

THE ENGINEERING BRUNSWICKAN



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Faith of the Engineer

I AM AN ENGINEER. In my profession I take deep pride, but without vainglory; to it I owe solemn obligations that I am eager to fulfill.

As an Engineer, I will participate in none but honest enterprise. To him that has engaged my services, as employer or client, I will give the utmost of performance and fidelity.

When needed, my skill and knowledge shall be given without reservation for the public good. From special capacity springs the obligation to use it well in the service of humanity; and I accept the challenge that this implies.

Jealous of the high repute of my calling, I will strive to protect the interests and the good name of any engineer that I know to be deserving; but I will not shrink, should duty dictate, from disclosing the truth regarding anyone that, by unscrupulous act, has shown himself unworthy of the profession.

Since the Age of Stone, human progress has been conditioned by the genius of my professional forbears. By them have been rendered usable to mankind Nature's vast resources of material and energy. By them have been vitalized and turned to practical account the principles of science and the revelations of technology. Except for this heritage of accumulated experience, my efforts would be feeble. I dedicate myself to the dissemination of engineering knowledge, and especially to the instruction of younger members of my profession in all its arts and traditions.

To my fellows I pledge, in the same full measure I ask of them, integrity and fair dealing, tolerance and respect, and devotion to the standards and the dignity of our profession; with the consciousness, always, that our special expertise carries with it the obligation to serve humanity with complete sincerity.

From Engineers' Council for Professional Development.

The foregoing admittedly is idealistic, but only by setting a certain ideal standard is it possible to attain anything near perfection. Like the Hippocratic Oath to a medical graduate, the Faith of the Engineer may stand as a guide for the engineering graduate. There is no doubt that human nature will keep the engineer from mastering thoroughly the ideologies outlined in his credo. There is plentiful evidence to support this, evidence which is sometimes publicized to an extent which can only harm the reputation of the engineer. Unlike those in two other leading professions, medicine and law, engineering malpractices are usually brought to the public eye by the press and radio because of their relative importance to so many people.

Empirical and derived formulae which have been tested, tried, and proved since the practical beginnings of engineering can make no mistakes. The mistakes are the responsibilities of the man, the engineer. But these must be mistakes, they must not be unscrupulous deeds. To prevent the malpractices the engineer must have instilled in him a desire to do a 'service to humanity' as quoted from the foregoing. By studying and understanding and practicing this credo, or any other worthy guide, the engineer can hope to imbue within himself a true desire to serve humanity and as a result to become proud of his profession.

In order to establish himself firmly as a professional the engineer must acquire first of all the status of a professional. It is pertinent to notice that our professionals, such as the clergyman, the architect, the medical doctor, have as their primary aim the improvement of mankind's living conditions both physically and spiritually. Apparently, then, to acquire the status of a professional it is first necessary to devote one's efforts towards the betterment of humanity. This in conjunction with his contemporaries in other professional fields the engineer must strive to serve humanity and make this world a better place to live in. He can accomplish this by keeping in mind the Faith of the Engineer. In this way he will earn his title as professional and eventually become universally recognized as such.

Esprit de Corps A Need

This is engineering week. To some that means a Wassail, to others the Formal Dance, but to a number of under-graduate engineers this week is no different from any other.

It is the hope of the Engineering Society that in this edition of the Brunswickan the under-graduate engineer may be made aware of the fact that there is more to engineering than knowing moduli constants and LRC circuits. There is what is known as pride in one's profession. After reading the report by John Fisher in this issue, take stock of your own "esprit de corps".

To all engineering students, and others where possible, we extend the invitation to join with us in celebrating Engineering Week.

H. S.

Engineering, A Profession

By Dr. A. F. Baird
Dean of Applied Science

It is in recent years only that Engineering has become a profession. This is a recognition of the fact that our applications of science in this modern world have become so tricky and involved that the handy man of a hundred years ago is entirely inadequate. In medicine years ago the doctor was one who was skillful in bleeding. The sign of their skill is still retained in the red ribbon in the barber's pole. His place today is a bit different, but exemplifies no greater change than that required in Engineering knowledge.

One result of this has been the establishment of Associations of Professional Engineers. There are eight of them in Canada, one in each province excepting Prince Edward Island and Newfoundland. They are in each instance groups of engineers who have been given legal powers by the government of the Province concerned, and determine who may practice engineering legally and call himself an engineer. This should be known by all students taking engineering courses. Even after you have completed your engineering courses and are graduated, before you may undertake responsible engineering practice on your own, you must have applied for admission, been accepted, and registered as a Professional Engineer in the Province where you wish to practice.

The New Brunswick Act which came into force about 1920 is in the main similar to the Acts in force in the other Provinces. It should be noted that the associations are not unions, and their applications to the various legislatures were not based on any claims for protection of its own members, but from the standpoint of the protection of the public.

I have said that the Engineering Acts in the different provinces are, in the main, similar. There does exist still some differences regarding entrance requirements and training to qualify. In 1935 the Associations agreed to set up a National Council, called the Dominion Council of Professional Engineers, and on which each association is represented. It has no legal status but is simply a co-ordinating body charged with the responsibility of smoothing out differences.

(Continued on Page Seven)

Maintain Your Enthusiasm

By Dr. E. O. Turner
Dean of Engineering

In times of stress and uncertainty it is reassuring to contemplate any evidence of good cheer. At this time young Engineers in particular should be greatly encouraged to know that their services will be vitally needed, and very much in demand in the years immediately ahead. Surveys have been carried out by the E.C.P.D. (Engineers' Council for Professional Development), the Engineering Institute of Canada, and the Department of Labour at Ottawa, and all reports indicate a distinct shortage of trained Engineers as early as 1953. These surveys were started B. K. (before Korea) so it is probable that national defence requirements will make the situation even more acute. Even last Fall it was impossible for us here at U.N.B. to find available graduates for good openings at that time.

Whatever is ahead for us therefore, will require all of our efforts. During last summer I encountered an infectious bit of enthusiasm, presenting a very good morale builder for us all. For many years I have been a member of the Oak Hill Country Club near Boston. It is our custom to invite once each year, the members of the Boston Red Sox Baseball Club of the American League, for luncheon, dinner and a round of golf at the Club. It was my good fortune last summer to be matched with Bill Goodman, leading batter of the American League, and probably the finest all around player of his generation. As many of you know, Bill played every position for the Red Sox last season excepting the two battery positions, an unprecedented feat. In the course of our round, which by the way he insisted on extending to 27 holes, I asked him what position on the team he really preferred. In his soft southern drawl he replied, "Ah don't care where Ah play so long as we win". This young fellow, weighing only 158 pounds, saw three years tough service in the South Pacific during the last war, and even now has trouble gripping his bat, due to a jungle infection in his hands. But as attested by his reply, no-one ever possessed a finer team spirit.

Whatever calls are made upon us in the days ahead, if we follow

Bill's simple and self-sacrificing formula for generous service, we should have no trouble in maintaining our esprit de corps.

Letters To The Editor

An Open letter to the Students:

The Editor of the Brunswickan has resigned. In an explanation tendered with his resignation to the Students' Representative Council last week, Mr. Warner made it clear that pressure of studies made the move absolutely necessary. The paper is at present without an editor.

We, the students, are faced with this question: Is the Brunswickan worthy of our continued support? We have supported it with funds from the S.R.C., from your levy, but it has not been supported by enthusiastic student participation. The students have been almost willing to read the paper, but practical contributions have been in large degree lacking, or wholly individual.

The case stated plainly is this: The students as a body are very willing to have a student paper, but not to work for it.

Are we going to continue with the Brunswickan?

The issues this year have been of a high quality; but that quality has been achieved by the labour of a much overworked minority. The Brunswickan does not only require a new editor but an entirely new and enthusiastic editorial staff. The position of editor is one of considerable status, but implies much responsibility. With renewed student interest, however, the duties of an editor need not be overly weighty, nor need the quality of the paper lapse.

It is not an exaggeration to say that this is a very real crisis. If an editor is not procured within the next week, the future of the Brunswickan for the remainder of the college year is non-existent. Although it will certainly be resumed, for it is in many respects indispensable, it will become increasingly difficult to re-institute it as time passes.

The college community becomes decidedly inferior in the absence of a student publication. We are convinced that our campus is worthy of a weekly, although at many times it may appear that proper persons to publish it are lacking. The University of New Brunswick has supported a student paper longer than any other Canadian University, as our mast-head announces.

There will be a meeting open to all students to consider the facts presented in this letter. It amounts to this: Do you as students, want the Brunswickan to remain a part of our student activities? The meeting will be held Wednesday at 2 p.m. in the Geology lecture room of the Forestry Building. Any applications for the position of Brunswickan editor may be given to Jim McAdam, vice-president of the Students' Representative Council, or presented at this meeting.

The Brunswickan Committee,
The Students' Representative Council.

The Student Engineer

I stood on the bridge at midnight,
A simple Pratt truss span,
My fingers were held fixed ended,
In the clasp of my dear love,
Anne.
While I there surveyed her
(Ah but my love was fair)
A diagonal wind load suddenly
Caused tensile stress in her hair.
I said, "Wilt thou measure with me
The chart of Life's unknown
road?"
And my heart by reciprocation
Set up an impact load.
"Thou art the illumination of my
life
I pray thee do not dim it"
The joy when she softly whispered
"Yes"
Exceeded my elastic limit.
—Adapted from the Minnesota
Technolog.

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Editor's Note:
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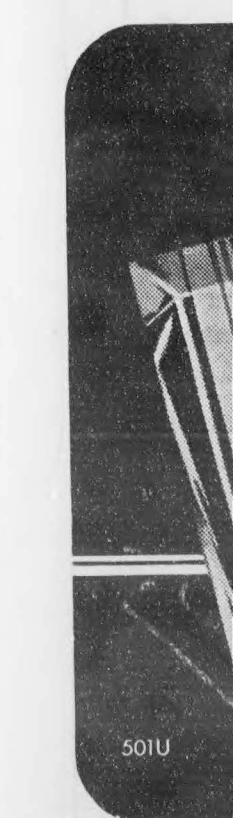
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