

APEO - LUNCHEON ADDRESS

OVER THE PAST FEW YEARS, APEO, THROUGH ITS LONG-RANGE PLANNING COMMITTEE, ADOPTED THE FOLLOWING FUNDAMENTAL BELIEFS:

PURPOSE: THE ASSOCIATION EXISTS AS THE SOLE AGENCY ESTABLISHED TO REGULATE THE PRACTICE OF PROF. ENG. IN THE PROVINCE OF ONTARIO IN ORDER TO PROTECT AND SERVE THE PUBLIC INTEREST.

OBJECTIVES:

1. TO GOVERN THE PROFESSION THROUGH SELF-ADMINISTRATION AND TO ENSURE AND DEMONSTRATE TO THE PUBLIC RESPONSIBILITY, ACCOUNTABILITY AND COMPETENCE OF REGISTERED MEMBERS.
2. TO ENHANCE THE ENGINEERING CONTRIBUTION TO SOCIETY, TO ACHIEVE THE MOST EFFECTIVE UTILIZATION OF AVAILABLE TECHNICAL SKILLS AND TO ENSURE ACCESS TO THE PROFESSION BY ALL WHO CAN QUALIFY.

THE TRADITIONAL ROLE OF OUR PROFESSION'S LICENCING BODY HAS BEEN FOCUSSED ON THE FIRST OBJECTIVE, THE SECOND IS EMERGING AS AN IMPORTANT OBJECTIVE THAT RECENT COUNCILS HAVE BEGUN TO RECOGNIZE AS A PARTICULAR OBLIGATION THAT

WE, AS PROFESSIONALS, HAVE TO OUR PROVINCE, OUR COUNTRY AND TO THE PUBLIC IN GENERAL.

TODAY I WOULD LIKE TO COVER A FEW TOPICS THAT WILL BE OF CONCERN TO ALL OF US OVER THE COMING YEAR. WE HAVE A FULL YEAR OF EVENTS AND PLANS RELATING THERETO TO LOOK FORWARD TO - IN PARTICULAR THE NEW ACT, AND ALSO SOME ISSUES SURROUNDING ENGINEERING EDUCATION WHICH WILL BE OF CONCERN TO THE PROFESSION. BUT FIRST, TO PUT THINGS INTO PERSPECTIVE - A FEW STATISTICS.

AS OF DECEMBER 31, 1981, THERE WERE 48,041 MEMBERS ON REGISTER, REPRESENTING A 1,561 NET INCREASE OVER THE DECEMBER, 1980 FIGURE. BY 1984, OR POSSIBLY SOONER, WE SHOULD HAVE OVER 50,000 MEMBERS. LAST YEAR WE RECEIVED 4,241 APPLICATIONS AND HAVE ADMITTED 1,999. LAST YEAR WE ISSUED 1,777 CERTIFICATES OF AUTHORIZATION, AND HAVE DESIGNATED A TOTAL OF 1,599 CONSULTANTS AND JUST OVER 300 SPECIALISTS. AS A MATTER OF INTEREST, THE APEO'S ANNUAL BUDGET NOW IS APPROXIMATELY \$4.2 MILLION, AND THERE IS A PERMANENT STAFF OF ABOUT 60 PERSONS, 40% OF WHOM ARE PROFESSIONALS OR SPECIALISTS.

THE EXPECTED MAJOR EVENT OF THE YEAR WILL BE THE NEW ACT, THE FIRST DRAFT OF WHICH WE MAY RECEIVE AS EARLY AS MID-YEAR. IT IS MY INTENTION THAT THIS ACT RECEIVE THE MOST THOROUGH AND EXHAUSTIVE REVIEW BY THE WIDEST POSSIBLE REPRESENTATION OF THE PROFESSION. IN ORDER TO DO THIS EFFICIENTLY, IT WILL BE

NECESSARY TO MAKE IT AS EASY AS POSSIBLE TO UNDERSTAND THE CHANGES FROM THE EXISTING ACT, THE REASON FOR EACH CHANGE AND ITS EXPECTED IMPACT.

LAST YEAR, PRESIDENT KOBELAK WISELY SET OUT A SCHEDULE OF EVENTS THAT WOULD TAKE PLACE FOLLOWING RECEIPT OF THE DRAFT ACT. I WILL GIVE YOU THE HIGHLIGHTS OF THIS PLAN SLIGHTLY MODIFIED THAT I PLAN TO IMPLEMENT:

ON RECEIPT OF THE DRAFT ACT, D-DAY, IT WILL BE DISTRIBUTED WITHOUT COMMENTARY TO MEMBERS OF COUNCIL, CHAPTER CHAIRMEN AND KEY COMMITTEES INCLUDING THE JOINT PRACTICE BOARD, LEGISLATION COMMITTEE, PRACTICE AND ETHICS COMMITTEE AND PROFESSIONAL PRACTICE COMMITTEE WITH A COVERING LETTER DESCRIBING THE TIMING OF EVENTS.

WITHIN 4 WEEKS OF D-DAY, THE DRAFT ACT WILL BE REVIEWED BY STAFF AND LEGAL COUNSEL AND A SPREADSHEET WILL BE PREPARED WHICH LAYS OUT AS CLEARLY AS POSSIBLE, SUBJECT BY SUBJECT, THE NEW ACT, THE CORRESPONDING PORTION OF THE OLD ACT OR REGULATIONS TOGETHER WITH THE REASON AND SIGNIFICANCE OF ANY CHANGE. THERE ALSO WILL APPEAR ON THE SPREADSHEET PRELIMINARY EDITORIAL COMMENTS PERTAINING TO THOSE CHANGES THAT WE MIGHT WISH TO INCLUDE IN OUR RESPONSE TO THE GOVERNMENT.

WITHIN 5 WEEKS OF D-DAY, THIS REVIEW WILL BE DISTRIBUTED TO THOSE THAT RECEIVED THE ORIGINAL DRAFT, AND PUBLISHED IN DIMENSIONS (A SPECIAL ISSUE MIGHT BE NEEDED) WHERE A REQUEST WILL BE MADE FOR RESPONSE FROM MEMBERS.

WITHIN 10 WEEKS OF D-DAY, COUNCIL WILL HOLD A SPECIAL WORKSHOP ON THE NEW ACT, AND WE WOULD ENCOURAGE SPECIAL CONGRESSES TO BE HELD FOR THIS PURPOSE TO COORDINATE INPUT FROM THE CHAPTERS. THIRTEEN WEEKS AFTER D-DAY, COUNCIL, CHAPTER, COMMITTEE AND MEMBER INPUT WILL BE REVIEWED IN ORDER TO FINALIZE OUR RESPONSE TO THE GOVERNMENT: AND BY 14 WEEKS, SAY 3 MONTHS, WE WOULD HOLD A COUNCIL MEETING TO APPROVE OUR RESPONSE TO THE FIRST DRAFT. THIS SCHEDULE MAY REQUIRE SOME MODIFICATION IF IT SPANS THE SUMMER MONTHS, THE CHRISTMAS SEASON OR OUR NEXT ANNUAL MEETING.

I WON'T DWELL ON THE ISSUES HERE. WE HAVE SEEN THE THIRD DRAFT OF THE ARCHITECTS ACT AND HAVE COMMENTED TO THE ATTORNEY GENERAL, AND OF COURSE WE HAVE SOME UNDERSTANDING OF WHAT TO EXPECT, HAVING MADE OUR OWN SUGGESTIONS LAST SUMMER. I CAN ASSURE YOU WE HAVE OUR WORK CUT OUT FOR US, AND A VERY BUSY 3-MONTH PERIOD SOMETIME AHEAD.

ANOTHER ISSUE THAT IS COMING INTO THE FORE AGAIN IS ENGINEERING EDUCATION. BACK IN 1979 THE NATIONAL COMMITTEE OF DEANS OF ENGINEERING PREPARED A DOCUMENT "RESOURCES IN ENGINEERING FACULTIES" WHICH SHOWED THAT FINANCIAL SUPPORT PER STUDENT FOR ENGINEERING EDUCATION IN ONTARIO LAGS FAR BEHIND THAT AVAILABLE IN OTHER REGIONS OF CANADA.

APEO EXPRESSED INTEREST AND CONCERN, BUT WANTED POINTS IN THE REPORT TO BE CLARIFIED AND ASKED SPECIFICALLY FOR "HARD" DATA SHOWING EVIDENCE OF DECLINE IN THE QUALITY OF ENGINEERING GRADUATES.

THE RESULT WAS A REQUEST BY APEO TO THE COMMITTEE OF ONTARIO DEANS OF ENGINEERING (CODE) IN APRIL 1980 TO PREPARE A REPORT ADDRESSING THESE ISSUES. THE RESULT WAS A BRIEF TO APEO IN JUNE, 1981 ENTITLED "RESOURCE ALLOCATIONS TO FACULTIES OF ENGINEERING IN THE PROVINCE OF ONTARIO" PREPARED BY CODE.

WHILE THE REPORT COULD NOT SHOW A DETECTABLE DECLINE IN THE QUALITY OF GRADUATES, IT DID CONCLUDE THAT THE QUALITY OF ENGINEERING EDUCATION HAS DECLINED IN RECENT YEARS. IT POINTED TO THE SHORTFALL OF RESOURCES PER STUDENT COMPARED TO OTHER PROVINCES INCLUDING FACULTY, TEACHING RESOURCES AND LABORATORY EQUIPMENT. ALSO, IT IS WORTH NOTING THAT UNIVERSITY BUDGETS HAVE NOT GENERALLY KEPT UP WITH INFLATION IN RECENT YEARS.

FOLLOWING RECEIPT OF THE CODE BRIEF, COUNCIL HELD A TWO-DAY SEMINAR IN MUSKOKA LAST OCTOBER TO ADDRESS THIS MATTER AMONG OTHER EQUALLY VITAL ISSUES. THE RESULT WAS A LETTER FROM THE ASSOCIATION TO THE MINISTER OF COLLEGES AND UNIVERSITIES EXPRESSING CONCERN ABOUT THE DECLINE IN QUALITY OF ENGINEERING EDUCATION AVAILABLE TO ONTARIO STUDENTS. THE LETTER OUTLINED THE ROLE PLAYED BY THE CANADIAN ACCREDITATION BOARD IN MONITORING THE STANDARDS OF THE OVER 60 ENGINEERING PROGRAMS OFFERED IN ONTARIO, AND POINTED OUT THAT APEO HAS OFFERED FULL SUPPORT, INCLUDING FINANCIAL, FOR AN INCREASED LEVEL OF VIGILANCE REQUIRED BY CAB UNDER CURRENT CIRCUMSTANCES. THE LETTER APPEARS IN THE MARCH/APRIL 1982 ISSUE OF DIMENSIONS.

NO NEW PRESIDENT-ELECT SHOULD BE WITHOUT AT LEAST ONE MAJOR NEW ISSUE HE HOLDS IMPORTANT, AND I AM NO EXCEPTION. FOR SOME TIME NOW, I HAVE BEEN CONCERNED THAT WE DO NOT GET ADEQUATE FEEDBACK FROM EMPLOYERS ON THE QUALITY AND CHARACTERISTICS OF THE NEW ENGINEERS WE ADMIT INTO THE PROFESSION. BY THIS I MEAN THERE IS NO MECHANISM WHEREBY WE CAN GAUGE THE EFFICACY OF OUR ADMISSION CRITERIA. IT WOULD BE FOOLISH TO BELIEVE THAT NEW GRADUATES AND INDEED EXPERIENCED ENGINEERS ARE USED THE SAME WAY TODAY AS THEY WERE 10 OR 20 YEARS AGO. YET WE HAVE NO FEEDBACK MECHANISM TO HELP US DETERMINE WHETHER OR NOT OUR ADMISSION REQUIREMENTS REMAIN APPROPRIATE. WHILE IT IS TRUE THAT MANY THINGS DO NOT CHANGE - THE PRINCIPLES OF PRACTICE, THE CODE OF ETHICS AND THE BASIC SCIENCES UNDERLYING OUR TECHNOLOGY - THERE ALSO IS MUCH THAT DOES - THE TECHNOLOGY ITSELF, THE RATE AT WHICH RESPONSIBILITY IS LOADED ONTO NEW ENGINEERS ENTERING THE WORKFORCE AND THE EXPECTATIONS OF EMPLOYERS, NOT TO MENTION THE EXPECTATIONS OF ENGINEERS THEMSELVES.

THERE ARE SOME BASIC QUESTIONS I BELIEVE WE SHOULD SEEK ANSWERS TO. THEY INCLUDE THE FOLLOWING:

- IS MANAGEMENT THE PRINCIPLE DESTINY OF ENGINEERS HIRED BY INDUSTRY TODAY?
- WHAT LEADERSHIP QUALITIES ARE EXPECTED OF ENGINEERS, CAN OR SHOULD ADMISSION REQUIREMENTS REFLECT THESE?

- ARE CURRENT ACCREDITATION CRITERIA OF ENGINEERING PROGRAMS APPROPRIATE, AND TO WHAT EXTENT SHOULD EMPLOYERS OR USERS OF ENGINEERS INFLUENCE THEM?
- IS THE EXPERIENCE COMPONENT OF THE ADMISSIONS REQUIREMENT ADEQUATE, HOW CAN IT BE IMPROVED WITHOUT UNDUE ADMINISTRATIVE BURDENS?
- DO EMPLOYERS AND CLIENTS OF ENGINEERS WANT QUALITY SIGNALS FROM THE PROFESSION, AND IF SO, IS THERE A CASE FOR MULTIPLE GRADES OF MEMBERSHIP?

IN ORDER TO GAIN ANSWERS TO THESE AND SIMILAR QUESTIONS, I HOPE TO ORGANIZE AND CONDUCT A SEMINAR OF THE ONTARIO ENGINEERING ADVISORY COUNCIL, CHAIRED BY AN APPROPRIATE AND EMINENT ENGINEER FROM INDUSTRY, WHERE WE WOULD ASSEMBLE KEY MEMBERS OF THE EMPLOYER AND CLIENT COMMUNITY TO ADDRESS THESE ISSUES. THE TIMING OF THIS EMPLOYER ASSESSMENT OF ENGINEERING GRADUATES WILL DEPEND ON WHEN WE RECEIVE THE DRAFT ACT WHICH OBVIOUSLY MUST TAKE TOP PRIORITY OVER OTHER DISCRETIONARY ACTIVITIES.

FINALLY, I HAVE TO KEEP EMPHASIZING THE GROWING IMPORTANCE OF THE NEED TO UNDERSTAND BETTER THE WAY ENGINEERS ARE UTILIZED BY EMPLOYERS. WE MUST SEEK WAYS FOR MORE EFFICIENT UTILIZATION BY BETTER UNDERSTANDING THE ROLE OF THE TECHNOLOGIST AND OTHER NON-ENGINEERS SUCH AS SCIENTISTS AND COMPUTER EXPERTS IN IMPROVING THE UTILIZATION OF ENGINEERS. EFFICIENT UTILIZATION AMOUNTS TO CONSERVATION, THUS IN EFFECT WE CAN CREATE A NEW

SOURCE OF ENGINEERS - THOSE WITH APPROPRIATE EXPERIENCE WHERE THE DEMAND IS NOT ACUTE. THE IMPACT ON BALANCING THE SUPPLY-DEMAND EQUATION IS TO LESSEN THE PRESSURE ON STREAMING NEW ENGINEERS OUT OF THE UNIVERSITY SYSTEM.

BEING A NATIONAL CONCERN, THE MAJOR TASK OF EXAMINING THE UTILIZATION QUESTION, FALLS UPON THE CANADIAN ENGINEERING MANPOWER COUNCIL. HOWEVER, BEING THE LARGEST PROVINCIAL ASSOCIATION BY A CONSIDERABLE MARGIN, APEO IS IN A POSITION TO MAKE A SIGNIFICANT CONTRIBUTION. A BETTER UNDERSTANDING OF THE ENGINEER'S ENVIRONMENT IN THE WORKPLACE IS NEEDED, AND THE OEAC SEMINAR ON THE EMPLOYER ASSESSMENT OF ENGINEERING GRADUATES WILL BE OUR STARTING POINT ON THIS IMPORTANT MISSION.

I REALIZE THAT THESE PROPOSED NEW INITIATIVES HAVE TO TAKE SECOND PLACE TO THE NEW ACT. HOWEVER IF THIS YEAR WE ONLY GET STARTED IN THESE DIRECTIONS, WHICH ARE ENTIRELY CONSISTENT WITH THE ASSOCIATION'S LONG-RANGE PLAN, WE WILL BE EMBARKING ON A COURSE THAT WILL LEAD TO A MORE RESPONSIVE PROFESSION, THEREBY ENHANCING ENGINEERING'S CONTRIBUTION TO SOCIETY AS SET OUT IN OUR OBJECTIVES.

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APRIL 23, 1982