

## **The Tourist Frontier: Still A Risky Business**

By Gary Martin, NASA Space Architect, writing in response to the *Wall Street Journal*

The op-ed, "Space: The Tourist Frontier," claims space tourism efforts by private companies could help put humans on Mars. While NASA looks forward to the day when space is readily accessible to tourists, it is not the tourism industry that will open up exploration, but exploration that will open up tourism. One would not send a group of tourists on a cruise through uncharted waters in a newly designed boat relying on complex new systems. Nor would we subject tourists to the risks of spaceflight without assurance of their safety.

The challenges of replicating a human spaceflight capability with private enterprise cannot be overstated. For example, the suborbital flights that may soon be accomplished as part of the X-prize competition would represent only the first step toward private spaceflight. Entrepreneurs will find, once this milestone is reached, that it is much more difficult to develop safe, reliable transport to low earth orbit.

NASA encourages the development of space tourism, but the agency and the nation cannot rely on private enterprise to accomplish the President's vision for space exploration. It is likely that, as in the exploration of the Earth, tourism in space will become a viable industry only after the costs and risks have been reduced. New technologies developed to achieve the nation's exploration goals will help enable future tourism.