ASTR 4800: Space Science - Practice & Policy

- Today’s Topic: Kennedy’s Vision for the U.S. Space Program
- Homework: McDougall, Chapters 19 and Part V (Conclusions)
- Exam 1 on September 19th.

Reactions to Kennedy’s 1962 Speech at Rice University

- A new generation with youth, ideas, vision, and boldness.
- Technology as a means to shape not only the space program but society.
- Apply command and control methodology to political and social problems.
- Investment. NASA budget climbed to $5.1 billion in 1964 ($33.4 B in FY07). Total R&D was 3% of GDP (GDP = The total market value of all final goods and services produced in a country in a given year, equal to total consumer, investment, and government spending, plus the value of exports, minus the value of imports).

James E. Webb (1906-1992)

James Webb’s Vision of NASA

- New management tools for large projects => apply to all R&D. Central Planning. Today called “Systems Engineering”.
- Manned spaceflight as THE focus of NASA (although science also did well).
- Prestige, cooperation, socioeconomic systems.
- A driver for the economy. Transform the national economy to high tech. Spin-offs.
- Template for implementing social change => Johnson’s Great Society.