Mars Scouts: An Overview

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Outline

Why Mars Scouts?
What are Mars Scouts?
When is a Scout likely to launch?
Summary of Concepts to Date?
Concepts Currently Studied
Future Work
Why Mars Scouts?

- Achieve program science goals not otherwise covered in the baseline plan.
- Optimize the use of limited resources to accomplish the best science.
- Provide the flexibility to quickly respond to discoveries at Mars.
What are Mars Scouts?

PI-led missions:

- Aerial Platforms
- Orbital
- Lander/Rover
- Network
When is a Scout Going to Launch?

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Pre-AO studies 18 2/2

CBD notice 1/15

Draft AO release 2/3

Final AO release 4/3

Step 1 proposals 4/4 11/1

Phase A (Step 11/1 7/1)

Phase B 7/1 6/30

TRL6 tech insert 4/1

Phase C/D (mass 7/1 6/30)

Schedule reserves

Launch Period 8/15 1

Step 1 and 2 duration based on recent Discovery experience.
May ‘01 Scout Workshop

- Encourage Community Cross-Fertilization
- Select 6-10 Concepts for Further Study
- Selected Concepts Help Scope ‘02 AO
  - Possible Science
  - Needed Technology
  - Cost/Schedule/Risk
- 43 Concepts Submitted, 10 Selected
- Selected Concepts DO NOT Prejudice AO
Summary of Submitted Concepts

- **Science Instrument**: 5%
- **Balloon**: 11%
- **Aircraft**: 13%
- **Lander**: 24%
- **Orbiter**: 13%
- **Sample Return**: 5%
- **Rover (mobility)**: 7%
- **Subsurface access?**: 4%
- **Combo of Platforms?**: 9%
- **Maybe Use '01 lander**: 9%
- **Science Instrument**: 5%
Concepts Currently Studied

Ten Concepts Selected for Study

(~150K each)
Future Work

➡ Start Work on AO by End of CY 2001
➡ Finish Studies and Report to NASA HQ
➡ Fold Study Results into AO as Needed
➡ Stay Flexible With Respect to Mars Program Budget

Mars Scouts are an Exciting Addition to the Mars Program!