

SPACE OPERATIONS SYMPOSIUM (B6)
Human Spaceflight Operations (1)

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FROM JOHANNES KEPLER TO EDOARDO AMALDI – THE ATV MISSIONS ARE NOT REALLY A
ROUTINE MATTER**Abstract**

On 9 March 2012 the 3rd ATV Edoardo Amaldi will start its 10-day journey to the International Space Station (ISS), for its nearly 6-month logistics resupply mission.

After the success of the first two ATVs – Jules Verne in 2008 and Johannes Kepler in 2011 - one might believe that implementing the subsequent ATV missions until the fifth and last one in 2014 has become a routine matter.

However, not only does preparing and operating such a complex vehicle require extreme care and attention to the utmost detail due to its interactions with a manned complex, but, additionally, every mission differs from the previous one due to, for instance:

- the need to incorporate the lessons learnt from the previous mission - the possibility to introduce design and operational improvements - the changes of cargo manifest - the changes of the ISS configuration
- the much shorter interval from the previous mission and until the next one - the operations and AIV manpower turnover

This paper first explains how these factors have been taken into account during the ATV-3 Edoardo Amaldi mission preparation. Then, it presents a synthesis of the main achievements realized during the actual execution of its mission, including a comparison with the previous ones. Finally it concludes with a projection on the final steps of the ATV Programme.