DEPARTMENT OF TRANSPORTATION

NEWS

4.97

TAD-494

OFFICE OF THE SECRETARY

WASHINGTON, D.C. 20590

60-S-72

SECRETARY VOLPE'S REMARKS TO THE WENTWORTH COLLEGE OF TECHNOLOGY COMMENCEMENT EXERCISES, WATSON HALL AUDITORIUM, WENTWORTH INSTITUTE, BOSTON, MASSACHUSETTS, SUNDAY, JUNE 18, 1972, 1:30 p.m.

It's a great honor for me to address this graduating class -- the first to receive the degree of Bachelor of Science in Engineering Technology. I come to this commencement with many warm emotions. I recall my own youth here as the son of Italian immigrants -- a young boy who trudged through Boston's snow and slush with books and drafting tools to a small technical school called Wentworth Institute. I remember long classroom hours during which I thought I'd never make hide nor hair out of what the professor was trying to explain. I remember falling asleep over textbooks in my Mother's front room -- while my neighborhood pals were out on the town.

I also remember some years later -- about 20 years ago -- when I served as what you might call one of the "Young Turks" on the Board of Trustees of Wentworth -- and we were searching for a new president. We were searching for a man of vision, of skill, of ability to lead our school in a new era of modern education.

We found that man in H. Russell Beatty, and since 1953 he has given fully of his intellect, his drive, and his integrity as Wentworth grew both in size and stature.

- more -

Little did the Trustees know then that we were selecting a man who not only would lead Wentworth Institute, but also a man whose dedication and vision would help establish a second great school here -- the Wentworth College of Technology. I am delighted to call him my friend. Mrs. Volpe and I cherish greatly our long friendship with Alice and Russ. They are wonderful people.

You are the first graduating class whose degrees reflect the wisdom and insight of Russ Beatty and of this new college. And I am more than proud to be your commencement speaker.

You carry away from these ceremonies the title "Engineering Technologist". And with it you also carry a great responsibility. As Secretary of Transportation I have spent the last three and one-half years wrestling with the technological problems associated with mobility. And I can tell you with all the certainty I possess that American transportation is on the brink of a technological revolution. We are looking to you -- the young engineering technologists -- to give that revolution direction.

When President Beatty inaugurated this College in November of 1970, he said "The engineering technologist is hardware oriented. He makes improvements in the hardware by studying it in relation to its function. He is interested in the design of products to sell in competitive markets."

We need that kind of person in transportation today. We need people who believe in those principles and who understand their value.

Americans today are faced with many frustrating problems -- not the least of which are related to technology. We have cars that pollute, trains that won't run, planes that are noisy, washing machines that break down, elevators that stick, and computers that seemingly complicate our lives. But the answer to these frustrations does not lie in the technological denunciation we hear so often today. Rather it lies in improvement -- in making a poor machine good, a good machine better. It lies in making that computer work <u>for</u> us -- to lift peoples' burdens, to make their work easier, to make <u>their</u> lives more pleasant.

And the responsibility rests with you -- the engineering technologists -- to make those improvements; and to demonstrate their value to the world. Social Scientist Peter Drucker points out that "To overcome the problems success always creates, one has to build on that success." And therein your challenge lies. We need builders who can take a functional approach to problem solving.

We have seen this need many times in the field of transportation. We know, for example, that at the rate this Nation is growing we will have to double our transportation capacity by 1990. Yet that capacity will not come from twice as many cars, planes and trains. It will come from radical new technologies that are now ready for applications, and it will come from evolutionary changes in existing transport systems -- changes hammered out by engineering technologists working in government, private industry, and occasionally somebody's garage or machine shop.

This is the technological development process that has sustained America's growth. And those who would turn their backs on technology -- those who yearn for the life of yesteryear -- have a short memory indeed. They forget that 150 years ago the male life expectancy was only 38 years. The work week was 72 hours. Average pay was 275 dollars per year. And a distance of 20 miles comprised a weekend trip.

I have no nostalgia for those dreary days. Rather, I look to the future. I look to the kind of engineering improvements that will reshape clanging commuter trains into quiet automated rapid rail systems; an aviation system that will move people through the terminal as efficiently as it does through the skies; buses that are clean and comfortable; automobiles and highways that exist harmoniously with the environment; and hundreds of other functional improvements necessary to upgrading the quality of life. And furthermore, I look to these improvements as a natural outgrowth of your graduation today.

Ralph Waldo Emerson once wrote that "The secret of education lies in respecting the pupil." I would carry that thought one step further. The secret of life lies in respecting each other -- in having confidence in our institutions and our fellow man. I have that kind of confidence in the Wentworth College of Technology and its first graduating class. And I have great respect for the talent you are about to apply to worldly problems.

In the field of transportation, it is that respect and confidence in you that allows us -- the older generation -- to plan for improved mobility in America. We know that what is started today will be continued and refined tomorrow -- by this graduating class and others to follow.

As I visited the exhibits at TRANSPO 72, our International Transportation Exposition which ended only two weeks ago, I stood in awe of the new technology on display. Not just because of its complexity or its innovative characteristics, but also because of the confidence it represented in future generations. I joined more than one and one-quarter million people in viewing tracked air cushion vehicles, the so-called "People Movers", experimental safety cars, new electronic guidance and control systems, and a host of other dramatic pieces of hardware. But what we did not see -- what we took for granted -- were the refinements, the continued improvements, the complicated support systems, that will be required for each of those developments in the years ahead.

We take those future achievements for granted because of confidence in you -- confidence in your ability and in the principles you have learned at home and in this school. In the years ahead you will have periods of grumbling and depression in your lives. We all have them. I ask only that you remember our unseen and often unspoken confidence -- and let it buoy your spirits in order to continue your daily work.

Too many speakers on too many platforms in recent years have denigrated the rewards of decent men doing decent work. And they have overlooked the daily struggles and hardships that are so much a part of our existence. I object to those speeches because they deny the fulfillment and satisfaction I have known as a contractor, as Governor, as a public servant. And they deny the great sacrifices and contributions of our parents, our friends and our families in building a better life for themselves -- and a better world for others.

I choose to take a different posture. I commend you all to diligence and hard work in attaining personal, family, community, and national goals. Right here in Boston we have engineers, scientists, engineering technologists, and others working daily to improve transportation. They are part of what used to be the N-A-S-A Electronics Research Laboratory and is now the Transportation Systems Center at Cambridge. This is a research and technology facility that is applying space technology systems to earthbound mobility problems. They are working on projects that will modernize our railroads, protect the environment, improve both passenger and goods movements, and increase capacity in all modes of transportation.

But first of all, they are decent people doing decent work that they believe in. And I am most proud of their accomplishments.

I believe young people today need work that they can believe in. But I also think that young people need to believe in their work. They need to take a job, work at it, struggle with it -- then either succeed or discard it and start something else. But don't sit back at the beginning waiting for Utopia, waiting for a corporate vice presidency, waiting for someone to drag achievement out of you. Get in there and do battle with your job -- with yourself.

Too often in today's structured world we don't give young people the opportunity to succeed or to fail. The establishment, the corporation, the government agency -- too often absorb mistakes rather than exposing them. And individual successes are buried in the same process. I offer these observations not as condemnation, but as a challenge to our generation, to give your generation a better break.

I mention it also as a challenge to you -- a challenge to push yourselves into success or failure, to know your own capacities, to know the unequalled joy of doing more than you think you can do. Demand the best of yourselves and your associates. And learn from defeat.

Oscar Handlin, the Harvard history professor, addressed the graduating class at Brooklyn College a week or so ago. And his closing words struck me as being particularly appropriate. He said, "No one can be certain in advance that he can measure up to the challenges. But the true failures are those who resent the test."

So I say do not flinch from being tested. As you move to the world of business and trade, as you go out and start to earn an income -- to earn compensation for your skills -- never flinch from tackling any job that is assigned to you. Even if it is sweeping floors (Which I feel certain none of you will be doing). But if this should be your lot, even temporarily, make sure that you sweep those floors cleaner, better, and faster than they've ever been swept before. If you do that, you'll find that you won't be sweeping floors for long. Your superiors will recognize that you are a go-getter, and you'll be given responsibility commensurate with your zeal.

I remember back in 1930, when I finished up at Wentworth Institute. Out of all the graduates, only 2 of us were fortunate to get a job in construction or engineering. Not that I started at the top! I started as a combination timekeeper and assistant engineer on a construction job -- and they paid me the princely sum of 25 dollars a week! For my part, I put in some 70 to 80 hours each week. And after a year they gave me a five dollar raise.

And then when there was a bank "Holiday" in 1933, you just couldn't find any kind of job anywhere. So that's when I started my own business -- 10 days after the banks closed.

Well, we've come a long way since then -- even without a Bachelor's Degree from a four-year college. And things may be a little tough today, but really -- they are nothing like the early 1930's. Today the opportunity is there for those who are willing to work, willing to sacrifice. Opportunity waits for those who -- as Professor Handlin pointed out -- do not resent the test. And there will be many opportunites to help solve the problems of grappling with tomorrow's technology. And I urge you to take advantage of them.

I wish you Godspeed in all the years ahead.

####

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE SECRETARY
Washington, D.C. 20590

Official Business

POSTAGE AND FEES PAID
DEPARTMENT OF
TRANSPORTATION
DOT 518

FIRST CLASS