

INST 154

Apollo at 50

Discussion Questions

Session 22: Apollo 11: Lunar Landing

1. What should NASA have done if the astronauts were stuck on the moon because the lunar module ascent stage engine could not be started? Some things are obvious – the President should make a statement, and one had been prepared. But other things are less obvious. What should be done by the three astronauts during the remainder of the mission? How would the cause of the problem be investigated? Should the Apollo program be continued? If so, what should be the goal of the next mission? Don't just give one answer to these questions. Articulate alternatives, and then choose one and explain why you think that is your best option.
2. The Apollo 11 astronauts did several kinds of things during their single 2.5 hour moonwalk, including collecting samples, taking photographs, conducting experiments, setting up experiments that would be left behind, conducting ceremonial activities, and practicing tasks that they or other would later need to do on the lunar surface. Given that the duration of the moonwalk was limited, what process should they have used for allocating time to these different types of activities? Now actually use the process that you have devised to actually allocate time to each of those types of tasks. Which one did you give the most time to. Why?
3. NASA went to great lengths to get television from the Moon, but there had been considerable debate within NASA about the value of doing this. What were the benefits of having television during the Apollo 11 moonwalk? What were the costs? In retrospect, was it a good decision? If so, why would it have been a controversial decision at the time?