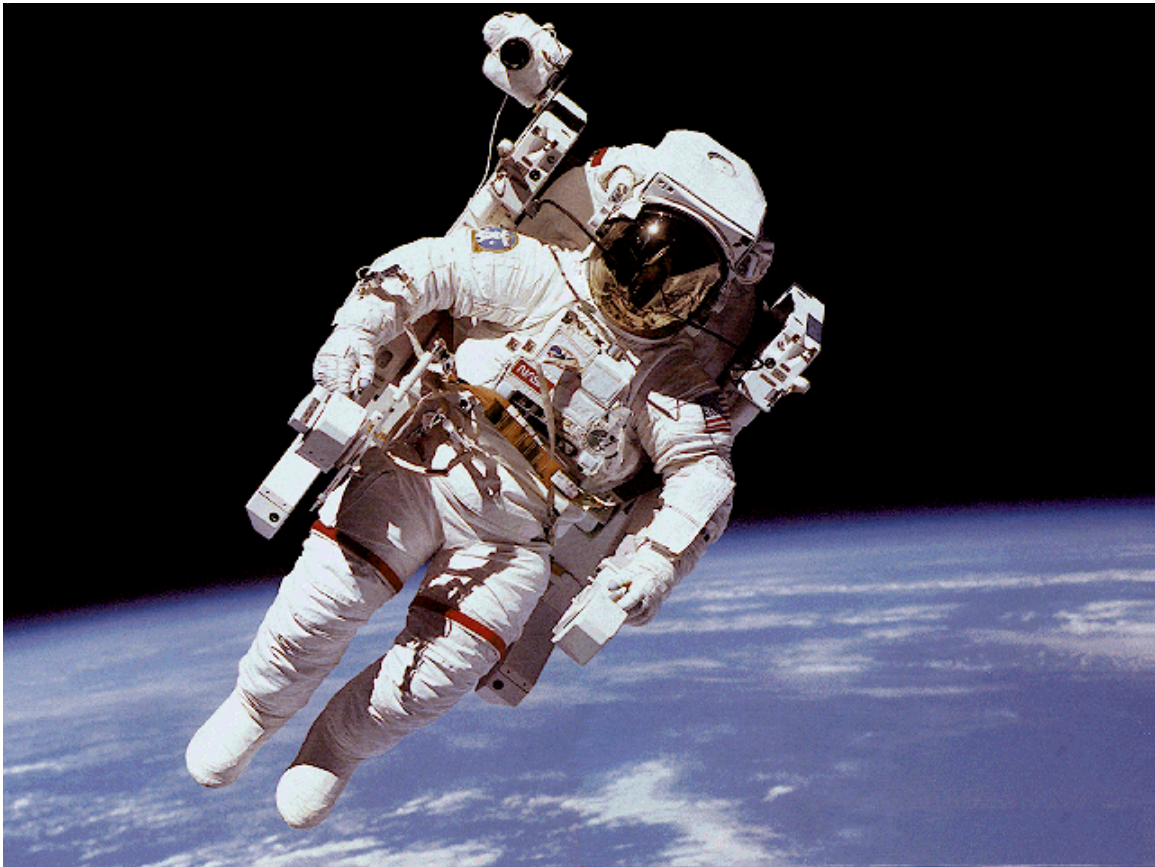# ORACLE® *at Work*

ORACLE DBMS ENSURES ASTRONAUTS ARE SAFE IN SPACE

Mark Russo, Oracle Corporation

When an astronaut suits up for a walk in space, he is literally trusting his life to his clothing. The protective garb is actually a miniature mobile environment, totally separate from the spacecraft but able to sustain life in what is probably the most hostile environment known to man.

NASA regulation spacesuits represent some of the most technologically intensive breakthroughs ever achieved, containing life support systems that rival any spacecraft. For example, a space suit must simultaneously be able to protect an astronaut from temperatures raging from 500 degrees Fahrenheit on the sun side, to minus 300 on the shadowed side.

Tracking all the components, systems and emergency gear on a NASA Space Shuttle mission requires a highly flexible database management system. From detailed engineering analyses and lab test reports to the continuously evolving arena of inventory, vendors, costs, delivery management, all aspects are meticulously logged and tracked with Oracle's DBMS database. The Oracle system has been running since 1982 and contains a database with over one million blocks of DASD. Boeing reviewed many DBMS vendors in the hopes of finding a flexible database that would instantaneously respond to changes in design, engineering and inventory. They discovered some software companies offered acceptable levels of performance but usually had to trade off performance with ease of use, system flexibility and development productivity….(article continues)