



NASA STTR 2009 Phase I Solicitation

T6.02 Planetary Surface Analog Support Technologies

Lead Center: JSC

Current testing of Lunar Surface System elements (such as rovers, habitats, space suits, etc.) is performed either piecemeal in laboratory testing facilities or in an integrated fashion at remote site field exercises. Large-scale controlled facilities in which lunar surface outpost elements and operations can be tested in integrated scenarios are needed to reduce the risk of future human lunar missions and eventually Mars missions. Development of such facilities provides many advantages to planetary exploration programs but also poses many technological challenges. Such technology development challenges include non-hazardous lunar/Mars soil/regolith simulants, lunar/Mars lighting systems, lunar/Mars gravity off-load systems, etc.