



Astrium Space Transportation

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Saint Médard en Jalles, October 28th, 2011

Objet/Subject : Bart van DEENEN - Reference Letter .

I first got to know Bart van Deenen in 1994 when ASTRIUM (at that time named Aerospatiale) subcontracted to the Van der Waals Zeeman Laboratory of the Amsterdam University the thermal control subsystem and associated thermostat of the ALICE facility, a microgravity payload aiming at studying critical CO₂ and SF₆ on board the Russian MIR station from 1996 on. As project manager for Aerospatiale I had the opportunity to appreciate the wide variety of skills that Bart showed for the benefit of the project as Masters student. His skills were ranging from the accurate understanding of scientific requirements in the field of critical fluids, their translation into hardware/software specifications up to the architectural design, coding and testing of flight software including with flight hardware. In addition to his way of handling scientific and technical aspects, his sense of commitment was obvious. All performances of the thermal control system and of the thermostats were met or even passed over, and the associated ALICE facility performed well on orbit giving raise to valuable scientific feedback and papers.

Later in 1999, ASTRIUM and the University of Amsterdam established a partnership for technological and feasibility studies about a thermostat to study critical H₂O. A technological gap was at stake. Bart contributed to these activities working as a scientist and engineer for the University of Amsterdam. His skills, which in the mean time he had broadened, were again much appreciated.

These precursor studies helped getting the DECLIC facility program launched in 2001. DECLIC is a facility currently onboard the ISS since 2009 and has been used flawlessly during more than 10000 hours, successfully running experiments on critical CO₂ and H₂O, as well as on Succinonitrile crystal growth from the melt. In this project, in addition to enhanced performances of the thermal control subsystem compared with former generation of similar science payload, he perfectly handled the increased complexity of a multi-user remotely operated facility. He elegantly interacted with a larger team within the University of Amsterdam, with other subcontractors of ASTRIUM, with ASTRIUM project team members and with Project Scientists. During on orbit operations he succeeded in implementing from Ground an on-board software change enabling to overcome some hardware mishap.

These various experiences have given him a pretty good understanding of space projects and space agencies like CNES, ESA, NASA; of space industry and of underlying stakes and processes.

I could also appreciate his open mind in a number of situations. The fact that he spent quite a long time abroad, in particular in France is another evidence of this.

Astrium SAS

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In summary I would particularly recommend hiring him for a number of jobs, in particular those dealing with space science and experiments. I am available for any additional information that could be of help for supporting such a process.

A handwritten signature in black ink, consisting of a large, stylized 'M' followed by the name 'Marcout' written in a cursive script.

R. MARCOUT

Former project manager for ALICE and DECLIC at ASTRION
Head of ballistic re-entry bodies