

Video: Flight control, space weather and debris: What an astronaut needs to know

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Credit: ESA—European Space Agency

Recently, Andreas Mogensen, now getting ready for his "Huginn" mission to the ISS in 2023, stopped by ESA's ESOC mission control center in Darmstadt, Germany, to meet with some of the experts who keep our satellites flying.

Andreas usually works at NASA's Johnson Space Center in Houston as

an ISS "capcom," and we don't often see him in Europe. A few months back, while returning to Germany for some training at ESA's Astronaut Center in Cologne, we seized the opportunity to ask him if he'd like to stop over in Darmstadt for a look behind the scenes at mission control, and he immediately answered, "yes!"

Andreas studied aeronautical engineering with a focus on "guidance, navigation and control of spacecraft" and we thought he'd be delighted to meet with the teams at mission control doing precisely that sort of work for our robotic missions.

We figured he'd also enjoy meeting colleagues from our Space Safety program, especially the ones working on [space debris](#) and [space weather](#), as these are crucial areas that influence the daily life of astronauts on the ISS.

Andreas met with Bruno Sousa and Julia Schwartz, who help keep Solar Orbiter healthy and on track on its mission to gather the closest-ever images of the Sun, observe the [solar wind](#) and our Star's polar regions, helping unravel the mysteries of the solar cycle.

He also met with Stijn Lemmens, one of the analysts keeping tabs on the space debris situation in orbit, and Melanie Heil, a scientist helping ESA understand how space weather and our active sun can affect missions in orbit and crucial infrastructure—like power grids—on ground.

We hope you enjoy this lively and informative day at [mission control](#) as much as Andreas and the teams at ESOC did.

Provided by European Space Agency

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