

SELF-REGULATION OF THE INDOMITABLE SPIRIT



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President

THE INDOMITABLE spirit of humankind has perhaps never been so much in evidence as it is today, when men and women in science and engineering are in the process of pushing back the boundaries of understanding of an expanding universe, and others are intent on obtaining individual freedom and self-governance for their nations.

Recent facts exemplifying the operation of this indomitable spirit have been shown through scientific findings of the Hubble Space Telescope, calling into question the existence of our planet Earth as the sole supporter of life in the universe, and by the human spirit's revolutionary zeal for freedom and self-determination, now in progress throughout the Arab world.

In our own engineering profession, we must respect the members' right

to elect their own president and the right to self-declaration of their areas of competence to practise. Both these rights have served us well for 90 years. As in the other struggles, these issues focus on the same freedom as is required to use our imaginations to explore the frontiers of applied science with our God-given talents.

This paradox of potential over regulation struck home recently in the field of education of young students, when I engaged in a discussion on the subject with one of my sons, who informed me of a happening in one of his Grade 6 mathematics classes.

Right in the middle of the class, out of the blue, one of his students asked why a little grasshopper could jump so high and so far in relation to its body size. Rather than dismiss the question as a disruptive influence in the midst of the lesson he was conducting, he regarded it as a genuine "teaching moment" or, as some call it, a "eureka" moment, for the young person and the class.

Obviously, at the time, the boy was thoughtfully exploring, in his own way, the boundaries of his understanding of mass and force. I do not know the outcome of the conversation that took place, whether it concerned the rate of metabolism of the insect, the conversion of a vast amount of energy to mechanical power in a short period of time, or the geometry of the insect's legs.

Suffice it to say, the incident brought forth the inquisitive nature of the human mind, whether applied to a fanciful question such as this, or as when we engineers seek inspiration for a conceptual design of an efficient opposed piston engine or, say, the development of a means to harness atmospheric scalar waves and the Tesla switch to provide an almost instantaneous charge for a battery capable of running an automobile or an electric generator.

Of all professionals, we engineers must be free to think, to imagine and to contribute to a world of ever-expanding possibilities. This

is our nature; this is what we have been educated to do; this is our job! While there will be failures in the process, which I dare say most of us have experienced, we must push the boundaries of self-realization while pursuing the integrity of our designs, making the outcome safe for public consumption.

As we start my new term as president together, I would like, if you agree, to put the future education and experience training of our engineers on the front burner.

We must continue to develop new disciplines, write the required new scopes of practice and, together with our universities and industrial partners, bring our collective experience to bear on the selection of new subjects to be taught, new paths of learning and different experience requirements for licensure.

For those who are concerned about the highest and best functioning power of our profession, please write to me at daveadams@bmts.com with your thoughts and recommendations for the incorporation of new science in the engineering curriculum, together with your recommended experience requirements. We at PEO, your regulator, wish to encourage not stifle the indomitable spirit of our profession while still protecting and serving the public.

We really need your input to succeed. Σ