

INST 154  
Apollo at 50  
Discussion Questions  
Session 12: Astronauts

1. Our colleagues at the University of Southern California Institute for Creative Technologies (USC-ICT) need to know what questions might be asked so that they can match those questions to answers. Write 3 questions you personally would like to ask Al Worden on your group's ELMS discussion board. We will share your questions with the team building the system.
  
2. One early proposal from would have set the following requirements for astronaut selection:
  - a. Male
  - b. Age between 25 and 40
  - c. Height less than 5'11"
  - d. Bachelor's degree
  - e. One of the following
    - i. 3 years of work experience in science or in engineering research
    - ii. 3 years of operations of an aircraft, balloon or submarine (including as navigator)
    - iii. Ph.D. in science or engineering plus six months of professional work
    - iv. M.D. plus six months beyond internship or residency
  - f. Demonstrated willingness to accept hazards, tolerate severe environments and react to emergencies, each of which is demonstrated by in some way, such as:
    - i. Occupation: Test pilot, Antarctic explorer, Experimental submarine crew, ...
    - ii. Wartime combat or military training
    - iii. Service as experimental test subject for acceleration, pressure, temperature, ...
    - iv. If severe or frequent: Parachute jumping, Mountain climbing, Deep sea diving, ...
  - g. Nomination by some reputable organization

How would Apollo crews have been different if astronaut selections had used those criteria?  
What would be the advantages? Disadvantages?
  
3. Scientist-astronauts had a much higher dropout rate than pilot astronauts during Apollo, but not during the Shuttle program. What could have been done in the Apollo era to limit this churn?  
Would any of the policies you suggest change what happened during the Apollo missions?