

SYMPOSIUM ON VISIONS AND STRATEGIES FOR THE FAR FUTURE (D4)  
Space Elevator Design and Impact (3)

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BASED ON THE INTELLIGENT INTERACTION PATTERN OF ENTITIES FOR THE SPACE  
LAUNCH COMMAND AND MANAGEMENT SYSTEM

**Abstract**

This paper put forward that by strengthening the information processing and learning functions of entity objects, under the premise of the network interconnection and the information sharing in each entity among the space launch, the spacecraft related personnel, facilities, equipment and so on, we could realize the autonomous interaction of information among those objects, and improve the auto-adaptive ability between the task and environment. According to the assigned task, it could make a single entity object get the matching analysis under required environmental conditions automatically, address and coordinate related objects to complete the task. Furthermore, in the event of equipment failure or quality problems, it could automatically detect and analyze fault, and adopt automatic recovery or degradation treatment to avoid the risk. Based on above intelligent network consisted of entity objects, a Space Launch Command and Management System could be built. By using this system, we can reduce the complexity of the project organization during each space launch, and improve the overall implementation of reliability and the efficiency of task.