PERSONAL SPACEFLIGHT FEDERATION Principal's Meeting – January 18, 2005 Minutes

SpaceX Headquarters, 211 Nevada, El Segundo, CA

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Principals

John Carmack – Armadillo Aerospace
Peter Diamandis – X PRIZE Foundation
George French – Rocketplane Limited, Inc.
Jeff Greason – XCOR Aerospace
Gary Hudson – t/Space, AirLaunch LLC
Michael Kelly – COMSTAC RLV Working Group
Elon Musk – SpaceX
Burt Rutan – Scaled Composites
Alex Tai – Virgin Galactic
Stuart Witt – Mojave Spaceport

Staff and Advisors

Bill Gaubatz – X PRIZE Foundation Bob Honzik – Consultant to Scaled Composites Gregg Maryniak – X PRIZE Foundation Diane Murphy – X PRIZE Foundation Brooke Owens – X PRIZE Foundation

AGENDA

- 1) Introductions
- 2) Open discussion
- 3) Teleconference with House staffer
- 4) Participant presentations
- 5) Discussion about PSF formation

Introductions

Each attendee introduced him- or herself, giving descriptions of current activities, future plans, and their primary political, regulatory, or general industry concerns. Concerns included environmental over-regulation, cost of licensing, how the new legislation (CSLAA) will be implemented by FAA/AST, and the lack experience of federal regulators with human spaceflight.

Open Discussion

Peter Diamandis moderated an open discussion. Topics included nomenclature, such as the use of "personal spaceflight" instead of "space tourism" and "flyer" instead of "passenger", and the overall regulatory framework and philosophy for the industry. The primary discussion revolved around a regulatory structure that:

- Has an experimental philosophy.
- Draws distinctions between the new, smaller vehicles of the personal spaceflight industry and the large expendable vehicles of the past.
- Has experienced regulators who are familiar with the systems involved.
- Imposes new regulations only as a result of established data or after incidents.
- Relies on the oversight of the insurance industry to reduce regulatory burdens.

Analysis of New Federal Legislation

Expert advisors (via telecom) gave analysis and opinions on various provisions of the CSLAA.

- Industry needs to decide if it agrees with Congress's definition of Suborbital Rocket, and provide feedback to the FAA within 3 years.
- The general philosophy of the legislation is to de-regulate where possible.
- The bill does not necessarily give authority to AST, allowing the Secretary of Transportation to bring in someone else if desired, but this is the most likely scenario.
- The bill requires the crew to undergo medical exam and training. FAA will decide the specifics of both.
- Informed consent and are needed for passengers, as well as medical exams beginning 3 years after the enactment of the legislation.
- There must be a risk calculation performed, and the results given as part of informed consent.
- The bill does not require the participant to sign a waiver with the operator, but it does also did not specifically prohibit them.

The group agreed to consider pre-empting the FAA with consensus standards before a proposed rule could be issued.

Discussion of Liability Concerns

After lunch, a discussion was held on the liability issues for the industry at large. Burt Rutan told a story from his experience on the matter, and some members called for the creation of standards to mitigate this risk. An agreed upon means of calculating risk was called for, possibly by an independent third-party, so the industry can self-regulate when it comes to informing the participants of the amount of risk involved.

Presentation

A brief presentation was given by Burt Rutan and Bob Honzik, proposing a system of regulation for the personal spaceflight industry.

PSF Formation

There was a general discussion about forming an organization, the type of organization to be formed, and the objectives should be. X PRIZE Foundation agreed to take the lead on developing the organization, and a press release would be drafted, circulated among the members, and then announced. Key components of the press release included: name of group, the desire to create voluntary industry consensus standards, and the list of members.