

Talking Points for Meetings
February, 2004

1. THE GOAL -- MARS BY 2020. We heartily welcome the stated purpose of the human exploration of space. We believe that our destination should be Mars, and that we should aim to get there by 2020.
2. ONGOING INDEPENDENT CONSULTATION AND REVIEW. We believe that a panel of competent reviewers independent of NASA and its contractors will be vital to sustain the effort long-term with minimal political add-ons and minimal organizational (inter-agency and intra-agency) conflict.
3. DEVELOP FOR MARS. We can lower costs, and accelerate development progress, by committing to coherent mission architecture across all destinations. We urge that the focus of technology development be human missions to Mars, with appropriate adaptations for work on the Moon.
4. MODEST COST. We believe this can be accomplished with very modest expenditures, as exemplified by the Mars Direct Plan (\$30B) and by the original NASA Mars Reference Mission plan (\$55B). The vast sums floated by some commentators are irresponsible and wrong.
5. TECHNOLOGY. We commend the re-directed investment of NASA resources into technology development for human exploration. We especially endorse two technologies: (1) nuclear power for Moon and Mars on-ground operations, and (2) in-situ resource utilization processes.
6. ROBOTICS. We urge the inclusion of human exploration research requirements in the design of robotic missions. This likely will require modifying missions already in the pipeline for this decade.
7. HEAVY LIFT. We urge the production of heavy-lift boosters using existing technology -- the shuttle launch stack and/or modular medium-lift boosters. This saves aerospace jobs, avoids or minimizes assembly in orbit, and greatly reduces overall cost and schedule. While we should plan for advances in propulsion systems, we do not need to wait for upstream technologies to mature.
8. REGULATION. We believe in a strong role in space by private enterprise. We urge Congress to reduce the regulatory burden on the commercial development, use and enjoyment of space.
9. HUBBLE. We urge NASA to reverse immediately its decision to abandon the planned upgrade and reboost of the Hubble Space Telescope. Hubble is one of the outstanding examples of the need for, and benefits of, humans in space. The benefits far outweigh the incremental cost.