2018 Fall Job Shadow Day Career Choices

- 1. **Acquisitions** Visit our office area, familiarize with different business focused aspects and areas of employment interest for both civilians and military occupations. Tour the base and see some interesting sites (e.g., turtle pond, commissary, etc.), and familiarize them with the education requirements (business or law degree students).
- 2. Acquisitions Visit my office to show what a typical office environment for a system program office supporting a major weapons system looks like. Introduce to colleagues and give an indepth presentation on the overall contracting career field and how it applies to every weapon system that the USAF procures. Give examples on the F-16 that I support. Escort students to the USAF Museum so that they can see an F-16 up close where I will describe the various systems that it employs.
- 3. Acquisitions, Aerospace Engineer, Physics, Hypersonic Testing I work at a wind tunnel that does hypersonic, above Mach 6, research. The plan is to have students help run the Ludwieg Tube and see the data collected. Students will be able to examine all parts of the tunnel and see how cutting edge research is done on a hands-on level.
- 4. Acquisitions, Financial Management, Mechanical Engineer, Program Management, Operations Research/Cost Estimation Discuss Air Force Acquisition experience from working on C-130, F-22, MQ-9 Predator/Reaper with a walk through the museum to visit exhibits of platforms I have supported. Discuss student's career interests and opportunities with the Air Force. Base tour. Student interaction and interests will shape the schedule to optimize student benefit.
- 5. **Acquisitions, Financial Management, Program Management -** Tour of the Combat Rescue Helicopter Program Office, hands-on viewing of a Black Hawk Helicopter, and presentation on the combat rescue mission from special operations operators.
- 6. Accounting, Acquisitions, Human Resources, Information Management, Logistics, Personnel, Program Management, Administration Visit the National Air & Space Intel Center; show the different levels at which our jobs help the mission and personnel; show the benefits and standard living of Air Force life.
- 7. Acquisitions, Medical Product Sales, Service Management Tour of the acquisitions/logistics offices and introduce them to the active duty and civilian employees. The students will sit with me and see what I do, to support the Medical Center Acquisitions and Logistics team. Speak about the different roles I have had to support; the commercial hospitals in the area and now the base hospital. My role may interest students who are not sure of their major or who may be looking at a business degree or program.
- 8. Acquisitions, Program Management, Human Systems Integration FULL
- 9. **Administration** Show how my career works and the benefits I receive from being an Administrative worker. How to use time management. Introduce the pros and cons.
- 10. **Aeronautical Engineer** Tour of the X planes in the museum, a group lunch with other junior force members of the division; tour of the lab and its wind tunnels. Discuss what it is like to be a military engineer and an aeronautical engineer.
- 11. **Aerospace & Mechanical Engineer** Introduction to Hypersonics. Tours of our test facilities. Career discussion. College discussion. Tour of laser lab. Discuss ROTC or Air Force Academy if anyone is interested. Tour turbine engine test areas.
- 12. Aerospace & Mechanical Engineer, Program Management, Modeling & Simulation Brief tour of X-plane collection at the NMUSAF, to give the student(s) a historical context for what they will observe. Provide material/hand-outs and discuss overview of AFRL, then focus on Aerospace Systems Directorate, High-Speed Systems Division, and the hypersonic vehicle design team. Goal: Brief exposure into what it takes to perform research and development for high speed systems.

- 13. Aerospace & Systems Engineer, Program Management Tour of Office (show what I do day-to-day, check contracts/PM/systems engineering stuff). Wind Tunnel Tour. Chat with officers/leadership about goals, ideas, careers, etc. Other aerospace divisions tour (if time).
- 14. **Aerospace Engineer** Show the computational work I do in support of Hypersonic Science and Technology Development. Sit in on a meeting with my contractors regarding some recent research results and determine how to proceed. Review some of the challenges we face in the S&T, specifically as it applies to large-scale computations and big-data.
- 15. **Aerospace Medical Technician** Tour the facility and meet the Flight surgeons and staff. Hands-on time with the equipment used for flight physicals and brief explanations on our mission in AMDS and how we support MDG/Wright-Patterson and the warfighters.
- 16. Aerospace, Electrical & Mechanical Engineer Tour of some of the labs; including labs that investigate: thermal systems, high powered LASERS, electrical generators, small UAV propulsion systems, magnetic materials, two-phase cooling, and so much more!
- 17. Autonomous Systems, Unmanned Systems, Modeling & Simulation, Aerospace Engineer, Program Management Several tours of laboratory/test facilities. These facilities could include: autonomous systems laboratories, landing gear test facility, Sensors Directorate Tower labs, and/or Aerospace Systems modeling & simulation labs. We also plan to include tours of the C-17 flight line and the C-17 crew training simulator at the 445AW.
- 18. Aviation Safety, Aircraft Maintenance, Flight Engineer Talk specifically about Aviation Safety and the programs that fall under it. Introduction to other Safety disciplines, Occupational and Weapons Safety. Tour of Base Operations, Flight Planning Area, Air Traffic Control Tower and Airfield. While on the airfield, observe an inspection of the taxiways and runways. If available, tour a C-17.
- 19. **Biomedical, Environmental, Electrical & Mechanical Engineer, Meteorology** We will cover topics in the exposure sciences, including air sampling device fabrication and testing, field sampling technologies and approaches for aerospace applications, aerosol generation and conditioning, simulated operational environment testing, and air quality computational modeling.
- 20. Cardiology We do EKGs, cardiac monitoring, heart ultrasounds, Stress tests, etc.
- 21. **Centrifuge, Hypobaric Chambers** Tour of centrifuge, altitude chambers, reduced oxygen breathing device, night vision lab demonstration, spatial disorientation training.
- 22. **Computer & Mechanical Engineer** Discuss student's interests in school and potential career plans. Tour high performance computing center.
- 23. **Computer, Electrical, & Software Engineer** Our plan is to expose the students to some of the research that we are doing in the department. Our interests range from network operations and security, cryptography, machine learning, and remote sensing.
- 24. **Contract Specialist** Visit several contracting units on base.
- 25. **Dental Assistant/ Dental Lab, Military** Brief background information provided. Tour dental facility. Scrub up and watch a dentist treat a patient.
- 26. Electrical Engineer, Technical Management, Academic Administration Students will sit through a graduate class as an evaluator of a teacher, followed by discussions with current students regarding their research, academic goals, and preparations to be in current positions. Students will be exposed to a typical day leading operations in a training environment to include staff coordination, personal mentoring, and business processing. Students will be asked to contribute technical or management solutions to a current leadership problem for the job host.
- 27. **Environmental Management** Installation tour covering major media areas of Environmental Management
- 28. **Financial Management** Tour Base Comptroller Squadron; HQ AFMC/FM Directorate Tour; Lunch in HQ Bldg (Q&A about being an officer/ROTC/USAFA).
- 29. Flight Nurse Show C17 and C130 aircraft as well as mannequins utilized for training.
- 30. Flight Nursing/Flight Nurse Instructor, In-flight Patient Care, Nurse At Det 4 we train nurses and technicians to transform a place into a flying hospital. We can show the C-130 and C-17 aircraft and all the medical equipment that goes on it.

- 31. **Foreign Military Sales, Program Management** Tour of the Air Force Security Assistance and Cooperation Directorate. Meet with a country team supporting a partner nation. Meet with leadership at AFSAC. Meet with the Foreign Liaison Officer from a partner nation.
- 32. **Geographic Information Systems (GIS)** Show how the data is collected in the field via GPS data collection; take the data from the field and process through various GIS programs. We will show how we update our GIS database with pertinent information required by the DOD. We will go through updating the information that runs our web viewer. Lastly we will show the collected information on our web viewer.
- 33. **High Performance Computing** Overview of our DoD Program, an introduction into what High Performance Computing is and how it differs from normal desktop processing, and a few examples of what kind of research is done on our systems. Run a tour of our computer floor giving students a chance to see the supercomputers currently in use at our site, followed by a hands-on experience with the systems.
- 34. **Human Resources** Show the students my organizational structure and educate them on the human resources development functions at these locations. Any student interested in this opportunity would have a strong desire for public service, should be interested in helping others learn and develop, a desire to develop good communication skills, and is a cultural steward of diversity and inclusion. The primary goal of human resource management (HRM) is to maximize workforce performance and value so as to meet the organization's business needs.
- 35. **Human Resources** Introduce the student to as many areas of Human Resources on base as is possible, such as Employee Management Relations, Labor Relations, staffing, classification, HR Liaison, and policy development. Attend meetings. Share the types of opportunities for students, such as internships, PAQ, etc. that are on base.
- 36. In-flight Patient Care Students will have the opportunity to be a part of the last day of one of our CCATT (Critical Care Air Transport Team) Initial Courses. The CCATT Team consists of 1 critical care physician, nurse and respiratory therapist. We are capable of flying on several types of aircrafts primarily including C17's, C130's and KC135's. On this particular day, the Job Shadow students will have the opportunity to watch our own students in the course package a critical care "patient" for transport, on load onto a real C17 or C130 we have here at the schoolhouse and observe an inflight patient simulation.
- 37. **Inpatient and outpatient Nutrition, Personnel** Have the opportunity to see how we evaluate and assess patient's nutritional needs. Students will also have the chance to see the clinical side of the house on classes offered.
- 38. **Legal** Introduction to the diverse mission of an Air Force legal office. Students will have exposure to a variety of legal disciplines to include: family law, estate planning, civil law, contracts and environmental law, labor law, and military justice. Students will get to meet both active duty attorneys and paralegals and civilian attorneys and paralegals and engage in mock legal exercises.
- 39. **Logistics** Help the students understand how Logistics works from a Foreign Military Sales point of view. Show my duties as a Logistician. Also, do some hands on learning too.
- 40. **Materials Engineer** Learn about Materials Engineering by observing manufacturing of solid state batteries using aerosol jet deposition. This will include ink formulation and various synthesis methods for electrolyte and electrode materials. Learn about various characterization methods such as X-ray diffraction, scanning electron microscopy and BET. Tours of our hybrid electric test bed to demonstrate how the battery technology and engine technologies come together as a power system for unmanned aerial systems.
- 41. **Mechanical Engineer** Explore AFRL's Turbine Engine Fatigue Facility and actively learn how real world engineers measure, analyze, and control vibration in real world components. Students will have the opportunity to instrument a test article, operate lab-grade equipment, collect vibration data, and perform real world experiments that will help the students understand phenomena that they see every day.

- 42. **Meteorology** Begin at the Base Weather Station. Weather forecasting and observing tools and techniques will be discussed. Tour the airfield where we will see and discuss weather sensors. Tour the Air Traffic Control Tower (and possible the ATC Flight Simulator) will take place and speak with Air Traffic Controllers and see how weather impacts their operations. Meet advanced degree Staff Meteorologist who will discuss the programs that they are involve with (Emerging Technologies) as well as have an open forum discussion on education paths and curriculums.
- 43. **Microbiology, Virology, Molecular Biology** Spend the day in a clinical laboratory environment rotating in microbiology, virology, molecular biology sections. Working with specimens from patients such as nasal swabs, stools, urine, throat swabs. Working with bacteria, viruses, and parasites. Students will be wearing lab coats and gloves.
- 44. Modeling & Simulation, Security Forces, Acquisitions, Fighter Pilot, Unmanned Systems Pilot See an F-35 simulation, Security Forces Operations, and Acquisition of Agile Combat Support equipment and unmanned systems.
- 45. **Molecular Biology and Entomology** Visit the entomology lab, where students will have the opportunity to raise mosquito eggs, feed mosquito larvae, and understand why this insect group is relevant to Public Health and the Air Force. Students will also have the option to collect ticks in a field setting (e.g. wear tyvek suits and walk in grassy areas). Lastly, we will examine molecular techniques used to identify zika virus in mosquito samples and learn how Next Generation Sequencing is used to identify pathogens in the Applied Technology and Genomics Division.
- 46. Program Management Learn about project and program management regarding the Operational Aerospace Medicine Education program. Experience different tools used to ensure medical residents are selected, on-boarded, trained and placed within Aerospace Medicine. Students will get to see some of the training facilities used and talk to those in Aerospace Medicine. This is a great opportunity for those seeking business, leadership, management, administration and/or program management positions.
- 47. **Security Forces** Students will get a full length tour on how an Air Force Cop Squadron operates on a daily basis and will get a first-hand look into how all the different offices inside our squadron work together to maintain the security of one of the Air Force's most important bases.
- 48. **Systems Engineering** Demonstrate the many diverse aspects of Systems Engineering/Systems Integration Engineering to include how they interact with the other engineering functions to bring about a successful program. Will include trips to Special Operations Forces/Personnel Recovery and Battlefield Airmen (SOF/PR and BA) Program Directorate, Rapid Development Integration Facility (RDIF) and a C-17, depending upon aircraft availability.