



Job Situation

Aerospace research lab. Workrooms and fabrication shops. Computers, drafting, tools. Teamwork and work alone. Deadline pressures. Reporting to Design Chief and Research Directors. Irregular, flexible hours.

Weekly Hours of Work

50

Overtime

As required

Monthly Salary

\$4,800

Student Loan – Owing

\$25,000

Student Loan – Monthly Payment

\$360

Duties

Design satellite components. Develop computer models of design. Prepare specifications. Supervise and co-ordinate fabrication of prototypes. Co-ordinate testing. Develop operational specifications and maintenance manuals.

Prospects

Project direction. Education and training. Consulting.

Job Title

Aerospace Engineer

National Occupational Classification (NOC)

2146

Job Description

Aerospace Engineers work in research and industry designing and building spacecraft and satellites for telecommunications, scientific research and defence. The work is intense, creative, and often very confidential. Huge sums of money are involved, so there is very serious competition for the contracts, and amongst the scientists for the top positions. You are a junior member in the design team, so the politics of the situation are of interest to you, but not much concern yet.

Every week begins with a production meeting that can sometimes go on all day. The project directors and section heads form the inner circle with the rest of you poised over laptops and clipboards, listening hard. This is when you find out what other sections accomplished last week. You are designing the mechanisms that will open and close the protective housing around a fabulous telescope that is going into space for a closer look at the big picture of our galaxy.

The rest of the week is spent at your computer, with six others in a large workroom festooned with diagrams, flow sheets and computer printouts. You bounce your ideas off of each other. There is always a sense of urgency in high-tech design, but everyone is especially motivated to solve this piece of the puzzle this week. Next week will be a seminar week. Industry representatives are coming in to talk about materials and to bring you up-to-date on software.

At the moment you are stuck. The complex image on your screen looks like a ball of tangled string. You walk over and stare at the scale model for a while, then shake your head and walk over to the window. "Space is a vacuum," you mutter to yourself as you stare at the empty sky, imagining space. It's a little trick you use to empty your mind so fresh ideas can pop up. It works. You're back in the groove, tapping at your keyboard until someone reminds you that it's time to go home.