

SYMPOSIUM ON INTEGRATED APPLICATIONS (B5)
Tools and Technology in Support of Integrated Applications (2)

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CONCEIVE OF THE TELEOPERATOR SPACECRAFT

Abstract

The teleoperation technique developed greatly in the past decades. It was successfully used in the International Space Station (ISS) and the deep space exploration missions, for example the Remote System (RS) on the ISS and the Sojourner on the Mars Pathfinder. All of them did great contribution to extend the people's space operation ability. However, these teleoperation systems were developed to finish few given missions only. The versatility was not enough sufficient to satisfy the space operation missions in the future. The teleoperator spacecraft conceived in this paper is a versatility space flight platform which can be used in various space operation missions with little changing.

This paper conceives the concept of the teleoperator spacecraft and surveys the previous researches in the field of teleoperator spacecraft firstly. Secondly, the paper describes the primary design of the teleoperator spacecraft such as the elements of it. Finally, the critical techniques to design and develop a teleoperator spacecraft are discussed. It's confirmed that the concept of teleoperator spacecraft is feasible and the teleoperator spacecraft must have extensive usages in the future.