

Judith Love Cohen Siegel Black Katz

1933 – 2016

Neil Siegel
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With the Pioneer P-3 satellite, which was to be launched by the Atlas-Abel rocket (1959)

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Among the pioneers of women in engineering

- Judy entered college in Brooklyn, New York, to study engineering, in the early 1950's
- In fall 1952, she met Bernard Siegel; they moved to California and got married
 - I was born (in Brooklyn) shortly thereafter
 - 2 more siblings followed in the next 5 years; a 3rd sibling came in 1969
 - At the same time, she worked full-time in engineering, and attended college (by 1962, she had earned both a BS and an MS degree in electrical engineering from USC)

Career highlights

- In her early career, she specialized in guidance computers
 - Missiles, satellites, and manned spacecraft (including the Apollo moon exploration program)
- Later, she worked on (a) missile defense, (b) a specialized government communications satellite, and (c) the science ground station for the Hubble Space Telescope
- She always considered her work on the Apollo moon exploration program to be the highlight of her engineering career

Apollo 13

- Mom: the Lunar Excursion Module (LEM) abort guidance system (AGS), and the Apollo orbitology team
- Dad: the LEM descent engine



Advocate for women in the work-place

- She agitated – and got – many things instituted in order to aid fairness in the work-place:
 - Job descriptions
 - Performance reviews
 - Internal job postings, and the right for any employee to apply for any job
 - . . . and more . . .
- She also served for a time as the president of the Los Angeles chapter of the Society of Women Engineers

Post-retirement: the “*You can be a woman XYZ*” book series

- After she retired from engineering, she wrote a book – aimed at young girls – called “You can be a woman engineer”
- She could not find a publisher, so she and her (3rd) husband, David, self-published the book
 - David also did the illustrations
- They then had to figure out how to sell all of those books!
- Readings, work-shops, press-kits . . . they ended up starting a book company (Cascade Pass)
- Many other titles ensued





Woman of Apollo

- After the first 10 or so titles, she decided that she wanted to have a book about 4 women that worked on the Apollo moon exploration project
- Since one of those women was to be herself, she decided that she needed someone else to write this book
 - I suggested that she have my wife, Robyn Friend, be the author
- That relationship seemed to work, and Robyn wrote the final 11 books in the series



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Professional legacy

- A woman early to engineering (not the first, but there were still very few women in engineering when she started)
- A member of the team that created many guidance systems, including for the Minuteman missile, and for the Apollo Lunar Excursion Module abort guidance system
- Successful advocate for fairer treatment of women in the workplace
- Sold more 100,000 books advocating technical careers for women, and held / sponsored 1,000's of workshops; she must have influenced tens of thousands of young girls to consider careers in technology
- Always believed that she could do exactly what she wanted, and was not going to let anyone else stop her



2012