

MATROSHKA – Overview of 2004 - 2005

T. Berger¹, G. Reitz¹, S. Burmeister², R. Beaujean², Neal Zapp³

¹ *DLR Institute of Aerospace Medicine, 51147 Köln, Germany*

² *Universität Kiel/IEAP, 24098 Kiel, Germany*

³ *JSC, Houston, USA*

The MATROSHKA facility aimed for the determination of skin and organ dose of astro – and cosmonauts during an extravehicular activity was launched in January 2004. The facility was mounted on the outside of the Russian Service Module in February 2004. The active radiation detectors were activated – after some software testing – in April 2004. The facility will be positioned outside the International Space Station till autumn 2005. The data of the seven active radiation measurement devices was either downloaded to earth via the US Voice Link or stored on PCMCIA cards. We will give an overview of the performance of the facility in the years 2004 and 2005. This will include updates for the housekeeping and scientific data as well as a comparison of measured data obtained with the DOSimetry TELEscope (DOSTEL) mounted at the top of the head of the facility with calculations. Further on we will compare outside dose measurements of the DOSTEL with measurements performed by the active and passive radiation survey instruments currently installed outside and inside the ISS for the spring 2004 time period and we will give an overview over the future MATROSKA activities.