Curriculum vitae Manuel Frey

COMPANY: ArianeGroup

NAME: Dr. Manuel Frey

BORN: August 27th 1969 at Überlingen am Bodensee, Germany

ASSIGNMENT: Senior expert for liquid propulsion

EDUCATION: Diploma (Dipl.-Ing.) in Aerospace Engineering, University of Stuttgart,

1996

Doctorate (Dr.-Ing) in Aerospace Engineering, University of Stuttgart,

2001

WITH COMPANY: since September 2003

CURRENT POSITION: expert since 2005, senior expert since 2013

EXPERIENCE: 1996-2001 DLR Lampoldshausen, Germany, Main Division Space

Propulsion: Research scientist, topic nozzle flows

2001-2003 Volvo Aero Corporation, Trollhättan, Sweden, Space Propulsion

Division: Development engineer; topic nozzle engineering

since 2003 EADS Astrium ST Ottobrunn, Germany, Development Launcher

Propulsion: Development engineer; topic thrust chamber

engineering.

since 2005 Expert in the field of "Fluid mechanics"

2008-2009 Team leader "Simulation of thrust chamber components"

2009-2013 Team leader "Advanced tools"

2013-2015 Team leader "Components engineering and system analysis"

since 2013 Senior Expert in the field of "Liquid Propulsion"