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DEVELOPMENT OF ASTRAX ZERO GRAVITY AIRCRAFT EDUCATION AND TRAINING  
SIMULATOR

**Abstract**

Commercial space travel has started worldwide in 2021, and the demand for zero gravity flight has also been increasing. In Japan, ASTRAX has been providing zero gravity flight services using an aircraft owned by Diamond Air Service since 2012. In the case of a simple experiment, called a simple zero gravity experiment, the experiment can be completed simply by boarding the zero gravity airplane on the day of the flight. In the case of television filming, however, it is necessary to conduct in-flight checks and rehearsals in advance using the actual aircraft. The actual aircraft is usually used for other flight services, making it difficult to use it for in-flight checks and rehearsals in advance. To accommodate this issue, ASTRAX has developed a simulator that can be used for in-flight checks and rehearsals using a zero gravity aircraft, as well as for education and training for personnel involved.

In this paper, the outline and functions of the simulator developed by ASTRAX will be introduced, and its usage and future possibilities will also be presented.