

*Rise of the Rocket Girls*  
**Questions and Topics for Discussion**

1. What was office culture like for the human computers in the early days of the Jet Propulsion Laboratory? What did supervisors like Macie Roberts do to influence that culture? How were traditions like the Miss Guided Missile contest “a result of JPL’s progressive hiring practices” (79)? Do you feel that the working culture for women at JPL shifted significantly over time?
2. Eventually, JPL’s mission changed from developing jet planes and missiles to space exploration. Why was this shift in mission important to JPL employees? How did the computers feel about their new assignments?
3. Despite the diversity of their backgrounds, a number of the women profiled shared early experiences such as being the only girl in all-male math and science classes, losing a parent at a young age, or having parents who strongly prioritized education. How important do you think these factors were to these women’s later success at JPL? Do you think it is easier now for young women to enter STEM fields? If so, what accounts for the relatively low proportion (see p. 281) of women entering these professions today?
4. For Janez Lawson, “The fact that the [JPL] job didn’t require a degree was code, signaling... that it was open to women” (81). Why was this the case? How did the requirements for advance degrees at JPL change, and what impact did this have on the women who worked there? How did supervisors like Helen Ling work around these requirements?
5. A male supervisor told young married hire Janet Davis, “You won’t last long,” assuming she would soon leave the job to have children (172). How did cultural expectations and employment policies influence the ability of women with children to work at JPL? Do you feel that later policies at JPL, such as flexible working hours, helped make up for some of the discrimination women there faced early on?
6. As digital computers became more reliable, the jobs of human computers across NASA were eliminated (186). How did the women profiled in the book avoid this fate? Did any particular policies and practices at JPL help facilitate this?
7. In Chapters 7 and 8, author Nathalia Holt explains that those at JPL were far less interested in launching missions to the moon than in sending probes to other planets in the solar system. Why was this? What were some of the difficulties posed by planetary exploration that lunar missions lacked? Do you feel that the discoveries made in sending unmanned craft to other planets has outstripped those made in sending humans to space and to the moon?
8. As supervisors of the department, Macie Roberts, Barbara Paulson, and Helen Ling all made a concerted effort to hire women. In fact, Holt writes, “Macie saw men as a potential disruption to her group” (64). Do you think the resulting spirit of camaraderie and sisterhood, and the fact that “Today more women are employed at JPL, in all positions, than at any other

NASA center” (281) justifies their efforts? Or was their practice one of “reverse discrimination” against male applicants?

9. *Rise of the Rocket Girls* is organized by decade. How did the women’s struggles and opportunities at work and home evolve over time? Do you feel that changes in women’s roles at JPL have kept pace with social and political change in the country as a whole?
10. In addition to showing the “big picture” of how current events influenced the women in the book, Holt details their personal lives, from big transformations such as marriage or the loss of a child, to smaller challenges such as arranging child care. How important was this part of the narrative to your understanding of these women’s lives and accomplishments? Were there specific stories that helped you relate to any of the women in particular?
11. For decades since the launch of Ranger 7 in July 1964, Dick Wallace’s practice of passing out peanuts in the control room became a tradition to ensure good luck—one that the teams ignored at their peril. Does it surprise you that groups of engineers, scientists, and mathematicians subscribed to such a superstition? Are there other inside details of life at JPL that surprised or intrigued you?
12. From its inception, JPL has had to confront conflicts between the desire for pure scientific exploration and the need to develop practical applications from its work. Which do you believe JPL should prioritize? How have political pressures such as those during WWII, the Cold War, or the Nixon years impacted JPL’s mission? In Part IV, the author details growing public sentiment in the 1960s and 1970s that the government use funds for social programs rather than space exploration. Do you agree or disagree?