



# X PRIZE Briefing

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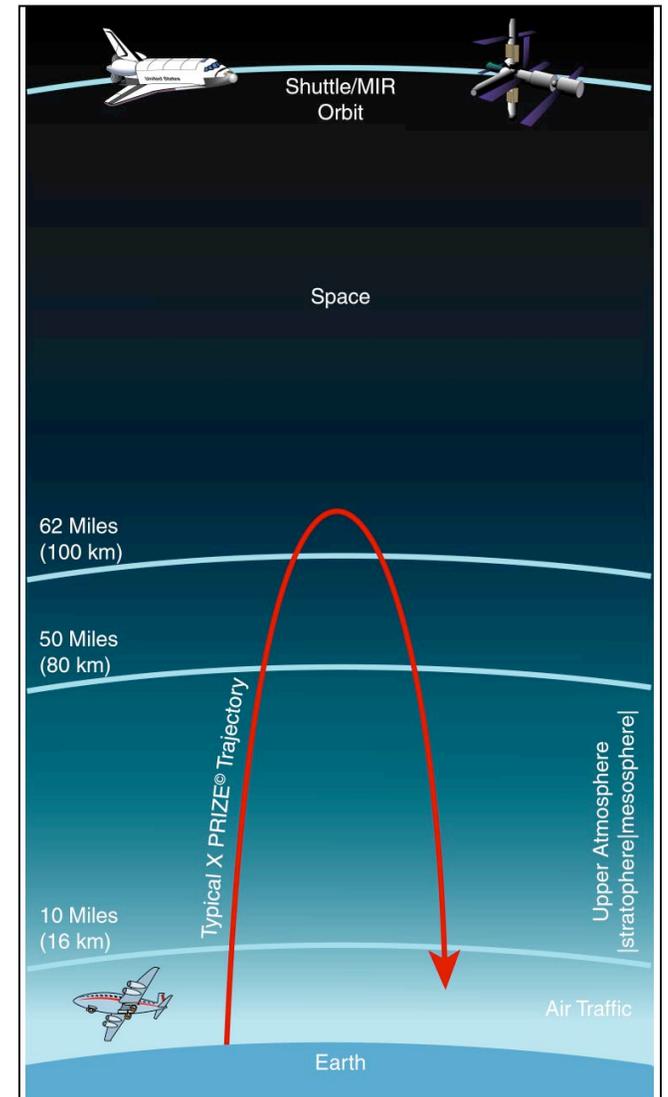
# WHAT IS THE X PRIZE?

**An international competition that will award a \$10 Million cash prize to the first team to:**

- *Privately finance, build & launch a ship*
- *Carry 3 people to 62 miles (100 km)*
- *Two flights within 2 weeks (same ship)*

**The X PRIZE is:**

- *The largest cash prize ever;*
- *The NASCAR of space;*
- *Speed, innovation, performance; and,*
- *A high profile, global event.*
- *The Ultimate drama...*



Typical X PRIZE® Trajectory

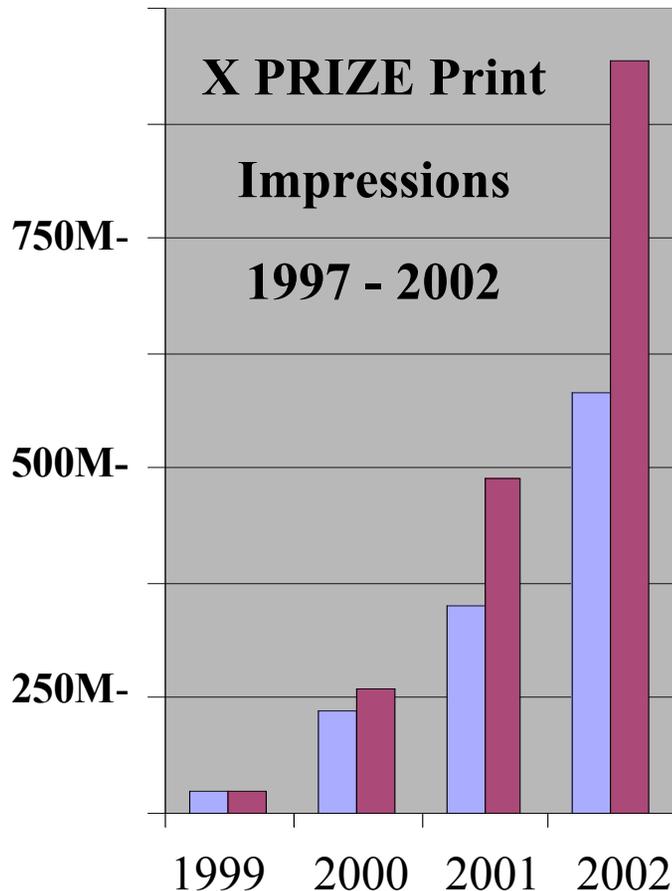


# X PRIZE MEDIA REPORT

## Total Print Impressions:

May'96 – Apr'03 **>1.5 Billion**

Newspaper articles...	4,000
Radio shows...	300
Magazine articles...	250
TV appearances...	150
Documentaries...	25



X PRIZE (R), X PRIZE CUP (TM), Patent Pending

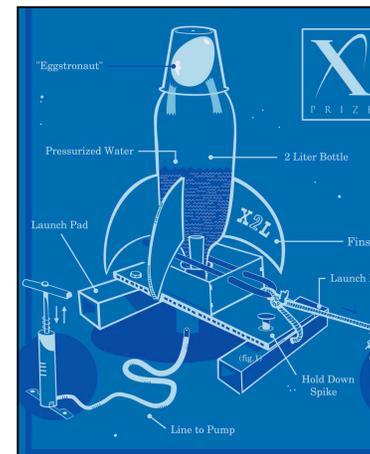


# EDUCATIONAL PROGRAMS

- X PRIZE is an educational foundation.
- X PRIZE has created a complete curriculum (Eggs Prize) to energize students about science, math, history and engineering studies.
- School Programs:
  - Classroom Projects
  - Teacher's guides
  - Internet-based curriculum
- Partners:
  - National Science Teachers Assoc.
  - Science Museums (St. Louis)
  - NASA Astronauts & Educators



Internet enabled curriculum



EGGS PRIZE



# LINDBERGH FLIES AGAIN – IN SUPPORT OF THE X PRIZE

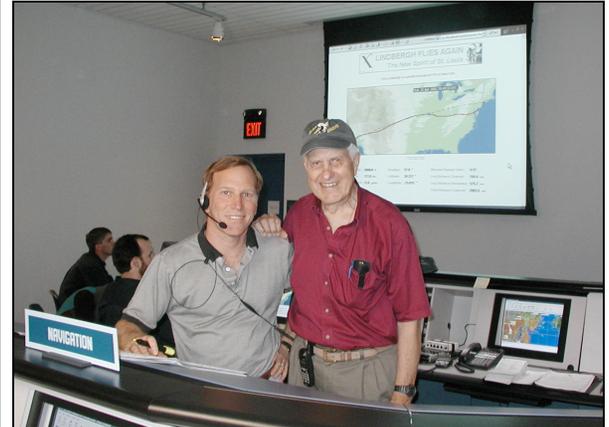


75<sup>th</sup> Anniversary Flight – May 1<sup>st</sup> -- NY to Paris –

X PRIZE (R), X PRIZE CUP (TM), Patent Pending



# MISSION CONTROL IN ST. LOUIS



- \* Navigation
- \* Guidance
- \* Weather
- \* Communications
- \* Media/PR
- \* Safety
- \* CapComm
- \* Outreach/Education
- \* Imaging/Documentation

X PRIZE (R), X PRIZE CUP (TM), Patent Pending



# 24 TEAMS FROM 7 COUNTRIES

Scaled Composites/Rutan



Starchaser/Bennett-UK



Canadian Arrow



DaVinci Project – Can.



Armadillo Aerospace



DeLeon – Argentina

**>20 teams, from 7 countries, have thus far registered to compete. More teams are expected. Each team is spending \$2M - \$20M to win the coveted X PRIZE.**

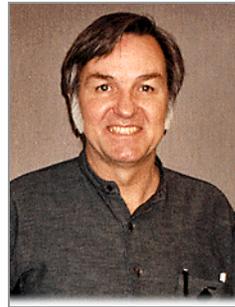


# Scaled Composites, Inc.



California, USA

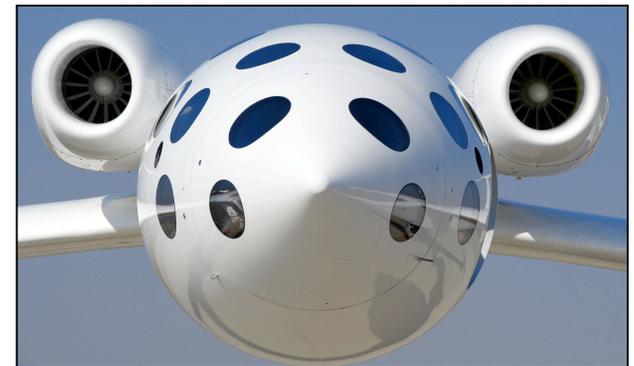
**Team Leader Burt Rutan**  
**Designer of *Voyager* non-stop round-the-world aircraft**



**LAUNCH METHOD:** Runway & air launch

**PROPULSION:** Hybrid – N202 Engine

**LANDING METHOD:** Horizontal Runway



X PRIZE (R), X PRIZE CUP (TM), Patent Pending



# Additional SS1 Images



X PRIZE (R), X PRIZE CUP (TM), Patent Pending



# The daVinci Project Canada



**LAUNCH METHOD:** Rocket is tethered to a balloon and launched from 80,000 ft altitude

**PROPULSION:** Liquid oxygen/kerosene rocket system

**RECOVERY:** High drag re-entry ballute and parachute combined with inflatable airbag

***Prototype Completed in Feb 2001.  
Team Leader: Brian Feeney***



***Full-scale mockup  
and successful  
rocket motor tests  
completed in 2002.***





# Canadian Arrow Canada



**LAUNCH METHOD:** Vertical takeoff from coastal launch site

**PROPULSION:** First Stage: Alcohol and liquid rocket engine

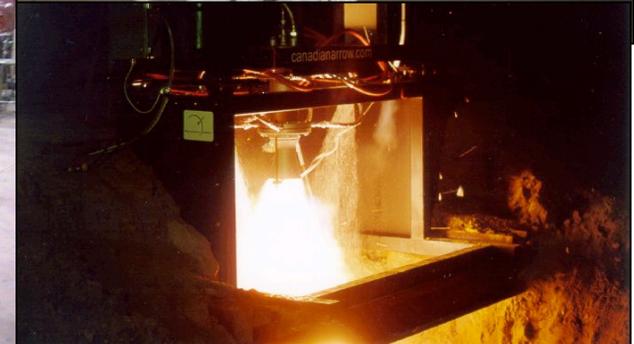
Second Stage: Solid Rocket Propulsion

**LANDING METHOD:** Parachute Landing



**Geoff Sheerin --  
Team Leader**

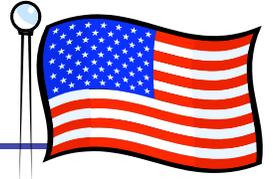
**Vehicle in  
Rockefeller Center  
NYC – Good  
Morning America**



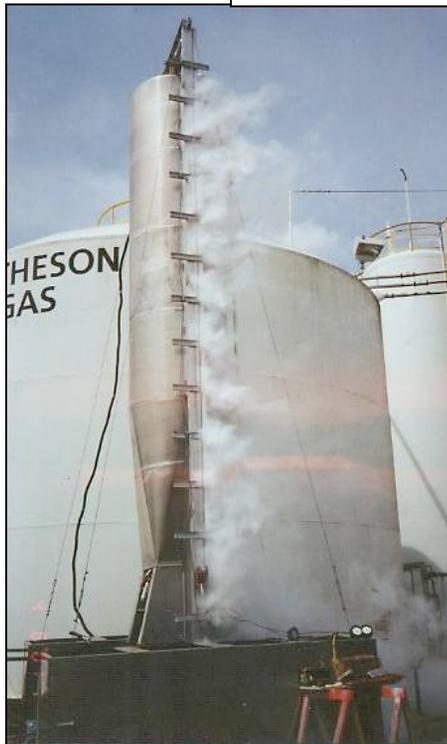
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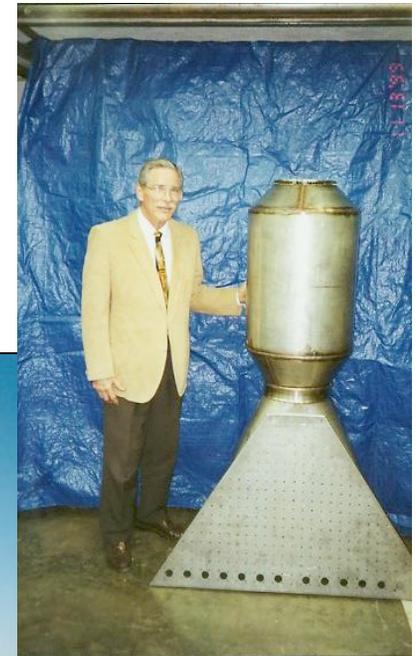
# Advent Launch Systems Houston, Texas, USA



**LAUNCH METHOD:** Water Launched  
**PROPULSION:** LOX/Methane Engines  
**LANDING METHOD:** Water Landing



**18,000 lbs Thrust**  
Launch system ready  
for testing in the  
Houston, Texas area.



**Leader Jim Akkerman - Former NASA Propulsion Engineer**

X PRIZE (R), X PRIZE CUP (TM), Patent Pending



# Pablo DeLeon & Associates Argentina



**LAUNCH METHOD:** Vertical launch

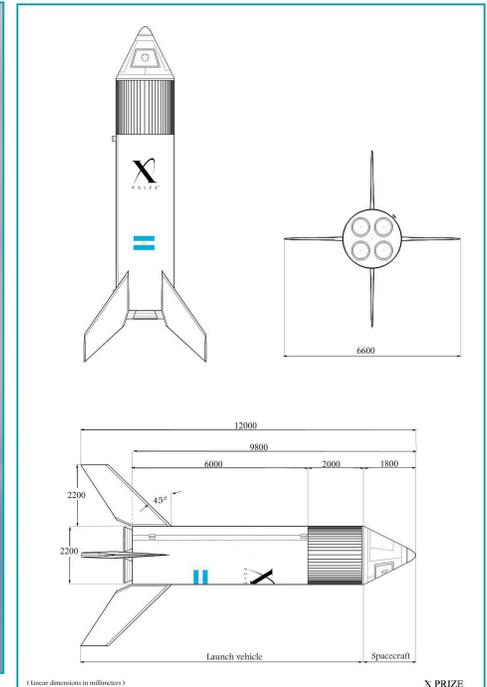
**PROPULSION:** Hybrid (Liquid/solid) rockets

**LANDING METHOD:** Parachute landing system

***Half-scale Vehicle Test scheduled for December 2002***



*Hybrid Engine Test*



**Clean room Ops**



**Testing Space Suit**



**Scale Capsule drop test from 96,000 feet**



# Suborbital RUSSIA

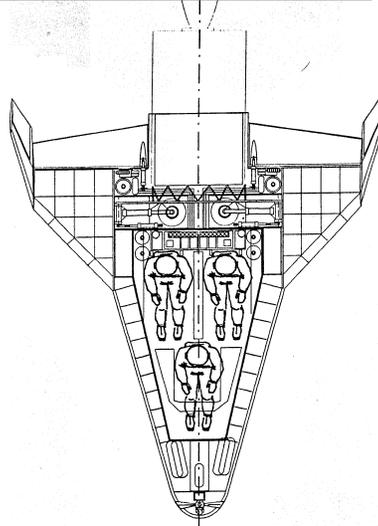


**LAUNCH:** Off high altitude M-55 Aircraft, boosted to altitude with a Solid Rocket Motor.

**PROPULSION:** *1st:* Kerosene Jet Engines & SRBs.  
*2nd:* Solid Rocket Motor

**LANDING METHOD:** Unpowered Glide to conventional landing strip

**LOCATION:** Moscow, Russia



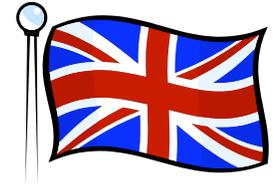
Sergei Kostenko

CEO, Suborbital Corp.

X PRIZE (R), X PRIZE CUP (TM), Patent Pending



# Starchaser Industries. Ltd. United Kingdom



**LAUNCH METHOD:** Rocket Powered Vertical Takeoff

**PROPULSION:** Hybrid Rocket Motors

**LANDING METHOD:** Parachute



**Team Leader: Steve Bennett  
Britain's #1 Rocket Developer**



**Bennett's 40 foot tall  
Nova launched from  
England in Nov 2001**

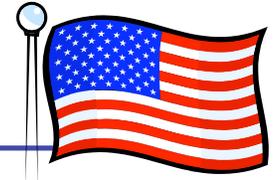
**Hot fire rocket engine tests in Oct 2002.**



**Parafoil pilot training in advance  
of Nova capsule drop tests in  
early 2003.**



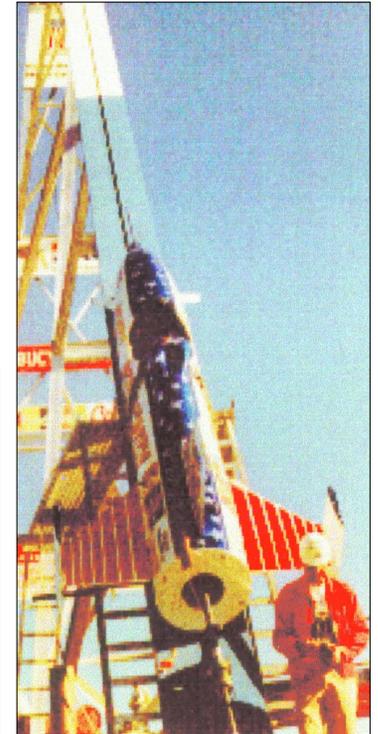
# American Astronautics San Diego, CA, USA



**LAUNCH METHOD:** Vertical Take-off

**PROPULSION:** Bi-prop Hypergolic fuel

**LANDING METHOD:** Parachute Landing in water



**20,000 pound thrust propulsion system – based on X-3 rocket.**

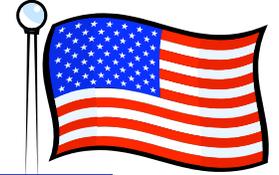
X PRIZE (R), X PRIZE CUP (TM), Patent Pending



Drop test of “crush cone” deceleration.



# Armadillo Aerospace Dallas, Texas, USA



**LAUNCH METHOD:** Vertical Takeoff

**PROPULSION:** Hydrogen Peroxide Engines

**LANDING METHOD:** Parachute/Crushable Nose



**Leader John Carmack - Software Guru, creator of *Quake* and *Doom* leads technical design and funding of Armadillo.**