

Table of Contents—Mechanical Engineering

- [Title Page](#)
- [Vision](#)
- [Career Goals](#)
- [Career Goals Continued](#)
- [My School Courses](#) *
- [Resume Introduction](#)
- [Letter of Application](#)
- [Resume](#)
- [College Course Examples](#)
- [College Requirements](#)
- [Employment Examples](#)
- [Places Aerospace Engineers Might Work](#)
- [Common Requirements for Aerospace Engineers](#)
- [Sources](#)

ERB Comprehensive Testing Program 4

Teacher: Tenth English Honors
 School: Radnor High School
 Grade: 10
 Student: Frey, Samuel J.

Individual Subscore Report
 Test Date: 10/06
 No. of Students Tested: 98
 Norm: Fall

The table immediately below compares the student's scores on each test with the scores of one or more "norm groups." "Percentile rank" is the percentage of students in the norm group who scored lower than this student. (It is not the same as the percentage of the questions on the test that this student answered correctly.) "Stanine" refers to a division of the norm group into nine score categories, from 1 (lowest) to 9 (highest).

The graph in the lower half of the page shows the percentage of the possible points on the test that the student earned. On most tests, this is simply the percentage of questions answered correctly. (It is not the same as the student's percentile rank.)

Norm Group:	National Norm Group		Suburban Public Schools		Independent Schools	
	%ile rank	Stanine	%ile rank	Stanine	%ile rank	Stanine
Test:						
Verbal Reasoning	97	9	84	7	73	6
Vocabulary	87	7	66	6	45	5
Reading Comprehension	82	7	61	6	41	5
Writing Mechanics	95	8	79	7	68	6
Writing Concepts & Skills	99	9	98	9	94	8
Quantitative Reasoning	99	9	97	9	93	8
Mathematics 1&2	99	9	93	8	87	7
Algebra I	-	-	-	-	-	-

In the graph below: ◆ = Student ▨ = Norm Group

Percentage of Maximum Possible Points
 Norm Group: Suburban Public Schools

Tests	Possible Points	Earned Points	%
Verbal Reasoning	45	39	87%
Analogical Reasoning	14	11	79%
Categorical Reasoning	12	10	83%
Logical Reasoning	19	18	95%
Vocabulary	35	23	66%
Word Meanings	18	11	61%
Precision	8	5	63%
Application	9	7	78%
Reading Comprehension	37	27	73%
Explicit Information	15	12	80%
Inference	10	7	70%
Analysis	12	8	67%
Writing Mechanics	45	34	76%
Spelling/CAPS/Punctuation	22	14	64%
Usage	23	20	87%
Writing Concepts & Skills	50	45	90%
Organization	16	14	88%
Purpose, Audience, Focus	8	7	88%
Supporting Details	15	14	93%
Style and Craft	11	10	91%
Quantitative Reasoning	50	41	82%
Comparison	15	11	73%
Extensions/Generalizations	22	19	86%
Analysis	13	11	85%
Mathematics 1&2	84	64	76%
Numbers and Number Relationships	14	9	64%
Geometry and Spatial Sense	25	20	80%
Data Anal., Stat. & Probability	13	10	77%
Algebra	32	25	78%
Conceptual Understanding	28	20	71%
Procedural Knowledge	28	23	82%
Problem Solving	28	21	75%
Algebra I			

* Constructed Response. See Score Report Folder for explanation.
 - Test not taken.

Copyright © 2002 by Educational Records Bureau. All rights reserved. 9-6426-20-395563-11/09/2006-183

Electronic Career Portfolio

Ted Mansfield

Mechanical Engineering

Table of Contents—Mechanical
Engineering

Vision

- I believe that in order for one to achieve one must work hard and make good choices. If one does not work hard, one will not be experienced enough to know how to work on challenging situations. Also, if one does not make good choices, challenging decisions could prove fatal.

[Table of Contents—
Mechanical Engineering](#)



Career Goals

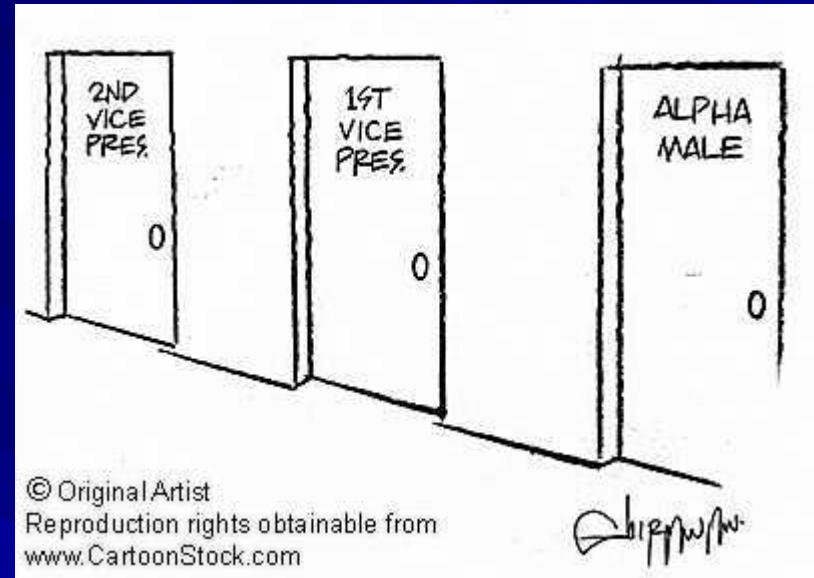
- My career interests and goals begin and end with math. My favorite recreational activities were and are art and computers, and when one mixes the three together one gets architecture and/or engineering. I am taking a Principles of Engineering Honors class this year, and I am planning to take a Architecture Honors course next year.
- To learn how to apply business to operations such as this, I participate in the Junior Achievement (internship-type) program out of Lockheed Martin, and I get the opportunity to work with some employees of the mechanical engineering company as well.

Table of Contents—
Mechanical Engineering

Career Goals Continued

- I hope to obtain a job, anywhere from errand-boy to project manager, at a architectural or engineering company while attending college. I hope to one day work myself up to the top of such a company by my middle or late working years.

Table of Contents—
Mechanical Engineering



My School Courses

Radnor Senior High School

Honors Algebra 2

Band Honors

Honors Ninth Grade English

Honors Biology

Honors Spanish 2

Honors Western Civilizations

[Table of Contents—Mechanical Engineering](#)

Resume Introduction

My resume seeks to provide evidence confirming that I will make a good business man, and that I will excel in my interest area. You may notice that in my resume, it mentions a no absence award, as well as umpiring being listed as a job. The no absences award symbolizes that I am a hard worker, and umpiring requires excellent decision making, especially for such a young age. I do many extra-curricular sports, as well as two major educational extra-curriculars as well.

[Table of Contents—Mechanical Engineering](#)

College Course Examples

Penn State

- AERSP 504. Aerodynamics of V/Stol Aircraft
- AERSP 550. Astrodynamics
- AERSP 505. Hydro and Aero Elasticity
- AERSP 512. Viscous Flow
- AERSP 553. Structural Dynamics

[Table of Contents—Mechanical Engineering](#)

College Requirements

C or higher in math 140, 141, Chem

012 or 17, and Phys. 211

>3.00 GPA: Entrance Guaranteed

with the previously listed courses

Minimum of 2.00 GPA required

[Table of Contents—Mechanical](#)

[Engineering](#)



Employment Examples

Top Salary- \$102,300/yr

- Director of Engineering
- Quality Assurance Engineer
- Senior Software Engineer
- Software Analyst
- Technician
- Verification and Validation Engineer

[Table of Contents—Mechanical Engineering](#)

Other Fields Of Engineering That Mechanical Engineers Might Be In

Acoustical engineering
Aerospace engineering
Alternative energy
Automotive engineering
Biomedical engineering
Computer-aided engineering
Design optimization
Heating, ventilation, and air conditioning
Marine engineering
Nanotechnology
Nuclear engineering
Piping
Power generation

[Table of Contents—Mechanical Engineering](#)

Common Requirements for Mechanical Engineers

At Least 4 yrs. in school

5 yrs. in employment

Various Degrees

Passing grade on PE exam (professional engineer exam)

[Table of Contents—Mechanical Engineering](#)

Sources

http://en.wikipedia.org/wiki/Mechanical_Engineering

http://en.wikipedia.org/wiki/FE_Exam

[Table of Contents—Mechanical Engineering](#)