands, Spain – 2016 ©ESA (2shots) * GV’s Pangaea training, geology with Andreas Mogensen – Lanzarote, Spain – Nov 2021 ©ESA (2shots) * Animation Artemis II ESM – nov 2022 ©ESA * Animation Orion docking with Gateway – 2020 ©NASA/ESA/ATG Medialab * Soundbites Ruediger Seine: Lead of the Space Training Team at EAC - EAC - Cologne, Germany – March 2023 ©ESA * GV’s M. Maurer and S.Cristoforetti traiing at Dr. Reinold Hagen Stiftung – Dec 2017 ©ESA (6shots) | **Soundbites Luca Anniciello: Increment traininglead for increment 70, ESA**  Training will change a lot in the transition from the ISS to moon and then beyond moon. // Mission on the moon will be rather shorter than the one on the International Space Station. But what we are looking for are different skill sets because they are going to explore the lunar surface. We want them to have geological skills, and that's part of new training especially is ESA implementing.  **Soundbites Ruediger Seine: Lead of the Space Training Team at EAC, ESA**  For future missions that will go beyond Earth orbit, be it to the gateway, be it to the lunar surface or even further out to Mars. What is more important and what needs to become more evident in training is training for the crew to be autonomous. // The crew will need // more technical knowledge, but will also need to have more tools on board and at their hands to deal with the situation and to thoroughly analyze the situation. |
| 10:03:50:05   * Animation Orion docking with Gateway – 2020 ©NASA/ESA/ATG Medialab * GV’s ESA candidate astronauts Sophie Adenot, Pablo Álvarez Fernández, Rosemary Coogan, Raphaël Liégeois, and Marco Sieber – Nov 2022 – Paris, France ©ESA (5shots) | **VO: While missions to the moon and Mars might still be a long way off, this new class of ESA astronauts can dream. But most importantly, it is clear that they will be ready for whatever awaits them.** |
| 10:04:03:00 | **ESA OUTRO** |
| 10:04:14:00 | **b-roll** |
| 10:04:14:00 | **Soundbites Luca Anniciello: Increment traininglead for increment 70, ESA (English)** |
| 10:19:40:14 | **Soundbites Luca Anniciello: Increment traininglead for increment 70, ESA (Italian)** |
| 10:23:24:17 | **Soundbites Ruediger Seine: Lead of the Space Training Team at EAC, ESA (English)** |
| 10:35:25:19 | **Soundbites Ruediger Seine: Lead of the Space Training Team at EAC, ESA (German)** |
| 10:40:17:09 | **end** |