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SECTION 1

SUMMARY

This paper deals with the concepts of professionalism and the implication of these concepts for the professional, who is an employee.

The 1979/80 Council of the Association of Professional Engineers, Geologists and Geophysicists of Alberta commissioned its Continuing Education Committee to prepare the paper.

The principal objectives of Council in commissioning the paper were:

- To produce a study document suitable for use by members-in-training prior to their admission to full membership in the Association.
- To produce a synoptic position paper, describing what APEGGA means when it talks about professionalism and professional conduct.

Professionalism and professional conduct are defined in terms of a profession and a professional.

A profession is an occupation characterized by high levels of technical competence and the degree the responsibility inherent in its practice. It requires the application of mature seasoned judgement to situations where many alternative actions are possible and where many persons can be significantly affected by the ultimate decisions taken.

A professional is a person recognized to have high levels of technical competence which are beneficially applied to those requiring his/her services. Conduct is characterized by responsible performance and dedication to service is evident in the application made of his/her special position of technical privilege. In the pursuit of professionalism, the individual's preservation of personal integrity and credibility are of the highest order.

When the Association of Professional Engineers, Geologists and Geophysicist of Alberta speaks of professional conduct, it means:

- Evident competence, responsibility and trustworthiness.
- The acquiring and maintenance of technical expertise.
- The beneficial application of this special expertise in the service of others.
- The responsibility to act with mature and seasoned judgement so that the maximum benefit will accrue to society generally.
- The self-regulation of our fraternity, association and peers so that we are always

seen to merit societal trust.

The paper identifies the importance of the understanding of professionalism in today's business environment. In addition to defining professionalism, it:

- discusses the impact of occupations,
- describes the characteristics and responsibilities of a professional, and
- identifies the principal dilemmas and problems of the professional, who is an employee.

Some highlights of the paper are:

- Professionalism is a quality control system characterized by service to others, wherein the quality of service is controlled by the profession as distinct from industrial or governmental control.
- The professionalism of occupations is directly related to the impact of the occupation's services and the level of societal trust merited by the professionals.
- The principal characteristics of the professional which, if present in an individual, will result in high levels of competent service to society, are:
 - Recognized expertise.
 - A set of attitudes which commit the professional to:
 - a willingness to assume responsibility.
 - an interest in social and economic aspects of his/her profession.
 - integrity.
 - credibility.
 - expanding and developing the expertise of his/her profession.
 - self-regulation through an association of professionals.
 - protecting the health, welfare and safety of the public.
- As most APEGGA members are corporate employees, it is a normal expectancy that this section of the membership will have the largest impact on society, commerce, and industry.

- While the paper defines the problems and dilemmas of the professional working as an employee of an organization, the obvious action must be the institution of training for the development of mature attitudes. Such training would supplement technical considerations with social and economic considerations and the techniques necessary to communicate with public and corporate bodies.

The ultimate objective of this action would be to equip the young professional with attributes to permit the individual to gain beneficial autonomy and professional recognition within the corporate and the public sector.

SECTION 2

INTRODUCTION

ORIGIN

Following a task force recommendation to Council in 1979, the Continuing Education Committee was requested to develop a paper to address three issues:

- the meaning of professionalism.
- what practical difference registration makes in the life of a member.
- what does the Professional Association do for me?

THE IMPORTANCE OF THE QUESTION

The confusion relating to the meaning of professionalism is not surprising. The definitions of a "a professional", "a profession" and "professionalism" are vague and ill-defined. One thing, however, is clear. Contemporary usage of the words "profession", "professional" and "professionalism" indicate a perception that prestige and status are indicated by these words.

Nearly every occupational group applies these words to itself and strives to emulate the actions and characteristics of "the professions".

The concepts of professionalism do have importance and produce positive results if there is a clear understanding of the full meaning.

Therefore, definitions need to be set out so that the members entering the profession and the Association may have guidelines for their early understanding of the concepts. This is the threshold from which "their professionalism" can develop.

PROFESSIONALISM AS A QUALITY CONTROL SYSTEM

It is APEGGA's view that professionalism can best be defined as a "quality control" system. In addition to the professional system there are other systems whereby services of occupational groups are maintained above certain pre-determined minimum quality levels (see the following section on Quality Control Systems).

The quality control system resulting from professionalism elicits the peak of responsibility and discipline from the individual. The essence of a profession, self-regulation, is recognized by the governments who, by virtue of their confidence in "the profession," have vested regulation of professional matters in "the profession".

This self-regulating aspect is the essential hallmark of the professional quality control system and is probably why other occupational groups strive to emulate the actions and characteristics of "the professions".

The professional system reflects a commitment to decentralization of authority based on acceptance of responsibility. It protects the individual practitioner who accepts the responsibility of self-governance. It protects the society to which the individual professional provides services and it encourages pride of workmanship, productivity, individual responsibility, self-discipline, ethical standards and concern for society and the public interest.

QUALITY CONTROL SYSTEMS

Control systems can be classified as formal or informal. These general classifications can be divided further into government, professional association, employer, unions and voluntary associations or societies. Thus, there are the following systems:

- Formally set up by an Act of the Legislature
 - Governmental
 - Professional Association

- Informally set up
 - Employers
 - Unions
 - Voluntary Associations or Societies

Formal Administration

In the FORMAL system an Act is passed by government vesting the administration of the control system for an occupational group directly in government.

Under governmental administration, it is the government which sets entry standards, standards for competence, ethical practice, and carries out enforcement and discipline.

Alternatively, in a relatively few cases, the administration of the control system is entrusted to the occupational group. The government can then transfer to that group the legal right to certify and license as well as the power to punish those who practice the profession without a license or who do so unethically or incompetently. The "professional association" is also given the right to determine what the words qualified, ethical and competent mean. This is the chain of events which created APEGGA.

Membership in the professional association is mandatory if a person wishes to practice the

Profession,¹ either as an employee or in the professional-client mode.

Each member must maintain his/her membership in the Professional Association by paying a yearly fee for a license to practice. It is from such fees that APEGGA and other professional associations derive their income for governing their constituent professions.

Informal Administration

In the INFORMAL administration system where the services of occupational groups are not controlled by Acts of Government, quality control systems still operate under the administration of various agencies.

The hiring and dismissal practices of employers, based on expected and actual job performance, is a quality control system which operates to maintain and to improve the services of the total labour force. Employers can, and do, discipline their employees, with the most severe punishment for incompetent work being termination of employment.

It is normal for unions to require that potential union members meet stated proficiency criteria before they will accept them as members. Often this will be a certificate issued by the government or a certificate issued by an educational institution. In some cases, the certificate is issued by the union itself. Responsible unions also make serious efforts to improve the quality of service provided by members and discipline their own members for unethical or incompetent practice. The meaning of ethical and competent is set by the union.

There are many occupations which can be practised by anyone. No certificate is required by law: data processing, personnel work, economics, public relations, management and administration work, etc.

Those who practice these occupations frequently join together to form a ***voluntary*** society or association of members. That association of members normally will require specified credentials in order to become a member and will urge members to adhere to stipulated standards of practice and codes of ethics. Such associations cannot exercise the same control over members as a ***Professional Association*** does due to the fact that membership in the voluntary association is not mandatory in order to "practice the profession".¹

¹ The term "to practice engineering, geology or geophysics" is used in this brochure to mean specifically to take responsibility for the results of what will be referred to as "doing engineering, geological or geophysical work". Non-members of APEGGA, under the supervision and control of a professional engineer, geologist or geophysicist, may "do engineering, geology or geophysical work" but they are not legally permitted "to practice engineering, geology or geophysics" as that term is defined here and in the Engineering, Geological and Geophysical Professions Act.

SECTION 3

PROFESSIONALISM IN OCCUPATIONS

Why have some occupations been given the right and the responsibility to govern themselves? The answer seems to lie in two multi-faceted concepts:

- The level of responsibility of the occupation

and

- The level of the sense of responsibility of the practitioners of the occupation both on the individual level and on the group level.

THE LEVEL OF RESPONSIBILITY OF THE OCCUPATION

There is a level of responsibility continuum on which all occupations can be ranked. That continuum extends from the jack-of-all-trades or the unskilled labourer where it is not possible to define a set of activities usually engaged in (and thus an occupational identity) through the trades, the crafts, the technologies, the near-professions and finally, to the professions. To determine the level of responsibility of occupations, each can be examined by utilizing the criteria used by organizations to establish the level of responsibility of various positions in a company. Such a system will not definitely identify the point at which a trade or craft becomes a technology, nor will it identify when a near-profession becomes a profession. Such judgements will always remain subjective assessments.

However, it is APEGGA's belief that only a few occupations, those which exhibit the highest overall ranking on a level of responsibility basis, will be granted full self-governing powers and thus *the clear claim to the title of "a profession"* and even then, only if the practitioners are professionals who have gained a high level of societal trust through a demonstrated sense of responsibility.

CRITERIA FOR RANKING OCCUPATIONS BY LEVEL OF RESPONSIBILITY

Importance of the Service (Impact)

The importance of the outcomes of services provided by the occupation will be high and the effect, *particularly of errors in judgement*, will be significant before an occupation will be classed as a profession. For the professions, the impact of even a single service may well be high.

If the number of services required by an individual is high or if the number of individuals requiring the service is high, then it follows that the overall importance of the service to society is high.

This aspect is sometimes called the cruciality of an occupation.

The Nature of the Professed Knowledge

The breadth and depth of the body of knowledge on which a practitioner of an occupation must draw in order to make the judgements required in the practice of the occupation is of major importance. At the upper end of the scale, knowledge will be highly abstract and theoretical. Careful and lengthy study is required in order to master the understandings to be "professed". This body of knowledge will be defined from time to time by the professional association usually in terms of academic requirements. Additionally, it will be of a nature not learned or comprehended by society generally.

The knowledge will be relatively discrete and/or distinct from the knowledge needed and used by other professions and occupations.

Frequency of Need for Reasoned Judgements

Occupations will vary in the frequency and the nature of reasoned judgements required. Those at the upper end of the scale will consistently require such judgements. To make these judgements, knowledge and understanding of the situation at hand is required, why it works, and how it might or should be varied to obtain beneficial results. In many instances, reasoned judgement will often be needed in a profession in order to correctly prescribe which of several possible methods should be used as the problems to be solved by professionals will frequently have several acceptable solutions and a "best solution" will depend on a careful consideration of a variety of factors.

Supervision

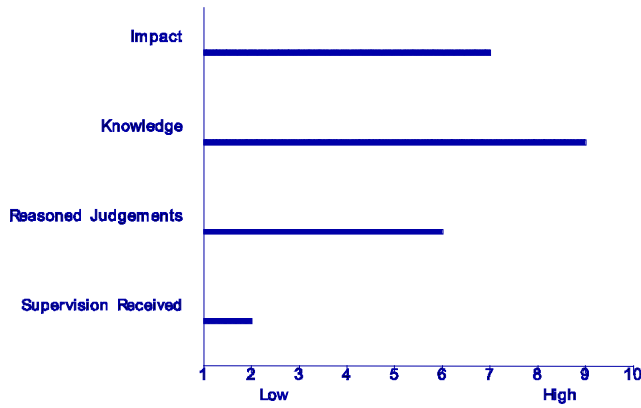
Arising from the specialized nature of the knowledge possessed by professionals, they receive a minimum of supervision. This is principally because "others" will not have the knowledge to decide whether the work is good, adequate or poor. Continuance of a low level of supervision presupposes a high degree of trust that the persons practising the profession will govern themselves

with the public interest clearly in mind.

Level of Responsibility Score

By applying best judgement weightings to the various components described above, it is possible to produce a mathematical score indicative of the level of responsibility of various occupations.

Sample



Level of Responsibility

Score = $7+9+6+(10-2)$

Note: Supervision received is a "reverse" score hence the rating is subtracted from a total possible of 10 because the lower the supervision received rating, the higher the responsibility.

SECTION 4

PROFESSIONALISM IN THE INDIVIDUAL

CHARACTERISTICS OF A PROFESSIONAL

Individuals may be classified as more or less professional in accordance with the degree to which they meet the requirements of the "ideal model" of a full professional.

Competent

Competence which results from the application of knowledge, responsibly and ethically, is the hallmark of the professional.

The expertise of the professional stems from having command of an extensive body of knowledge. As the knowledge is highly specialized and often abstract, a prolonged period of specialized training is invariably required in its acquisition.

The practice of a profession requires the exercise of *reasoned judgement* to solve the problems which a professional must address. It is this requirement that demands the command of an extensive body of knowledge.

A Desire for Autonomy

A professional will have a strong desire for independence of thought and action in his/her work. The professional will have a strong desire to choose the methods to be used in solving any given problem. If tasks are set for the professional, he/she will highly prefer that they be set in terms of results desired rather than in terms of actions to be carried out, as the latter tends to reduce the necessity to use "reasoned judgement".

Committed to, and Identifies with the Profession

The professional's commitment is to the profession, the body of knowledge, the field of specialization and to the use of his/her expertise in the service of society. The professional's most significant source of satisfaction and pride will be peer approval which will be gained by a demonstrated expertise in the profession and by a demonstrated commitment to the growth and development of the profession as measured by its service to society. The professional identifies strongly with other members of the profession generally. He/she identifies as well with the body of knowledge professed and is willing to expend time and energy to keep up to date with it, promote its growth, expansion, development and use.

Ethical

Protection of the public from unethical and/or incompetent practice is a value held in high esteem by the professional. This public-interest bias will take precedence over self-interest. The desire for personal, material and psychic returns is not precluded but the professional will not place this above ethical practice.

Commitment to Collegial Standards

The professional will have a strong belief that professional standards, like those noted below, should be set, revised and maintained by professionals.

- first certification
- continuing competence
- ethical practice
- regulation and control
- discipline

The professional will jealously protect the right to carry out and accept responsibility for these tasks because he/she believes that his/her profession has the competence to make proper appraisals and judgements. This exclusive right does not stem from a feeling of superiority from a human worth point of view. It does stem, however, from an understanding of the complexity of the issues and a realization that a full understanding of the implication of various decisions is only possible because of knowledge resident in the members of the profession.

This is the reason that responsibility for carrying out these functions is given to formal associations of members such as APEGGA.

DEGREES OF INDIVIDUAL PROFESSIONALISM

As with all personal characteristics and attitudes, the degree of professionalism is a variable. Individuals may have different levels of expertise and commitment to their specializations; they may strongly identify with others or they may be individualists; they may have exceptionally high ethical motivation and strong needs for autonomy. Any combination of these personal attributes may be exhibited by a given individual. Likewise, it is this profile which characterizes the individual's professionalism.

A person may be uninvolved with, and may even disdain or be opposed to, all the mechanisms which act to maintain the standards of the group. It could then be said that such a person has low "collegial standard" values. Consequently, this type of person could be categorized as not being as highly professional as a person who is a strong supporter of the mechanics set up for the self-regulation of the profession of which he/she is a member.

It is readily seen that the professionalism of an individual may be quantified in much the same manner as the various characteristics of an occupation may be used in establishing the level of responsibility of that occupation.

In summary, if each member of a professional group were highly professional, then clearly the group would be a highly professional group. Conversely, if each member had a very low level of professionalism, the group would be only marginally professional.

It is important to realize that many individuals who work in an occupation which may not be classed as a profession possess and practice the attributes of professionals. For example, a carpenter or other tradesman may rate as high as or higher than a professional on commitment, responsibility, ethics, etc.

THE MANY FACES OF THE WORD PROFESSIONAL

There are many *popular* meanings for professional and this is a fertile source of confusion regarding its meaning. These popular misconceptions occur because only part of the total meaning of "professional" is used. In some cases, one or more of the characteristics is slightly modified which again gives rise to inaccurate applications of the word professional.

Honest, Trustworthy, Principled

A professional is honest and trustworthy and his/her work is guided by a set of ethical principles. These concepts are embodied in the concept of ethical. However, being honest and trustworthy is only part of the total concept of "professional". One can be completely honest and trustworthy yet not be *fully* professional because of a lack of knowledge, for example.

Skilful

Skilful essentially means the application of knowledge and know-how through the medium of one's body; e.g., the brain surgeon and the hockey player. It is also used in a more figurative sense to mean the effective application of knowledge and know-how in various situations so that desired results are achieved; e.g., interpersonal skills, communication skills, negotiating skills.

The professional is skilful. It is part of the concept of expertise; but again, if skill is the only characteristic possessed then the person does not meet all the criteria of "professional" as set out in this paper. One can be highly skilful at something, even several things, yet not be *fully* professional due to a lack of honesty, for example.

Paid

Persons who are beginners or unskilled or amateur are often not paid, or at least the pay is very low, as the service they offer is of little value. When their service moves into the skilful category, it becomes valuable and thus commands a price; e.g., the "professional" writer, boxer, tennis player as opposed to the amateur.

The service provided by professionals is of value and thus people are willing to pay for that service. However, providing a professional service for no pay does not return a professional to the non-

professional ranks. Conversely, one can be highly paid yet not be *fully* professional because of a lack of competence, for example.

A Loyal Employee

Being a loyal employee and being professional should be synonymous and indeed will be, when the employer is "professional". The loyal employee, intent on providing quality service to his/her employer, has many attitudes and characteristics in common with the professional. They both will have expertise, want responsibility and autonomy to act, and have a high level of commitment. Both will identify strongly with a group. Both will be ethical and both will want to maintain high standards. However, the orientation of the loyal employee is fundamentally different from that of the professional and this difference makes it difficult for the highly professional person to be a loyal employee of an employer who is less than professional.

High Quality, High Rank

Perhaps the most extensive meaning attached to the word professional is high quality, high standards and excellence.

This connotation of the word explains to a large extent why occupational groups consistently adopt the appellation, strive to meet the criteria of a professional, and protest strongly at any suggestion that their occupation is not a full profession or that the members are not fully professional.

SECTION 5

DILEMMAS AND PROBLEMS OF THE PROFESSIONAL

BEING CLASSED AS AN ELITIST

Professionals and the professions are often tagged with the label "elitist". This label is characteristically attached to those who promote professionalism especially if the promoter believes that he/she is a professional working in a profession.

Members of an elite will have high standards and a high level of competence. These concepts are also part of the concept of professionalism.

In addition to the above, the meaning of elite and especially of the words elitist and elitism have taken on the meanings of arrogance, smugness and self-satisfaction. Members of an elite are widely perceived to feel that they are *better than* other people from a human worth point of view.

This aspect of elitism is completely at odds with the concept of professionalism. No *real* professional believes he/she is better than someone else from the human worth standpoint. *Every* real professional believes that he/she is *expert* in his/her field and that he/she provides only top quality service. Though a clear distinction exists between the positive and the negative connotations of elitist, the professional will often be spattered with the negative connotations. This is true because it is easy for the professional, just by acts of omission, to be perceived as meriting the negative connotations, and because only a few instances of actual or possible smugness, arrogance or incompetence spread far and linger long.

MONOPOLIES AND PROFESSIONS

A monopoly of any kind is viewed with disfavour as the directors of the monopoly can raise or lower prices at will, raise or lower the quality of the product or service, control how the product or service is distributed, to whom and when.

Obviously, a monopoly can act in the best interests of the public it serves but few seem to take seriously a code of ethics which includes protection of the public.

The professions are monopolies. The members of the profession are the only ones who may legally supply the services of that profession to the public so there is no alternate source of service for the public.

Further, it is argued that because professions are internally controlled monopolies, the temptation to provide less than maximum quality service and/or to do so at more than a reasonable cost to the

client or employer is too great to resist, particularly in the employer mode (Type 1). In the employee-employer mode, there is less concern as the employer, reacting to the open market demands of customers, will have considerable influence on both these factors.

The relatively high status and incomes of professionals are pointed to in support of the contentions of those who claim that the professions are abusing their monopoly position. The suggested cure is the removal of at least part of the rights of self-governance.

APEGGA is convinced that not only is this diagnosis inaccurate but that the proposed action leads in the wrong direction. APEGGA agrees that a profession which fails to responsibly accept its duty to provide a professional level of service at a competitive cost should be brought to task, but APEGGA does not agree that the high income and status of professionals is due to abuse of a monopoly position.

APEGGA believes that the explanation for the high status and income of professionals lies in factors which have little to do with the concepts of a monopoly. High status and income in organizations tend to match the level of responsibility carried by an individual. Professionals practice an occupation, a profession which carries a high level of responsibility.

The level of responsibility of a job, in an organizational setting, is judged on such factors as the breadth and depth of knowledge required (including knowledge gained through experience), the impact of decisions made by the incumbent on the health and profitability of the organization served, the frequency with which "reasoned judgements" are required—as opposed to following a plan or routine procedures—the length of time and the amount of effort required to train a replacement, etc.

When professionals are paid in accordance with the level of responsibility they carry as professionals, their remuneration and their status will reasonably and justifiably be above the average for all occupational groups.

PUBLIC EXPECTATIONS

Public expectations have increased considerably, perhaps inordinately, in the past decade or so. There is now almost a feeling that *every* person has a *right* to immediate and faultless diagnosis, prescription, action and results and at a price which would make a monk look askance. Yet absolutely faultless service in each and every case is an impossibility. As a result, there is a growing mismatch between expectations and what can be delivered. This is particularly true in the case of the professions where public expectations are the highest, and rightfully so, but other occupational groups do not entirely escape this expectation.

Arising from complaints of incompetent service or higher than expected costs, critics of the profession are assuming that the professions are not being vigilant in disciplining and removing incompetent and unethical members. They are calling for the abolition of the self-governing rights of the professions erroneously claiming that such action will solve competent service at a reasonable cost problem.

APEGGA believes that the strengthening of the professional model of occupational control will pay better dividends in this regard than, for example, transferring professional control to a government board.

PROVIDING PROFESSIONAL SERVICE TO THE PUBLIC THROUGH AN EMPLOYER

No one thing places more pressure on the professionalism of a professional than does providing his/her services to the public through an employer. When a large proportion of the members of a profession provide their service through employers, real and rather intractable pressures are also placed on the professionalism of the profession. These statements are not an indictment of employers. It reflects only the problems faced by professionals operating in the employee-employer mode.

Labour Exchange Systems

Each person in the labour force provides a service — his/her effort, judgement, advice — to someone or to an organization in exchange for pay. Although there are many variations, two basic models of labour exchange systems are of particular importance to the discussion of professionalism. Two types of each of the models are discussed in order to illustrate that there is a series or a continuum of types.

(a) The Professional/ Client Model

(i) Type 1 — The "Ideal" Type of the Model

This is the traditional or ideal model for the controlled exchange of professional services for compensation.

The professional's reasoned judgements, based on his/her knowledge of an esoteric, abstract body of knowledge, are supplied to clients. Because of the clients' lack of knowledge, they are dependent on the ethics and competence of the professional to insure that the advice received is in the clients' short- and long-term best interests. The client is dependent on the professional for the *identification* of specific problems, for a *prescription* as to the remedial action to take (if in fact a problem exists), where to find someone who is competent to *carry out* the proposed action (often the same person who diagnoses and prescribes), and even for advice to know when (or if) the prescribed action has been *successful*. The dependency of the client on the ethics, competency and commitment to public service of the professional is extremely high. Because of this client vulnerability, maintenance of standards through a professional association is critically important.

Operating in this way, the "self-employed" professional is relatively autonomous to choose which clients to serve, when and how, what to charge, etc. The professional association will establish "standards" for these matters.

Clients are free to obtain services from any professional based on their own preferences.

Career development corresponds to professional development. As one becomes more expert, more recognized by one's peers in the profession, the cases referred to this now "senior" professional are the most difficult ones: those which require the most carefully reasoned judgements based on the broadest command of the most abstract segments of the professional knowledge package, or those which will have a far-reaching impact on standards of practice, or those which require the most up-to-date, in-depth knowledge of a specialized area.

Two facts are important to note. Firstly, the professional is relatively autonomous. Secondly, the professional association is the major quality control factor in the professional's work life.

(ii) Type 2 — The Professional/ Single Client Model

As the number of clients diminishes, the power of the remaining clients to control the time when the professional works, the type of work, the pay (fee) for work done, etc. increases to the point that if a professional is providing service to only one client, the professional has, in effect, become an employee even though some of the trappings of the professional/client relationship may still exist.

This is not to say that professionals cannot or should not enter into this type of service exchange system. The point to be recognized is that this model is a long step away from the "ideal" professional/client model. The professional's autonomy declines and control moves into the hands of a single client. Standards of professional service will be influenced as much by the client as by the professional's association. The professional's expertise will narrow into the requirements of the single client and the single client's situation rather than expanding to meet the needs of a variety of situations which a professional with a variety of clients will encounter. This will have a tendency to cause a diminution in the number of times when reasoned judgements are required.

Not providing service as required by the single client is to risk losing the single client. Being dismissed as an employee is not significantly different from losing one's single client.

Nevertheless, the professional with a single client is still paid by the client and the professional provides services directly to the client. This connection is lost when the professional becomes an actual employee.

Two factors now control the quality of service in the professional's work life: the professional association and the client.

(b) The Employee/Employer Model

(i) Type 1 — The Visible Customer

The professional offering services directly to clients in the professional/client mode, is both the employee and the employer. Separating these two functions into two distinct segments and placing these segments into different controlling hands increases the difficulty the professional faces in trying to meet fully all the criteria set out as being the characteristics of an ideal professional. The criteria affected most significantly are autonomy, commitment, identification, and ethics. This is because the professional now answers directly and daily to the employer and only indirectly and infrequently to the professional association and the client who is not the customer of the employer.

Many firms hire employees to provide services to the customers of the employer: banks, stores, consulting firms, temporary manpower firms are examples. It is important to note that the person or persons to whom the employee now provides services are not the clients of the professional. They are the customers of the employer. The customers pay the employer for the services (of the employees), and the employers pay the employees for providing services to their customers.

It is inevitable then, that the employer will desire to control such things as to whom, when, under what conditions employees provide services. The employer will wish to judge the performance, competence and ethics of his/her employees. Employers will not generally agree to have these duties carried out by the professional association although a shared role is not unusual.

One of the best methods of increasing human efficiency is specialization of tasks. Employers have strong tendencies to reduce large complicated jobs to small or at least smaller segments. One person will then be assigned to do each segment on a repetitive basis rather than assigning one person to carry out all the segments on a project basis. As this happens, the need for a command of an extensive range of knowledge and the need for reasoned judgements declines. Replacing one employee with another is also made easier. Add to this the loss of autonomy (control of when to work, which problems to work on, working conditions, pay, etc.) as well as the intrusion

of the employer into the field of standards, ethics, competence (the domain of the professional association in the "ideal" model), and it is not difficult to see the increasing problems the professional employee will have in retaining a "highly professional rating". Career development and progress depends on the employer and professional standards and attitudes may hinder career progress if the employer is not fully professional.

These problems increase if the services of the employee are used to make a product for the employer which is then sold to customers. The customer is now invisible to the employee.

(ii) Type 2 — The Invisible Customer

It is now the employer, acting to meet the needs of both customers and shareholders, who dictates standards, ethics, working conditions, pay scales and career progress for his/her employees. Professionals providing their services in this type of system are almost indistinguishable from other employees unless the employer adopts a set of employment practices which allows the professional to retain his/her professional characteristics and unless the professional stands up strongly for his/her own professionalism.

Obviously there are strong pressures for the professional employee to abandon some of the concepts of professionalism particularly those professional concepts which will or may negatively affect career progress, and to turn instead toward an allegiance to those concepts which will improve his/her chances of moving up the career ladder. This means a tendency to give primary loyalty to the company rather than primary loyalty to "the profession". That is no problem unless the employer wishes to shave standards too thin, take unjustifiable chances with public safety, ignore environmental diseconomics generated by the operation of the enterprise, etc.

One author puts the dilemma this way.

"In the case of the employed professional many of the traditional amenities of professionalism are lacking. For example, employers are perfectly willing to substitute their own judgement as to who is qualified to perform certain functions, replacing the concept of professional control based upon individual expertise. Institutions feel perfectly competent to judge what they think are adequate standards of performance. They say to their employed professionals, 'Not you, but I will decide adequate standards of performance, and I will tell you how your work is to be organized and what you should do on a day by day basis , and how much you will be paid for it.' This problem is only partially alleviated by selecting supervisors from among the professional staff. Supervisors, even if qualified

professionally, are typically chosen by the employer and normally feel a closer identification with management than with the employed professionals. In summary, employers are likely to insist on controlling compensation and salary levels, the schedule of work and assignment of duties. Employers may even organize the performance of the entire range of professional tasks so thoroughly as to 'deprofessionalize' the occupation."

Organizations need not deprofessionalize their professionals as a place for professionals can be provided in both large and small organizations. What happens depends on the strength of the professional(s) in the organization and the attitudes of the organization's leadership.

It is usual that unions will exist in such organizations. If the professional becomes part of a union, by choice or by force, he/she now has three sets of expectations to meet: those of the employer, those of the union, and those of the professional association. The professional's responsibility to the public may seem rather remote in such a situation.

PROFESSIONAL RESPONSIBILITY AND CORPORATE RESPONSIBILITY

APEGGA believes that the professional's primary responsibility is to protect the health, safety and welfare of the public and that this responsibility is not mitigated when the professional is providing service to the public through an employer. In APEGGA's view, professionals, working as an employee, must make their employer clearly aware of "the consequences to be expected if their professional judgement is overruled by other authorities in matters pertaining to work for which they are professionally responsible". (Code of Ethics, 7)

Corporate responsibility to the public is also a fact of life. Companies are held responsible by society for the quality of the products and services which they supply to their shareholders. This dual responsibility is not dissimilar to the dual responsibility of the professional who is constantly striving for both design efficiency and design safety.

The influence of the professional working as an employee should be to maintain the company in the ranks of "a professional organization" and this will, not infrequently, bring the employee professional face to face with the dilemma of company loyalty versus professional responsibility.

The dilemma is made acute when the career development of an employee can be negatively affected by a decision to take the professional position. In such a situation the professional, in an employee role, must ask, "Am I right?", "Even if I am right, is it important enough to 'make a fuss', 'blow-the-whistle'?", "Even if right and it is an important enough issue to 'stand firm', is it worth it in terms of personal and family stress, potential career damage and just plain dollars and cents?".

These are questions that the professional, whether a consultant or an employee, accepts to face when accepting to become a professional. The answers require the use of "reasoned judgement" as

each case will be different.

ENCOURAGING PROFESSIONALISM

Employers who encourage professional employees to maintain a high level of professionalism will reap solid returns in loyalty, productivity and morale. Company policies which make this support visible are a positive step in this regard.

An APEGGA publication, *Guide to Professional Employment Practice*, enunciates the overall climate in which professionalism can grow.

"It is essential that a company's management recognize each engineer, geologist or geophysicist as an individual who has been professionally trained, normally of better than average intellect, and usually of higher than average individuality. This type of employee, in spite of his/her technical background, cannot be considered as a thinking machine, but as an individual who has career and job satisfaction goals which the employer must help the individual attain — goals which include the need for personal achievement, opportunities for advancement, a satisfactory salary level based on contribution to the organization and the responsibilities required to assume, and the necessity to be considered an individual of stature among his/her colleagues. It is the definite responsibility of the employer to show that recognition of professionalism in employees, and supply careers which will give adequate challenge to each."

A supportive climate can, however, be seriously compromised when company needs and professional responsibility conflict. Company policies which elaborate a conflict resolution procedure are often useful in this regard.

Such policy should indicate that a professional employee will not be required to agree to or sign or approve technical documents or procedures with which he/she disagrees as a matter of technical ethics.

Company policy should therefore indicate that no action will be taken against a professional employee who brings a disagreement problem to the attention of APEGGA and could indicate that the company is ready and willing to request APEGGA to act as a mediator in cases of dispute which cannot be resolved internally.

FROM PROFESSIONAL ENGINEER, GEOLOGIST AND GEOPHYSICIST TO "PROFESSIONAL" MANAGER

It is typical for occupational practitioners to begin their careers on a technical career ladder and this is certainly true of the engineer, the geologist and the geophysicist. It is important for the young engineer, geologist or geophysicist to realize at the outset that an employer is a client. It is a

responsibility of the employee professional to develop a professional relationship with his/her employer so that the employer will, in due course, develop the confidence to consider the employee as his/her professional advisor.

The first two years are spent in the in-training category and the young member-in-training normally works under the close supervision of a senior member of the profession.

In approximately six years, the average member has become a confident, full-fledged technical engineer, geologist or geophysicist. The member knows how to combine the formal, theoretical knowledge learned at university with the practical knowledge gained from on-the-job experiences into practical, feasible judgements related to problems in his/her field. Problems are now assigned in terms of results desired. How to get those results is left now to the "professional". Supervision is more distant and less frequent. The full professionalism of the member is more and more a reality and less and less a myth.

At the eight- to ten-year stage, the professional is often faced with a serious dilemma if he/she arrives at this juncture without being prepared to make another reasoned judgement. The choice that is to be made at this time is whether to continue to pursue a technical career or to turn to management.

Career progression in organizations frequently leads from the technical path into the management path. The skills and knowledge needed to make the reasoned judgements required by the manager are quite different from those required by a professional engineer, geologist or geophysicist. As an example, getting engineering, geological and geophysical work done through others is vastly different from "doing" engineering, geology or geophysics personally.

High levels of professionalism evident in technical personnel can be said to be one of the important indicators in the identification of candidates for management positions.

Coming full circle, those who will be considered for the "near-profession" of management, must in themselves be seen to have prepared themselves for and be, in fact, highly professional. This all starts with the technical employee developing a highly professional relation with the employer.

Even if the engineer, geologist or geophysicist is fully professional and thus is committed to:

- his/her field of technical knowledge;
- peers within the professions;
- extending, clarifying and using his/her engineering, geological or geophysical knowledge;
- "doing" engineering, geology or geophysics;

The individual knows that his/her career pattern will change by going to management. There will, for example, be less and less engineering to do as one moves into higher levels of management, the

preoccupation in management will be with people and system problems.

The larger monetary packages generally go to the "managers" and not to the "technical" employees. With increasing acceptance of the importance of developing technology and the necessity for participatory management, the need for financial rewards to those who wish to contribute in technical roles becomes increasingly apparent. APEGGA supports philosophies which enhance job satisfaction for all its professionals and particularly for those who wish to continue their contribution in the technical environment. They should be able to do so without loss of monetary rewards.

APEGGA believes that management positions with responsibility over engineering, geological and geophysical functions in large organizations or positions in management of engineering, geological or geophysical organizations are best filled by members of APEGGA.

At present, some of these management positions are filled by non-engineers, -geologists and -geophysicists. APEGGA urges members whose aspirations lie in this direction to prepare themselves for such positions so that all these positions will be filled by capable, well-qualified people who are both professional managers and professional engineers, geologists and geophysicists.

APEGGA also encourages all engineering, geological and geophysical organizations or organizations with engineering, geological and geophysical functions to provide for a technical specialist path, with more positions than at present, with better status, visibility and deference rewards than at present so that more engineers, geologists and geophysicists will be able to and want to remain in their engineering, geological or geophysical profession and find that satisfying and rewarding both financially and psychologically.

PROFESSIONALISM DOWNWARD

Can the professional manager retain his/her technical professionalism?

APEGGA does not believe that organizations are best served by treating their professional engineers, geologists and geophysicists like "any other employee". Managers of professional members are strongly encouraged to review the *full* meaning of professional and to avoid applying only the concepts of work hard, work long, work well, be loyal, and don't complain. Supervising and rewarding the professional can be most satisfactorily achieved when the full meaning of professional is used as the starting point. Multiple career paths (technical, managerial, creative) in an atmosphere of job security and autonomy, realistic performance appraisal, financial and psychic compensation equal to their contributions, avoidance of practices which in effect abuse the professionalism of the professional (excessive overtime with no compensating adjustments, using professionals to keep the organization running during a strike or lock-out, locating the professional in isolated areas without consideration of the professional's private life, cutting the job into such small pieces that reasoned judgements are seldom required) would go far in promoting true professionalism among members of APEGGA.

STANDARDS OF PROFESSIONAL SERVICE

The quality of professional service should not equate to "adequate" or just "satisfactory". If professionalism is to have real meaning then the meaning of professional service can logically be expected to equate to above average at least and, whenever possible, to excellent

The "standard" established in each case will normally be what a reasonable and competent group of peers would accept as the satisfactory/unsatisfactory demarcation. The standard is dynamic and changes over time as new techniques, practices, materials, etc. are accepted. The importance of maintaining one's competency at current levels is therefore very high. A professional will not feel that just meeting the standard is sufficient and will normally reject the concept that the minimum standard is also the maximum.

LATERAL PROFESSIONALISM

Engineering firms often specialize and thus a large project will not infrequently find two, three or more engineering firms working on the same project. It is easy, in such circumstances, for the members of one engineering firm to openly criticize the work of members of another engineering firm. Professional ethics precludes such action.

The professional, whether he/she is an engineer, a geologist or a geophysicist, is not openly critical of a professional colleague until attempts have been made to make the colleague aware of the concern and, as a second step, involves the professional association. (see article 10 & 11 in the Code of Ethics.)

DISCLOSURE OF TECHNOLOGY

APEGGA's Code of Ethics contains a section which elaborates on the duties of the professional to an employer. In essence the Code indicates that the employee owes an employer loyalty and faithful service.

When a professional leaves one employer and begins work for another, to which employer does the professional then owe loyalty and allegiance relative to knowledge obtained while employed?

Only some general guidelines can be provided.

1. What is termed general knowledge is the property of the individual. Specific knowledge is usually considered to be the property of the company.
2. Do not violate contractual arrangements made with a former employer. These are often made as a condition of employment.

3. Do not violate unwritten but generally accepted standards applicable to the industry sector concerned.
4. Proprietary processes and patented information are the property of the employer.
5. Discuss problem areas with the potential new employer before accepting engagement.
6. The professional has a responsibility to use knowledge for the betterment of society. He/she should not therefore agree to allow knowledge to remain unutilized indefinitely and indiscriminately.

SECTION 6

WHAT DOES THE PROFESSIONAL ASSOCIATION DO FOR ME?

IT GIVES YOU AN IDENTITY

When you say to a new acquaintance, "I'm an engineer" or "I'm a geologist" or "I'm a geophysicist", it has meaning. "Professional" is implied even if not stated. You can not legally claim that you are an engineer, geologist or geophysicist without being a registered member of the Association.

IT GIVES YOU STATUS

To be able to "practice engineering, geology or geophysics"² requires a high level of expertise. The public looks to the professional geologist, for example, for advice. The success or failure of the project and/or the company very often depends on that advice. Your status and the deference accorded to you is because of your expertise.

IT GIVES YOU A REPUTATION

To say, "I'm a geophysicist", implies that you are a professional and that implies trustworthiness, competence, and honour.

IT GIVES YOU RESPONSIBILITY

Professionals provide high quality service to meet the needs of not only their immediate client or employer but also the long-range good of the general public. Protecting the public health, safety and welfare is a heavy responsibility.

THE ASSOCIATION PROTECTS YOUR IDENTITY, YOUR STATUS, AND YOUR REPUTATION

The Council of the Association, its committees and its staff, administer the Engineering, Geological

² The term "to practice engineering, geology or geophysics" is used in this brochure to mean specifically to take responsibility for the results of what will be referred to as "doing engineering, geological or geophysical work." Non-members of APEGGA, under the supervision and control of a professional engineer, geologist or geophysicist, may "do engineering, geology or geophysical work" but they are not legally permitted "to practice engineering, geology or geophysics" as that term is defined here and in the Engineering, Geological and Geophysical Professions Act.

and Geophysical Professions Act: they enforce its provisions and discipline members who do not act professionally.

If that activity stopped, *anyone* would be able to call himself or herself an engineer, or a geologist, or a geophysicist or "practice engineering, geology or geophysics". The terms would then have only a very general meaning.

IT GIVES YOU A CAREER

Whether you work in the professional/client mode or in the employee/employer mode, the occupational classification of engineer, geologist or geophysicist gives you a career category and a career path.

It can be said that for this purpose all one needs is an engineering, geological or geophysics degree and that one does not need to be registered with the Association. That is true as long as the individual is content to "do engineering, geological or geophysical work" under the supervision and control of an APEGGA member as opposed to "practicing engineering, geology or geophysics" which includes not only doing the work but taking professional responsibility for that work and is content to use some title other than engineer, geologist or geophysicist. Having a university degree in engineering, geology or geophysics is one step short of legally being an engineer, geologist or geophysicist.

SECTION 7

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