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DESIGN AND VALIDATION OF A NEW TYPE DEPLOYMENT TO SIMULATE MICROGRAVITY
FOR SATELLITE SOLAR ARRAY

Abstract

In order to simulate zero gravity condition at ground testing, a new solar array deployment equipment which is mainly consist of long guide, short guide, slippage subassembly and air bearing subassembly is introduced in this paper to minimize disturbance forces caused by deployment equipment. Finally, the method design is verified by testing, according the test results, optimization design for the equipment is developed.

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