



Sloan Career Cornerstone Center

Profiles of Materials Science and Engineering Professionals



Michael McCulley

**Vice President and Associate Program Manager
United Space Alliance
Titusville, FL**

Education:

1970 - BS Metallurgical Engineering, Purdue University
1970 - MS Metallurgical Engineering, Purdue University

Job Description:

Management

Advice to Students:

"Treat school as if it were an extension of your job. Learn, learn, learn but also enjoy."

Video Transcript 1:

"The front end of the space shuttle achieves temperatures as high as 2,000 degrees Fahrenheit and I thought about it on reentry because my feet are on the rudder panels in the pilot seat, and literally just a few feet in front of me the temperature is 3,000 degrees Fahrenheit. And of course the materials that protect you from that are immensely important."

Video Transcript 2:

"When I look at something like the space shuttle, for example, and look at what factors limit its ability to work, it's not the brute force or mechanical systems or the wiring of the electrical systems, it's the ability to use the materials properly, to get to the next level. Whether it's performance or speed or whatever it is."

Interview:

- Typical Day

7:00 AM - Staff meeting, usually up-beat and informative.

8:00 AM - Same as above

9:00 AM - Same as above

10:00 AM - Space Shuttle schedule meeting

11:00 AM - Review environmental compliance report

12:00 PM - Eat or jog.

1:00 PM - Review and approve with NASA customers the Launch Pad upgrade plan.

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4:00 PM - Work several space shuttle technical problems.
5:00 PM - Same as above
6:00 PM - Meet with second shift folks on retirement plan changes.
Evening - Home.

- Career Experience

1996-Present: United Space Alliance, Vice President & Associate Program Manager
1995-1996: Lockheed Martin Space Operations, Director
1990-1995: Lockheed Martin Space Operations, Vice President and deputy launch site director.
1984-1990: NASA, Astronaut

- Honors & Awards

Military, Public Service Medal, NASA Space Flight Medal, Florida Child Advocate of the year, Carried the Olympic Torch.

- Best Preparation:

Mother, boy scout leader, three special teachers and a few super role models.

- Getting First Job:

By application and in constant follow-up.

- Advice

Treat school as if it were an extension of your job. Learn, learn, learn but also enjoy.

- Military Experience

1970-1984 - US Navy, Test Pilot

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