

1106-J1-2668 **Michelle Ghrist*** (michelle.ghrist@usafa.edu), HQ USAFA/DFMS, Dept of Mathematical Sciences, 2354 Fairchild Hall, Suite 6D2A, USAF Academy, CO 80840. *The Adventures of an Academic Working as an Analyst for the Air Force.*

For my most recent sabbatical, I worked full-time for Air Force Space Command at Peterson Air Force Base as an analyst. For a year, I was immersed in several complex projects which involved applying mathematics to problems of real-world interest. In this talk, I discuss the three main projects on which I worked; one involved examining the numerical methods that are used to predict orbital trajectories and two involved modeling missile trajectories. I also reflect on how my experience was affected by and influenced my life as an educator. (Received September 16, 2014)