INST 154
Apollo at 50
Discussion Questions
Session 14: Gemini Rendezvous and Docking

Today's discussion questions are all about decisions.

1. The Americans designed a rendezvous and docking procedure that required the astronauts to make decisions and manually fly the spacecraft for the procedure to be successful. The Soviet Union, by contrast, designed a fully automatic procedure, but one in which the cosmonauts could intervene if necessary. Why did these two space programs adopt different approaches? Is one approach clearly superior to the other? If so, which one and why?

2. When the Gemini 6 Agena target vehicle failed to reach orbit, NASA chose to instead use Gemini 7 as a target vehicle. To do this required that many things be done differently than had been originally planned. But what's even more interesting is NASA's ability to decide to do this. How did they know it was possible? What process did they use to make the decision? What kind of experience did they need to have before they could make decisions like that? These are important questions, because the ability to land on the Moon before the end of 1969 would depend on the ability to make similarly audacious decisions, and on those decisions being correct.

3. The Gemini 8 emergency that required an early reentry required that a decision be made under very tight time pressure, as is common during the actual conduct of missions. How did NASA make the decision to land the spacecraft early and to use a secondary recovery zone, and how did they make that decision so quickly?