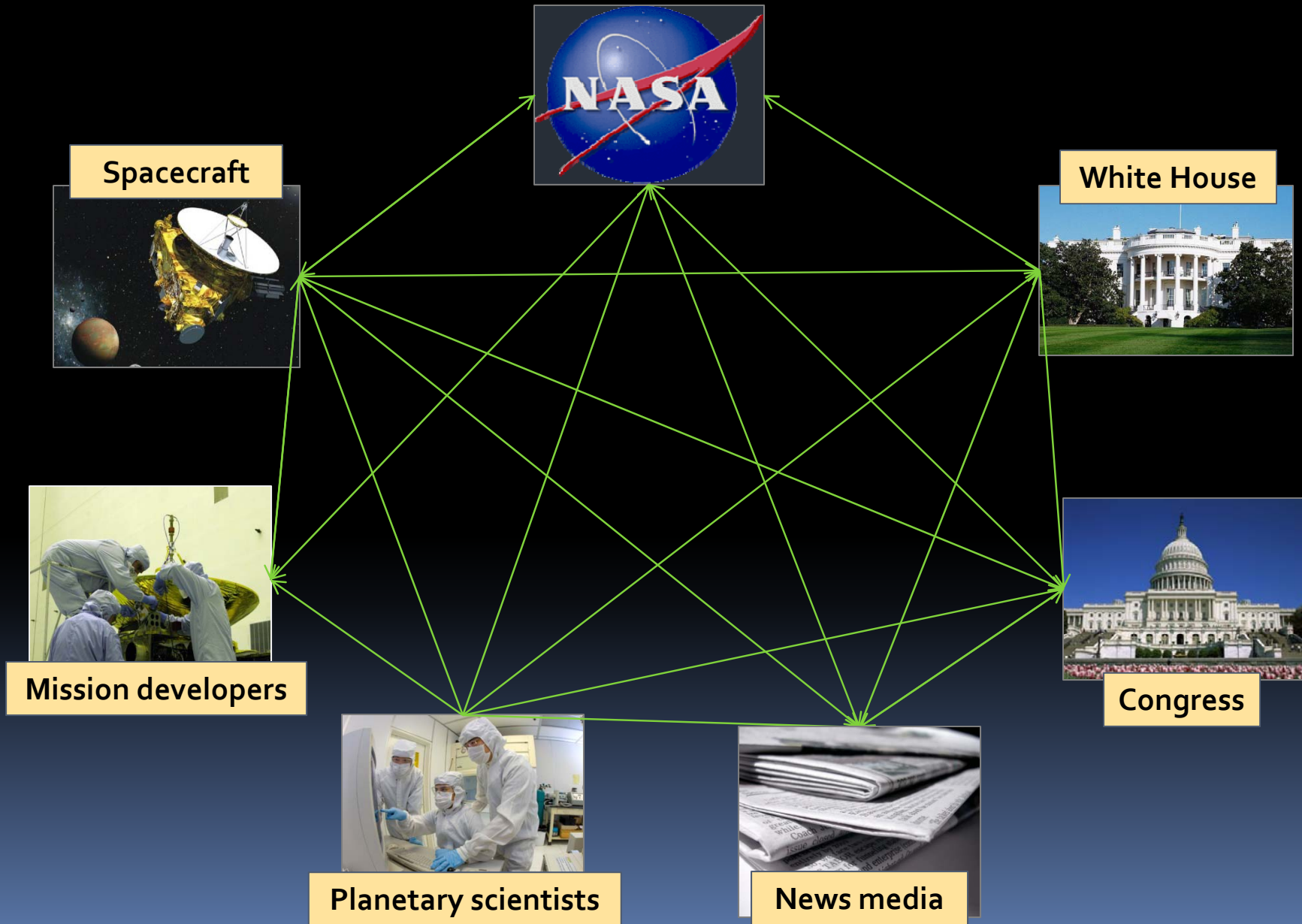


Faster, Better, Cheaper: *A Sociotechnical Perspective on Programmatic Choice, Success, and Failure in NASA's Solar System Exploration Program*

Amy Paige Kaminski
Solar System Exploration @ 50
October 26, 2012



Space Exploration: A Sociotechnical System



FBC: A New Operating Philosophy

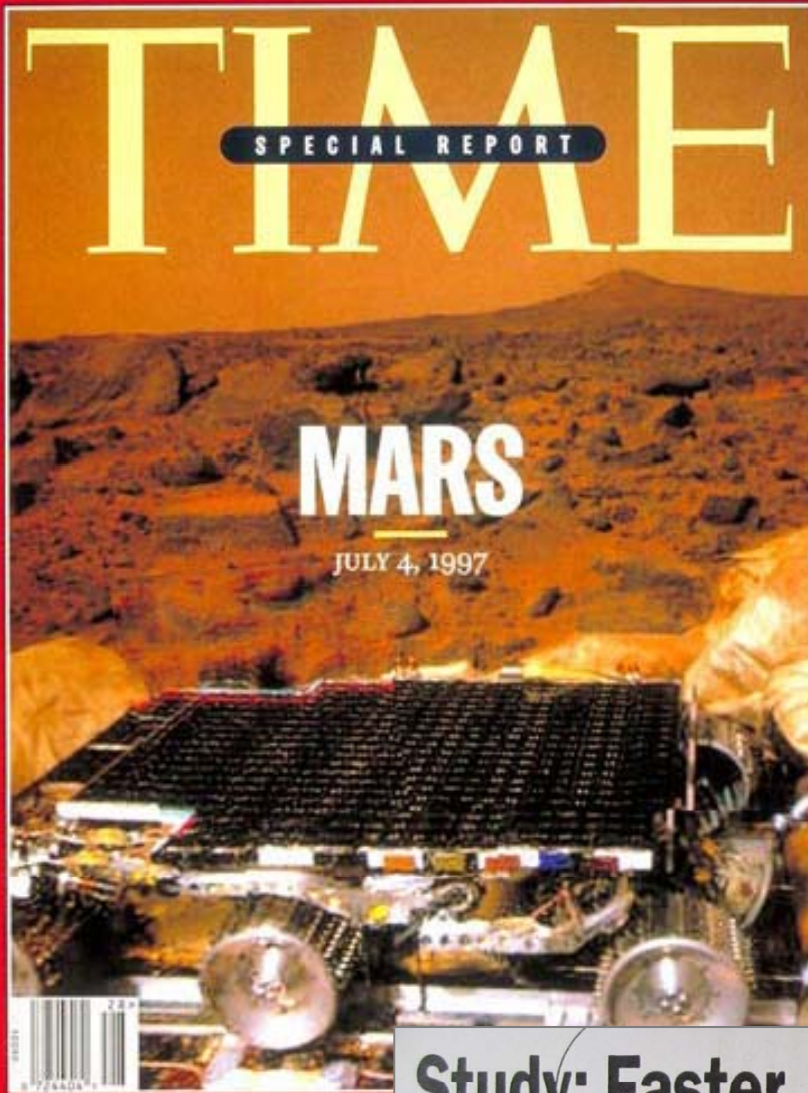
1980s: "Too big to fail"

- Few, complex spacecraft to few destinations
- Many objectives, instruments per mission
- Science determines cost
- Long development schedules
- Engineering conservatism
- Every mission counts, near-term focus
- Extensive management reviews and oversight
- NASA determines all missions



1990s: "Failure is ok"

- Many, simple spacecraft to many destinations (portfolio approach)
- Few objectives, instruments per mission
- Constrained cost determines science
- Fixed development schedules
- Risks should be taken
- Missions as sites for trying new technology and investing in future exploration
- Streamlined management
- Scientists compete/responsible for some missions



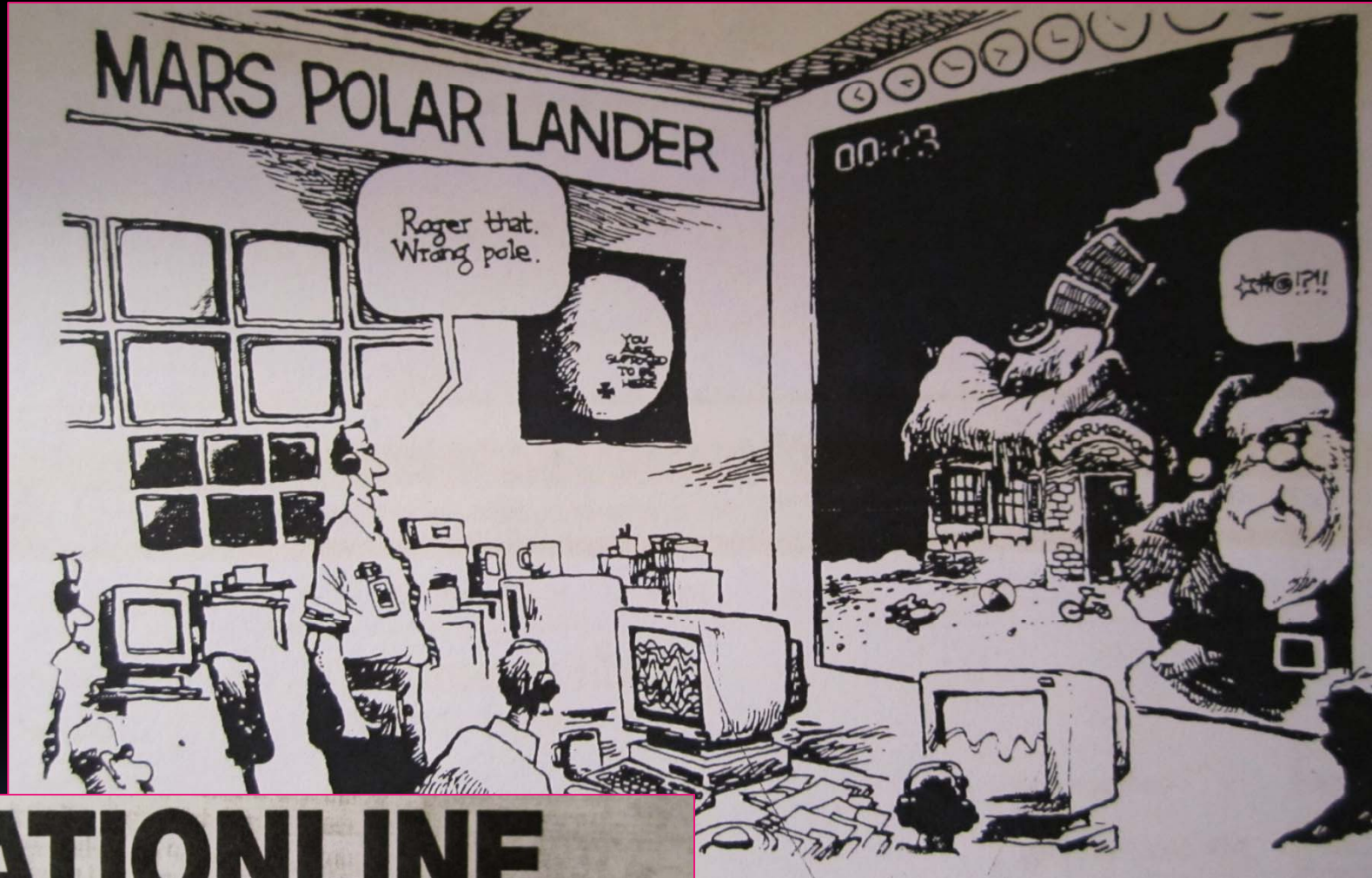
Study: Faster, Better, Cheaper Method Works

By WARREN FERSTER
Space News Staff Writer

LOGAN, Utah — NASA's so-called faster, better, cheaper mission philosophy adopted

The remainder of the missions in the study were of the low-cost variety launched since 1992 on expendable rockets. They include such missions as the Mars Pathfinder

edge over their smaller counterparts in terms of failure rates, Mosher said. Faster, better, cheaper missions have a catastrophic failure rate of 99 percent and a partial failure rate of



NATIONLINE

Reports: NASA's approach to exploration not working



"...REALLY STUCK THE LANDING!!"

