

## For the Love of the Profession

Part 2: Amen, Herbert!

By Robert H. Lyon, P.E.

*Structural engineers consistently rank high in levels of job satisfaction and public respect. Through the experiences and testimonies of practicing engineers, both past and present, this series of articles celebrates the joys and satisfactions of our profession. From this collection of personal accounts, sources of career satisfaction are identified and examined. Obstacles are also identified which can impede our level of job satisfaction. These observations are used to formulate keys for improving, advancing and uplifting the structural engineering position and its personal rewards. Whether an idealistic young professional or an experienced engineer in need of a career re-charge, reclaim the pleasures that make structural engineering a great profession!*

What you think, what you believe, what you love... Your innermost senses can be so abstract and yet so real; so very vital, but difficult to communicate to others. If you are like me, you probably remember a time when you wanted to shout, "What he said!" after hearing someone express a concept or feelings that you yourself had been unable to articulate.

Recently a colleague drew my attention to an article written almost sixty years ago by Herbert Hoover, the engineer who became the 31<sup>st</sup> President of the United States. His words resonate strongly with my own sentiments toward my chosen field.

*"Engineering is a great profession. There is the satisfaction of watching a figment of the imagination emerge through the aid of science to a plan on paper. Then it moves to realization in stone or metal or energy... It elevates the standard of living and adds to the comforts of life... To the engineer falls the job of clothing the bare bones of science with life, comfort and hope... The engineer himself looks back at the unending stream of goodness that flows from his successes with satisfactions that few professions may know... And the verdict of his fellow professionals is all the accolade he wants... This is the engineer's high privilege."*

Every day, Hoover's ideals are lived out at the workstations of modern engineers. Technologies may have changed, but inclinations and affections have not.

### **Engineering is a great profession...**

We structural engineers do not work as individuals, but as teams, part of a profession engaged in a good and noble cause. Our common purpose and the respect and trust of our colleagues make our working environment great. What we do is worthwhile, and we enjoy the camaraderie of like-minded peers.

### **There is the satisfaction of watching a figment of the imagination emerge through the aid of science to a plan on paper...**

We relish our creative instincts. Our finished product starts with an idea. Through the process of thinking, tinkering, vetting, discussing, revising and checking, our vision becomes a tangible plan. We take the trusted foundation of our structural mechanics principles and constantly apply them to new and different challenges daily. Our joy in is in the journey!

### **Then it moves to realization in stone or metal or energy...**

Our satisfactions do not stop with a concept. Our ideas become plans that become reality. Most of the frustrations we encounter wither away when we see a building or bridge completed and operational. We look back with pride at the cross-disciplinary commitment that overcame obstacles and problems to pave the way to success. We see tangible evidence of our lasting contribution to our environment that affirms our callings. We finish our projects with a collective sigh, "Well done!"

### **It elevates the standards of living and adds to the comforts of life... To the engineer falls the job of clothing the bare bones of science with life, comfort and hope...**

Yes! Structural engineering is a valuable endeavor. We are to be structural engineers for good. Whereas there is some truth that it is usually not the engineer's role to identify and define the projects, but rather to carry them out, our vision and source of satisfaction is that we know and subscribe to the value of our efforts. Much like the mason working on a building who is asked the question, "What are you doing?" our answer can either be "laying bricks" or "building a cathedral." By taking a step back and looking at the good and productive purposes of our work, we are reminded of the significant roles we play in the betterment of society.

### **The engineer himself looks back at the unending stream of goodness that flows from his successes with satisfactions that few professions may know...**

Did you catch that? This is the President of the United States, who looks back on his career and identifies engineering as the profession that provides satisfactions that few others can. My dad told me he supposed there were structural engineers who were unhappy in their work, but he couldn't remember meeting one.

I recently performed an informal survey of my colleagues regarding the source of their career satisfaction as structural engineers. Generally, they fell into two broad categories: 1) The intellectual satisfaction that comes from "figuring things out," successfully devising solutions to difficult problems or creatively applying fundamental principles in new ways; and 2) The satisfaction of seeing their work product become reality and positively impact our society. Hoover's reflections seem to capture these same – seemingly inherent – fundamental values.

### **And the verdict of his fellow professionals is all the accolade he wants...**

I like this one, and have found it to be true. With few exceptions our satisfaction is not dependent upon public recognition, a rather unique concept for this day and age. Knowing what does drive us helps us understand why this professional respect is all we need. There remains a place for those who skillfully and creatively labor in humility and anonymity, providing responsible services that the public can trust.

Herbert Hoover's reflections have helped me better understand why I love this profession. He has articulated the joy that I have

experienced in practicing structural engineering for the past thirty years and renewed my appreciation of the opportunities that await me each day.

*This is the engineer's high privilege.*

Amen, Herbert.

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