TO:

FROM: C. Smith

SUBJECT: Job Application Description

DATE:

The first job I am applying for is with Sikorsky Aircraft. The job posting encourages engineering interns in a variety of fields to apply, including aerospace engineering. The job will require work in a cross-functional team environment, so communication skills and previous teamwork will be highly coveted. Projects on the job will include design, development, testing, and support of various aspects of their helicopter product line. The description also calls for fluency in a vast assortment of computer software programs. The job description is very widely encompassing of many engineering disciplines, which I suspect is because they are looking to hire many student engineers under the same job posting.

Having already served 2 co-ops with Sikorsky, I have had plenty of firsthand experience with how the company operates and the culture within it. Sikorsky Aircraft is based in Stratford, Connecticut with several other facilities around the country. They design, manufacture, and support a wide assortment of advanced civil and military helicopters. Models include the Black Hawk, Seahawk, S-76, S-92, CH-53, and every Presidential helicopter for the past 45 years.

With approximately 6,000 employees, it is no wonder that all applications are to be submitted online, where they will be reviewed by the Human Resources Department and forwarded to the appropriate hiring managers for consideration. As stated in the description, a company this large demands teamwork and communication skills. Another characteristic that is at the core of Sikorsky's values is thinking "outside the box." They are constantly encouraging new ideas and seeking fresh talent to help them develop the most advanced and safest helicopters in the world.

When approaching my resume for Sikorsky, I tried to highlight the desired skills from the description, and accentuate my past work experience there. Because the description is so broad, I chose to make my resume reflect a wider variety of my aerospace skills than normal. I listed several engineering courses and computer skills that would be picked up when scanned by a computer for keywords when filtering resumes. For maximum readability, I followed a logical progression with the objective first, then education, experience, and computer skills. Honors and activities were put at the end, not because they aren't important, but simply because the rest of the information is more pertinent to the job description. Because of the mention of teamwork and project experience in the description, I added a few of my aerospace projects under the education section. I have several work experiences listed, but I placed emphasis on my work at Sikorsky because I feel that being a previous employee will be what sets me apart from other candidates.

My cover letter shows that I am very familiar with the company, and eager to return. I chose to highlight my aerospace background at Penn State, my fluency in the desired computer software, and my ability to work in a diverse team environment. I modeled these three areas to highlight directly from the desired qualities in the job posting. Following the typical business letter format, I stated my purpose and a preview of my qualifications in the introduction, followed by a more detailed description of my qualifications in the body, and a review and call to action for the conclusion. The tone of the letter shows that I have knowledge, interest, and great respect for the company.

The second job I chose to apply for was at Boeing's Tukwila, Washington facility. The position is for a student aerospace engineering intern in the Summer of 2005 and will focus primarily on creating aircraft performance operating data for all Boeing aircraft models. Coursework and experience in aircraft performance are highly desired. The job description also calls for fluency in a variety of computer software programs.

Boeing is an extremely large aerospace company, with products ranging from commercial jets, to helicopters, rockets, satellites, and all systems involved. Their world headquarters are now in Chicago, Illinois, but they have facilities all over the world. Being such a large company, online applications are a must. They will electronically scan resumes for keywords, and then pass a few from the masses onto hiring managers.

I suspect that this internship will have a focused subject matter dealing with aircraft performance. Large companies like this often recruit people to specialize in specific areas and report there information to others. Therefore technical communication skills and teamwork will also be important.

When developing my resume for this position, I still used a combination format, but changed many aspects from the Sikorsky resume. I only included the most important pieces of information because I know that Boeing receives thousands of resumes. I organized the information in a way that I feel accentuates what skills I have that are pertinent. I reduced the number of relevant courses listed in the last resume, and put the ones relating to the job description first. Because of the desired computer skills in the description, I put my computer skills nearer to the beginning for this resume. I also reduced the number of work experiences mentioned so that I could use the space to more effectively highlight my work at Sikorsky Aircraft and my aircraft performance experience.

The cover letter is my chance to set myself apart from other candidates, so I did so by looking to the future for Boeing. I opened with a quote from one of Boeing's CEOs where he challenged Boeing to be innovative. I then previewed my qualifications and stated the position I was looking for in the introduction. In the body I was careful to highlight my industry experience and piloting certification. I made sure to go into a little more detail about my work in aircraft performance analysis at Sikorsky because I highly suspect that this will be similar to what this internship will entail. I also stressed my real world experience as a pilot and how it sets me apart from other student engineers. Upon

revision from the first draft, I cut out a few lesser important parts because the letter was a little longer than it should be. With so many applications to look at, this new shorter format would be more likely to be read all the way through. I then closed this formal business letter with a review of my qualifications and an invitation to call for an interview. For the overall tone of the letter, I tried to present myself as confident about my abilities and qualifications, but still humble to be considered for the job.

Each of my application packages took a different approach, but will hopefully achieve the same result of getting me interviews with the respective companies.

340 Blue Course Drive Apartment 200 State College, PA 16803

Date

Hiring Manager Sikorsky Aircraft Corporation 6900 Main Street Stratford, CT 06615

Dear Hiring Manager:

During my first experience working as a co-op in Sikorsky's Environment, Health, & Safety Department, I got the chance to see firsthand how your company's constant innovation and attention to detail have made Sikorsky a world leader in the aerospace industry. For this reason, I would like to return as an aerospace engineering intern in the Spring of 2005. As a senior in Aerospace Engineering at The Pennsylvania State University, I have the necessary background in aerospace theory, computer technology, and teamwork required to be an effective addition to your company.

My engineering education over the past 4 years at Penn State has helped me to become skilled in a wide variety of aerospace discipline including aerodynamics, structures, aeronautics, and flight testing. I am also fluent with many computer software programs including most Microsoft Office applications and FORTRAN programming. While working at Sikorsky last year, I supported aircraft performance engineers by performing vertical takeoff analysis for the S-92 helicopter using a helicopter dynamics performance code on UNIX platform.

Perhaps the most important aspect in working at a company as large and diverse as Sikorsky is teamwork. My participation in aerospace group projects has taught me how to properly communicate a plan and perform experiments to solve real world problems. One such project involved the design and structural analysis of a wing box to provide support for an airplane wing.

I am eager to return to the productive atmosphere Sikorsky embraces. If you would like to set up an interview, I can be reached by phone at 814-367-4098. Thank you for your consideration

Sincerely yours,

# **CHRISTOPHER J. SMITH**

# Cjs293@psu.edu

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**OBJECTIVE:** To obtain an Aerospace Engineering internship position at the Sikorsky Aircraft

beginning Spring 2005; interests include aeronautics and rotorcraft, with emphasis on flight testing, aircraft performance analysis, and hands-on

assignments.

**EDUCATION:** Bachelor of Science in Aerospace Engineering Anticipated

Graduation: December 2005

The Pennsylvania State University, University Park, PA

Cumulative GPA: 3.43 Major GPA: 3.71

**Relevant Courses** 

Aerospace Structures Hands on Helicopters Aerospace

Laboratory Techniques

Aeronautics Unmanned Air Vehicles FORTRAN

**Computer Programming** 

Aerodynamics Technical Writing Engineering

Design and Graphics

Projects/Teamwork

Structural Wing Box Design Project

Pyroshock Noise Attenuation Group Project

**EXPERIENCE:** Co-op/Industrial Hygiene Technician, Environment, Health & Safety

Department

Sikorsky Aircraft Corporation, Stratford, CT

June 2004 – December 2004

- Performed risk assessment investigations, including employee interviews, air sampling, and noise monitoring, to ensure compliance with Occupational Safety & Health Administration regulations
- Created Microsoft Excel databases to improve company accountability in the tracking and testing of radioactive In-Flight Blade Inspection Systems on CH-53E and Presidential VH-3D helicopters
- Aided with vertical takeoff analysis of S-92 helicopter using a helicopter dynamic performance code on a UNIX platform to prepare the procedure for Federal Aviation Administration approval
- Efficiently managed my daily schedule in a professional atmosphere using Microsoft Outlook to correspond with fellow employees, set up meetings, block out project time, and prioritize tasks

Delivery Driver/Restaurant Employee *Mike & Dave's Pizza & Subs*, Bellefonte, PA June 2003 – October 2003

- Regularly performed all aspects of order taking, food preparation, and delivery at local pizza shop
- Took initiative to complete all tasks in timely manner, consistently faster than company standards

Warehouse Clerk Meijer Distribution, Tipp City, OH Summers of 2002, 2001

- Manually selected detailed orders of bulk foods to be shipped to over 100 stores, consistently 25% or more above company rate and accuracy requirements, with perfect attendance.
- Demonstrated leadership by frequently training new employees and reporting performance feedback to management

**COMPUTER** MATLAB, FORTRAN Programming **SKILLS:** 

Iron CAD

Microsoft Word, Excel, PowerPoint, Outlook, Access

Windows &

**UNIX** 

**HONORS:** Dean's List -4 of 6 semesters

**ACTIVITIES:** Private Pilot – currently have 100+ hours flying experience

Member Aircraft Owners and Pilots Association Builder/flyer radio-controlled model aircraft Engineering Mentorship Program – Trainer/Mentor Special Olympics Pennsylvania – Volunteer Security Date

Hiring Manager Boeing Huntington Beach, CA

Dear Hiring Manager:

In a recent speech by Boeing's Integrated Defense Systems President and CEO Jim Albaugh, he said "If we want to transform the aerospace industry, we have to be innovators creating the next quantum leap that will mark the dawn of a whole new era." My industry and pilot experience will allow me to infuse new ideas into your company as an engineering intern in the Summer of 2005.

I was able to apply my education to industry scenarios when serving as a co-op at Sikorsky Aircraft. My work here primarily dealt with industrial hygiene, but I did have the opportunity to spend some time working in the aircraft performance engineering group. I performed vertical takeoff analysis for the new S-92 helicopter using a helicopter dynamics performance code on a UNIX platform. The purpose was to find a relationship between actual flight test data and computer models to define a flight envelope in preparation for FAA certification.

In addition to my formal education and industry experience, I have successfully trained and become a certified Private Pilot with over one hundred flying hours. This has allowed me to see firsthand the necessity for designing safe and efficient aircraft.

I hope my industry experience and piloting knowledge distinguish me from other applicants for this aircraft performance engineering internship position. If you would like to set up an interview, you can contact me by cell phone at 814-360-4032 or by email at cjw193@psu.edu. Thank you for your time and consideration.

Sincerely yours,

# **CHRISTOPHER J. SMITH**

# cjs199@psu.edu

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#### **OBJECTIVE**

To secure an aerospace engineering internship position at Boeing beginning Summer 2005; interests include airplane performance analysis, flight testing, computer modeling, and hands-on assignments.

# **EDUCATION**

Anticipated

Hands

Bachelor of Science in Aerospace Engineering

Graduation: December 2005

The Pennsylvania State University, University Park, PA

Cumulative GPA: 3.43 Major GPA: 3.71

**Relevant Courses** 

Aeronautics Unmanned Air Vehicles I, II

on Helicopters

Aerodynamics I, II, & Lab Aerospace Structures I, II, & Lab

Astronautics

FORTRAN Programming Engineering Design and Graphics System

Dynamics, Control

Technical Writing Effective Speech

Mechanics and Thermodynamics

## **COMPUTER SKILLS**

FORTRAN Programming Microsoft Access

Microsoft Excel w/ Visual Basic

Windows, UNIX Microsoft Word, PowerPoint, Outlook

MATLAB

#### **EXPERIENCE**

June 2004 – Dec. 2004 Sikorsky Aircraft Corporation, Stratford, CT

Co-op – Aircraft Performance Technician & Industrial

Hygiene Technician

- Aided with vertical takeoff analysis of S-92 helicopter using a helicopter dynamic performance code on a UNIX platform to prepare the procedure for Federal Aviation Administration approval
- Created several large Microsoft Excel databases to improve company accountability in the tracking and testing of radioactive In-Flight Blade Inspection Systems on CH-53E and Presidential VH-3D helicopters
- Maintained Microsoft Access databases accounting for paint usage and employee records at every Sikorsky facility
- Performed risk assessment investigations, including employee interviews, air sampling, and noise monitoring

June 2003 – Oct. 2003 Mike & Dave's Pizza & Subs, Bellefonte, PA

Delivery Driver/Restaurant Employee

- Regularly performed all aspects of order taking, food preparation, delivery and customer interaction at local pizza shop
- Took initiative to complete all tasks in timely manner, consistently faster than company standards
- Demonstrated leadership by frequently training new employees, checking up on them, and providing feedback on performance.

# **ACTIVITIES & HONORS**

FAA Certified Private Pilot – currently have 100+ hours flying experience Member Aircraft Owners and Pilots Association
Builder/flyer radio-controlled model aircraft
Engineering Mentorship Program – Trainer/Mentor
Dean's List – 4 of 6 semesters