

## 工作于国际空间站的来自 OI 分析仪公司的总有机碳分析仪

七名宇航员乘坐奋进号航天飞机于上周五(11月14日)晚间发射升空前往国际空间站,进行一系列设备的升级。

其中的重大升级之一,就来自于 OI 分析仪器公司。

OI 分析仪器公司的 Gary Erickson,负责这个项目的经理,指着一个与一台膝上型电脑尺寸相仿的蓝色盒子说:“这就是工作在 NASA 上面的实际原型仪器之一。”

这台工作于地球表面几百英里高的太空中的设备就是总有机碳分析仪(TOCA)。虽然此次还有其他一些升级的设备将投入国际空间站的运转,但是这台总有机碳分析仪是 NASA 为之兴奋的一个亮点,由于这台仪器的成功应用,宇航员们将能够安全地循环处理、利用水源,就像在地球上的专业净化水厂一样。

“我们的仪器实际上处于整个净化过程的末端,确认净化是成功的,净化后的水对于人员的饮用是绝对安全的。” Erickson 说。

Erickson 和其他科技人员都工作于 OI 分析仪器公司, OI 公司已经从事总有机碳分析仪的设计、制造和服务 30 多年,都是对于这个项目,他们只花费了两年多的时间就出色的完成这一杰作并送上了太空。

“对于这个特殊的项目,我们投入了大量的人力和物力。” Erickson 说。

在此之前,宇航员不得不在每次航天飞机发射升空时携带大量的清洁水。但是利用这台总有机碳分析仪,他们就能够循环净化大量的、来自不同水源的水,包括冷凝水,甚至人尿。虽然这听起来有点令人恶心,但是 Erickson 讲,在地球上的水被净化之前,能够在其中检测到很多不感兴趣的物质,即使是来自天然的泉水。

“当你饮用一杯水的时候,你应该乐观地面对一个现实,我是第七个饮用经过净化水的人。实际上根本没有什么新水。” Erickson 说。

当你下一次抬头仰望太空的时候,请记住在太空有一个很小的部分(装置)来自 OI 分析仪器公司。

对于那些希望观测到太空站的爱好者,下一次太空站掠过 Brazos Valley(位于美国的德克萨斯州, OI 公司的总部位于此)的时间是 11 月 18 日星期二下午 5 点 52 分,再下一次是 11 月 19 日星期三下午 6 点 19 分。

如果希望观看相关的电视新闻,请登陆: <http://www.oico.com/default.aspx?id=corpnoteworthy>

上面的新闻稿翻译自美国 KBTX 电视新闻。

网页链接: <http://www.kbtx.com/state/headlines/34493284.html>

Seven astronauts on the space shuttle Endeavour took flight Friday evening on a mission to make some upgrades on the International Space Station.

And one of those changes, which could potentially have some big implications, has its roots right here in the Brazos Valley.

"This is one of the actual prototypes that was built for [NASA](#)," said O. I. Analytical Engineering Manager Gary Erickson, pointing to a blue box about the size of a large laptop. "Very small, compact, and very simple to operate."

The device that is creating a buzz hundreds of miles above earth is a Total Organic Carbon Analyzer (TOCA). Though there are other upgrades being made on the I.S.S., the TOCA is the one change that NASA is excited about because if it works successfully, astronauts will be able to safely reprocess water similar to the way it's done at plants here on earth.

"We're actually at the end of that process to validate that the process has been successful and the water is safe for human consumption," said Erickson.

Erickson and his team of scientists and engineers at O. I. Analytical have been making carbon analyzers for more than 30 years, but it took them more than two years to perfect one that could be used in space.

"There was a lot of effort and engineering that went into it, for this specific application that won't transfer back to the terrestrial application," said Erickson.

Currently, astronauts have to haul fresh water with them on every flight. But with the TOCA, they would be able to recycle water from a number of sources including condensation and even urine. And while it sounds slightly disgusting, Erickson notes that before water is processed on Earth, there are many unfavorable things that can be found in any sample, even from natural springs.

"When you go to drink a glass of water, and as you drink it, you should enjoy the fact that you're the seventh human being to process that water," Erickson said. "So there's no such thing as new water."

So the next time you look towards the heavens, just remember that a little part of the Brazos Valley is looking back.

For those that would like to catch a glimpse of the space station as it passes over earth, it's expected to be in orbit over the Brazos Valley about 5:52 p.m. Tuesday November 18, and then again on Wednesday the 19th around 6:19 p.m.

美国 OI 分析仪器公司  
上海代表处

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