FORGING A DRAFT TEST PROTOCOL FOR MARS SAMPLE HAZARD TESTING ON EARTH. J. D. Rummel, East Carolina University, Greenville, NC 27858, <rummelj@ecu.edu>.

Introduction: In anticipation of a Mars sample return (MSR) mission taking place during the first decade of the 21st Century, and with the recommendation of the US National Research Council's Space Studies Board [1], NASA undertook the development of a protocol for the handling and testing of martian materials returned to Earth. Previous groups and committees had studied selected aspects of sample return requirements, and a workshop held at NASA Ames in 1997 [2] was of particular importance in coalescing those studies. Specific detailed protocols for handling and testing were needed to understand both the feasibility of testing allowing for the release of a martian sample from containment as "safe," and the nature of a facility that would allow for the effective application of that protocol. To further refine the requirements for sample hazard testing and to develop the criteria for subsequent release of sample materials from containment, the NASA Planetary Protection Officer convened a series of workshops beginning in 2000 with the overall objective of developing a comprehensive draft protocol to assess returned martian sample materials for biological hazards while safeguarding those samples from possible Earth contamination. This process culminated in the release in October 2002 of NASA's "A Draft Test Protocol for Detecting Possible Biohazards in Martian Samples Returned to Earth"[3]. This presentation will review the process that led to that document, the nature of the discussions that led to the final document, and perceptions of the document's ongoing utility to international preparations for a future MSR mission..

References: [1] Space Studies Board (1997) *Mars Sample Return: Issues and Recommendations*. [2] DeVincenzi et al. (1999) NASA CP–1999–208772. [3] Rummel, J. D. et al., eds. (2002) NASA/CP–2002–211842.