

PAPER FOR IAF 1994**"SPACE SCIENCE WITH COMMERCIAL FUNDING"****M. S. REID****ABSTRACT**

The worldwide recession, and other factors, have led to reduced or flat budgets in real terms for space agencies around the world. Consequently space science projects and proposals have been under pressure and seemingly will continue to be pressured for some years into the future.

A new concept for space science funding is underway at JPL. A partnership has been arranged with a commercial, for-profit, company that proposes to implement a "band width-on-demand" information and telephone system through a network of low earth orbiting satellites (LEO). This network will consist of almost 1000 satellites operating in polar orbit at Ka-band. JPL has negotiated an agreement with this company that each satellite will also carry one or more science instruments for astrophysics, astronomy, and for earth observations.

The paper discloses the details of the agreement and the financial arrangements. It describes the technical parameters, such as the 60GHz wideband inter-satellite links and the frequency, time, and position control, on which the science is based, and it also discusses the complementarity of this commercially funded space science with conventional space science.

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