

washingtonpost.com

Giving a Fledgling Industry Space to Breathe

By Cindy Skrzycki

Post

Tuesday, May 3, 2005; E01

You already can make reservations on future manned space flights. College students majoring in hospitality are working on the amenities civilians in space might enjoy. And, thanks to Congress, the government is taking a regulations-lite approach to the nascent industry.

The *Federal Aviation Administration* already has experience in space, licensing 171 unmanned commercial launches since 1984. It was only last year, though, that the FAA licensed the first human commercial space flight and issued guidelines covering pilot and passengers.

It was acting under the *Commercial Space Launch Amendments Act*, which set a timetable for the agency to issue guidelines and then rules. Congress also stipulated that the agency could not have free regulatory rein over the industry until 2012, unless some disaster happened first. The idea, it seems, was to keep space flights from coming apart over Iowa, but not kill a new industry in the cradle.

This regulatory atmosphere, which is geared toward experimental flight and allowing private citizens to assume the risk of space travel, is based more on the model of adventure travel than on boarding an airplane to Omaha. Several industry participants note that there are no rules when you set out climb to a base camp on Mount Everest or lurk in a submersible to peer at the Titanic and say that thus there shouldn't be a Dr. No for the fledgling space tourism industry.

To an extent, the FAA agrees.

"We have to give them a certain latitude. This is a risky business, and anyone who doesn't believe that should be disabused about it by the process [of informed consent]. It is much more akin to adventure sports right now. Nobody is doing it to get from here to there," FAA Administrator *Marion C. Blakey* said in an interview.

Blakey said, however, that the rules the agency will issue will be the regulatory platform for a mature industry. As in commercial aviation, there was no regulation of early "barnstorming," but regulations kept pace with evolving passenger demand and technology. "I think that's what we will see with commercial space," she said.

Interest in space travel began to take off with the success of SpaceShipOne a year ago, the first private suborbital spaceship flight that won inventor *Burt Rutan* the \$10 million Ansari X Prize. A bevy of billionaires, such as *Paul G. Allen*, co-founder of Microsoft Corp., are financing ventures; Allen backed SpaceShipOne. Surveys show potential passengers are willing to spend up to a year's salary to come aboard.

Virgin Galactic, the space tourism venture of billionaire *Richard Branson*, who owns *Virgin Atlantic Airways Ltd.*, plans to offer regular space travel beginning in 2008 at \$200,000 a pop. Rutan has a deal to build five of Branson's spaceships. Other companies have sprung up, such as *Space Adventures Ltd.*, which brokers space travel.

John S. Edwards, a space systems analyst for *Forecast International Inc.*, a market research firm, said there are waiting lists for private flights. He said that in 20 years, "you'll know somebody who has been to space." The firm predicts there will be up to 15,000 suborbital space tourists by 2025, accounting for \$700 million in annual revenue.

Advertisement



The Susan
G. Komen
Breast Cancer
Foundation

"It will be the adventure traveler you will get," said professor *Clinton J. Wallington* , who teaches space tourism development at the Rochester Institute of Technology. "I tell students this will come true in your middle-management years. Prices will drop and there will be suborbital travel. Keep your eyes open if you are in the hospitality business."

The FAA guidelines depend on getting prospective customers to acknowledge the risk of the flight. Participants have to be provided with a disclaimer saying the FAA has not certified the safety of the vehicle. The guidelines suggest passengers should meet certain medical requirements and operators should use trained and qualified crew. It also makes provisions for the space vehicle, advising, but not requiring, operators to pay attention to fire detection and suppression and maintain atmospheric conditions that can support life.

Under the law, the agency has until the end of the year to propose rules addressing safety and operational requirements for crew and passengers. It also has to devise experimental permits for reusable launch vehicles.

There is disagreement within the industry about the FAA role. *Gregg E. Maryniak* , executive director of the X Prize Foundation in St. Louis, said the government is taking a rational approach.

But others, like *Michael S. Kelly* , chairman of an advisory committee to the FAA and a rocket scientist and entrepreneur, said the industry can do a more efficient job of coming up with standards. Kelly said a group of companies have formed an Industry Consensus Standards Organization to do just that.

"The biggest risk investors see is regulatory risk," Kelly said. He worries that the government will impose rules that are impossible for operators to afford or to live by. He thinks Congress acted improperly in trying to "regulate risks people take."

Whatever the regulatory approach, industry acknowledges it can't attract passengers -- or investors -- if it is unsafe. Rutan said in an interview with Time magazine last year that space flight must be at least 100 times safer than it is now. "You can't have an airline that kills 4 percent of its passengers," Rutan said, referring to the 18 of 430 humans who have ventured into space and died.

Rep. *James L. Oberstar* (D-Minn.) agrees. He introduced a bill in February that would require the FAA to include safety standards for crew and participants with every license it issues to avoid what he called the "tombstone mentality" -- the regulators waiting for a disaster to happen before they act.

Esther Dyson , editor of a technology newsletter and an investor in the new industry, said the most efficient regulatory route might be linked to insurance. Companies in the space flight business will want to keep safety up and costs down. "They are more motivated by premiums," she said, than they are by regulation.

© 2005 The Washington Post Company

Advertising Links

What's this?

Refinance Rates Hit Record Lows

Get \$150,000 loan for \$720 per month. Refinance while rates are low.

www.lowermybills.com

MyCashNow - \$100 - \$1,000 Overnight

Payday Loan Cash goes in your account overnight. Very low fees. Fast decisions. Direct deposit is not required. No credit check. Confidential - secure.

www.mycashnow.com

LendingTree.com - Official Site

Lendingtree - Find a mortgage, refinance, home equity or auto loan now. Receive up to four loan offers within minutes. When banks compete, you win.

www.lendingtree.com