

SPACE DEBRIS SYMPOSIUM (A6)
Mitigation and Standards (4)

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THE PASSIVATION PROCESS FOR CRYOGENIC STAGE OF LM-3A LAUNCH VEHICLE

Abstract

During launches of LM-3A launch vehicle, its 3rd stage is ejected into GTO orbit. At the end of a flight the remains of the propellant and pressuring gas and the remains of the helium in bottles should be evacuated. This paper describes the standard passivation process of LM-3A and passivation result of a flight. According to the scheme, the third stage will coast for a while after SC/LV separation to make sure the SC is far enough from LV, then the passivation starts. The residual propellant and high pressure gas will be depleted through engine systems, the batteries will also be exhausted. The passivation process is a regular scheme of LM-3A flights.