

INST 154

Apollo at 50

Discussion Questions

Session 16: Lunar Science

1. "Science" is a human activity, and like any human activity it has social structures by which norms are established, leaders are selected, and resource allocation is performed. Moreover, science needs to compete with other activities (infrastructure, social welfare, defense, ...) for resources. Viewing the problem from this perspective, compare the way the scientific goals of Apollo were decided upon with the way in which the decision to go to the Moon was decided, and with the way that Lunar Orbit Rendezvous was decided. What was similar? What was different? For the differences, explain the reasons for those differences.
2. NASA ultimately proved to be unable to recruit enough geologists as astronauts to do what the Sonnet Report had suggested (putting one geologist on every lunar landing mission). NASA was, however, able to recruit enough scientist astronauts to put a scientist on every lunar landing mission. Ultimately, they chose to fly only their one scientist – their single geologist astronaut – on the last Apollo lunar mission, and then to fly one scientist astronaut on each of the three Skylab missions. Could they have flown more scientist astronauts? If so, should they have? Why or why not?
3. NASA's use of "spy satellite" reconnaissance technology from the National Reconnaissance Office created serious risks to other important national objectives (in particular to intelligence and diplomacy). Why did they take those risks? What alternatives existed? Whose approval was needed to take those risks? How was that approval obtained? What role did science play in these decisions?