

Transcript for **International Space Station toilet tour**

Samantha Cristoforetti: Hello, and welcome to the toilet of the International Space Station. Let's say you're up here in ISS and you need to go to the restroom. You want to come to this cabin and the first thing you want to do is grab this piece of equipment and turn this rotor switch ninety degrees to the open position. What that does is it turns on a fan which creates a suction effect in this hose so that you can use this yellow element for your number one.

For number two the principle is actually exactly the same ... suction. We have a solid waste container here and on top of it is this err ... seat. And the solid waste container is connected via this hose to the same fan so that again the same suction in fact allows you to do your number two in weightlessness. I want to show you how it looks but since we don't want any bad smells to come out we're going to actually turn on the fan. It's going to be a little bit loud. Here we go. Now you can lift the lid. There is this erm ... seat that sort of looks comfortable but you don't really sit in weightlessness so most of us actually prefer to lift this one as well and use directly the, the opening that goes into the bag. And in fact there is a bag in there. It looks like this and when we are done with our business we close the bag and we push it down into the solid waste container and then of course as a courtesy to the next person we put a new, fresh bag inside.

The solid-waste container gets changed when it is full which is roughly every ten days for a crew of three people using it. This one, for example, was installed on the sixty-first day of this year. So probably roughly around day seventy-one we will have to change it again. Erm, but urine gets recycled. So from err ... the pretty complicated hydraulic equipment that is behind here and makes the use of the toilet in space possible, the urine actually gets directly transferred to another piece of equipment which is here in the floor which is called UPA – Urine Processing Assembly – which is the first step into turning urine into potable water.