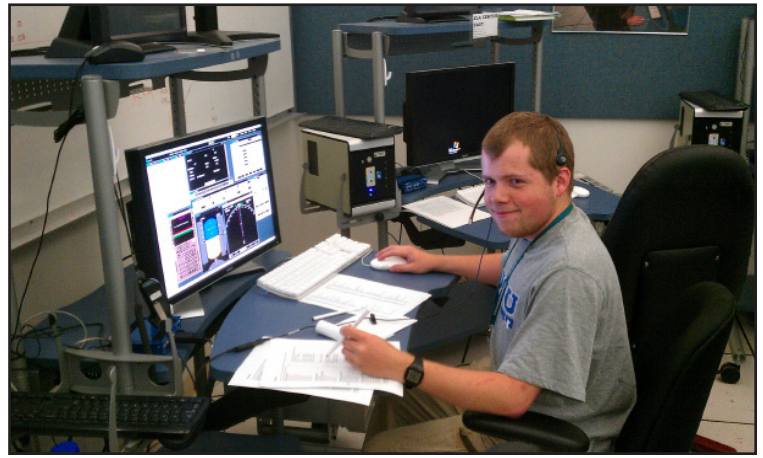


Me Myself & NASA

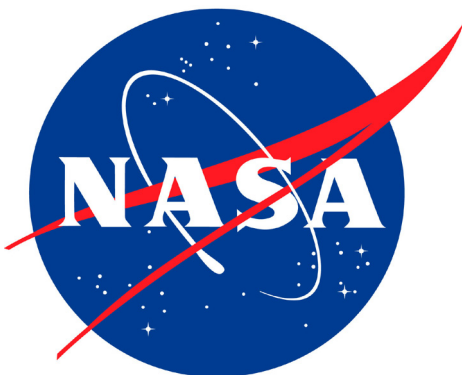
by Brian H. Andrade



Simulations in the ATC Lab

Working at NASA this summer is one of the most engaging things I have ever been involved in. I feel fortunate to have been afforded this opportunity. Three years ago I became involved in Mathematics Engineering Science Achievement Program (MESA), it was the first year that the program came back to Independence High School, and through MESA I began to realize how interesting the fields of science and engineering can be. Although I was already interested in those areas MESA showed me their practical applications. MESA has also shown me how fun it can be to design, plan, and build through the yearly MESA day competitions. I am fortunate that I got involved in MESA, for all that I learned in the program but also because my involvement in MESA made it possible for me to participate in this internship.

Most people might think that when I say I am working at



NASA that I am working on rockets, but NASA Ames has a lot more to offer than just rockets. A lot of what Ames does is research, both in support of space missions but also research into improving everyday technologies. Ames is home to the world's largest wind tunnel which can fit a Boeing 737, and NASA's supercomputing facility, which houses the world's seventh fastest supercomputer, Pleiades. Ames also houses the Arc-jet facility, which is used by NASA to test the materials to protect spacecraft on reentry and the fluid dynamics facility which tests the efficiency of designs for aircraft, ships, trucks and even trains. The building where I work at Ames is dedicated to aiding the development of a new air traffic system for the U.S. airspace that is envisioned to help reduce delays, increase fuel-efficiency and streamline air-traffic.

This entire internship has been a huge benefit to me as a learning experience. Throughout this internship I have been introduced to things that I never thought of before. I have learned how to use Matlab, a powerful data analysis tool, I have also learned about the National Airspace System and how it works today, its limitations and how we hope to improve it in the future. This is my first real job and

with that said it is also a major test of my independence and being able to work on my own, because, while my mentors steer me in the right direction, they leave me to sort out the finer details for myself. By working through tasks on my own I have gained knowledge, developed new abilities and challenged myself.

Despite the brevity of this internship, the knowledge I have gained and the people I have met during this summer will be invaluable as I move forward into college and I am extremely grateful to MESA and NASA for giving me this opportunity.



In front of the Unitary Plan Wind Tunnel