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Apollo at 50

Discussion Questions

Session 14: Gemini EVA

1. NASA developed Gemini in part to work out possible problems with Lunar Orbit Rendezvous, but rendezvous and docking worked every time. On the other hand, spacewalks turned out to be a far bigger challenge than anyone had anticipated. Why did NASA get that backwards, investing time and energy in the issue that turned out to be easy, and failing to invest time and energy in the issue that actually was a problem? There are at least three good answers to this question.
2. One important part of the solution to the EVA crisis turned out to be neutral buoyancy training. Several people had thought of this idea, but the Manned Spacecraft Center had not chosen to pursue it. Why? Once you understand why, explain what could have been done to get MSC using neutral buoyancy training sooner.
3. Maneuvering units turned out to be an evolutionary dead end – today they are used only for astronaut rescue. Instead, tethers, and a foot restraint on a robotic arm, are used. Explain what it is about maneuvering units that make them less good of a choice. Then explain why they didn't know that back in Gemini.