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NUGGET

NORTHERN ALBERTA INSTITUTE OF TECHNOLOGY

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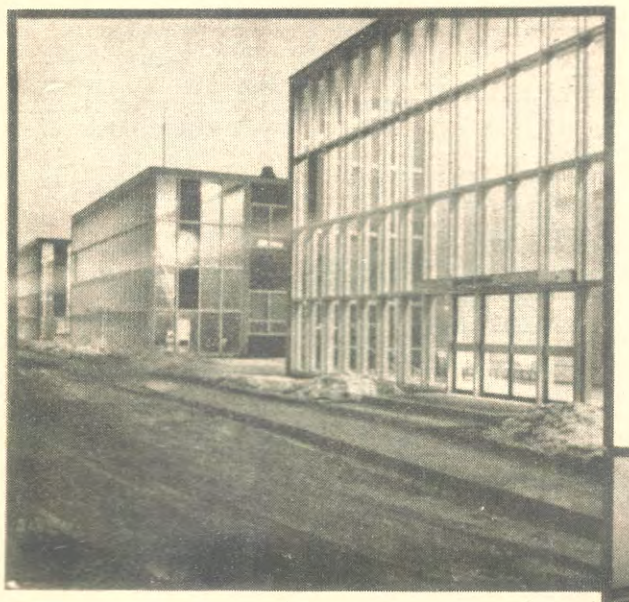
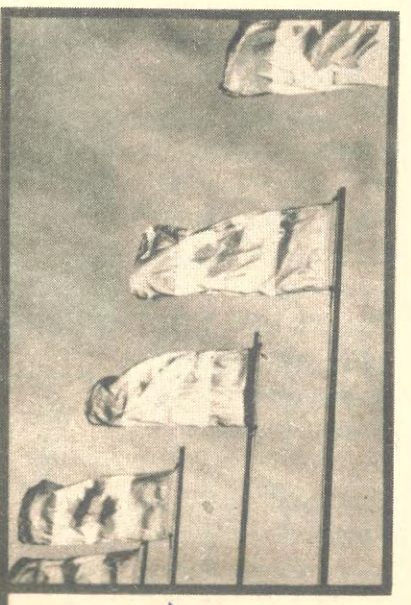
Open House Edition — March 15, 1968 — Page 1





Northern

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of

Technology

Progressive

Modern Active!

PHOTOGRAPHY BY LAWRENCE

OPEN HOUSE 1968

THE SECOND PAGE

NAIT IS ENTHUSIASM

The Nugget staff extends a most sincere welcome to all visitors who have come to our institute for Open House 1968. The newspaper staff, now approximately 15 strong, has had a highly successful year due to dependable, consistent personnel in staff positions. Like several other "voluntary" association in the institute, the Nugget usually suffers from high turnover in staff, but this year was not the case.

The performance of a newspaper may be measured in many ways. For the Nugget, feedback would be the best measurement of effectiveness. We have received unprecedented letters to the editor this year. It is through this praise and constructive criticism that the Nugget will continue to play it's best role. This brings about the question: What is the role of a school newspaper? First of all, the newspaper should be the voice of the student body. Secondly, it should act as an interpreter for administrative policy. Thirdly, and most important, it should be a conscience of the whole institute. These are the basic premises by which the Nugget effectively operates. When we combine these three components that are resultant in a worthwhile school newspaper, we have issues of news, opinions and facts brought to the attention to everyone.

Open house is the most important external function of the year for the Northern Alberta Institute of Technology. This also applies to the Nugget. In the Open House Edition we try to present an explanation and picture of every technology, along with all student services and clubs. Most of the course outlines have been written by students in that technology, hopefully this will give you a practical insight into any technology that you are considering for enrolment. Every department has been preparing for weeks for your visit. All students within these departments have contributed in some way to their particular technology display. You will see that the facilities and equipment offered at NAIT are second to none compared to any educational institution of our time.

As in years past, Open House this year, will undoubtedly be bigger and better than ever. This is because of you, our visitor, who returns to become a student. The enthusiam that IS NAIT cannot help but be felt as you wander around the hallways and classrooms. It is to those many people, with whom this enthusiasm will become a part, that we will be saying "Welcome to NAIT", next fall during enrolment. We look forward to seeing you again. Thank-you for attending NAIT Open House 1968.

Editor

NUGGET

NORTHERN ALBERTA INSTITUTE OF TECHNOLOGY

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WELCOME TO NAIT EVERYONE!!

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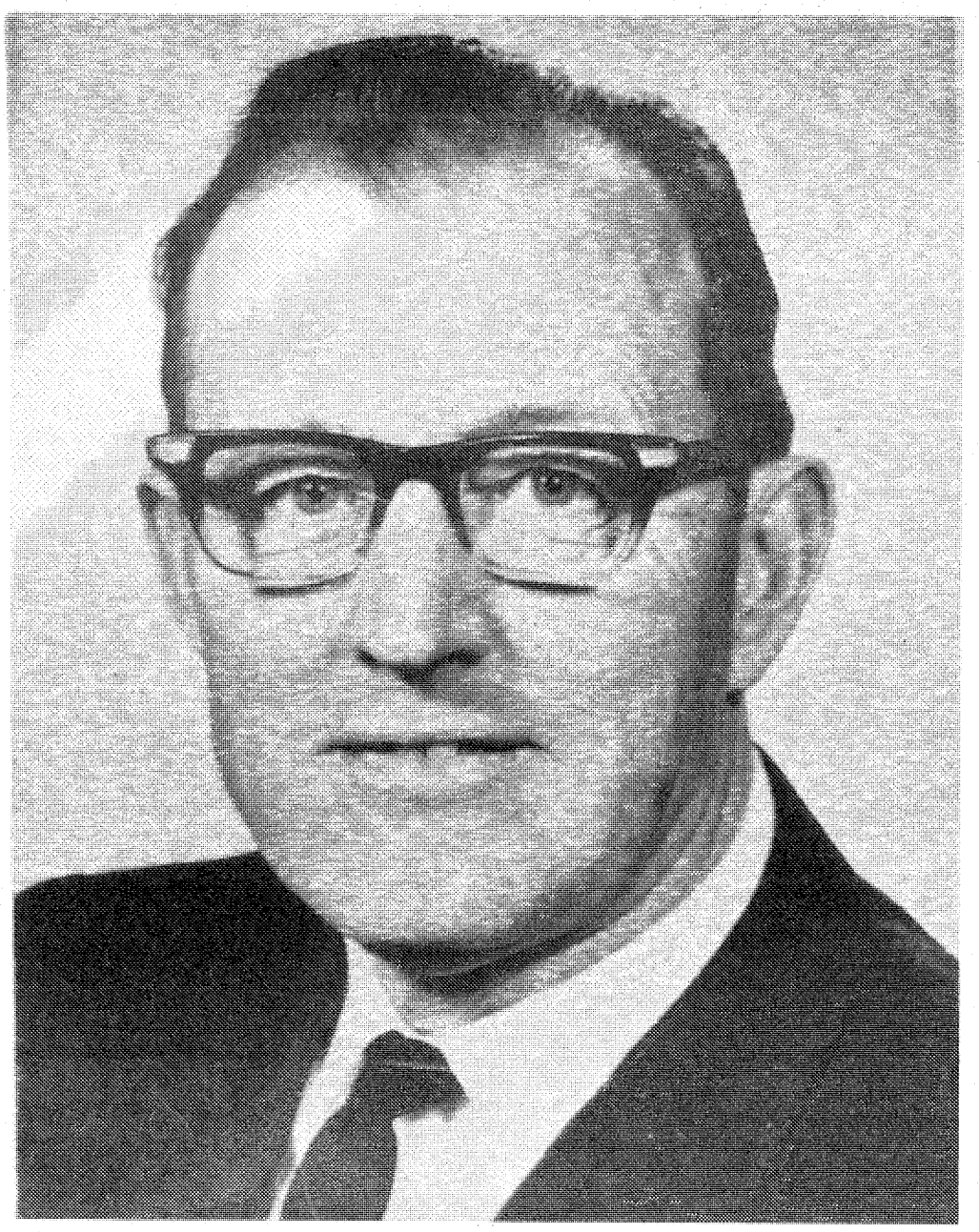


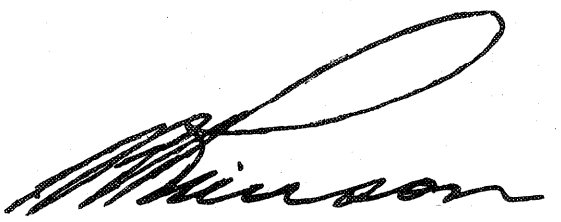
THE NORTHERN ALBERTA INSTITUTE OF TECHNOLOGY

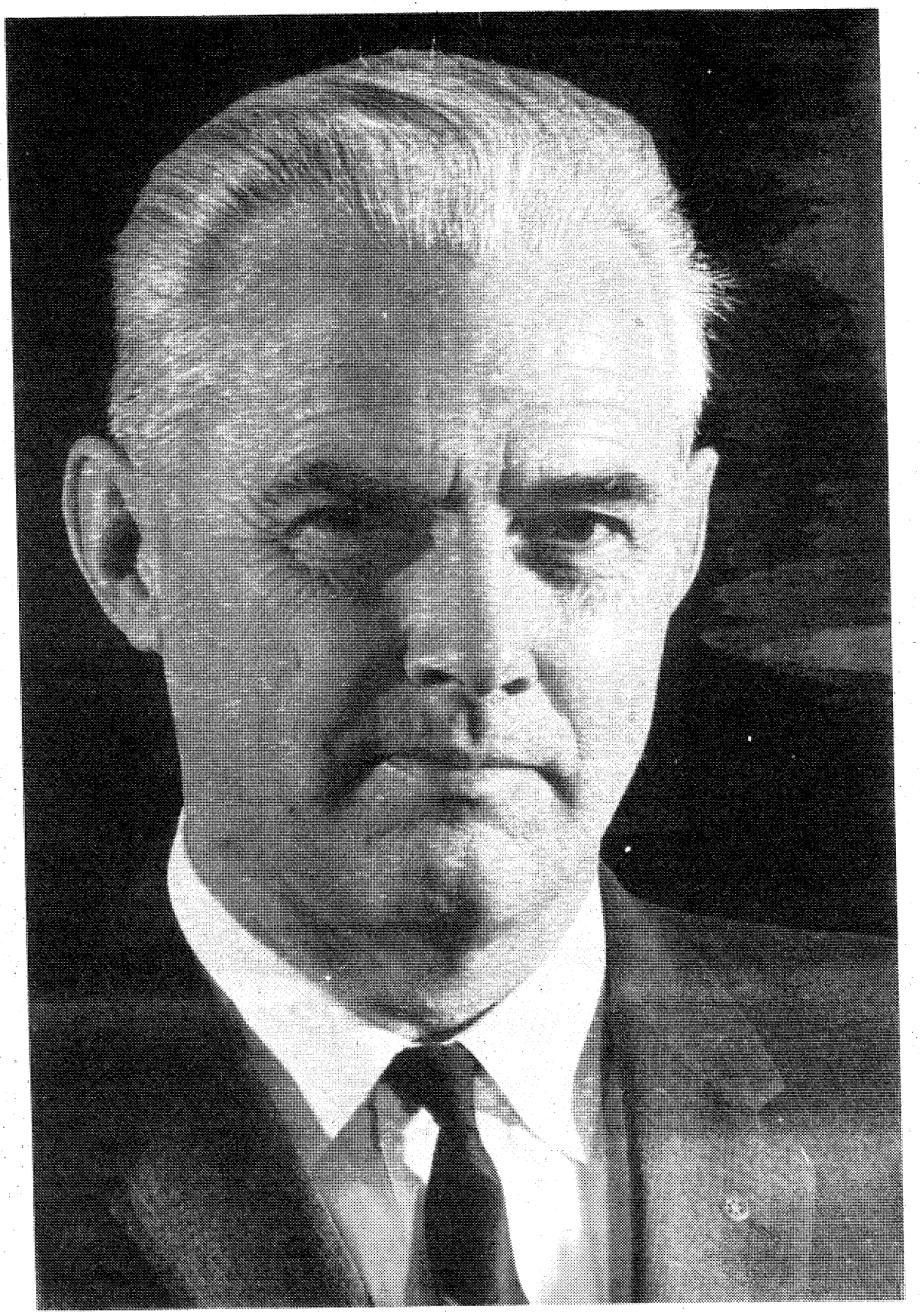
By Hon. R. Reierson, Minister of Education and of Labour

It is becoming increasingly evident that young people who desire to enter the labour force, and who wish to participate to a full extent in citizenship, must have increasing amounts of education and training. NAIT has been established and is operated by the Government to serve the needs of many of our young people who wish to prepare themselves for entry into the labour force by securing technical or vocational education. NAIT offers a wide variety of programs of this nature, and it is interesting to note that they are all equally successful. However, a particularly outstanding group of programs are those technician traing programs of two and three years in length. Upon successful completion of these programs, the student receives a Diploma of Technolgy or Diploma of Applied Arts, and find ready acceptance in industry and business. It is, of course, similarly true that because of the high standard of instruction, shorter courses offered to apprentices and others are also valued highly in the world of work.

It is a matter of concern to me that we are unable to accept all qualified applicats to the Institute. I have previously expressed the opinion that this is a desirable type of problem, for it indicates that we, fortunatley, have young people who wish to pursue education and training, and at the same time are offering programs of education and training which young people wish to take. I am hopeful that we will be able to proceed in a reasonable yet expeditious manner to improve this situation by expanding the programs offered at NAIT, and by the creation of more institutions offering programs at a similar level.

I would like to take this opportunity, particularly on the occasion of the Sixth Annual Open House, to recommend to persons wishing further training or education and not desiring, or able, to attend a university to seriously consider taking one of the many programs offered in this fine institution. I would also like to express my appreciation to all of the students and staff who have contributed so effectively to the development of the Northern Alberta Institute of Technology, and to wish all of its future students success with their studies.





It is my pleasure to welcome you to our annual Open House. It is particularly nice to see so many of our friends make an annual visit to the Institute. We suppose that there are so many things to see and there are so many changes from year to year that we are able to hold your interest. During the past six years since our first Open House, there has been a major growth in the number of students, buildings and equipment. Our first intake of students in 1962 was around thirty. Our total intake for 1968 will be 2,700 in the Business Education and Technology Divisions, 4,200 Apprentices and 6,000 in the Extension Division before this school year is completed. The total enrolment during any one day and evening compares with the total population of some of our larger Alberta towns. Imagine the entire Town of Wetaskiwin, for instance, with a population comprised entirely of NAIT students.

During the past year we have added courses in Medical Record Librarian, Biological Sciences, Inhalation Therapy, Radio and TV Arts, Commercial Baking and Building Construction. In some instances we have found it necessary to doublt shift some courses / starting next fall we expect classes to start at 8:00 a.m. and go to 6:00 p.m. for day students and start at 7:00 p.m. and go to 10:00 p.m. for evening students. We would ask you to direct any questions to the students, they are willing and anxious to explain their courses and the equipment you see on display. We hope you enjoy yourself and we hope you will return next year.

W.A.B. SAUNDERS, P. Eng.
Principal

It is my privilege on behalf of the Student's Association, to welcome you to N.A.I.T.'s annual Open House. We are looking forward to your enjoyment of the displays planned for you by the various departments of N.A.I.T.

Open House is an annual affair designed to provide an opportunity for the people of Alberta and high school students to visit and become familiar with the Northern Alberta Institute of Technology. This is your best opportunity to explore N.A.I.T., to meet the instructors and students, and to examine the opportunities which are available to you to continue your education.

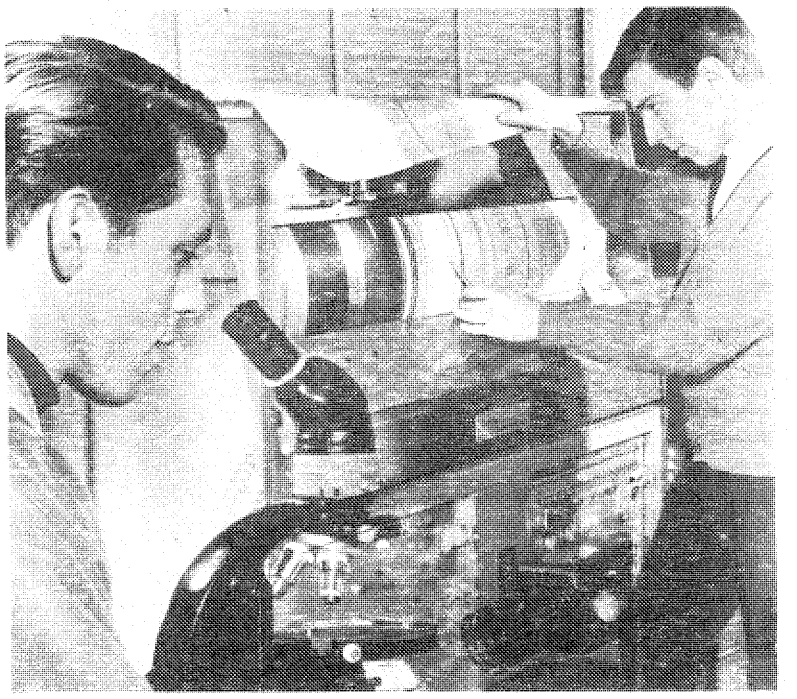
As you probably know, tech is very different from high school, and the more familiar you are with its environment and operation, the more easily you will adjust to tech during your first year. The orientations which you receive during Open House will be of great benefit to you when you are confronted with tech in all its aspects.

It is the hope of the Student's Association, better known as N.A.I.T.S.A., that you become familiar with some of the many extra-curricular programs which supplement the formal learning processes of tech. These extra-curricular aspects which give students an opportunity to develope their potential abilities are the concern of the Student's Association, which developes programs and activities in many areas.

Even if you do not plan to attend N.A.I.T., we are happy to have you as our guests at Open House so that you will better understand the purposes and operation of N.A.I.T. The Student's Association, and the Student's Council extend to you a warm welcome.

JOHN LAW

EXPLORATION TECH.



The Exploration Technology program prepares students for a career in the application of exploration techniques to the mining and petroleum industries. In this area, science, technology and a good sense of humor are the means which achieve results.

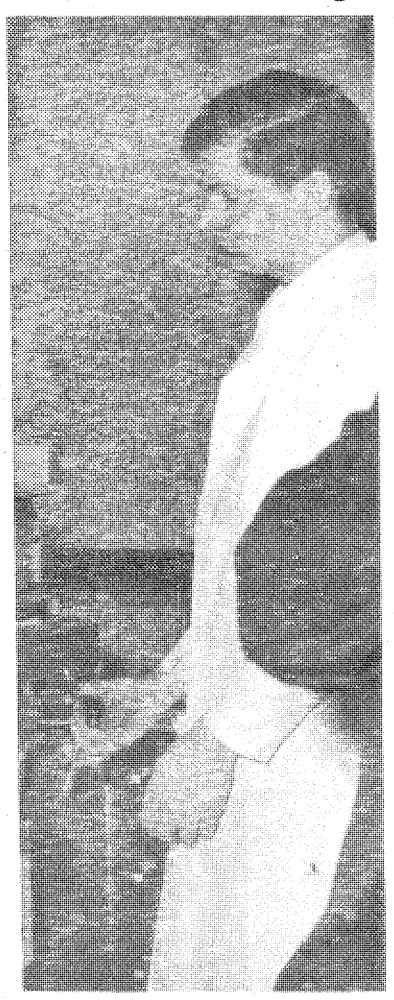
Geology, chemistry and physics provide an analysis of the earth's crust. A basic knowledge of these fields introduces students to the perversity of nature, whose works can rarely be described in simple terms. But here lies the challenge to technology and the rewards for imaginative effort. We wouldn't have it any other way.

Electronics, geophysics and geochemistry provide the means to measure the physical properties of the earth's crust. Confidence in the reliability and accuracy of such measurements grows with the experience gained in obtaining and interpreting exploration data.

An impressive fund of knowledge and experience has grown, during recent years, from a worldwide demand for minerals and petroleum products. The successes and pitfalls of workers in North America, Europe and Asia form the basis for students of exploration to build their approach to exploration problems.

The success of this program depends on whether the knowledge and insight gained by the student is sufficient to create a feeling of optimism as they become involved in exploration programs. With this in mind, the balance of science, mathematics and practical problems has been designed with an 'exploration flavor'. Hopefully, the students' initiative will complete the story. So far, we have every reason to believe that both the students and the exploration program will make a significant contribution to the industry.

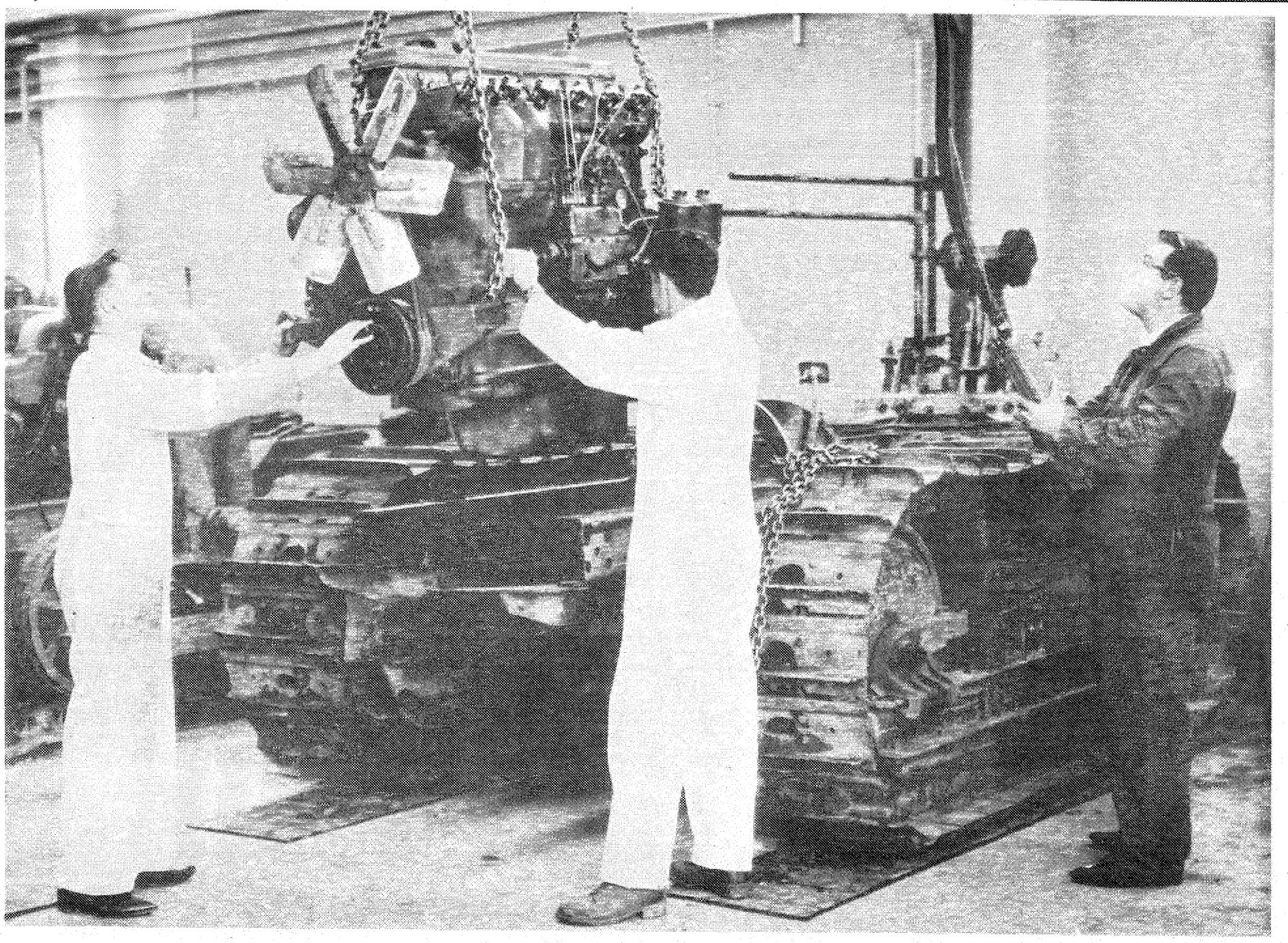
MATERIALS



The purpose of the Materials Technology course is to train technicians in the selection, application and inspection of engineering materials for industry. Graduates from this technology are working in positions in metallurgical control and research, testing of materials such as steel, concrete, soils and asphalt, non destructive testing of welds and forgings and experimental stress analysis.

In order to provide the necessary theoretical knowledge of the courses studied are varied. The main areas of study are metallurgy, destructive and non destructive testings of construction materials, math, physics, chemistry and English. Laboratory exercises are undertaken to relate the theory and practice in the extensive laboratory facilities at the Northern Alberta Institute of Technology. Approximately half of the time spent is in the laboratories. With this arrangement the materials technologist is capable of doing the work and applying the theory.

Job opportunities for graduates are excellent with starting salaries competitive with those offered other technologies. Positions are available in either industry or governmental organizations.



HEAVY DUTY EQUIPMENT TECHNOLOGY

The Heavy Duty Equipment Technology Course consists of two eight-month training periods and offers a Technologist's Diploma. The role of the Technologist is to occupy a zone of competence between the tradesman and engineering plateaus.

The first year presents theory and shop studies of basic design, repair, rebuild and maintenance procedures of engines, drive trains, electrical equipment, hydraulics and fuel injection systems.

Supporting related subjects in welding, technical mathematics, English, technical report fundamentals, physics and electricity are offered by the Industrial and Technology Divisions.

The second year presents advanced academic subject studies in industrial electricity, mathematics, English, Technical sketching, oil chemistry, thermodynamics and business.

Industry has readily accepted holders of the Heavy Duty Equipment Technology Diploma in technician capacities, however, major benefits are enjoyed by the holder of a Technology Diploma combined with Journeyman Certification as a Heavy Duty Mechanic.

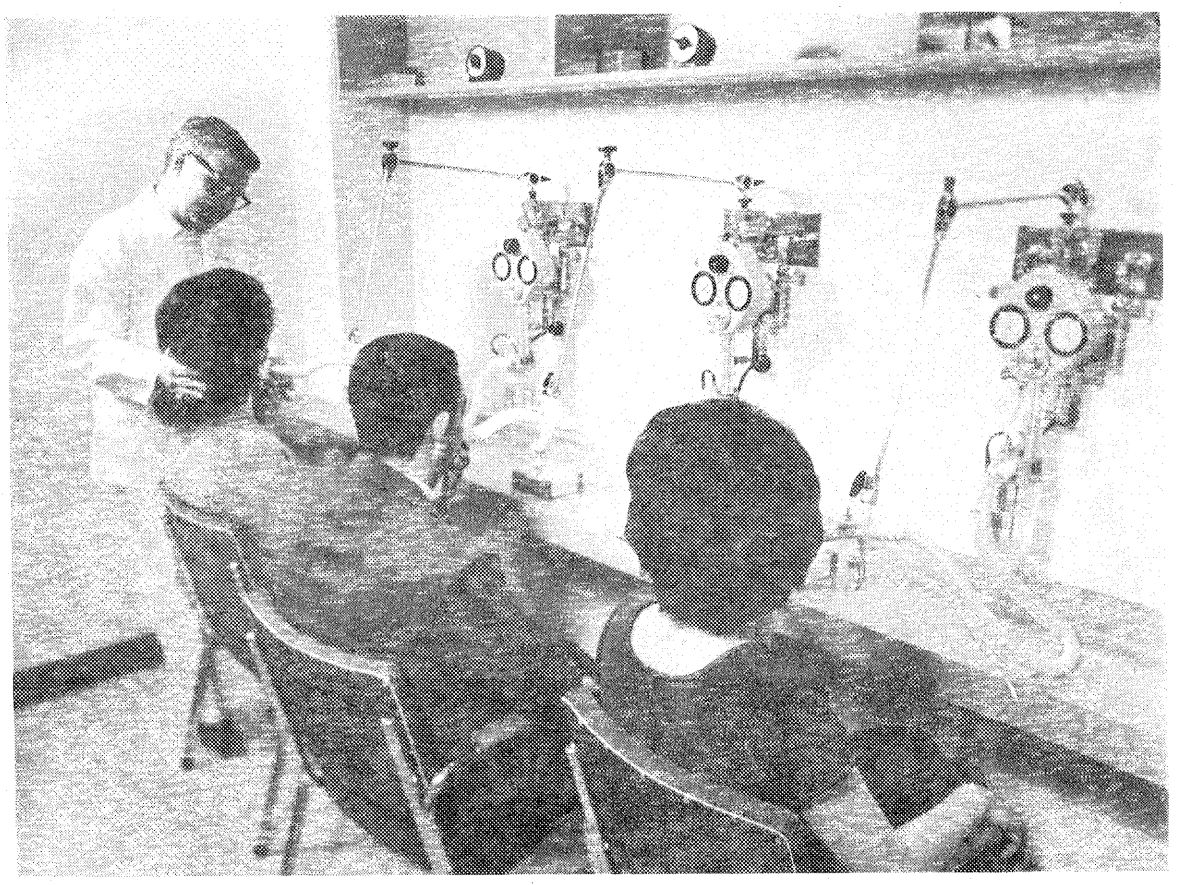
Heavy Duty Equipment Technologists may acquire Journeyman Certification by entering employment in the Heavy Duty repair field. Under Apprenticeship Contract privileges full technical credit is granted, the practical experience period become four six-month periods at which time the Technologist may write a Journeyman Qualification examination. Successful examination attainment provides Journeyman qualifications and a 70% attainment also provides Inter-Provincial standards recognition.

The Heavy Duty Equipment Technology course is designed to enable capable, ambitious students to enter industry with comprehensive knowledge. Combined with adequate practical experience these credentials should enable the holder to attain major positions of responsibility -- as foreman, supervisors, heavy equipment salesmen or equipment training personnel.

RESPIRATORY TECHNOLOGY

(INHALATION THERAPY)

As medical techniques have grown more complex, it has become increasingly difficult for the physician and the nurse to perform all the functions of medical care and treatment. From this development have arisen many modern paramedical specialists who serve as essential assistants to the physician in their designated areas.



One of these new paramedical specialties is Respiratory Technology. This new profession is often defined as the treatment and diagnosis of the many conditions caused by deficiencies or abnormalities associated with respiration. The last decade has witnessed a great technological advance in the equipment used to treat such cardio-pulmonary disorders. Because of the complexity of the equipment, a new specialized technician in respiratory work has been developed both to treat the patient and to maintain the machinery.

This new profession offers you an opportunity to share in its future. A comprehensive two-year training program for Respiratory Technicians is now available utilizing the facilities of the Northern Alberta Institute of Technology and some of the teaching hospitals of the province which possess an accredited school of Inhalation Therapy. The course consists of two phases: ten months of didactic lectures and laboratory sessions conducted at N.A.I.T., followed by twelve months of clinical instruction in a hospital training school. During the two-year program, such subjects as physics, chemistry, anatomy and physiology, equipment design, equipment function and maintenance, microbiology. pharmacology, pathology and nursing arts will be presented along with actual clinical practice during the second year.

The Respiratory Technician's responsibilities and tasks generally make the hospital his place of work. By the very nature of hospital work, the technician is always working with people, and the entire medical team and all supportive care toward caring for patients with cardio-respiratory disorders and the other will be maintaining the actual equipment used in such care.

The technician's duties will vary according to the individual hosptial's particular situations. These responsibilities will include:

1. Technical Maintenance: As the equipment utilized in treating patients is extremely technical, he must know how to maintain, adjust and repair equipment to ensure its proper function and results. For this reason alone, some understanding of physics is essential.

2. Therapeutics: Serving the patient according to specific instruction from the physician. To do this effectively he must understand (a) the physical and psychological needs of the patient, the doctor's goal in using inhalation therapy, (c) how to accomplish this goal with his knowledge, technique and equipment.

3. Administration: The possibility of advancement to a senior position in the hospital department is excellent. The duties of senior and supervisory staff include control of personnel treatments, patients on therapy, supplies, medical gases, and equipment, all of these require systems, records and correct management. These duties will require and produce administrative ability.

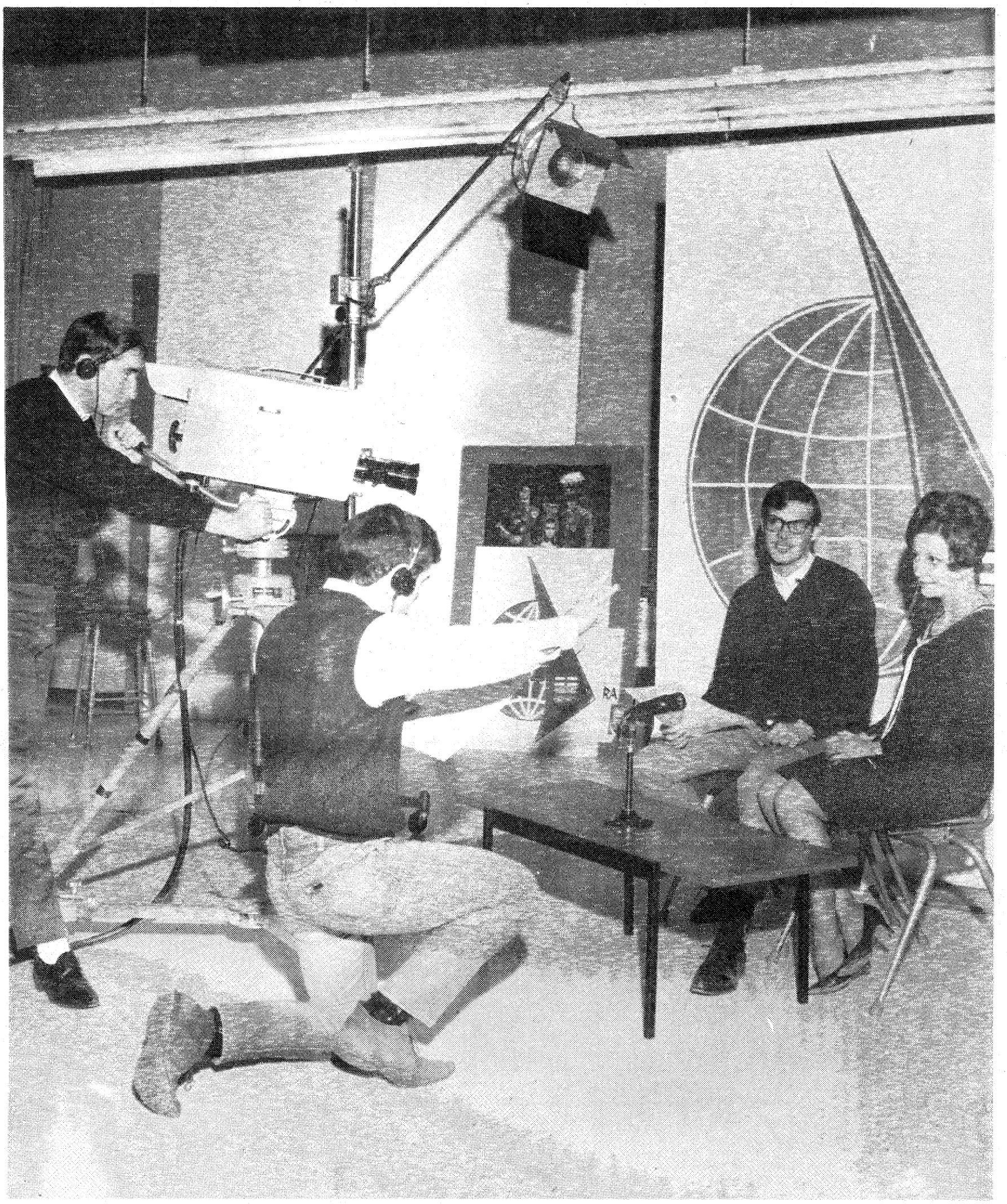
4. Teaching: The technician is responsible for instructing patients and members of the patient's family about the use of their therapy. The technician is also involved in the teaching of other personnel in the use of equipment.

5. Development and Research: Respiratory Therapy is still in the infant stage. The need for research, development and testing of new equipment and technique is very necessary.

In order to do well in this field, a person should have a genuine interest in people and their welfare. One must have the ability to work in harmony with members of the staff and other hospital personnel. Patient care in lifesaving situations is often encountered, and, therefore, of course requires a stable person wo be able to cope with such problems. The students invariably find the profession extremely challenging and rewarding because the work is varied, new and interesting. This variety of work also means that the field is open to both men and women.

For years to come the demand will far exceed the supply. There is an urgent need for pioneers to establish new departments. With the profession so new and the demand so great, numerous schools are being organized and the need for teachers in Inhalation Therapy is pressing. Many centres throughout North America are planning cardio-pulmonary function laboratories and there is a need for post graduate studies in the and other work.

Those willing to work hard have an unexcelled opportunity for a challenging and rewarding future.



RADIO AND TELEVISION ARTS

At the request of a number of stations across Alberta, N.A.I.T. instituted the R.T.A. program to provide the broadcast industry with conscientious, vitally interested people who are fully trained. The program developes and polishes innate talents related to this field such as writing, acting and announcing. The course brings out hidden abilities, and encourages interest in new areas of literature, world affairs, advertising, public relations and many others associated with the communications media.

The students in this course are very quickly immersed into a stream of fascinating subjects. The begin immediately working on their voices. Through exercising, breathing correctly, and speaking in public, they overcome nervousness, and communicate clearly and pleasantly.

Courses in communication media are initiated to give the student an awareness of the facilities at his disposal to inform, to persuade, and to entertain. The strengths, the weak nesses, the challenges of mass communications in a free society are discussed. Topics such as censorship. pornography, sensationalism, propaganda, the functions of station personnel, the rights and duties of journalists (in newspaper, T.V. or radio fields), are discussed to give the graduate an idea of his responsibilities to the public.

During the two years, a student learns how to produce both radio and T.V. programmes. A variety of program formats are covered, including news, and current affairs; dramatic, with lessons on stage technique, sense memory, and theatre vocabulary; interviews, adlibs, etc. The student follows the planning of a show to the writing of it, to learn the correct form of putting it on paper with cues, effects and related items all shown. He studies and practises the writing of commercials which might interrupt his show. After the programme is written, the student workds with equipment such as tape recorders, microphones, turn tables, cameras, video-tape recorders, and lights learning the uses and limitations. He learns how to manage and direct a T.V. or radio programme.

The student in RTA gains a knowledge of the broadcast industry that interests him and in which he will probably spend most of his career life. Broadcasters are the sense organs. They are its informers, it detractors, and its emotional outlet. Whether the graduates of RTA enter the broadcast industry as performers, equipment operators, writers, announcers, salesmen, public relations personnel, or producers and directors, they will be responsible for informing people effectively about the world, their surroundings and themselves.

CIVIL ENGINEERING TECH.

Civil Engineering Technology is a course in the training of semi-professional people, draftsmen, surveyors, inspectors, estimators, designers and materials inspectors to aid the Civil Engineer in modern construction.

Civil Technology is concerned mainly with the study, design, construction and maintenance of bridges, highways, railways, airports, dams, power developments, canals, docks, harbours and buildings of all kinds. Civil Technology also includes aspects of drainage, irrigation, sewage disposal and water supply systems.

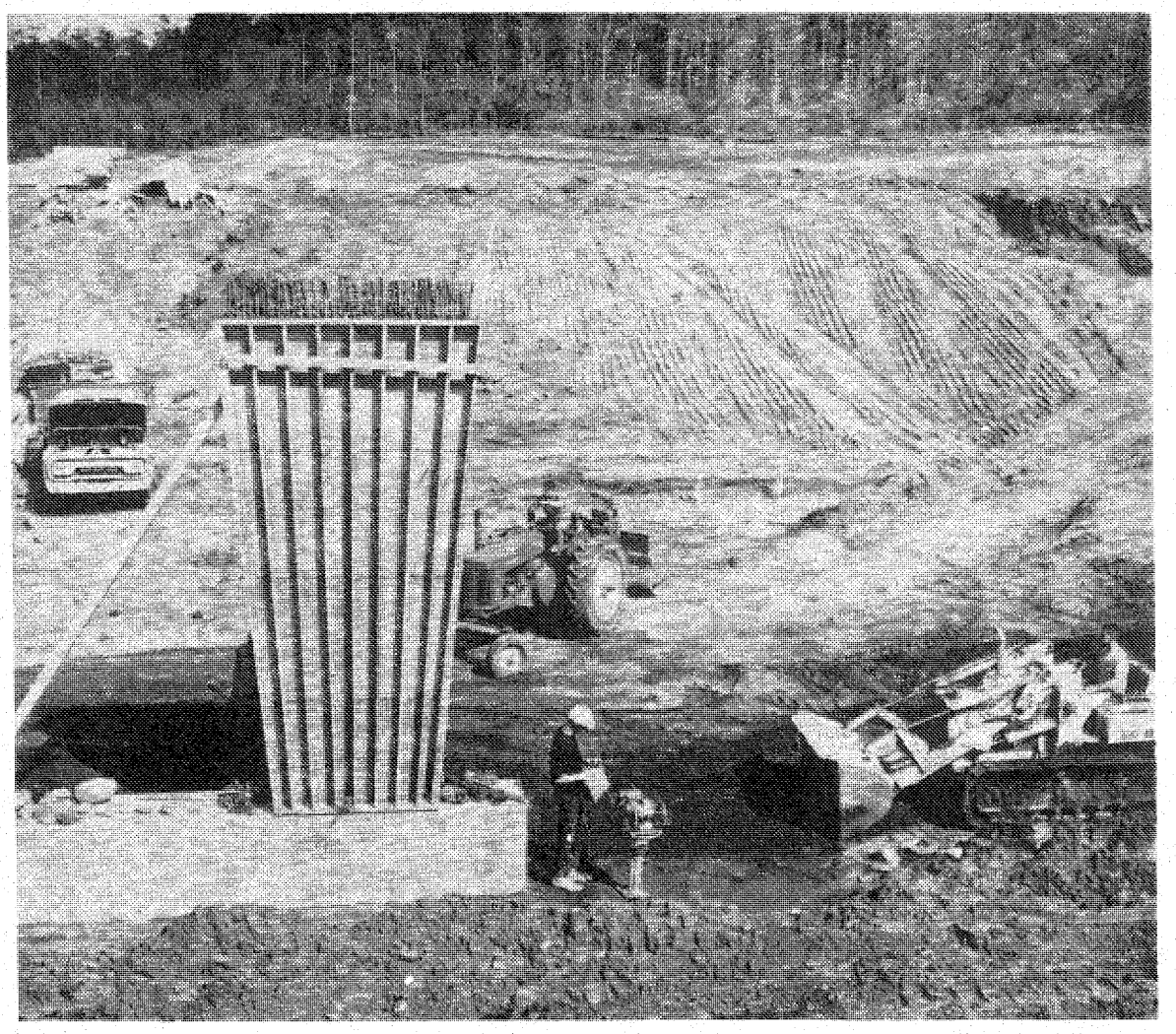
Qualified graduates are employed in various engineering fields - wherever there is construction. Approximately one-third of the graduates are employed by engineering consultants and materials testing companies. This includes the study, design, construction and inspection of roads, sewers, water mains, reservoirs, sewage disposal plants, water treatment plants, harbour installations and irrigation canals. The materials testing field includes the laboratory and field testing of soils, cements, concrete, asphalt and other materials used in construction. Another third of the graduates are employed by private contractors as estimators, draftsmen, surveyors and job superintendents. The remaining third work for various governmental agencies as draftsmen, surveyors and inspectors.

Apart from the engineering fields mentioned before, there are graduates involved in technical sales, while still others are continuing their education at University level.

Salaries for graduates are comparable to those paid similar semi-professional people, and vary individually depending on the experience and personal capabilities of the employee.

Advancement opportunities are good for graduates because of the increasing amount of construction and the resulting expansion of the need for technology graduates. Many graduates start as junior inspectors, draftsmen, designers and estimators. The road to seniority, in these fields involves experince and dilligence, but many graduates will succeed. Civil graduates are given basic knowledge required of job superintendents for private contractors: grads may start work as assistant to the superintendent and later advance to superintendent, field superintendent, and construction manager. Advancement is on a merit basis, and so the individual dictates his rate of advancement as opportunities present themselves.

To become a Civil Engineering Technician a person must have a Civil Technology diploma. The Civil Technology course at N.A.I.T. is a two year program. Entrance requirements are a high school diploma or equivalent, with at least a "B" standing in mathematics 30, 32 or a combined average of mathematics 30 and 31, and credit in physics 30 or 32. Additional data may be obtained from the office of the Registrar, N.A.I.T.



DRAFTING TECH.

The Drafting Technology program at NAIT is designed to train interested and qualified young people for the third category. The training includes courses in Mechanical, Survey and Topographical, Structural, and Architectural drafting as well as major subjects, together with Electrical Drafting, Technical Illustration, and an introduction to various modern techniques as minors. These courses are supported by studies in Mathematics, verbal and written communication, science, structural design, machine shop and surveying.

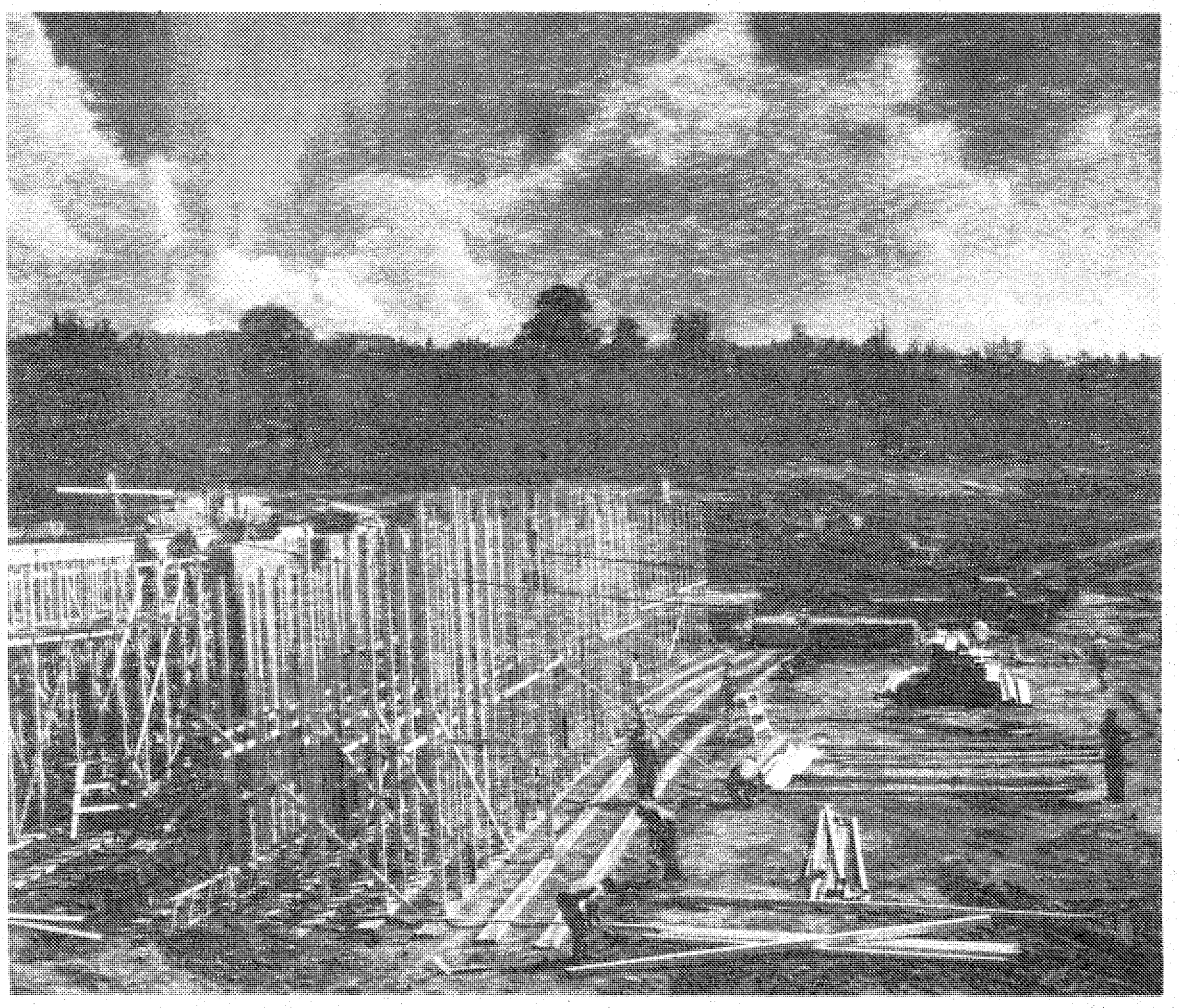
By means of trips to manufacturing plants, engineering offices and microfilming plants, the students have the opportunity and the use to which their work will be put. The program can generally be classified as being two of two years duration, if the applicant has a grade XII standing. Interested persons can obtain more detailed information at the drafting technology display, the information booth, or by contacting the registrar of the institute.

A short number of years ago "experts" were predicting that the ancient and honorable trade of drafting would be taken over by computers.

However, according to a survey concluded in 1967, and conducted by the American Institute for Design and Drafting, there is a continued high demand for designers and draftsmen, in both the United States and Canada.

The trend however is to require higher educational standing for employee draftsmen, which is rewarded with higher pay, good working conditions and better opportunities for advancement.

Although salaries reported in this survey were for work in the United States the following comparison can be validly applied to Canadian Conditions salaries for untrained persons as a base of 100%, employees with high school drafting start generally at a level of 140%, and the Technical Institute graduates at a level of 180%. There is also a definite trend to increase the ratio of designers and draftsmen to engineers.



BUILDING CONSTRUCTION

The Construction Industry in recent years has enjoyed an honored position as number one industry in Alberta, as it has generally in North America. Because of the tremendous growth of the industry a heavy demand for trained personnel has arisen. To supply the necessary training, and pursuant to a request from the Edmonton Construction Association, NAIT has initiated a course in Construction Technology.

The young men taking this course learn the advantages and limitations of materials, the role of the trades, and varied construction techniques. Some of the subjects offered are drafting, statics, soil mechanics, surveys, estimating, use of heavy equipment, form design, carpentry, masonry, tile and marble setting, plumbing, gas and steam fitting, air conditioning and controls and maintenance of small engines.

Graduate Building Construction Technologists should obtain positions as estimators, assistants to job sponsors and superintenddents, sales and servicemen for material supplier, inspectors for government agencies and material testing companies, and in related employment. The challenges offered by the Construction Industry and its myriad affiliated companies are unlimited.

It is generally found that promotions and pay are based on merit rather than seniority. Therefore, those seeking careers in the Industry should be self starters, ambitious and confident.

The entrance requirement is a grade twelve diploma with a "B" standing in mathematics, or a Journeyman's Certificate in a building trade and successful completion of a special entrance examination.

If you are considering a career in this field, the staff members of the Construction Department would be pleased to discuss the program with you.

ELECTRICAL TECH.

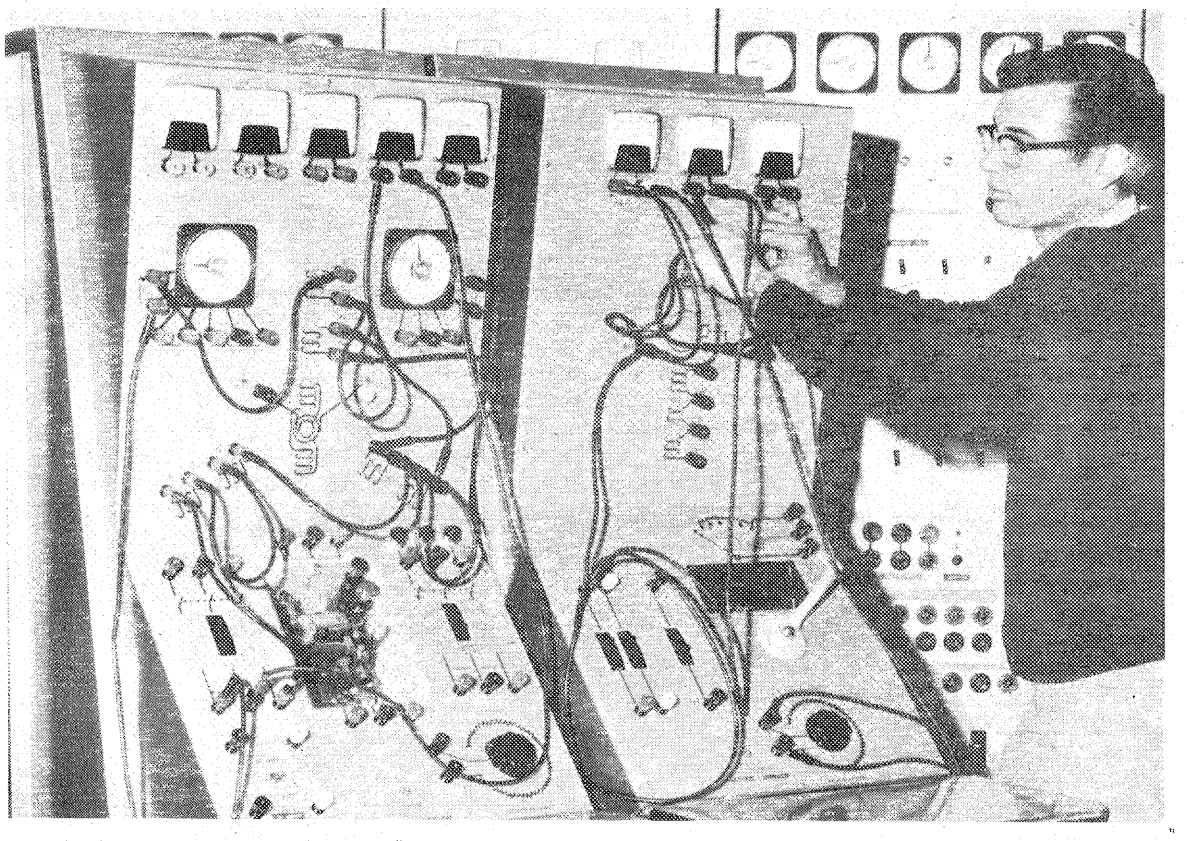
Of all the things taken for granted in our age, probably one of the most frequent is the availability of electrical energy. We are forcefully made aware of advances in areas such as medicine, science, space technology, food production and industrialization of our society but seldom correlate them all with one common factor; electrical energy. All future advances serve to accelerate the demand for electrical energy and expand the opportunities for people trained in this field.

The electrical technician receives a comprehensive training that will complement the specialization of his future employment in one of the many areas of opportunity to which electrical energy is a common factor.

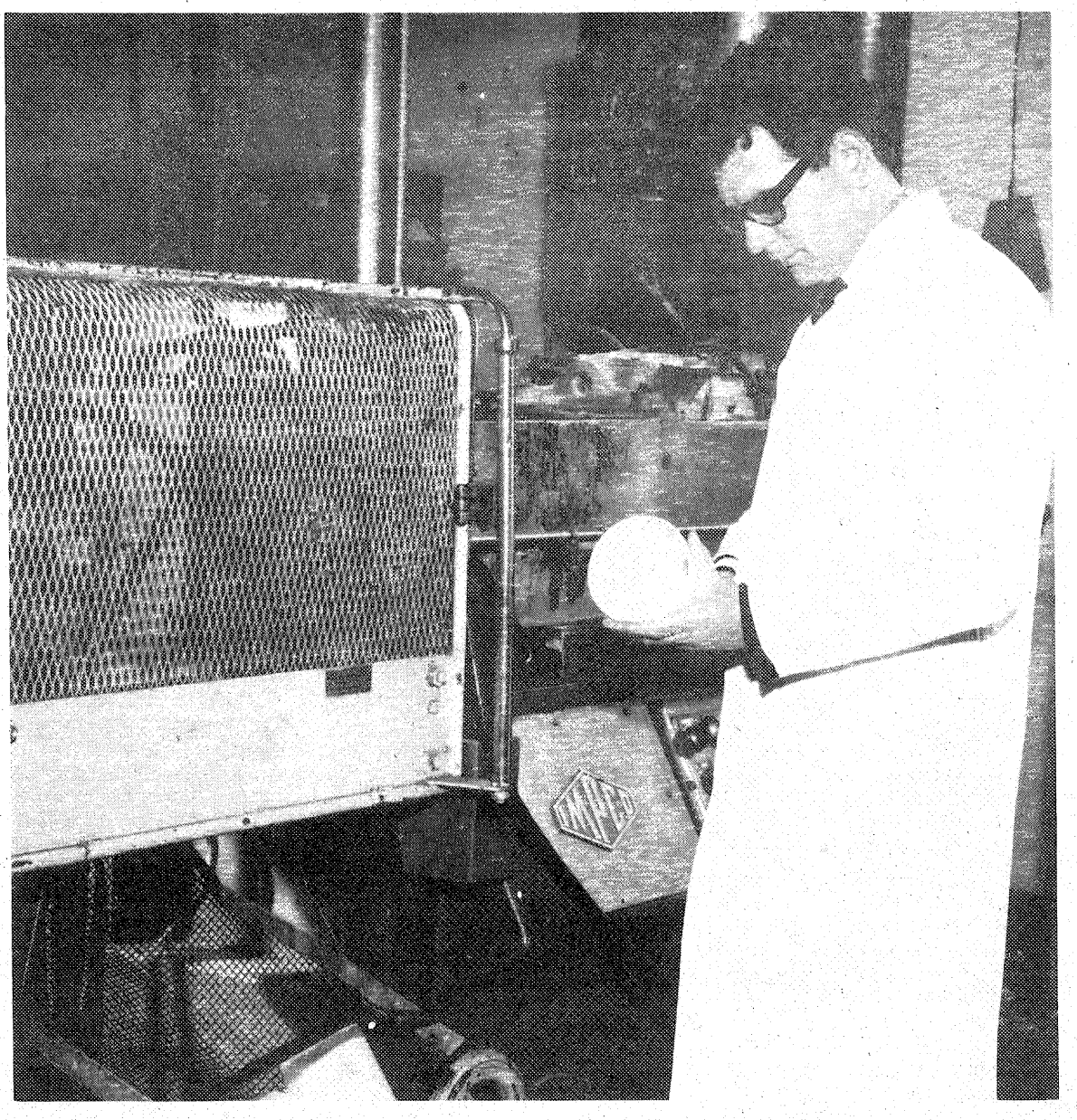
Subjects in the program begin with a thorough coverage of basic electr-magnetism and electronic theory supported by related laboratory experiments as well as mathematics, physics and technical English. Successive quarters cover theory and laboratory experiments on single and three phase systems, d.c. and a.c. machines, transformers, switch gear, controllers, electronic power supplies, amplifiers, solid state and integrated circuits as applied to control functions and a continuation of applicable math, physics and English. The final year subjects concentrate on industrial electronic control. Static switching, supervisory control. telemetering, protective relaying, commercial and industrial design problems and theory and application of computer math.

The Electrical Technology program may be completed in either two or three years, depending on the students academic background. A sudent with grae XI would require 3 years to complete the course while one with grade XII may complete an accelerated course in 2 years. Details of high school subject requirements for admission into the course are available from the Institute.

1967 graduates received an average starting salary of $435.00 per month. Employers of Electrical Technology graduates include: The City of Edmonton, Calgary Power, Canadian Utilities, B.C. Hydro, Canadian General Electric, Canadian Westinghouse, Atomic Energy Commisssion, A.G.T., Bell Telephones, Chemcell and numerous other industrial firms, pipeline companies, consulting firms, maintenance firms and mineral corporations.



PLASTICS TECHNOLOGY



INTRODUCTION

Plastics form a relatively new class of engineering materials. They have taken their place along side of the more traditional metals, wood, glass and paper.

It is difficult to name a facet of our lives which is not affected directly or indirectly by plastics materials. Plastics componenets in space equipment now circle the earth, are on the moon and beyond. The rapid growth and use of computers is largely due to the electrical and dimensional properties of special plastics components. Replacement heart valves and other surgical implants are further examples of the versatility, use and importance of plastics.

More familar applications occur in and around the home, in communications and transport -- in fact, the uses of plastics are limited only by the imagination.

WHAT ARE PLASTICS?

In contrast to the naturally occuring substances such as asbestos, wood, natural rubber and metals, plastics are man made. In a few instances they may be "semi-synthetic" that is, naturally occuring substances such as cellulose may be modified chemically to produce a "plastic".

The molecules of a plastics material generally form long threads. Those long-chain molecules are make up from relatively simple hydrocarbon molecules. By reacting the simple molecule ethylene, for example, one obtains the familiar polyethylene.

Under the action of heat and pressure, the long thread-like molecules may be made to flow and take on a variety of shapes.

INDUSTRY AND N.A.I.T.

The rate of growth of the Plastics Industry in Canada exceeds the national average of all other industries. This growth has created a shortage of trained technical personnel in this field.

The two year course in Plastics Technology is designed to educate the student in the principles of manufacturing processes, chemistry, properties and applications of plastics. In addition, the student is given a basic understanding of engineering sciences and business. The successful graduate in Plastics Technology will be well trained for responsible positions in technical process and quality control, design, research and development, customer liaison and representation as well as the commercial aspects such as sales and marketing.

COMPUTER SYSTEMS

Undecided about a career for yourself after graduation? Or are you interested in getting a high-paying exciting job in the field of tomorrow? If the anwer is yes, it's time you considered entering the fascinating world of "man-made brains" as a student in Computer Systems Technology at NAIT.

The objective of this course is simple: to train students, both men and women, to become efficient programmers and competent system analysts in the rapidly expanding field of electronic dataprocessing. The course is well-suited to people with reasonable mathematical ability and a clerarly logical mind; furthermore, certain subjects offered will help to develop these qualities. Prerequisites include Math 30 and a high school diploma. Suitable applicants with senior matriculation are welcomed.

What is offered to the prospective student by the Computer Systems Technology? As a first year student in Computer Systems you will immediately begin to program the newly installed Control Data 3150 computer. The problems which you program are integrated with the mathematics, accounting and economics courses. In addition, you receive instruc- communications so that you can learn how to effectively present your ideas. Believe it or not typing is becoming more and more necessary because we have now entered the age of remote terminals to computers.

In the second year in Computer Systems, school becomes even more fun as you begin to solve practical problems that allow each person to use his own creative abilities. Also more emphasis is given to the aspect of systems analysis in data processing; that is, analyzing and designing workable business systems using the computer as an aid. Other subjects taken include advanced mathematics and cost accounting; statistics, which requires a more scientific approach to problem solving; business production and inventory control, various computer applications, and others. Naturally a proportionate amount of work is expected from the student in both years to produce the results required for graduation.

As a graduate of Computer Systems, what can be expected for job offers. Recent graduates of the technology have been employed as programmers, systems anslysts, operators, technically competent sales representatives, etc. with some of the largest companies in Canada. Starting salaries range from $450 to $500 and promotion and salary increase is virtually unlimited. Improvement in jobs and salaries is foreseen, as industry is made more aware of the superior quality of the Computer Systems course as offered at the Institute.

APPRENTICESHIP TRAINING FOR INDUSTRY

Industry has many facets. Let us consider the construction of a building, the maintenance of a motor vehicle, the maintenance of electrical and electronics equipment, and the manufacture of metal products. As we consider the personnel and the type of work involved, we will think of the various trades.

In the construction of a building, we have the carpenter, the bricklayer, the plasterer, the roofer, the lather, the painter, the tilesetter and the glassworker. In trades closely associated with the construction of the building we have the piping trades; the plumber, steamfitter, gasfitter; we have the sheet metal mechanic, the ironworker and the welder. There are three electrical trades -- the Construction Electrical, involved in wiring and electrical services in buildings; the Power Electrical, associated with the distribution of electricity; and the Communications Electrical, working with telephones and related equipment. These many trades are involved in the construction of a large building.

Consider the maintenance of the equipment within the building: we have the Radio Technician, involved in the repair of radio and television equipment, we have the Appliance Serviceman and the Refrigeration Mechanic.

The tradesmen involved with the automobile, truck and heavy equipment are the Auto Body Mechanic, the Motor Mechanic, the Heavy Duty Mechanic, the Partsmen. Involved in the manufacture and erection of equipment we have the Machinist and the Millwright. We must also remember that in the food preparation area we have the Cook and the Baker.

Apprenticeship is an earning while learning arrangement. Apprenticeship is a training on-the-job and trade school training program. NAIT serves as the school arm in this training program.

There are many opportunities available to young people who would choose to become skilled craftsmen by joining the field of work under a contract arrangement which provides for formal schooling that will enable them to become recognized as well-trained. Apprenticeship training leading to the position of Journeyman in these various trades is under the direction of the Provincial Apprenticeship Board. A contract is drawn up by the Provincial Government, Apprenticeship Board, between the employee and the employer. The length of apprenticeship is usually three or four years, with a part of each year taking formal training at a suitable school. The length of training per year is usually six to eight weeks, but may be as little as four or as long as twelve weeks. While at school, the apprentice is treated as a regular student with the normal responsibilities and privileges of the school.

There is a minimum education requirement. For many of the trades is is Grade X, with an emphasis on Mathematics, other trades may have Grade IX minimum requirement. Many employers do not accept this minimum as a trade minimum, they may require a potential apprentice to have Grade XI sometimes Grade XII. We can, therfore, expect to have some pretty high quality apprentices in some of the trades.

An apprentice must be at least sixteen years of age and in acceptable health and physique for the type of work that will be required of the tradesman. A prospective apprentice must have employment. Experience is gained in many phases of the trade under the guidance of qualified Journeymen in on-the-job training. Wages are paid in keeping with the apprentices' experience and the wages paid to Journeymen. The apprentice's progress is established by the school examinations, the Apprenticeship Board's termination exams and the report from the employer.

The contents of the course offered during the school training will have been prepared by the Apprenticeship Board, with the assistance of Advisory Committees for that particular trade and in close liaison with the school. The course will include Trade Theory and Shop Practice, supported by Mathematics, Science, Blueprint Reading, Codes and Safety and Genderal Knowledge all pertaining to that particular trade, as requested by the Advisory Committee composed of employers and employees from industry.

The economy of Canada and Alberta is expanding, and the Apprenticeship school attendance is constantly rising. NAIT offered its first apprenticeship training to a group of Communication Electrical apprentices in the late fall of 1962. During the 1966-67 term, training was offered at NAIT to some 4,000 apprentices. It is expected that during 1968-69, about 4,500 apprentices, in twenty-five of the designated trades, will benefit from school training at this Institute. The largest registration in a single day at NAIT was January 2nd, 1968, when about 820 apprentices were enrolled.

The instructional staff for the apprentice training at NAIT is an interesting blend of Journeymen, Technicians, and Engineering and other professionally trained personnel.

The Technologies that have close contact with the apprenticeship school training in the same area are in a very fortunate position, as, indeed, are also the apprentice groups. High calibre Instructors are found. They normally have a good academic background. The Instructors in the technolgy programs are involved in or influenced by the apprenticeships programs, with the result being a very well balanced technology. It is recognized that the technologist is between the tradesman and the engineer or professional of the field, and if he is to fulfill his far either toward one end of the scale of to the other. The influence of the tradesman or apprentice at NAIT complements the highly qualified instruction to make a good technologist. The benefits are not one sided -- the apprentice is continually in contact with the upgrading influence of an academic environment. He is, thus, able to understand better the theoretical side of his work as well as see facets of the technologist that may not otherwise be seen. The apprenticeship program is an interesting and important part of NAIT.

TELECOMMUNICATION TECHNOLOGY

The Telecommunication course may be taken in the two year plan or the three year plan.

Three Year Program - Admission to Year A- Minimum requirements are 69 Alberta High School credits with at least a "B" standing in Math 20 or 22, Science 20 or 22 and English 20.

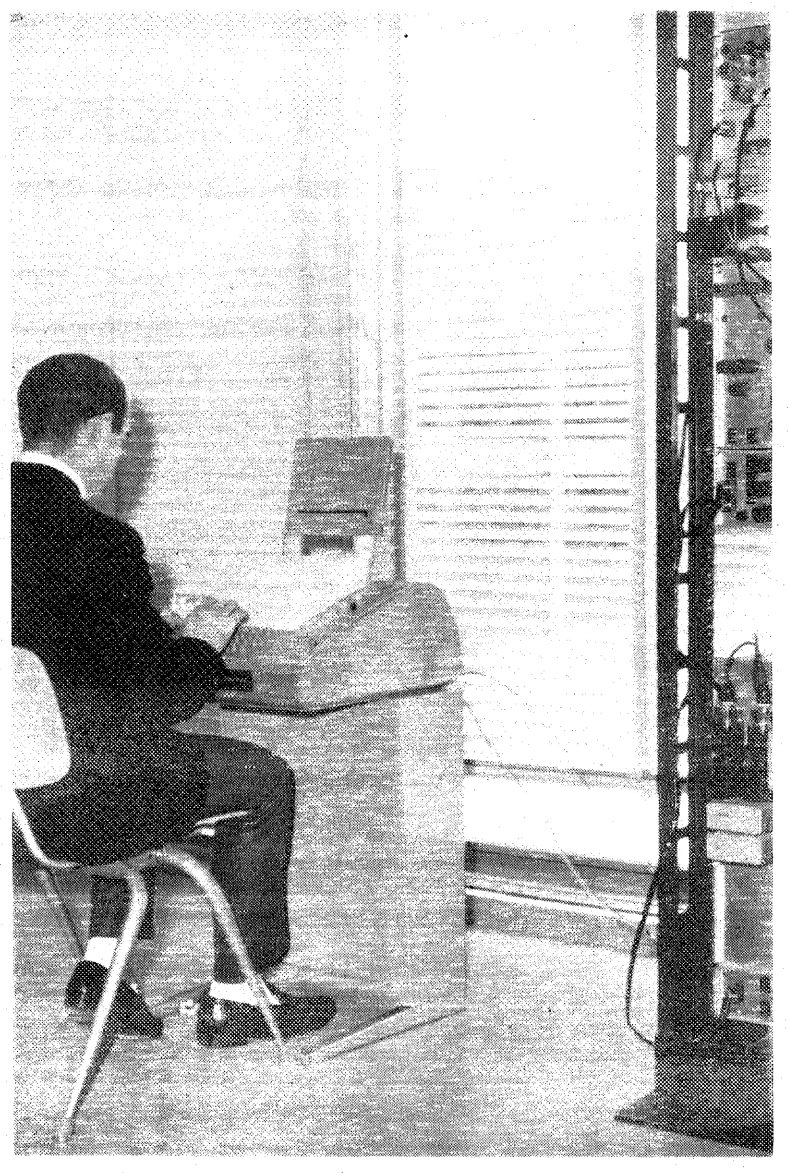
Two Year Program - Admission to year AB - Minimum requirements are a high school diploma with a "B" standing in Math 30 or 32, physics 30 or 32, and credit in English 30 or 33.

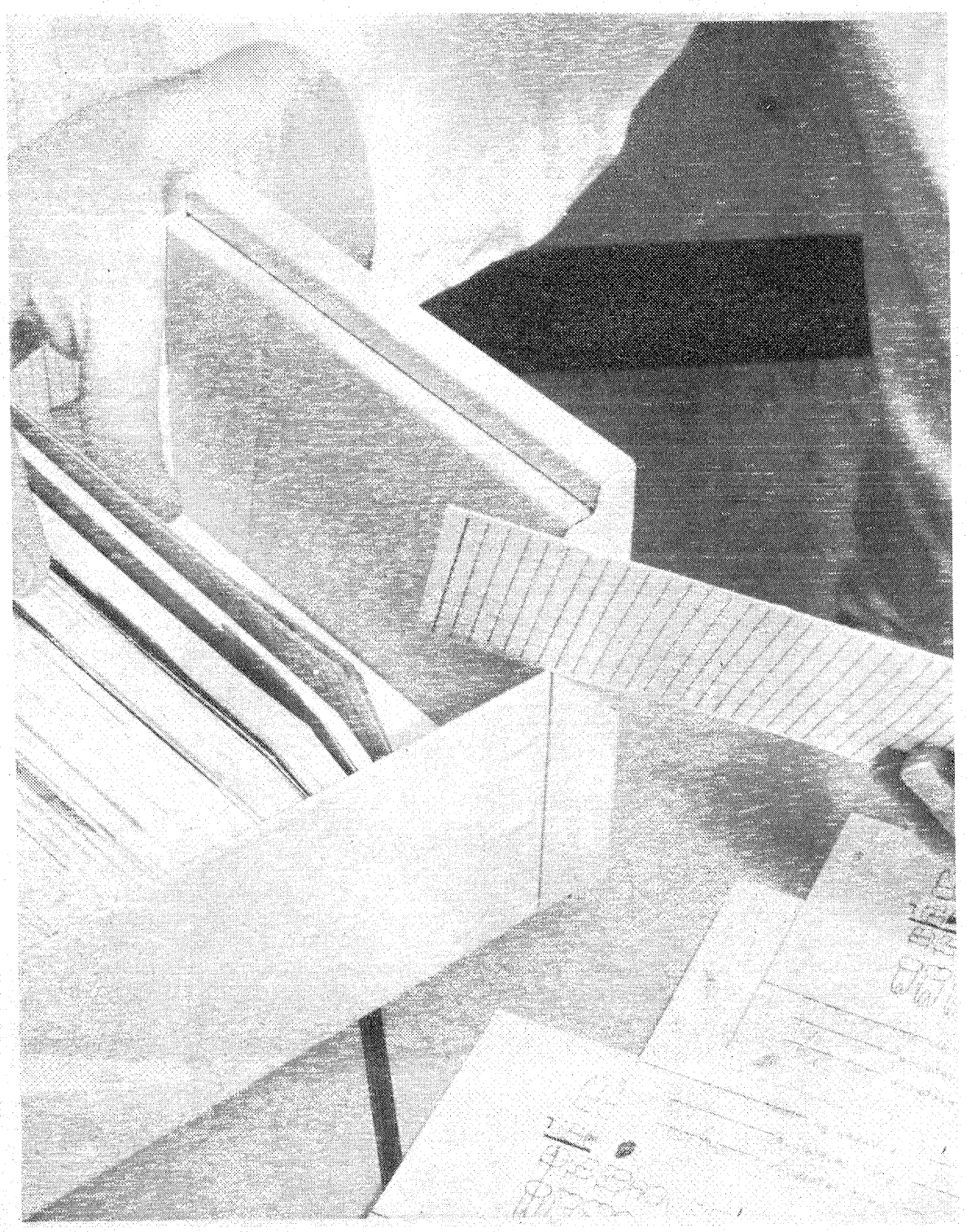
If you wish to further your education after leaving NAIT, your Telecommunications diploma will allow you to enter second year Engineering at the University of Alberta.

The telecommunications technologist would work in the broad field related to the telephonic, carrier, microwave and other communication systems.

While taking the "Telecom" course you will be working with extensive modern communications equipment, ranging from telephone instruments, subscriber equipment, control exchange switching equipment, crossbar, carrier and transmission equipment. All of these communications instruments are operational and are set up as you would find them in industry. In the labs you will also find high frequency radio, microwave, acatter and specialized test equipment and instruments as well as kits for all typesof logic and switching equipment.

Graduates in Telecom can expect a job as an engineering assistant for such companies as AGT, IBM, Edmonton Telephones, BC, Sask., and Manitoba Telephones, Canadian National Telecommunications and other associated electrical industries.





MEDICAL RECORD LIBRARIAN

"A medical record is a clear, concise, and accurate history of the patient's life and illness, written from the medical point of view." A complete medical record must contain sufficient data, written in sequence of events to justify the diagnosis and warrant the treatment and end results.

The medical record begins in the Admitting Department, with the admission of the patient. Here, identification data is obtained, and the medical record goes to the floor on which the patient is to be hospitalized. The nurses add the bedside record and other graphic chart forms. The attending physician and his intern staff add the patient's complaints regarding his present illness, his personal and family history and report of physical examination. Reports such as laboratory reports, x-ray reports, electrocardiograms, operations as dictated by the Surgical staff, consultations and others, are added daily. The nurses continue to record the temperature, pulse and respirations of the patient at intervals as well as diet and medications as ordered by the attending physician, who also records the general progress of the patient as often as necessary until discharge.

The hospital, having assumed an obligations for the accuracy and custody of such a valuable document, must ascertain that the medical record is complete and justifies its purpose. The Medical Record Librarian is a person trained to assemble and analyze all components of the medical record and it is to her that the Hospital assigns the following responsibilities:

1. Making the medical record available immediately to persons authorized to receive the confidential information.
2. Determining whether the content of the medical record justifies the diagnosis, warrants the treatment and end results, before filing.
3. Assigning a code number to diseases, operations and special treatment according to a recognized coding system.
4. Assisting the medical staff in research based on information contained in complete medical records.
5. Participating in staff meetings representing a professional service.
6. Preparing comprehensive statistics on each department in the hospital as well as the overall utilization of the hospital.

The medical record librarian must be thoroughly familiar with the organization and management of a medical record department. She must know the component parts of the medical record, be able to interpret the scientific statements made by the physicians attending the patient, and to refer the record to the proper medical authority should she discover any deficiency. She must be able to assemble and coordinate the various parts of the medical record as received, to recognize and correct deficiencies before passing the record on to the medical record committee for their final appraisal. She must play her part in establishing a good relationship between the Medical Record Department and all other departments in the hospital.

DENTAL ASSISTANT

Greater demands are made upon the dental profession as the population growth rapidly outpaces the number of graduating dentists. It has therefore become imperative that every measure of conserving the dentists time be employed. This demand has created the need for large numbers of well trained dental auxillary personnel, particularly dental assistants, to whom dentists can delegate more of the time consuming tasks that require neither their scientific knowledge nor their professional skills. The assistant can work with the dentist on treatment procedures and so permit him to complete them in less time than if he worked alone. In addition the dentist can be relieved of certain sub-professional tasks in the laboratory.

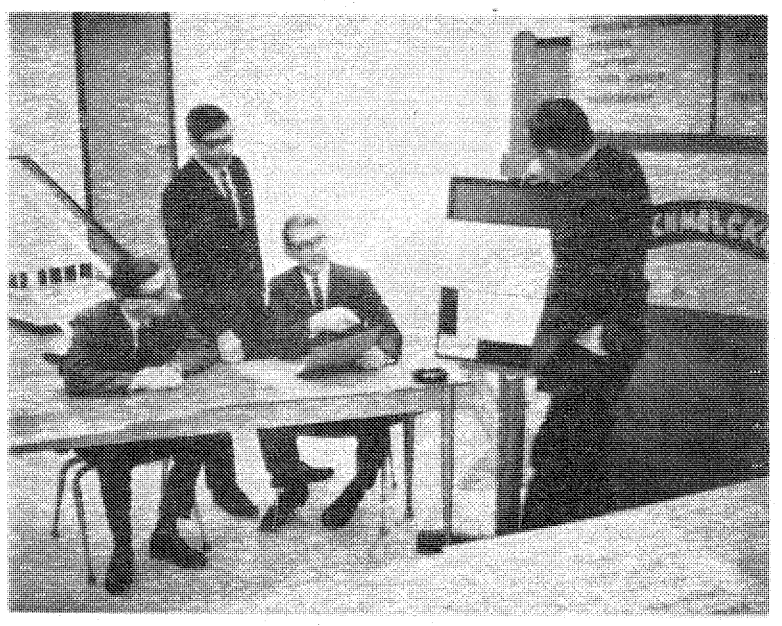
Recognition of the contribution which the assistant can make to the dental practice has been demonstrated with the establishment of various Dental Assistant training programs in Technical Institutes and Vocational Schools across Canada and U.S.A. These programs provide future dental assistants with greater knowledge and scope than can be gained from on the job training. This then enables them to adapt more easily to various office circumstances and roles.

In the hope of meeting the demands mentioned above the following are four main objectives of the N.A.I.T. Dental Assisting Program:

1. To provide the student with knowledge of dental theory adequate for understanding and the significance and implications of all procedures to be performed.
2. To provide the student with working skills in chairside, clinical and laboratory techniques, This is accomplished by preliminary clinical practice at N.A.I.T. and through the co-operation of private dental offices in Edmonton and Calgary.
3. To provide the student with knowledge, understanding and skills in recordkeeping, office maintenance, cominess procedures.

To impress upon the student the importance of professional ehtics and conduct and of good public relations.

WHY DISTRIBUTIVE ?



Why? Because taking Distributive Technology is like getting in on the fifth floor, not the ground floor of the business world. With Distributive you ride the elevator to the top, not climb the stairs, Yes, the course offers a good background for the young man or woman with aspirations of reaching a top executive level.

Distributive offers a thorough knowledge of what is involved in business. A varied program to train those who will be in the process of distributing goods from manufacturers to consumers.

Distributive Technology was first offered in 1964. Now, under the guidance of Mr. Baird, the course runs smoothly from the teaching of subjects to the participation in social functions.

Queen Week, Open House, and sports activities are a few of the function enthusiastically joined in by the club.

Even though Distributive is one of the more enjoyable courses socially there is a lot of work involved in receiving the essential training for the future. In the two-year training you receive a basic knowledge of the various fields of distribution.

In addition to the main core you receive course applicable to the program you choose. If advertising is chosen you take Advertising courses as well as creative labs. In Salesmanship you learn of the various facets of sales in the specialized course. In Merchandising, course in retial management are taken as well as retailing labs.

PROFESSIONAL SALESMANSHIP

Our on-going society demands a constant flow of goods and services. This flow is maintained through the constant efforts of the Professional Salesman. In this decade, personal and industrial selling is identified with a company representative who is market manager in his territory, who sells within a keenly competitive business structure, and who utlizes highly sophisticated motivational tools, combined with a problem-solving approach to business.

Within this program, the student will be schooled in four basic subject matter areas. First, the student will examine and develop sales techniques in the realm of industrial and retail markets. Secondly, he will explore the area of the consumer with psychology and motivation. Thirdly, administrative concepts of sales management are probed an analyzed. Fourthly, an orientation of marketing methodology will round out the program.

After a successful completion of the program, the student's employment possibilities range from direct sales to corporate accounts representative.

ADVERTISING MANAGEMENT

The objectives of the advertising program are twofold. First, to provide students seeking advertising as a career with the basic and advanced techniques of advertising. Second, to provide the advertising industry with trained personnel.

Ther are three main streams followed in the course. Creative Advertising includes the study of copywriting for print and broadcast media, layouts, story-boards, production and direction. Advertising Management involves a study of the various media, the role of advertising agencies, the role of advertising in the marketing process and the role of advertising management. Advertising Research covers such areas as Nielson ratings, Starch Surveys, pretesting and postesting, and measuring sales effectiveness. Extensive case study is used in all areas.

Possible positions open to graduates are sales and research in agencies, advertising departments, print and broadcast media or research organizations.

MERCHANDISING ADMINISTRATION

The purpose behind the Merchanding Administration program is to provide students with a solid grounding in the practical and theoretical approach to Merchandising, and to develop for retailing organizations, employees who can immediately function as responsible staff members.

The course content is very extensive, and covers the following aspects of Merchandising. Retail Organization, the Customer, the Buyer, Merchandising Policies, Technique of Buying, Fashion Merchandising, Visual Merchandising, Merchandise Control. Mathematics of Merchandising Control.

There is also a Co-operative Work Program included in this prgram. It entails twelve hours a week of practical part-time work in local Department stores that have volunteered to cooperate with N.A.I.T. in a progressive in store program.

BANKING

In keeping pace with the rapid changes of our time, Canadian banking has also undergone many changes. New policies, improved services and better systems have resulted. No doubt, one of the most significant changes has been the increased education required by new employees.

With most banks a grade twelve diploma has become the minimum requirement for new recruits. Today limited numbers of university graduates are hired and specially trained for executive positions. However, there is a large and ever growing demand for young men and women to fill the clerical and middle management positions. The N.A.I.T. Banking and Finance course is specially designed to provide the practical training required by these important members of the organization.

The N.A.I.T. Banking and Finance Course is divided into two programs:

(a) TELLER TRAINING & GENERAL BUSINESS. (One year mainly for girls). This course deals mainly with teller training, practical banking, accounting, posting, and general bank practices and procedures, typing, and operating of the other various business machines.

(b) BANKING AND FINANCIAL MANAGEMENT. (Two years mainly for boys.) A completion of this course helps to prepare the young man for a managerial routine within a bank after about five to eight years after graduation. The young man takes courses mainly in credit, accounting, economics, and they also must have a general knowledge of law, banking machines, business machines, and general bank practices and procedures.

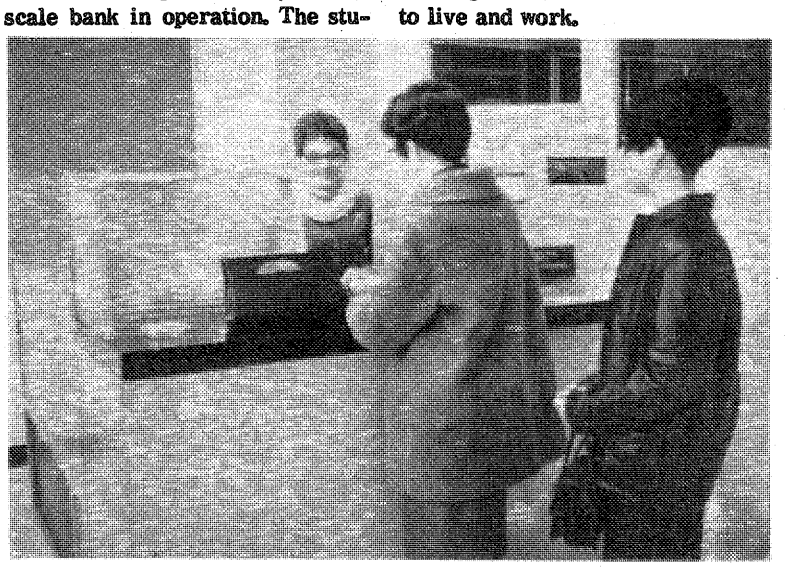
Completing one of the above programs doens't mean that one is trained for banking only. With a business machine and typing background a successful graduate can make a fulfilling career in almost any part of the business world, working as a clerk, a bookkeeper, a payroll clerk, a salesman, and saleswoman, or even a career as a professional accountant may be persued. Also, upon completion of the two year course, one may wish to continue in commerce or business administration at a university.

N.A.I.T. is also experimenting with a new ten week banking program. This is a crash course designed mainly to train girls to become competent bank tellers. Included in the program are such courses as business machines, practical banking, teller training, salesmanship, and oral communications. Enrolled at the present time are several young ladies specially selected and sponsored by local banks.

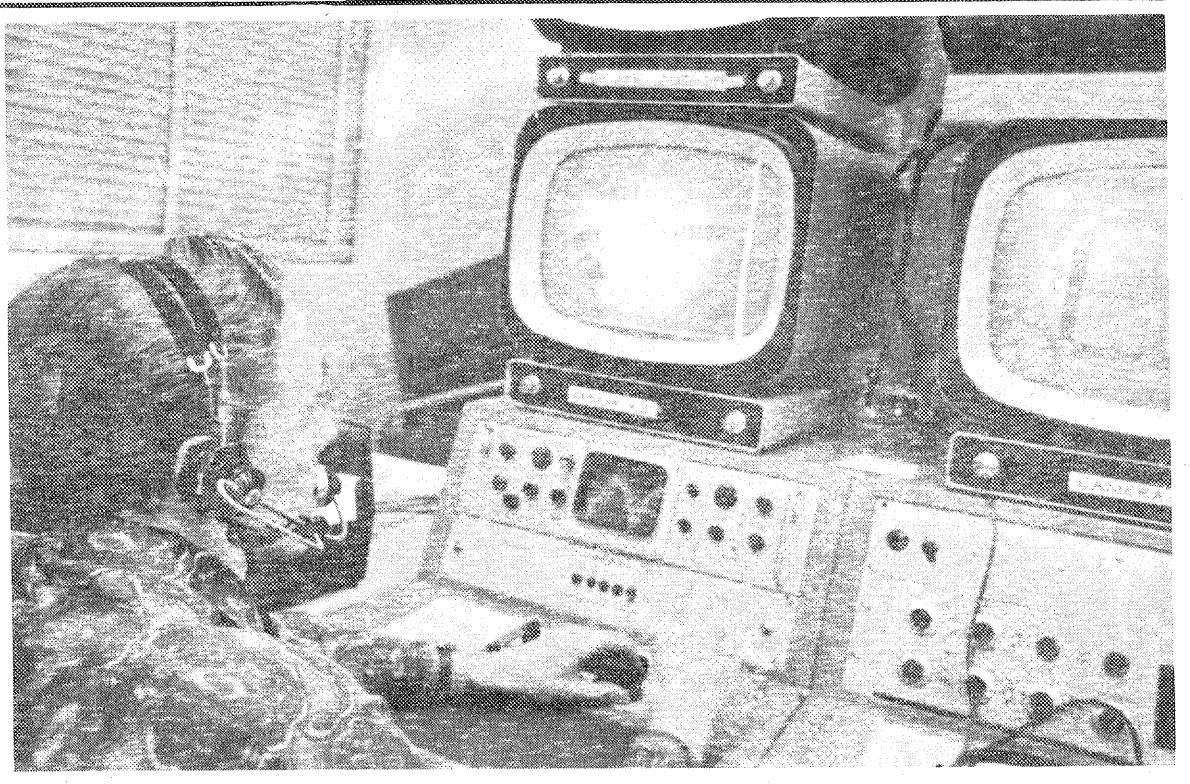
If you wonder just what banking really does entail, you ar encouraged to come to the fourth floor of the tower building and view Canada's future bankers in action. Here in our banking lab, room T-413, you will see, equipped with modern banking machines, a small scale bank in operation. The students working here will welcome your questions.

Should you select banking, you would be interested in its benefits. It has one of the best pension funds, a very good group life, sickness and accident insurance plan, very good working conditions, and competitive salaries are offered. Also to attract bright young people, many banks offer refunds of tuition fees following successful completion of an approved course of study. As for the future in banking it is hard to say, but there is a big possibility that many of the routine jobs will be done by computer. This means a strong demand for people with special skills, and shows the importance of a N.A.I.T. Banking and Finance Diploma.

Canadian banks have over 220 branches in some 21 foreign countries. Branches are located in the United States, United Kingdom, France, Germany, Mexico, Japan various section of the Carribean area. Just the mere mention of these exotic countries makes one a bit excited about a career in banking that could take him there to live and work.



RADIO AND T.V. SERVICE TECHNICIAN



This course has all the needed requirement for the training of persons qualified for the radio and T.V. service industry. The prerequisites for the course are only 67 high school credits with a "B" in Mathematics 20 or 22. Being a highly accelerated course in fundamental electronic theory, radio theory and television theory, the student would have to work steady, but not hard, to graduate with good marks. For the first two quarters, the theory and lab experiments coincide to make for a quick and EASY way to learn. (It is really quite effective).

BENEFITS

The main benefit of this course is the time saved in regards to the writing of apprenticeship examinations. Usually a trainee would have to work for one year before writing his first year paper and one other year before writing his second year paper, etc., etc. up to a maximum of four years, but in this course it is possible to write his third paper at the end of the third quarter. The first and second year papers are written in the third (last) quarter. Since the training is intensified, the student learns more by coming to N.A.I.T. than working for a very long time. Also, the student receives instruction in the use of all service equipment. (Also, there isn't much homeowrk so you can go and visit your honey every night.)

JOB OPPORTUNITIES

Most graduates from this course go into the customer service field of work as this is the main purpose of this course. Also, students may get a job with a large industrial firm repairing their electronic equipment.

PAY

The pay expected from this course mostly depends on the company for which you work. Starting salaries for graduates of this course are usually between $2.00 and $2.75 per hour. This is usually raised (but may be lowered) as the employer sees how a good person really is in the service industry.

GENERAL FEELINGS

The general feeling toward this course by the students now taking it is that is is not a hard course and it is a very interesting course. The first quarter seemed a bit slow because we were "chomping at the bit" to get our hands on a radio or T.V. but now realize that the basic theory was needed. Once the second quarter started, the fun really started. It is a good course and a very rewarding career for any person who wants to get into the radio and T.V. service industry.

NAIT FACTS

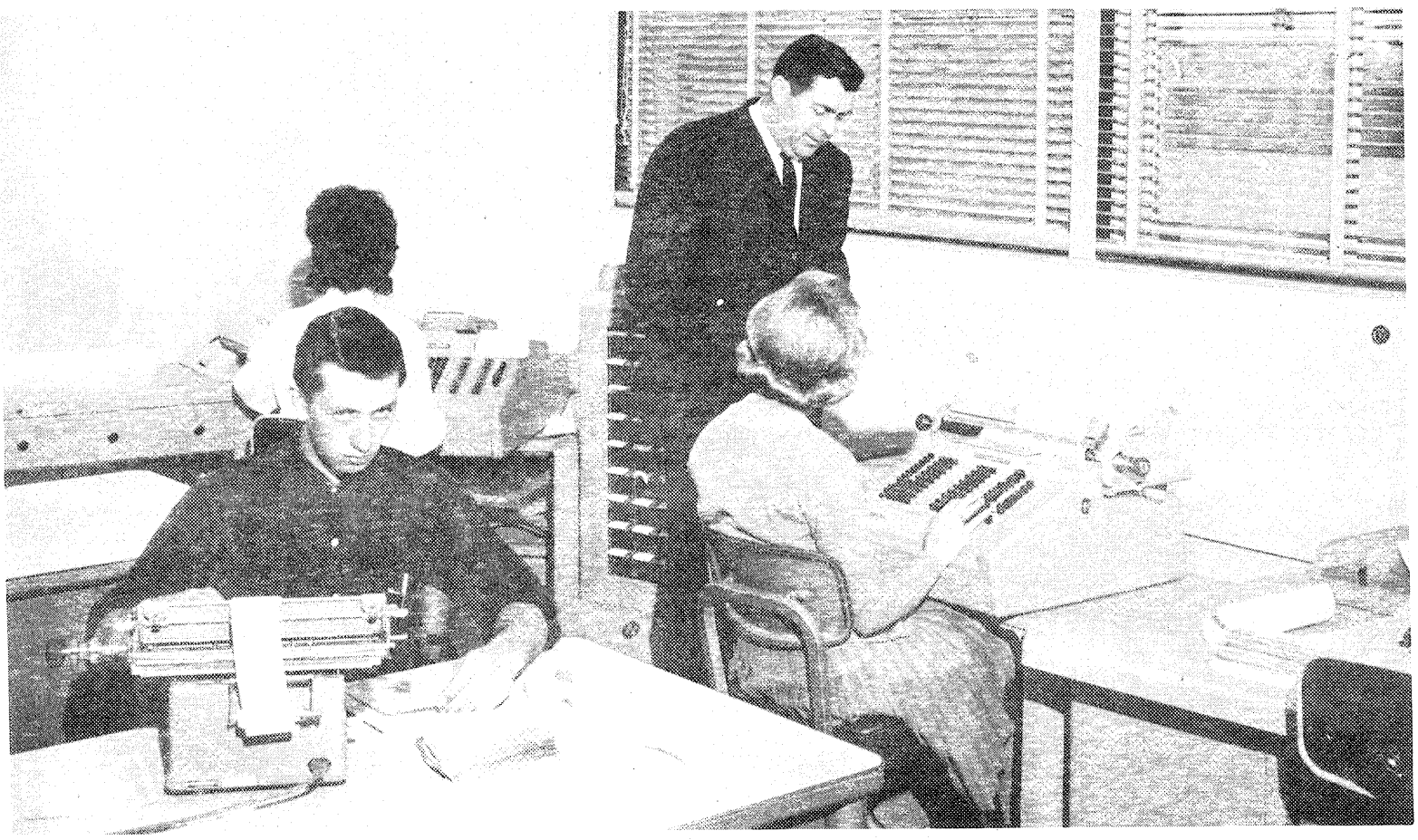
The N.A.I.T. campus consists of 37 acres of land. Of this, 11 acres is occupied by buildings, 11 acres is in parking area for 1,500 cars, 11 acres in in roadways and landscaped areas, and 4 acres in the recreation field.

The N.A.I.T. buildings have a total floor area of 870,000 sq. ft. or 20 acres. This includes the new Jay Wing now under construction.

NAIT Instructional areas consist of 170 shops and labs and 110 classrooms.

At present there are 4,000 students on campus in the day program. The average annual increase for the past 4 years has been 625 students per year.

The N.A.I.T. buildings cost $16,000,000.00 and the equipment and furnishings $8,000,000.00. This represents a otal capital investment of $24,000,000.00



BUSINESS ADMINISTRATION

With the development of computer systems and new and improved communication media, business in today's society is constantly changing and expanding. To keep pace with this rapid growth a broader education is required to produce personnel who will readily adapt to changing business conditions. The task of providing this broader background for business falls to business administration.

What is business administration' A broad definition might be the planning, organizing, and controlling of an enterprise in order to obtain the desired objectives of the owners in the most efficient manner possible. With this in mind, the first year students enrolled in the Business Administration program at N.A.I.T. study material designed to give them a general background in business practice and theory. Having a broad knowledge of what is involved, the student starting the second year program may then choose, from the four options offered, the one in which he or she is most interested.

The four second year options, listed in alphabetical order, are as follows:

ACCOUNTING

In any business, management needs systematic, comparative cost records and reports as well as analytical cost and profit data to manage an enterprise. The accounting option is designed to give a general knowledge of how an organization presents, analyzes, and interprets its own financial affiars both for management and owners.

Upon successful completion of this option, and at the discretion of the department, a student may apply to write certain examinations of the Society of Industrial and Cost Accountant of Canada.

BUSINESS MANAGEMENT

This option is designed to present the business fundamentals and methods that can lead to profitable management decisions and controlled courses of action. Included will be practical pointers in the matters of setting up, organizing and projecting basic plans and operations from the viewpoint of the administrator.

CREDIT ADMINISTRATION

With the increasing popularity of buying on credit, and with the demand for personnel to handle credit work exceeding the supply, the need for this option, now in its second year, is apparent. To our knowledge, N.A.I.T. is the only day school in Canada offering post high school training in credit management. The option prepares the student for credit granting, reporting and counselling, together with on-the-job experience.

OFFICE ADMINISTRATION

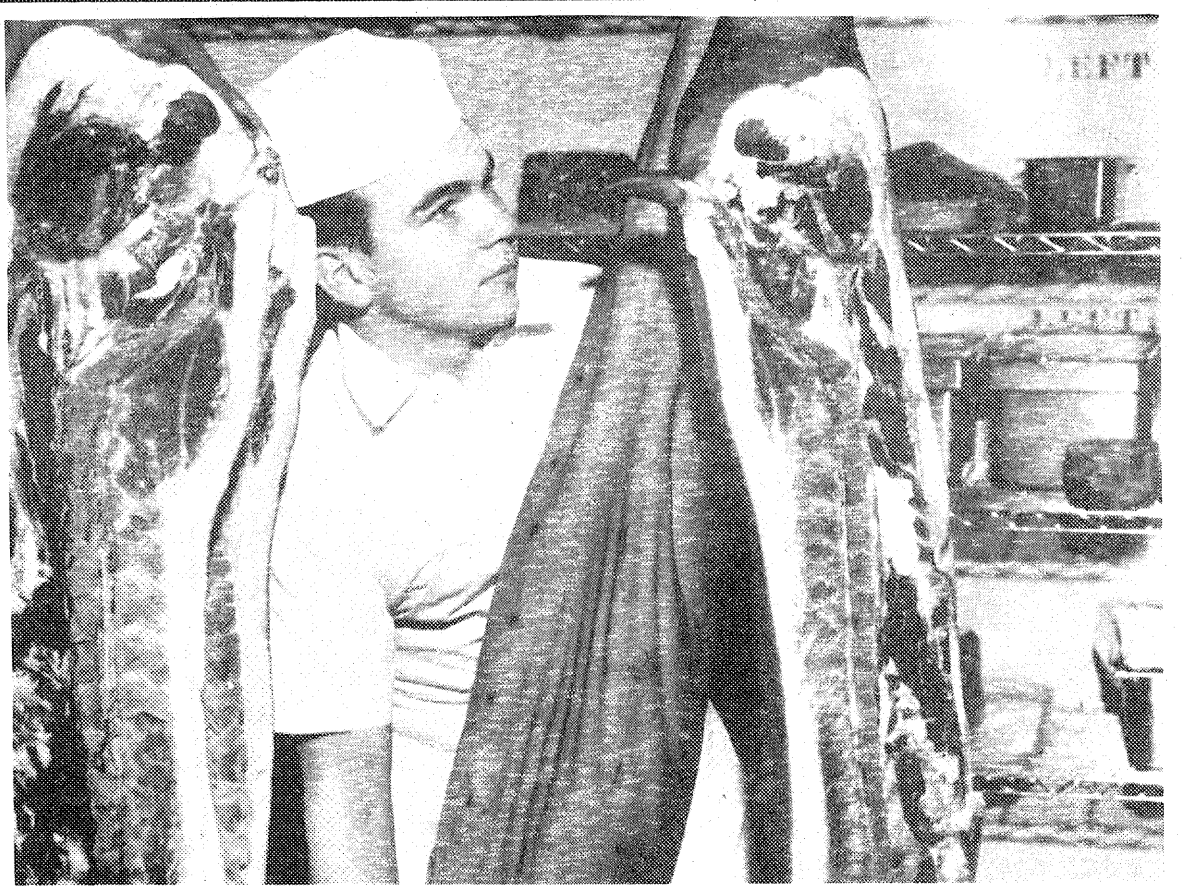
This option differs from the business management option in that students are primarily concerned with the supervision and administration of office procedures and problems rather than the other areas of an organization. This is the only option which offers several hours in computer programming drills and languages.

Upon completion of the option, a successful student may transfer directly to the second year program of Computer Systems Technology. If again successful, the student will possess, after three years at N.A.I.T., two diplomas, one in business administration, and the other in computer systems technology.

Whatever the choice, all options require work and perserverance in order that the student may graduate. However, "All work and no play makes Jack a dull boy" and to alleviate this situation the business students have set up their own society.

This students' club (Business Administration Society) provides activities for the student that deviate from the heavy turmoil of work and study. Activities such as queen week, open house, graduation, and dances allow full student participation and enjoyment. These activities are the complement to studying and help to provide a full and well-rounded schedule.

The future of the business administration department and the courses it provides lies directly with the graduating students. It is up to them to prove to their employers that the years of training for business at N.A.I.T. have been worthwhile.



FOOD PROCESSING TECH

The processing of food originated in the early nineteenth century with the invention of the canister. Since then the food industry has expanded to include canning, freezing, dehydration, smoking and others. In this vast industry the food technician makes his valuable contribution. This is an area that includes sanitation, contamination, preparation, preservation, packaging and storage of food. Besides this, consideration must be given to inspection, purchasing and consumption of food. Thus the demand for food technicians is strong in both the actual production of food and in quality control.

The food technician exploits the knowledge of the food industry in practical terms. He is needed to carry out the complicated operations involved in the production of consistently high quality wholesome food. This also involves the maintenance of quality standards with variations in supply and production factors.

He has an understanding of the basic principles of food preparation which is based on the knowledge of the chemical and physical properties of food, the environmental conditions to which they are subject during processing, the nature of the reactions caused by these factors and the effect on food of materials that have been added during the phases of production and processing.

Much of his time may be spent in the laboratory or in supervision of line assemblies, depending on his individual interest and the company policy.

A person entering this occupation is known as a technician. His work may be varied depending on his choice of industry. Major employers include: canning and freezing industry, fish and poultry packing, breweries, distilleries, and beverage manufacturers, dairy industry, oil and sugar refineries, and milling and baking industires.

The main objectives of this food processing course are to gain competence in handling scientific equipment in the food industry, including the operation of this equipment for chemical, physical and biological tests by undertaking routine laboratory procedures and processing calculations. Another aim is to have a general knowledge of the vast number of possible food industries and their operations in order to assume posistions in management and supervision. We also want to assist in quality control and the research of processing food.

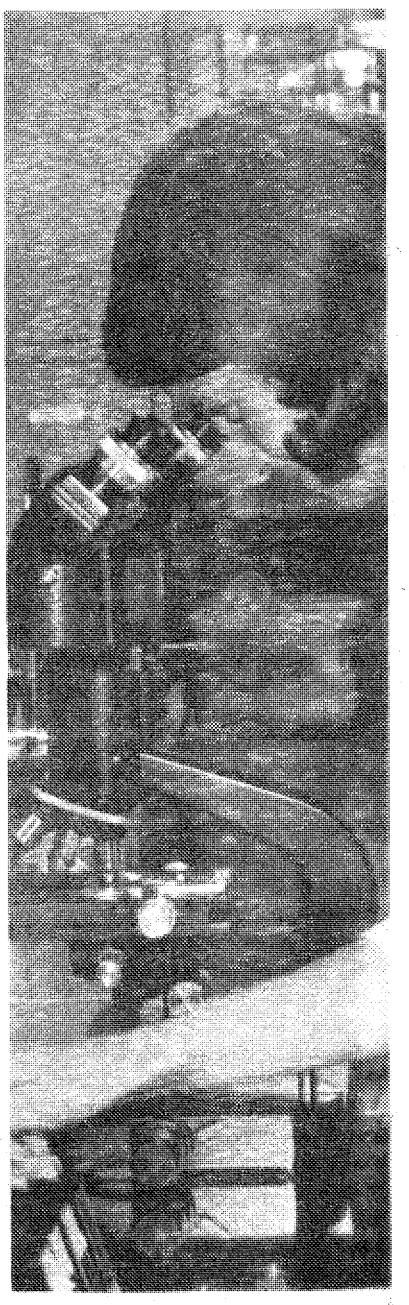
Persons entering this course should like and have good abilities in chemistry, math, biology, and physics would be an asset.

MEDICAL LABORATORY TECHNOLOGY

Medical laboratory technology is one of the para-medical sciences which has evolved in the last forty years. It has its origin in the work of scientists of the late nineteenth and early twentieth centuries. The discovery by Pasteur and Koch of the bacterial and viral causes of such diseases as rabies, tuberculosis, and anthrax led directly to the medical technologist who examines physiological fluids such as urine, sputum or pus in order to identify the bacterium which is causing the infection; the elaboration of a method of determining sugar in blood and urine by Benedict in 1913, and the discovery of insulin by Banting in 1922 to the biochemical technologist who determines, (among approximately one hundred other determinations) blood glucose levels - most essential in both the diagnosis and control fo diabetes. The work of Paul Ehrlich, that man of many talents, who not only discovered the first chemical cure for syphilis, but also investigated the reaction of dyes with tissues is still being utilized by the Haematology technologist who examines blood smears for, among other things, abnormal white blood cells characteristic of leukemia, and also by the Histology technologist, who cuts section of tissues which are 1/ 20,000 of an inch thick, and who stains (or dyes) these sections for examination by a pathologist. Landsteiner's discovery of the ABO blood groups and Weiner's discovery of the RH factor led to the Blood Bank Technologist who cross matches the blood necessary for such sophisticated and revolutionary surgery as heart and kidney transplants.

The term "information explosion" is a common one: its application to medical science means that no longer is one person – the doctor – able to perform, personally, the multitude of tests necessary for diagnosis, and treatment (or control) of disease. This is now the function of the med ical laboratory technologist, who obtains, at the doctor's request, the pertinent information. This cannot be done either accuratley or efficiently without a thorough grounding in the theory underlying the tests, and it is for this purpose that medical technology students come to NAIT. During the following year, the students apply this knowledge in the practical portion of their training at an approved hospital.

In their ten months at NAIT, they are expected to acquire a basic knowledge in six laboratory disciplines: Bacteriology (or Microbiology, as it is more precisely termined), Biochemistry, Haematology, Histopathological Technique, Blook Banking (or Immunohaematology, as it is now called) and Urinalysis. It is a year in which the student must quickly adjust from a high school atmosphere (where it is interesting but not essential to learn all that is taught) to a professional atmosphere (where it is both essential and interesting to learn everything). It is a year of adjustment to the knowledge that within a very short time someone's life will depend on precise and accurate work; a year in which the prospective technologist must adjust to instructors who (almost unreasonably from the student point of view) not only expect but loudly and firmly demand perfection; a year in which a student must adjust to the knowledge that technologists in most other field will make more money, work better hours and develop fewer ulcers; a year during which study is expected on week-ends! Is there no compensation? Those who leave in the first few months of the course think there is none; those who stay (the great majority) begin to realize that thier painfully acquired knowledge is essential and valuable; that they will, if only in a small way, contribute directly to a patient's welfare; that there are days when things go all right, instead of all wrong, in a lab; that they are laying the froundwork for some of the most enduring friendships they will ever have; that their starting slary, after they qualify as Registered Technologists with the Canadian Society of Laboratory Technologists, will be aproximately $400 a month (not exactly starvation wages); and their their instructors can, (even if they rarely do) show a glimmer of humanity.



SURVEY TECHNOLOGY

INTRODUCTION

The profession of land surveying is one of the oldest in the history of civilized man. In the earliest of civilizations land was subdivided and engineering works were surveyed and located.

Since the Second World War the tempo of Canadian life has accelerated. Multi-billion dollar industries have blossomed in oil, gas and minerals. Vast new highways and other engineering projects have been built.

Throughout this complex pattern the surveyor makes his valuable contribution. Land for expanding cities must be subdivided. Topographical and geological geatures must be explored, surveyed and located for such industries as oil, mining, highway construction, irrigation and power. Thus the demand for surveyors is strong in both surveying and related engineering work.

NATURE OF THE WORK

The surveyor is a professional measurer. All real property in highly developed civilizations is located and its size determined by him. His work is largely out-of-doors. Although his office may be located in one place, work will keep him constantly on the move. Surveys will take him into the most remote corners of the country. The Yukon, Northwest Territories, Labrador and the Arctic islands all play host to the surveyor engaged in his work.

The tools of the surveyor are still principally the tape, chain clinometer, alidade, level, and transit of theodolite. To these are now being added electronic and air borne tools of great precision such as the tellurometer and geodimeter.

The surveyor is a very active mathematician. Although he has many complex and precise instruments for measuring distances, angles, levels and gradients, he must employ his knowledge of mathematics to extract useful and intelligible information from the measurements taken. His mathematics range from simple arithmetic through algebra, geometry, plane and spherical trigonometry to calculus. Automatic rotary and electronic calculators speed his work and improve his accuracy. Astronomy plays an indispensable part in his work. He must have a knowledge of the stars, and of the methods of determining time and position from them. In remote areas of our north land, these are his only sign posts. Much of the life is of the rugged, outdoor type in constantly changing and often remote places. For those who enjoy this kind of life there is great choice and variety of work. It is also possible to select jobs where much of the work is carried out from the office in urban areas. Many young men begin with the travel, the adventure and the hig pay for the first type of job and later settle into the more routine second variety.

EMPLOYMENT OPPORTUNITIES

A person entering this occupation would begin as a "rodman" or "chainman". His work would be routine and under constant direction.

With adequate training and education, his first responsible position would be that of "instrument man", in charge of a survey team, consisting usually of a rodman and a chairman.

As "party chief" he would be in charge of one or more survey parties doing survey work connected with some engineering or survey project. Ability and experience is necessary to achieve this position.

Many surveyors form their own surveying companies and conduct their own contracted work. Working hours are usually forty hours per week but may vary will conditions. Overtime is frequently paid, but more commonly time-off is given in slack periods, or longer than normal vacations are taken when the party returns to the center of operations.

Vacation is usually of three weeks annually, and frequently includes travelling expenses if the work is in remote areas. All established companies have pensions, medical and hospital schemes. Some have attractive savings plans. The surveyors may also be included under the Workman's Compensation Act if he desires.

The common modes of transportation are by car, jeep, truck, plane, helicopter, boat, canoe and on occasion, dog sled, swamp buggy and snow tractor or sled. Driver's licenses are usually required of an employee.

COURSE DESCRIPTION

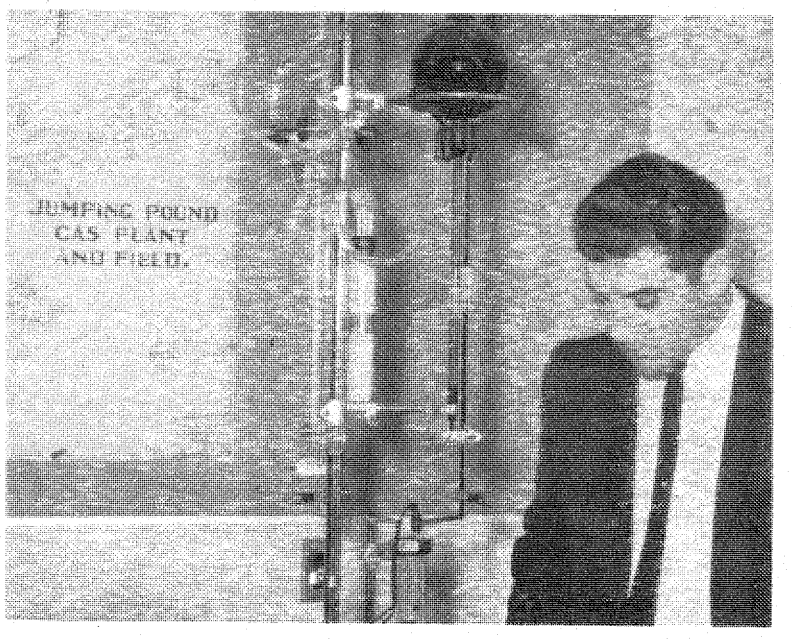
This course in Surveying Technology has two general objectives:

1. To provide suitable training in practical and theoretical aspects of surveying, such as, field work, survey theory and problems, drafting, astronomy, and photogrammetry so that the graduate can competently carry out his duties as a surveyor.
2. To provide suitable theoretical training in mathematics, physics, English, geology, photogrammetry and survey theory so that he may be fully prepared for the Professional Association at the preliminary and intermediate levels, and to be well started on the preparation of the final examinations.

Much practical work is done in field surveying with many types of problems under a variety of terrain and weather conditions. The field work is taken to the office and the necessary calculations and maps completed. Air photographs are used to supplement the information gathered in the field; studies in this section of the work are fairly extensive.

PERSONS ENTERING THIS COURSE SHOULD LIKE AND HAVE GOOD ABILITY IN MATHEMATICS!

GAS TECH.



The Natural Gas Industry is one of the largest and fastest growing industries even known in Alberta. The production of natural gas has risen considerably every year since its initial discovery and the future holds nothing but promise of more rises in years to come.

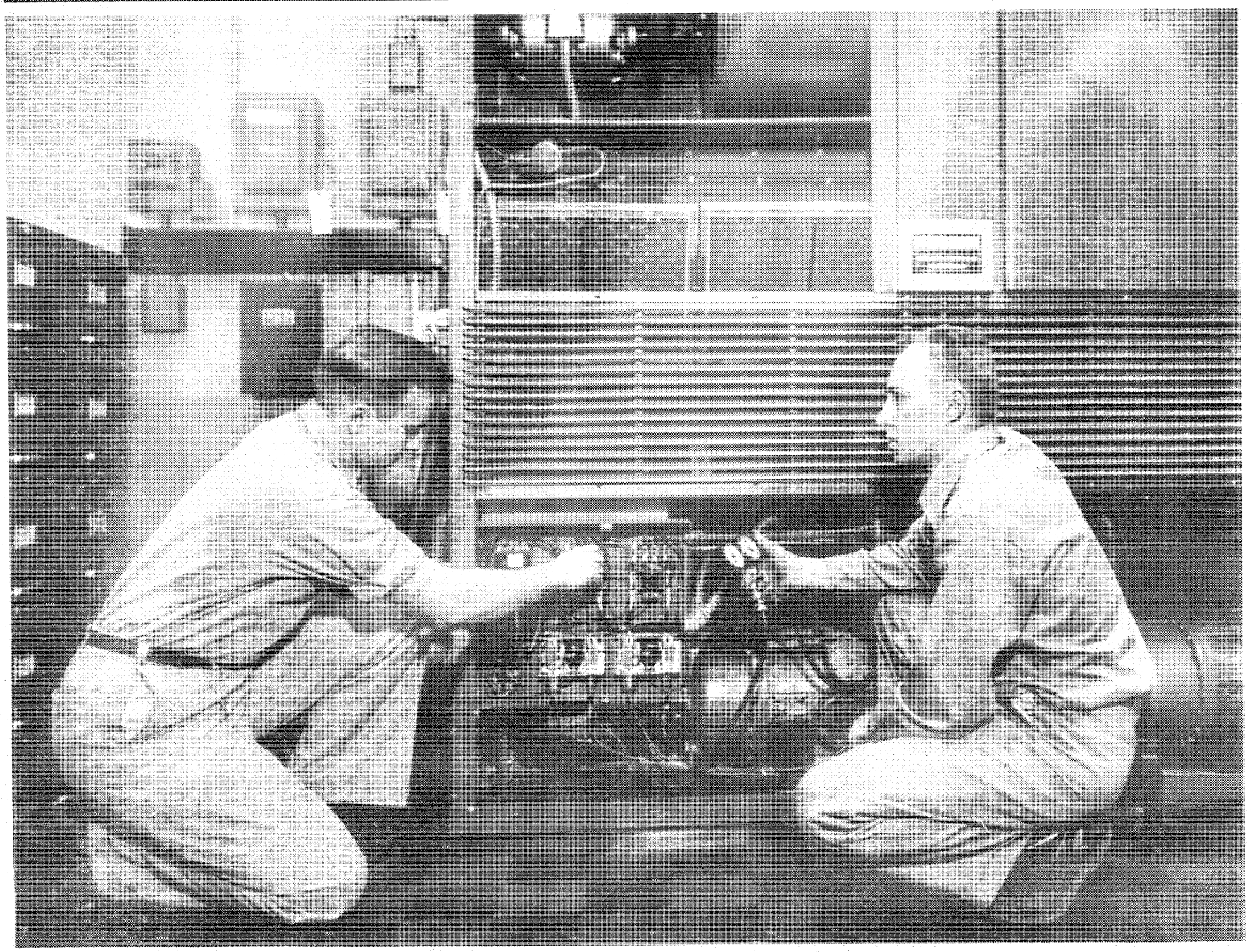
The Gas Technology Advisory Committe, a group of representatives from the major gas companies, has recently advised that industry can absorb upwards of twenty gas technologist per year for the foreseeable future. Considering the enrolment limit of twenty-five students and the less than fifteen diplomas awarded each year, it is easy to account for the high starting salary of the graduate gas technologist. The average starting salary has been and presently is the highest obtained by any of NAIT's graduates.

The gas technologist is trained to fill the gap between the skilled tradesman and the professional engineer. With few exceptions gas graduates begin their careers as engineering technologists in the engineering section of the oil and gas companies located throughout Alberta. The work is varied and interesing. Gas plant design, gas plant operations, economic evaluation, reservoir studies and gas well testing are but a few of the areas open for career work.

A basic review of mathematics, chemistry, physics and English begins the student's studies. The remainder of the first year includes courses in such subjects as geology, reservoir mechanics, drilling operations, surveying, drafting, statics, dynamics, report writing, organic chemistry and equipment testing. The second year is made up of several basic courses covering the following fields of study: power plant engineering, computer programming, instrumentation, strength of materials, calculus, organic and inorganic chemistry, design of gas processing equipment, natural gas analysis, formal report writing, industrial chemistry, gas instrumentation, electronics, gas plant operations, materials of construction, thermodynamics, economic evaluation and industrial relations. Throughout the two year course about one third of the students time is spent in the practical labarotories and in associated field work.

Gas technology's Open House display in room E213 will be quite interesting this year. A model of a gas processing plant and a model of a typical gas-oil reservoir will be displayed with working models of actual processing equipment. Several pieces of natural gas analysis equipment will also be shown and demonstrated. Of interest to the public will be a gas chromatograph which the gas section has modified into a form of "breathalizer". How much of what is in your breath?

Gas students will be available at alltimes during Open House to distribute literature, demonstrate apparatus, explain displays and generally answer questions.



AIR CONDITIONING AND REFRIGERATION

We can't see or touch the air, but we are aware when the air we breathe and live in becomes unpleasant. Technology of this century provides us with the means to treat air for year-round comfort where we live, work and shop. In colder climates some means for keeping warm has always been essential, but as the public have become more sophisticated in their habits and technologies, demands for complete airconditioning (refrigerated cooling) has also increased.

Building construction has changed, the old massive structure of brick and stone have been replaced by glass, curtain walls and concrete. The small specific mass of modern buildings involves rapid heat gain and heat losses due to sun, wind and temperature changes. Theses changing conditions have brought with them great problems for the heating and airconditioning system designer.

Air conditioning, refrigeration and heating sustems have therefore adapted towards greater refinement to meet the above noted demands. The benefits of total climate control like air itself are often intangible. Can you measure the relief from enervating humidity of a heat wave, protection from dust and city odors in the atmosphere, or healthy warm in the winter?

Often benefits in productivity and efficiency in an office or factory can be calculated. These calculations show that climate control pays in dollars as well as in high morale. The Airconditioning and Refrigeration Technology course is designed to prepare graduates for entry into the highly specialized and needed field of airconditioning and refrigeration. The opportunities for employment are many.

Graduates are presently being employed by mechanical equipment manufacturers and distributors, government departments, consulting engineers, mechanical contractors and building maintenance departments.

Assignments are usually in design with emphasis on mechnical drafting, or in maintenance involving operation and repair of existing complex systems, or in sales involving the application of specialized products for new systems.

The primary objective of the two year course is to train the students to become highly skilled technical assistants to the professional designer or engineer. Therefore to accomplish this objective the major portion of the course is devoted to refrigeration and air conditioning theory, refrigeration and air conditioning lab., control lab., and drafting. The Airconditioning and Refrigeration Technician must acquire a considerable amount of technical knowledge to the solution of practical problems. The skill of communication is considered an integral part of the course and emphasis is placed on oral and written English. Related subjects also included are plumbing, welding, sheet metal work, machine shop training and thermodynamics which give the student an insight into other aspects of the airconditioning and refrigeration field.

An elaborate lab set-up gives many facits of the systems to be encountered in commercial and industrial refrigeration and air conditioning. Different lab units are available for student demonstrations and tests. A $19,000 specially designed air conditioning test unit, can be set up to stimulate almost any system encountered in the field of air conditioning.

Job opportunities are almost unlimited. The graduate student of past years' have had no problem in obtaining employment. Typical starting wages of last year were $425 to $475.

PHOTOGRAPHY

Photography, as never before, has taken on a new responsibility to the people and economy of Canada. Once a medium of pleasure and beauty, photography is now helping to contribute important information towards the production of saleable and competitive goods.

The Northern Alberta Institute of Technology is helping to meet this new responsibility by offering a course in photographic technology.

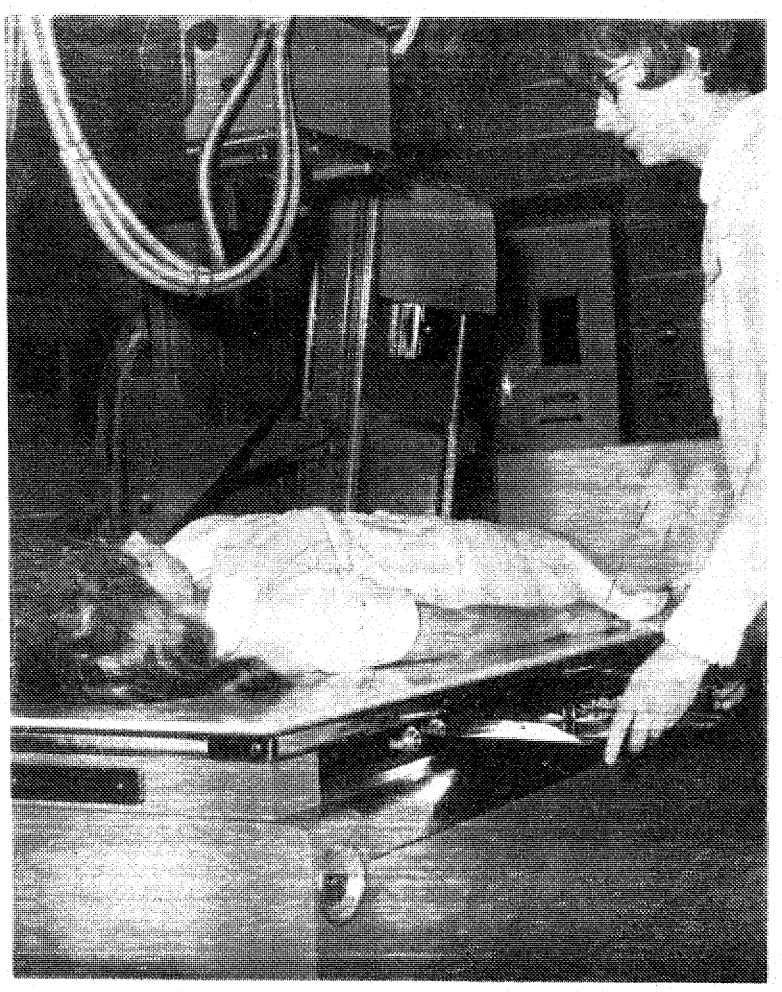
Placing more emphasis on the practical aspect of photography, the course will equip a person to solve a photographic problem in or out of the studio or drakroom.

The first year of the two year course being offered emphasizes the importance of black and white photography. Densitometry and quality control, along with other general practices, ensure that the student learns maximum efficiency cleanliness and consistency in the darkroom. The course also includes print and negative retouching and all the techniques of presentation.

Color processing and printing are incorporated in the second year studies, with the techniques of control and production in each clearly indicated by theoretical and practical instruction. Advanced black and white photography, both portrait and commercial, is continued with further instruction in the laboratory and on location. Basic motion picture procedures including editing and sound recording are also given.

With the increasing use of photography in police work, medicine and audio-visual employment opportunities are very good. The greatest area of initial employment is in darkroom technician work with studios, large firms and industrial plants. Opportunities are also good with the various wholesale and retailing outlets. The opportunities for advancement, like any competitive position, are only limited by the photographers ability, experience and training.

X-RAY TECHNOLOGIST



Last year almost half the people in Canada were examined or treated with X-ray. The persons most frequently seen during X-ray procedures are radiologic technolgists. Their skills play a vital role in helping your doctor and his consulting radiologist achieve the correct diagnosis. In assisting the radiologist, the technologist performs a wide variety of functions - positioning patients, operating complex equipment, making X-ray exposures and processing film. X-ray technolgists are an important member of the staff hospitals, clinics and private offices. How does a radiologic technologist achieve professional status? Acceptance by the Canadian Society of Radiological Technicians requires high school graduation plus the successful completion of a two year program of study and application of x-ray under the direct supervision of a radiologist. Technologists are trained in anatomy, medical and surgical diseases, radiographic exposure and chemistry. They also receive instruction in the basics of electricity, radiological mathematics and psychology. Radiologists depend heavily on their technical assistants to provide properly exposed and developed x-ray films. The rewards of radiologic technology are many. Foremost is the personal satisfaction and pride of working with respected medical practitioners.

COMMERCIAL COOKING

In recent years millions of dollars have been invested in the Food Service industry to cater to the increasing demands of the Canadian population and the flourishing tourist industry.

The Food Service Department at the Northern Alberta Institute of Technology has a dual function.

First the Food Service Dept. trains young men and women for the expanding field of Food Servicing. Secondly, the Food Service Dept. provides catering as a professional service to the Institute as a whole. To effectively train students and at the same time provide suitable service to the Institute.

This is a two-year course. The objectives of this course are to develop the students appreciation and understanding of sound food preparation methods. This entails a knowledge of the physical facilities within a food preparation area as well as various methods of cooking and serving food.

This course is designed to fill the growing need for men and women who are trained in the preparation of food on a large scale. Students are taught to prepare and serve nutrious food in varied and attractive ways, and to purchase and handle supplies so that an establishment may operate at a reasonable profit, observing at all times the importance of cleanliness, sanitation and good public relations.

Students are taught meat cutting, pastry and desert preparation, salad making, soup and vegetable cookery and the service of food. Mastery of the practical skills is achieved by realistic and practical work in the kitchen while the comprehension and technical information is taught in the classroom.

While the first year of the course acquaints the student with the basics of Commercial Cooking, the second year broadens and deepens the knowledge and skills of the first year. Emphasis is placed on the culinary arts. Advanced cooking, ice carving, far sculpturing, pulled sugar work, chocolate work and marzipan, are some of the areas covered in the second year. Professional responsibilities are also emphasized in the second year. The student is encouraged to assess himself as a professional food worker.

Since catering is a service to people, the prospective student should have certain personality traits. He should be even tempered and have a sunny disposition. He must be able to work under pressure, communicate effectively, and bear in mind that food catering means evening and weekend work.

EMPLOYMENT OPPORTUNITIES

Jobs are many and varied: restraurants, hotel dining rooms, department stores, coffee shops, clubs, hospitals, institutions, mining and logging camps, and catering firms are all looking for people trained in quantity cooking.

Starting salaries vary depending on experience, personality, willingness to cook, amount of training and other factors.

The tuition fee is $69.00 per year and supplies and books are estimated to cost $200.00 for both years.

COMMERCIAL BAKING

BAKERY SECTION

A very important part of the Food Service Department is the Bakery Section. It is in this area that training is given in all aspects of Baking. Before going any further, it might be as well to examine this word "baking" and find out just what it includes. As used by a baker it covers the making of all types of bread; white, whole wheat, rye, fruit breads as well as burns, rolls, and Danish pastries, in fact everything which uses yeast to leaven it. Sorry!! Beer making is not included. Besides this, bakers makes cakes in every variety, pies and their fillings, pastries and cookies of all kinds, makes the fillings and icings to go in and on them and applies the decoration.

In addition to these direct skills there are included related subjects, quality control, stock control, costings, selling and display and business management.

But why not come and see for yourself! For Open House days the Bakery - situated just to the north of the main cafeteria down the stairs - has a big display of mouth watering foods showing part of the wide range of items that the modern baker can produce. Further in the main bakery the students will be in action showing how they go about their work and what is entailed in their training. You may even be lucky and be able to buy some of their wares.

Two main training programs are offered in this section.

1. A two-year program in - Commercial Baking

The prime objective of this course is to graduate qualified and competent bakers having a sound background of practical, theoretical, and experimental baking with related mathematics and business knowledge enabling them to be employed in positions of responsibility in the industry.

Some of the subjects covered are:

Practical Bread, Cake, Pastry & Cookie Making
Baking Theory & Practice
Sanitation
Bakery Science
Trade Calculations
Business Organization
Merchandising

Full information about the course can be obtained from the Bakery Section or from the Registar.

2. The second program is offered in conjunction with the Provincial Department of Labour Apprentice Baker Training scheme.

Here the student obtains a position with a baker of his choice and becomes registered as an apprentice. Training is done while on the job (and while earning!) in this practical situation. Each year of the three years this training takes, the student attends an eight-week course in the Bakery Section obtaining the theory and related knowledge necessary to reinforce his practical work.

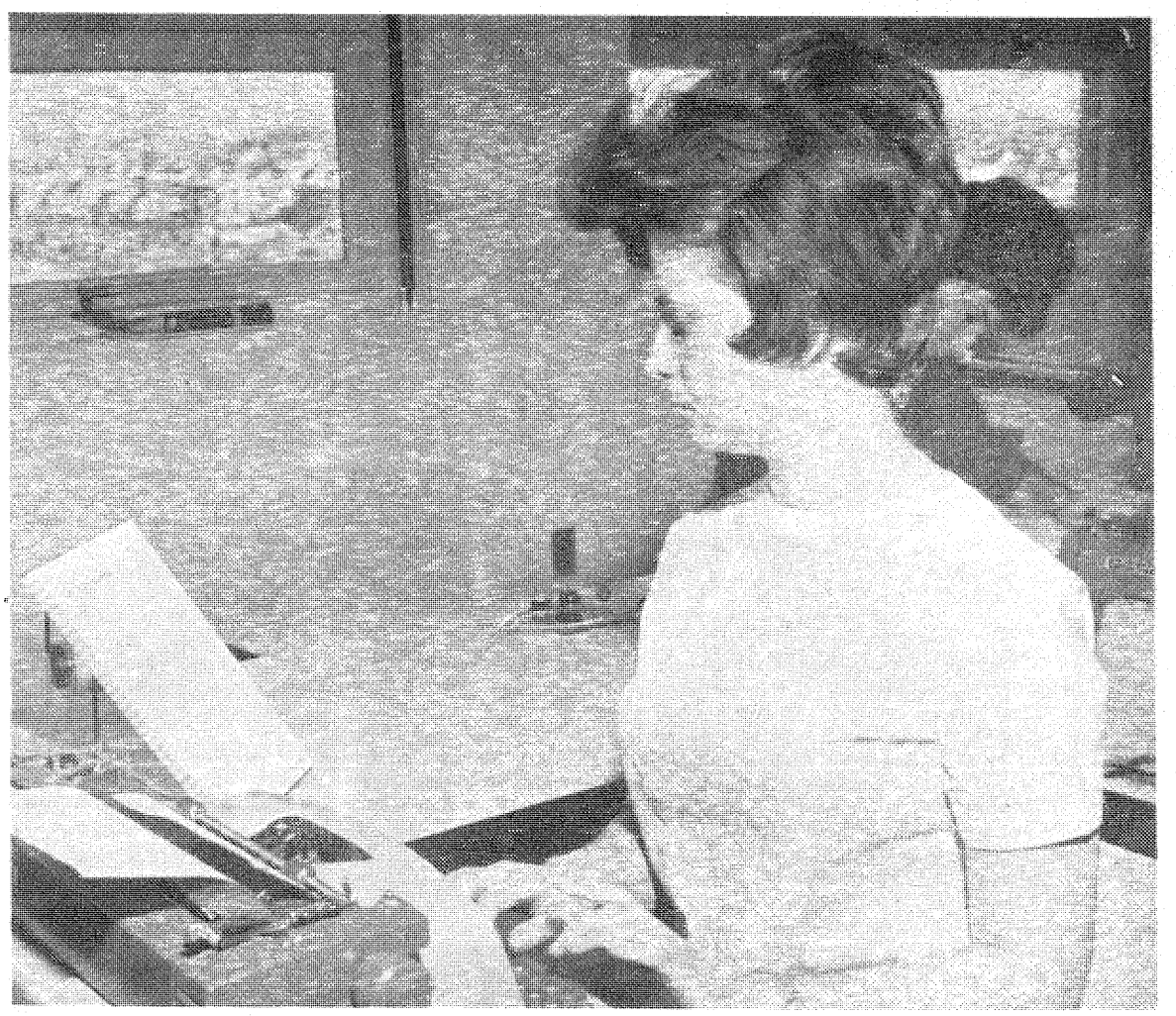
Further information about this method of entry to the trade can be obtained from the local Apprenticeship Board office or fom the Bakery here.

Besides these two major programs there are a number of short courses in various bakery subjects offered in the evenings. This provides an opportunity for Bakery workers to increase or renew their knowledge, enabling them to keep up with recent developments.

Facilities for these programs are provided in the 4500 sq. ft. this section occupies. Consisting of two large bakeries and laboratory classroom, it is fitted with the latest of bakery equipment and machines.

If you don't believe it come and see it yourself. See the new high speed dough mixer in action, the 5 deck "Infra Bake" ovens and the Bread Moulders and Sheeters.

SECRETARIAL



The secretarial profession undisputedly offers a challenging and profitable career. The secretary's position in the business world has become that of an administrative assistant. She has taken over many of the minor and yet essential tasks of the office administrator. This leaves him much more free time for the important matters of decision-making. As she grows with the business and in her capacity in the business, she will find never-ending opportunities opening up to her. There has been such a great change in the thinking of the business world and now a secretary through her training and experience can advance to administrative positions if she has the ambition to do so.

N.A.I.T. offers a two-year program to develop the secretarial skills to a high degree of proficiency and to provide basic knowlenge and understanding of business in general to enable the secretary to be a part of the management team. In this she covers not only the bare essentials that a secretary needs, but is taken into deeper and expanding subjects. She, naturally, receives training in all the regular secretarial skills such as shorthand, typing, filing, business machines, etc.; but also this course provides further training in the fields of law, accounting, psychology and office administration. Through certain subjects, her ability to think out problems in a systematic manner and correct them is put into practice. She is taught different ways of running an office efficiently and how to see and correct any inefficiencies in her office. Also, her training includes the understanding of people as a whole and each person as an individual personality; how to cope with difficult situations concerning people. This N.A.I.T. program is intended to enable their graduate secretaries to go out into the business world with the capacity to do her job above and beyond what is expected and with a confidence in her own capabilities. Also, it enables her to advance to higher positions because of the training given in the course.

SOCIAL SERVICES PROGRAM

The Social Services Program is designed to provide the basic knowledge and skills, both practical and theoretical, required to work with people under the auspices of social services agencies and institutions. The need for persons with this kind of training is indicated by the acute shortage of professionally trained personnel, the training is indicated by the acute shortage of professionally trained personnel, the expansion of existing programs and agencies and the implementation of new services.

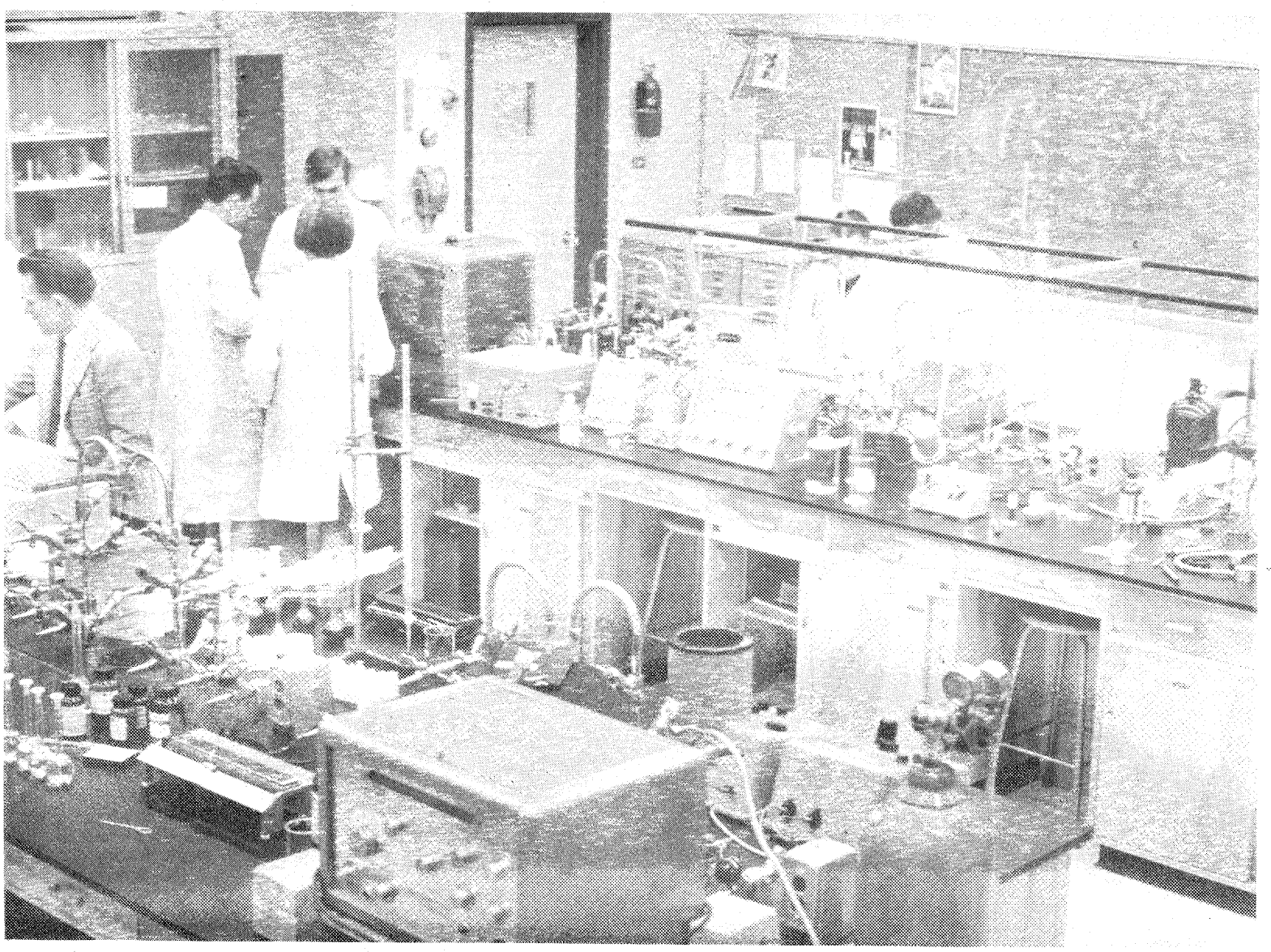
Opportunities for interesting and rewarding careers at the direct services level are provided by public and private social agencies, in the areas of child care, financial assistance, group homes, institutions for the aged, the physically and mentally disabled, juvenile offenders and many others.

Included in the curriculum are the following topics: the basic universal needs of people, human growth and development, contemporary social problems, social services programs and provisions, community resources and how to use them, interviewing, current welfare problems and practical administration including recording, budgeting and the use of dictaphones. In addition, students are provided with a practical field work experience and they participate in field trips, seminars and conferences in the Edmonton area.

The program is growth oriented designed to enhance the student's capacity for human relationships and his effectiveness as a helping person: it is philosophy oriented in the sense that each student is called upon to examine his personal philosophy and that of the social services: it is practical oriented in providing the student with the practical knowledge and skills required by the social services worker.

Prospective students are encouraged to make enquiries about the social services field before applying for admission to the course. Volunteer work, playground supervision, camp counselling or direct experience in the social services are valuable for persons wishing to register for Social Services.

CHEMICAL TECHNOLOGY



The Chemical Technology course offered at Nait is designed to produce highly trained and qualified chemical laboratory technicians. The role of the lab technician is that of the chemists right arm. What the professional chemist arrives at in theory, the technician translates into a reproducible laboratory procedure. He must have an extremely thorough training in practical laboratory techniques as his time will be spent almost exclusively in the lab.

Nait's Chemistry course is a two year programme, with a second year option. The student receives a basic understanding in all chemical aspects during the theory lectures. These principles are then put into practical use in laboratory experiments. At least two thirds of the student's time is spent in the laboratory. The chemistry student also receives instruction in closely related subjects. Upon graduation the technician should be able to understand and, if necessary, repair simple electrical circuits in laboratory equipment. He should be able to recognize various crystalline metal structures. And he should be able to compile a coherent laboratory report.

Specifically, the student receives comprehensive instruction in the fields of oil, inorganic, organic and industrial chemistry, biochemistry, and in instrumental methods of analysis. Theory lectures deal with the "why" of chemistry; explaining the mechanisms of the chemical reaction. The related labs are designed to give the student time to apply his theoretical knowledge improve his chemical technique

The Chemistry course at Nait is unique in that it is the only Institute of Technology that offers instruction in High Vacuum Preparation. Using non aqueous solvents, compounds of high purity can be prepared working at pressures as low as 10-3 mm of Hg and at temperatures as low as -320 degrees F.

Nait's Oil laboratory is designed to familiarize students with world accepted methods of oil analysis. The ASTM standards of oil analysis studied in this lab deal not only with petroleum, but also with the many petroleum derivatives. Lectures cover the nature of oil, its recovery, processing, and market value.

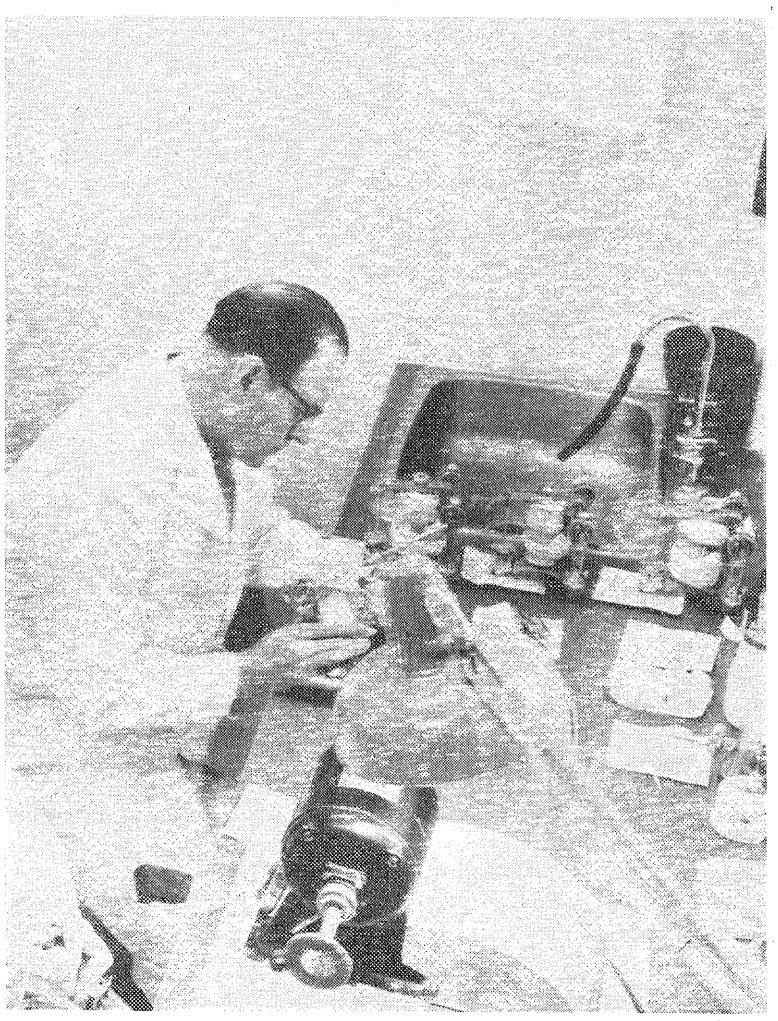
Chemistry's Instrumental Analysis laboratory is regarded as the finest in Western Canada. The graduate student will have learned the operation of every major instrument presently used in chemical analysis. In addition, he will have worked with equipment to be found in the most modern of labs. Such an instrument is the Electroscan, which is capable of performing fifteen different classes of analysis.

Although the course is slightly orientated to fulfilling the needs of the Chemical Indistry in Alberta, the graduate technician has the ability to work anywhere in Canada. In the past years some of our graduates have even found employment in Germany and Australia.

This year the Chemical Technology programme at Nait has been approved as meeting the standards asked for by the Committe for Ceritification of the Chemical Institute of Canada.

Upon graduation, students of these courses are entitled to interim membership as Chemical Technologists within the C.I.C. until they have completed the necessary industrial experience, at which time certification can be made permanent. As student associate members, those joining the Chemical Technology Association club are entitled to the same privileges as the senior members within the parent professional group.

Because of Canada's and the World's present industrial nature, there is an ever present demand for good chemical laboratory technicians. Today's graduates need never fear for lack of a job.



DENTAL TECHNICIAN

Dental technology is the science of constructing prosthetic appliances, i.e. the restoring of lost teeth as a result of accident or disease. These appliances may be full dentures, partial bridges, crowns, or orthodontics. The replacement of lost teeth is usually desired for two reasons - function and esthetics.

Among the early records of dental prosthesis the earliest example can be found to date back several hundred years B.C. Some of the techniques now in common use had their beginnings hundreds of years ago. Gold, for example, has been employed for prosthetic dental purposes for at least 2,500 years.

However, it is not certain exactly how and by whom the applicances of those earlier days were constructed. It is quite possible, as pointed out by the historians that physicians and barber-surgeons may have performed the extractions or treatment and goldsmiths or other metal artisans may have constructed the artificial appliances. Today, this latter role is the function of the dental technologist. If there were any records of the work of dental technologists or mechanics through the years they have probably been destroued due to religious or superstitious beliefs.

Dental technology has become a precision industry - techniques now employed are highly developed to a point where the control of shrinkage and expansion is maintained particularly in the metal field. Medicare or similar programmes will account for part of the increase in demand for prosthetic appliances.

Essential knowledge and acquired techniques are necessary to construct a good prosthetic appliance. At NAIT, in the Dental Technology section the student is taught the required knowledge and given ample opportunity to develop the necessary skills or techniques. The course also has variations which permit a larger outlook on the part of the student. One such variation is where the students are required to give clinical presentationals to the class. Each paper is followed by group discussion with the result that further knowledge and differing techniques are acquired.

Another variation takes the form of public speaking on topics of the student's choice. Discussions re current events and ensuing implications, student outlook on life, and ways in which immediate and future problems may be handled- are also valuable sessions.

The time spent having the students from other countries depict their way of living and attitudes toward many things proves interesting and enlightening to classmates.

With the above variations and the essentials of the course in dental technology being taught it is hoped that a student will graduate from the school prepared to accept a responsible attitude toward his vocation and his citizenship.

ARCHITECTURAL TECHNOLOGY

TOMORROWS WORLD

Today our world is changing rapidly; our ways of doing things quickly become archaic; our environment is becoming antiquated; our world is becoming inadequate. Our lives are changing. Not only the manner in which things are done, but even the very things that must be done will be different in the future. A whole new attitude and approach to life will shape our future activities; a new environment will be required. Tomorrow's world will be different, as far removed from us as we are from our ancestoral aboriginies.

THE BUILDING INDUSTRY

In our rapidly changing world, the techniques of building are also changing. No longer is it possible for the glorious architect to sit isolated in his ivory tower conceiving and busily producing electric variations of previous building solutions. Today's ever changing building industry has already become a diversified giant requiring the extensive cooperation of hundreds of qualified men and women working on each project. Each of these people must be skillful, knowledgeable and talented in his own field of endeavor as they make their vital contribution to the vast operation of creating the spaces and environments of today and tomorrow. Included in this large integrated team that produces our new buildings are graduates from schools of architectural technology.

EMPLOYMENT

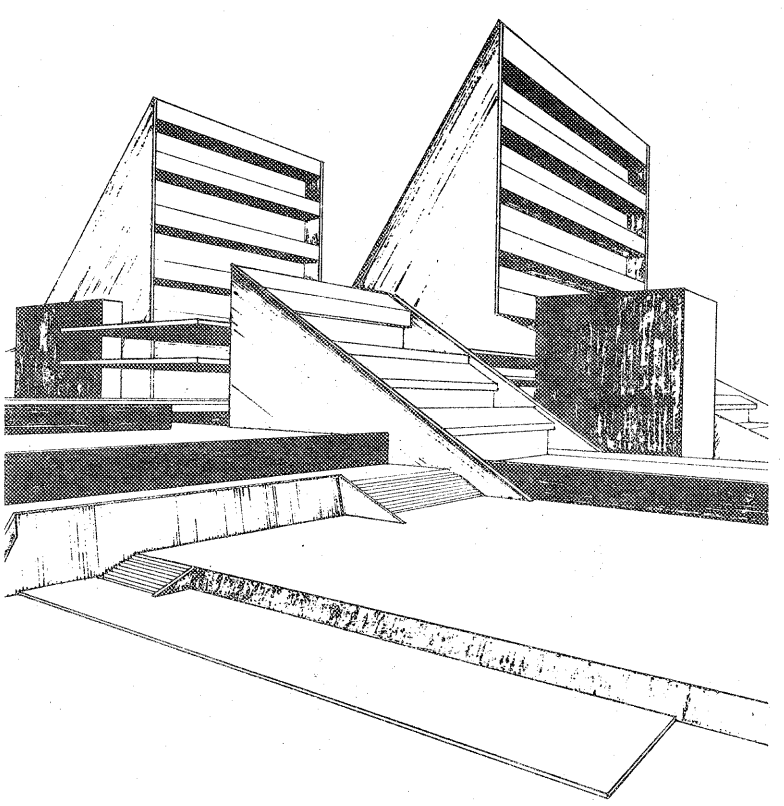
Opportunity exists in many fields for graduates of the architectural technology program. In addition to acrhitects' offices, graduates find employment in the areas of engineering, urban planning and redevelopment, building construction, building materials supply and sales, and governmental agencies. The work is thus diversified and the demand fluctuates with the pace of the building industry. Working conditions are usually very good, and the salaries are commensurate with the ability and initiative of the individual.

THE NAIT PROGRAM

The program of architectural technology at NAIT aims to prepare the student to fulfill his important role in the changing world of the building industry. The program does not intend to produce architects, engineers, contractors, or tradesmen, although an understanding of these professions and trades are developed by the student during his studies here at NAIT. The courses offered develop skills in architectural and engineering drafting, detailing and presentation, as well as a basic understanding of architectural and engineering design, surveying, supervision, and office practice. Architectural technology courses not only teach present techniques but also emphasize fundamental principles which will enable the student to make a vital contribution to the building industry as it constantly changes its methods, requirements and goals. Therefore the program at NAIT is under constant review and alterations are made as they are required to meet the changing demands of today's world.

OPEN HOUSE DISPLAY

The east foyer of the technology wing contains a display of drawings, designs, projects and models by current students in architectural technology. These are displayed in an environment designed and built by the students themselves.



DIETARY TECH.

In hospitals, Nursing and Convalescent Homes, and commercial institutions across Canada there is an increasing need for personnel capable of assuming responsibilities in food service operations. The graduate of Dietary Technology will help to alleviate this shortage by assisting Registered Dietitions or qualified Food Managers in large establishments or by assuming a portion or responsibility for food service in small operations where qualifed dietitians of food managers are unavailable.

Anyone interested in hospital or hotel work, diet meal preparations, and supervisory duties, Dietary Technology is the course for you. A Dietary Technician is capable of assisting a Registered Dietitian in large establishments or accepting full responsibility of dietary duties in a small institution.

Dietary Technology is divided into two groups: Plan A and Plan B. Plan A is a two-year program. It consists of one year of theory and lab practice followed by 1 year of in-service training at two or more hospitals throughout Alberta. At the end of the year of training the students return to Nait for twelve weeks of classes, which consist primarily of review, solving problems and applying knowledge learned so far in the course.

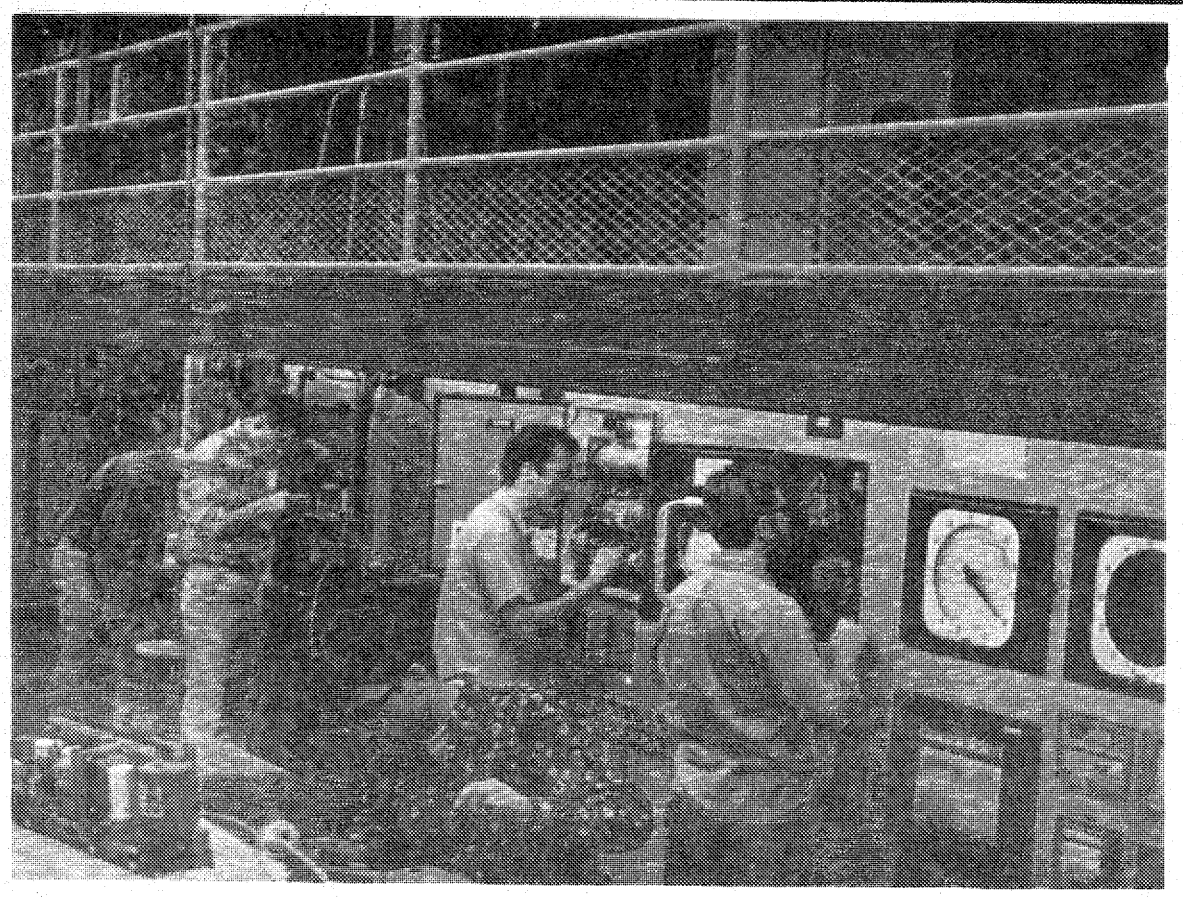
Plan B. consists of further training those people who have had five or more years of food service training. These people take the same courses as Plan A in the first year, but do not take part in the practical training. Instead, they continue with their fourth quarter of seminar-type instruction.

The courses offered in this technology are all very interesting and a valuable asset to the future career. The subjects consist of introductory courses in typewriting, English, mathematics, record keeping, physiology, health and personal development, as well as more involved courses in foods, and food preparation, normal and therepeutic nutrition, institutional management and psychology. Also, the students attend weekly cooking labs and go on various field trips.

Entrance requirements for Dietary Technology in Plan A are 67 High School credits, with B standing in Math 20, 21, or 22.

Plan B must have a minimum of 5 years in food service work as well as passing an entrance exam.

Upon graduation from this technology, the students will receive a Technology Diploma, cap and pin to signify they are Dietary Technicians.



INSTRUMENTATION

In the future it is hoped that a post-graduate course will be offered to Instrumentation graduates to help keep them abreast with new developments in the automatic control field. As the course progresses, the amount of time spent in the lab increases. In the lab the student will learn fault analysis, instrument repari, and installation. Tube fitting is also studied as well as a short course in welding. At his Institute we are fortunate to have perhaps the most competent equipped instrument lab in Canada. Upon completion of the new "J" wing this year, the exkisting instrument lab will be moved to a more spacious and fully equipped equarters.

This course, as mentioned before, is relatively new, and has had, and is having its growing pains. However, most of the early problems have been eliminated and the new student will find the entire course is highly organized and very efficient.

You may wonder what the job opportunities are in this field. After all, there is not much point in attending a two or three year program if after that time you are unable to obtain suitable employment. By all standards the opportunities are excellent. In Canada there are only three institutions training instrumentation technologists. Consequently the demand for graduates last year exceeded the supply, and the average starting salary was $480.00 per month. These jobs were divided primarily between industry and sales positions.

This has been a brief outline as to what instrumentation is all about. Of course there is much more in this field than can be learned from books alont. Practical experience and a good mechanical aptitude are great assets. If you are a person who is able to meet the requirements as set down by the Institute, there is a world of opportunity awaiting you in Instrumentation Technology.

Many people are unfamilar with what is involved in Instrumentation Technology. Probably one of the best definitions is that Instrumentation is the science of applying devices and techniques to measure, record, monitor and control plant equipment and process operations.

Instrumentation Technology is a relatively new and expanding field, requiring a great degree of knowledge in electronics, pneumatics, and chemistry of processes. Because it is a new field in technical training, there is a lack of properly trained people in industry. It is therefore the function of theis Institute to train young men to function efficiently in the atmosphere of industrial instruments, as well as to provide a basic knowledge in the sciences which will enable him to keep pace with the rapid development of new methods and mechanisms in the field of automation.

The basic two year Instrumentation course is devoted to training the student in the operation of instruments, actual lab training by using the instrument, theory and operation of related lectronic circuits, chemistry, physics, mathetmatics and English. Because of the rapid development of new instruments and the large number of existing types of automatic controls, it would be impossible for the student to study them all. Therefore, the instrument theory courses are designed to give the student a sound knowledge of the principals of automatic control, and in this way enable him to cope with practically all types of existing industrial instrumentation.

COMMERCIAL SIGNWRITING

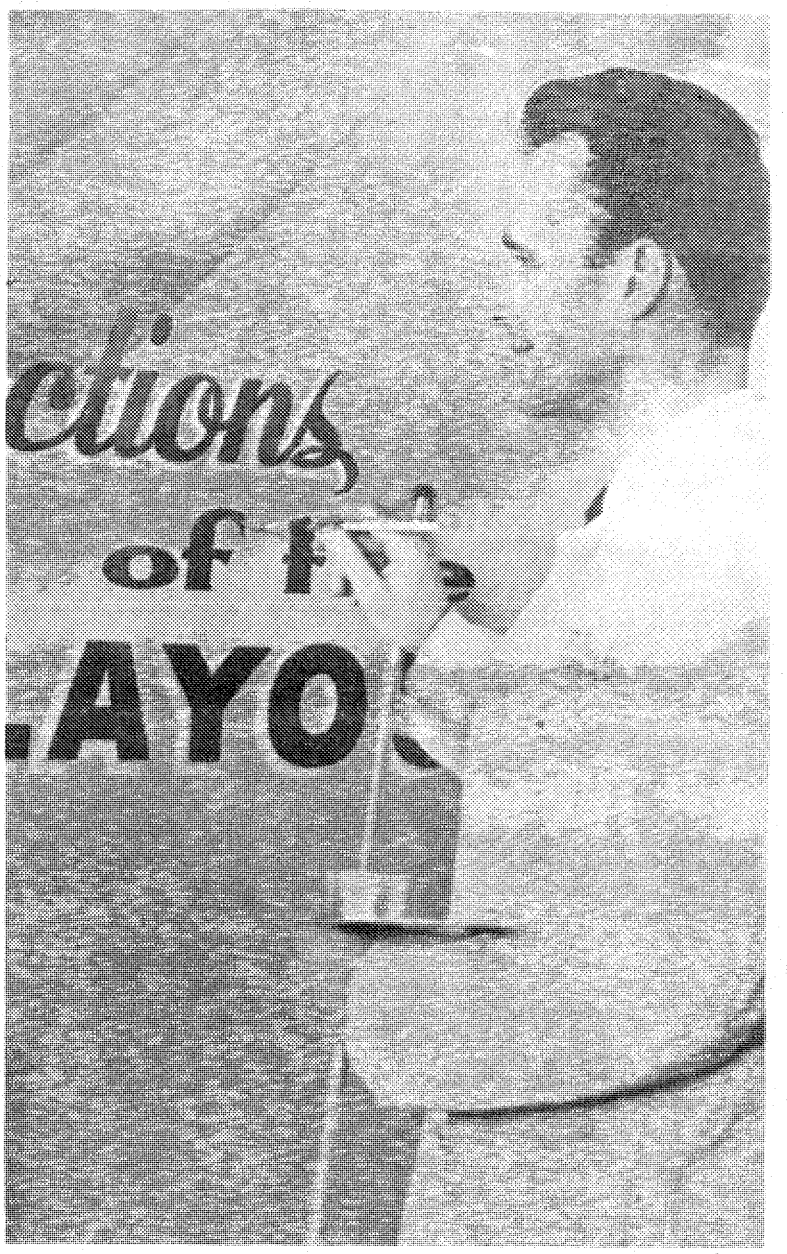
Welcome to the colorful world of signs. A welcome to all the visitors to the Northern Alberta Institute of Technology from a colorful though little known art field.

It is a field that can only be mastered by ambitiousness, professional know-how, constatn practice and experience.

Although it is considered by many as a stepping stone to other types of artwork, a good craftsman in this field in envied by all artists.

Creativeness, an eye for color and layout, and artistic talent are definite assets in the mastery of this trade. All this plus the desire to succeed are the make-up of a commercial signwriter, or better yet, the professional signman and signwoman.

As the growth of industry has increased a great deal in the past few years, so have career opportunities in the field of advertising. The expert craftsman in the field of commercial signwriting can find this trade a very rewarding and profitable one, as few business can function properly without the aid of craftsmen skilled in the art of lettering on all types of advertising materials such as: billboards, office doors, windows, and commercial vehicles.



It is a varied field and an interesting one, both to participator and to onlooker. It is also a colorful and important one.

With these few words about commercial signwriting, we hope we have given you, the visitor, an insight as to the functions of our trade; and again, we the students, extend a cordial welcome to come visit us in "the colorful world of sings".

FORESTRY TECHNOLOGY

Students are shown how seedlings are grown, how a nursery is run during their field trip to the Oliver Tree Nursery. Forestry, being a practical subject taught by practical instruction, students are given several opportunities to see various Forestry operations. Only a small portion of the diverse course in Forestry is shown here, along with extra-curricular activities. A more complete display of the vast diversification is on display in the Industrial Annex Room N114.

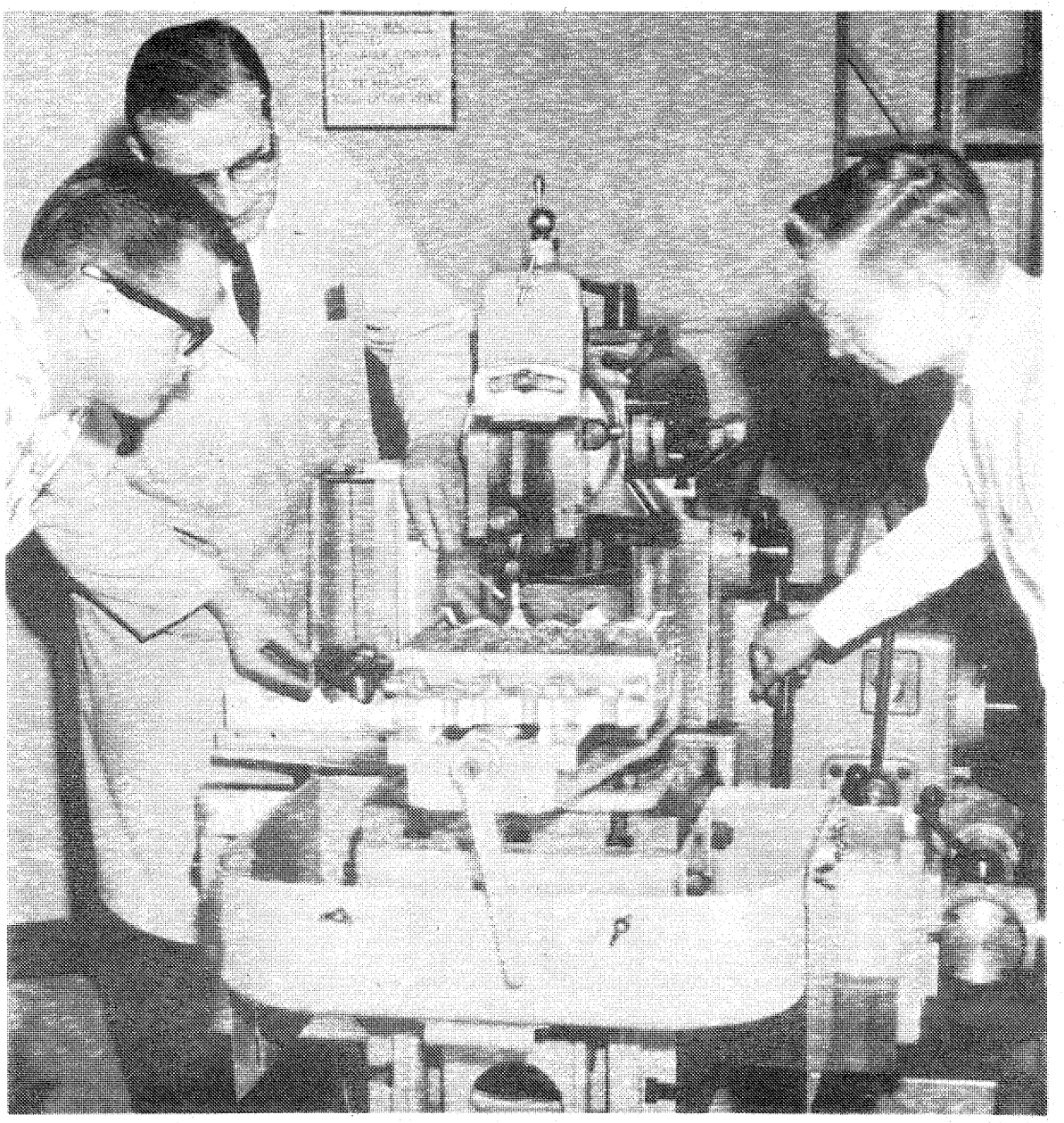
HINTON FIELD TRIP

To give the student a better understanding of the forest and some of the operatons, first year Forestry student spent three days at Hinton to learn first hand of the workings in the forest.

The Forestry Club if not big in numbers is doing its share for posterity. A Forestry Technology Yearbook has been started. Pictures of students staff and Technology activities will be the main feature of the yearbook.

To bolster a new Technical "fledgling", a Technical Foresters Association is in the making. Graduate Forest Technician and future technicians and employers should find this a beneficial organization.

INDUSTRIAL PRODUCTION



Today, more than ever before, the public are being enlightened through news and broadcasting media with the great need for increased production and are becoming very familiar with terms such as gross national product, productivity, production control, value analysis, work study and so on. The purpose of all this is to impress upon us as a nation that our continued prosperity depends not only upon and ever-increasing output of goods and services but also upon the efficiency with which these are made available to our own people and to our customers abroad. This is not to say that each of us has to work progressively harder each year but rather that the energies we put into our activities should be re-directed in order to achieve their maximum effectiveness.

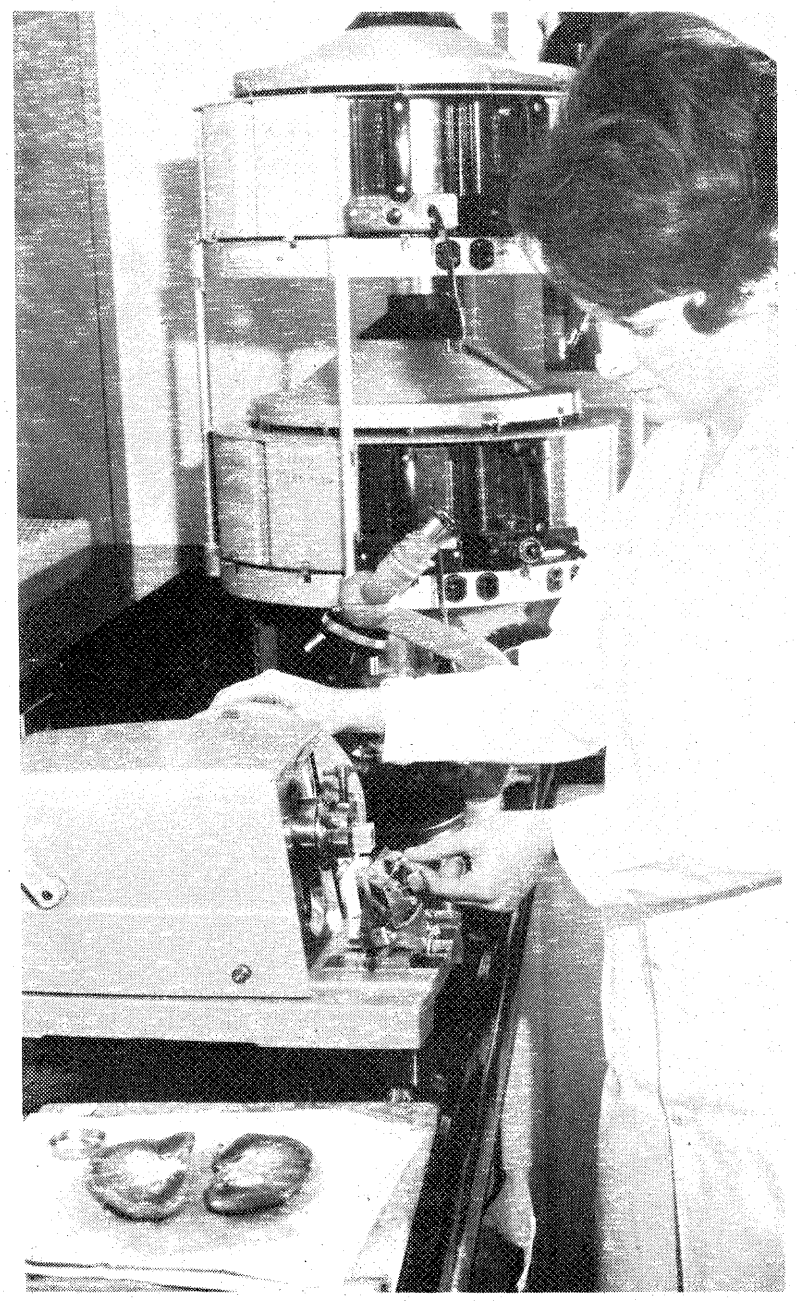
To think along these lines is the first concept presented to students enrolled in Industrial Production Technology. This is fundamental and is the philosophy underlying the complete program. Once the student is inspired to think in this direction the way is open for the presentation of many techniques which he will have to master if he is to apply such theory to practical situations in industry.

On completion of his course he should be able to visualize the need for an elementary pro- out a small plant for production of the article, modify procedures with time to achieve greater productivity and, finally, visit potential customers as a responsible representative of the company.

Throughout a great part of the course practical situations must be devised to which the students may apply these techniques and it has been found that the machine shop offers the most favourable medium for this purpose. The students, therefore, have their own program oriented towards the metals industry but the majority of the course matter presented to them could be equally well applied to such activities as pulp and paper, garment making, furniture manufacture, the production and processing of foodstuffs and so on. That industry is aware of this and has recognized the value of the program can be vouched for by the many and diverse activities of our former graduates.

With the progressive industrialization of our Province the need for graduates from Industrial Production Technology can only increase and a bright future faces the student who feels that this is an area in which his interests lie.

BIOLOGICAL SCIENCES



This program has been developed in co-operation with the Advisory Committee to help fill the increasing national demand for suitably qualified Biological Sciences Technologists. The need for trained technicians in the life sciences (biology, health and environment) has been created by the increasing concern of all levels of government and related industries in biological research and control measures. The increasing human population will place additional stresses on the natural resources of this country and the world. Recognition of the into the preservation of wild life species, botanical and zoological; health sciences dealing with diseases of both man and animals; and concern over the increasing expenditures of public and private monies. Authorities have estimated that present needs exceed 30 per year on a national basis and there is no doubt that the need will continue to increase.

Emphasis is placed on theoretical and practical instruction in a broad variety of biological processes common to both Botanical and Zoological sciences. Laboratory activities will include: animal care; plant growth; bacteriology; analytical analysis of biological material; the instrumentation, recording and analysis of physiological data; preparation of plant and animal material for microscopic examination; and environmental health laboratory procedures. Technicians are also required for field work involving; the collection and analysis of air and water samples, surveys of plant and animal populations, ecology studies, related activities.

Career opportunities are available in a wide variety of fields. These include: University Departments; Medical Schools; Federal and Provincial Experimental and Research Stations; Veterinary Laboratories; Fish and Wild Life Services; Environmental and Public Health Agencies; the Meat and Food Processing Industry; Biological Supply Houses, and many other areas.

Individuals considering a career in Biological Technology should have a good background in biology and chemistry. An interest in working with living material and the aptitude for attention to details are considered desirable. Direct contact with laboratories or agencies involved in the activities of major interest to the student may be of value in determining the type of work involved. The course will demand a considerable amount of work by the student.

The cost of books and other supplies should not exceed $100.00 per year. Attendance on occasional field trips will be required.

ELECTRONICS TECHNOLOGY

The Electronic Technology course offered at N.A.I.T. is orientated to provide knowledge and training in electronics to prepare the graduate for employment in industry.

Year A of the course will provide the student with the basics of electricity and the basics of transistor design. Many hours will be spent doing lab. work to obtain skills and knowledge required to enter research or industry.

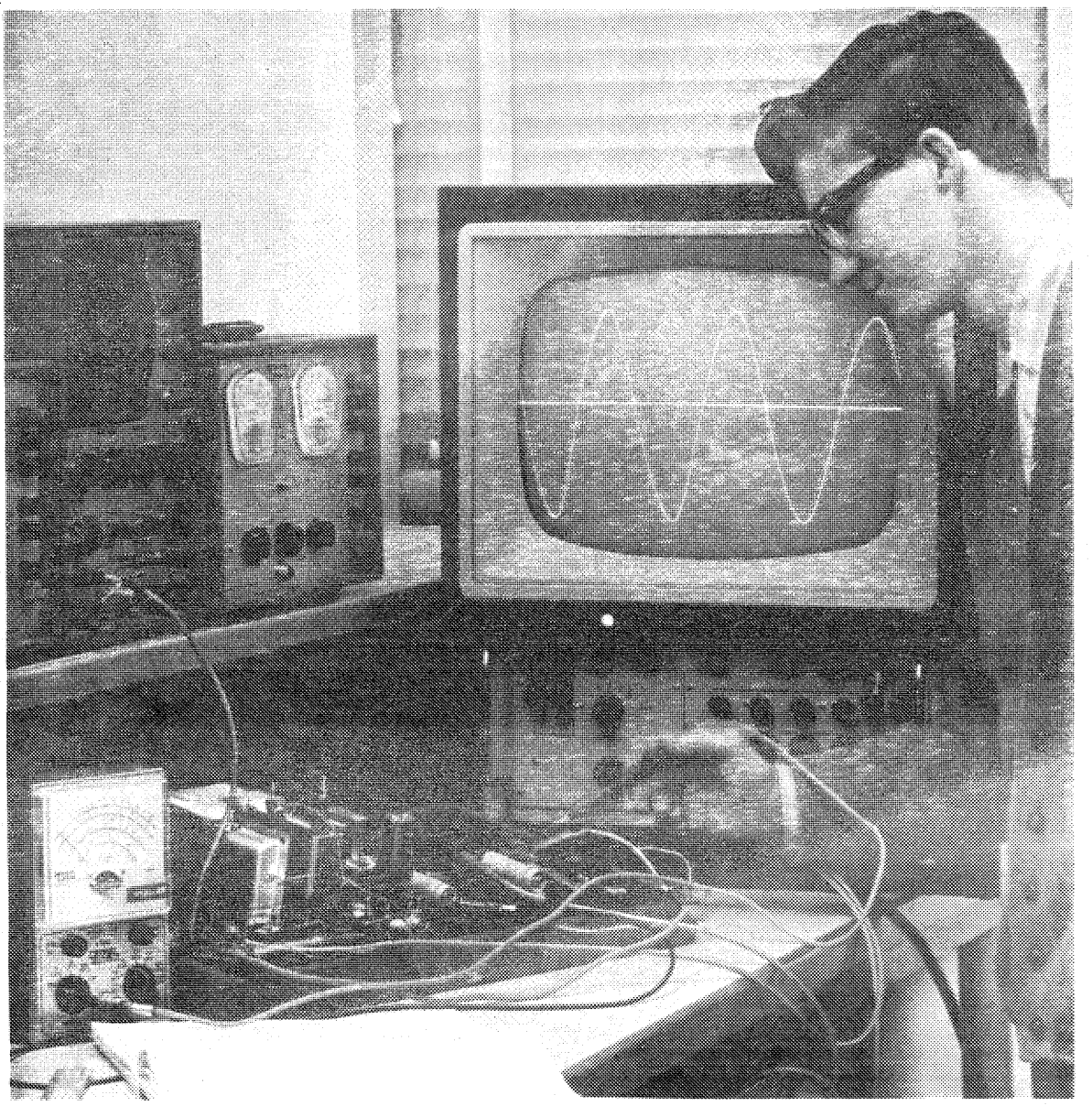
In Year B, the courses are more varied nad more detailed. Courses in Communications, Instruments, Television and Transistor Circuit Design are offered. The student is provided with the opportunity to study some complete electronic systems such as, a transmitter and receiver, a television set and instrument operations and applications.

The last year brings greater emphasis on computors and supervisory control as applied to industry. Optional courses are also offered in this year.

Anyone with a senior matriculation can enter the AB program in which Year and B are combined into an accelerated course. High school graduates who have taken Electronics 22 and 32 are admitted directly into Year B. Graduates in Electronic Technology have a wide and varied field of work opportunities to choose from. Some of them are: Computors, Research, Bio-medical Electronics, Exploration Electronics, and Communications. Also, the opportunity for the Electronic Technologist to move into management is increasing every year.

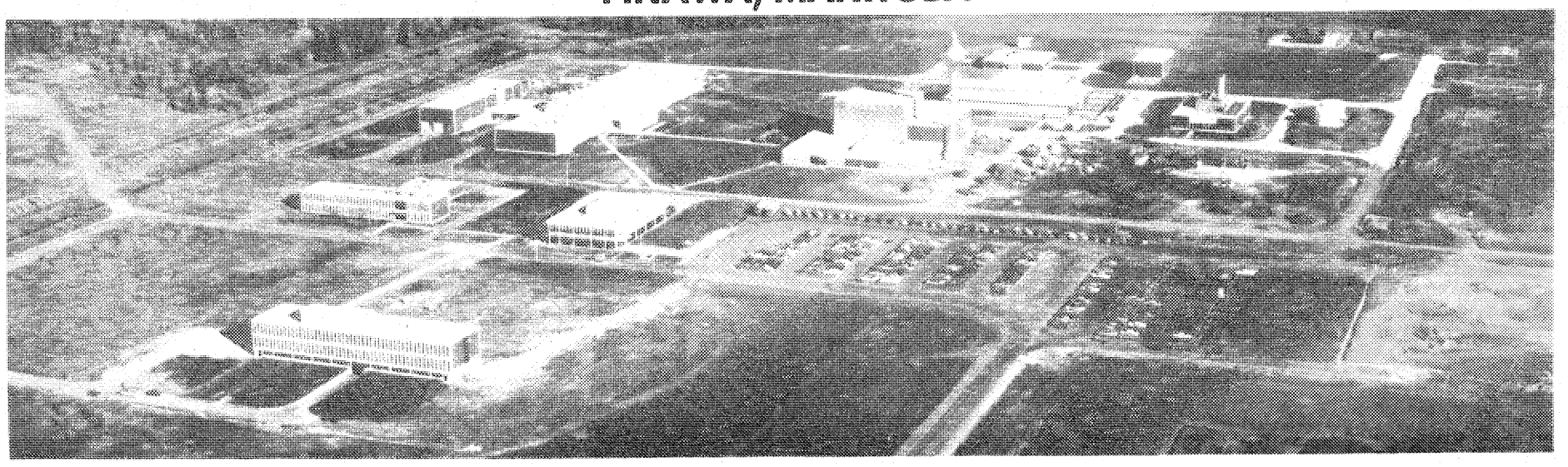
On the social scene the Electronic Technician Student's Society offers a varied program including tours. Also available to the .El-Electronic Student is the opportunity to operate a closed circuit television system. Our television studio has produced two, three quarter hour shows per week this quarter. Any student in Electronic Technology may become an associate member in the Institute of Electrical and Electronic Engineers. This is a professional organization set up for the exchange of current information of importance to the electrical and electronic industries.

To give you a better insight into the Electronic Technology course, visit interesting displays in the Electronic Wing.



WHITESHELL NUCLEAR RESEARCH ESTABLISHMENT

PINAWA, MANITOBA



EMPLOYING GRADUATES IN :

MECHANICAL ELECTRICAL

ELECTRONICS and MATERIAL TECHNOLOGIES

The Whiteshell Nuclear Research Establishment is the second major research laboratory of Atomic Energy of Canada Limited, a crown corporation. The laboratory site adjoins the northwest corner of the Whiteshell Provincial Forest, 65 miles northeast of Winnipeg, Manitoba, with modern plant buildings built along the banks of the Winnipeg River.

Using the world's only operating organic cooled reactor as a test facility, 675 (1967) scientists, engineers, technicians, and supporting staff are investigating and developing new materials for the further development of the CANDU (Canadian Deuterium Uranium) type commercial power reactor into a highly efficient economical power producing utility. By 1972, AECL expects some 1200 people to be working at WNRE.

The optium complement of 1200, WNRE management expects, will be large enough to execute a productive research program, while being small enough to allow for effective, interdisciplinary communication between technologists working at the research and development projects. People and ideas are the Whitesehll Research centre's prime assets, and its products are new, nuclear materials data and reactor designs.

The personnel philosophy, recognising the need for continuous post-graduate training of technical and non-technical staff, encourages each individual to participate in internal and external training programs. This internationally known scientists and engineers working at the establishment, give frequent seminars on the ideas they are researching an advances in their desciplines, advances they may not have yet published in the periodical literature or textbooks. Many personnel travel to the University of Manitoba to take sponsored credit and non-credit evening course to further their own qualifications.

Most of the WNRE staff live in the town of Pinawa, a modern town carved out of the Whiteshell forest in a joing development by AECL and the provincial government. Town planners have designed the community to take advantage of the forest setting on the banks of Sylvia Lake, a widening of the Winnipeg River, 10 miles east of the plant. Pinawa sits almost in the heart of the Whiteshell resort area, offering a full range and summer and winter recreational activities.

The town and research establishment will grow continually, if not in size then in the breadth of its personnel effort. One fundamental policy at WNRE is that no man in invited to join the establishment unless the proper support can be made available to him. Modern science demands modern sophisticated instrumentation. As a consequence, the Whiteshell Nuclear Research Establishment has one of the most utilized laboratories and test-reactors in the world today.

STENE ON SPORT

Welcome to Open House '68. On behalf of my partner Paul Ragan, I hope you find our Institute, and especially our sporting facilities most impressive. We do!

I guess the most logical place to begin on the topic of sport, is the conference NAIT competes in, and the various teams that compete in that conference. That goofy looking animal that sits in our showcases, with a proud smile on its face is called an ookpik. The hockey and basketball teams have adopted this name as the team name, and that's why the Ookpik is so proud looking. The basketball team is in the finals of the WICC and the hockey team has already won the conference. WICC stands for Western Inter College Conference. The conference is composed of teams from Red Deer, Camrose, University of Calgary, Mount Royal Junior College, Southern Alberta Institute of Technology and Lethbridge University. The Institute or University that attains the most points (including all sports competed for in the conference) will be presented with the Lethbridge Herold Trophy emblematic of conference supremacy. For all you good people who are not students at our institute, you may view the Trophy in the showcase outside the main gym. We have held it for the last two years. Please.....No applause.....we're modest.

The biggest surprise in the conference this year was our Wrestling team. Coach Marv McDonald has done an outstanding job. NAIT is the only Institute ever to big a University "A" team. They beat the University of Calgary in a recent meet. Chances are that our little ole' Institute could place wrestlers on the Canadian Olympic team. The most promising is former Footballer, Ken Sigaty. Big Sig will be competing in the Provincials and Nationals soon. Other promising wrestling includes Bill Gosset, Terry Hutchison. I better stop there because actually the whole team is promising. Another bunch of winners this year were the Curlers. Gord Tren lead his team to the Conference Championships at Lethbridge. Same goes for the Volleyball team. They won their title in Calgary. Actually winning seems to be a trend at NAIT; maybe because of the talented athletes that attend here, or maybe because they try harder than the rest of the conference. Whatever it is, we are proud of them. Other smaller clubs and teams that do very well are Bowling, badminton, archery, fencing, cross country, and golfing.

T.V. personality Al McCann is the conference commissioner and has done a good job at that post.

This years presentation of the Lethbridge Herold Trophy will probably go to NAIT again, because we do try harder, and enjoy it!

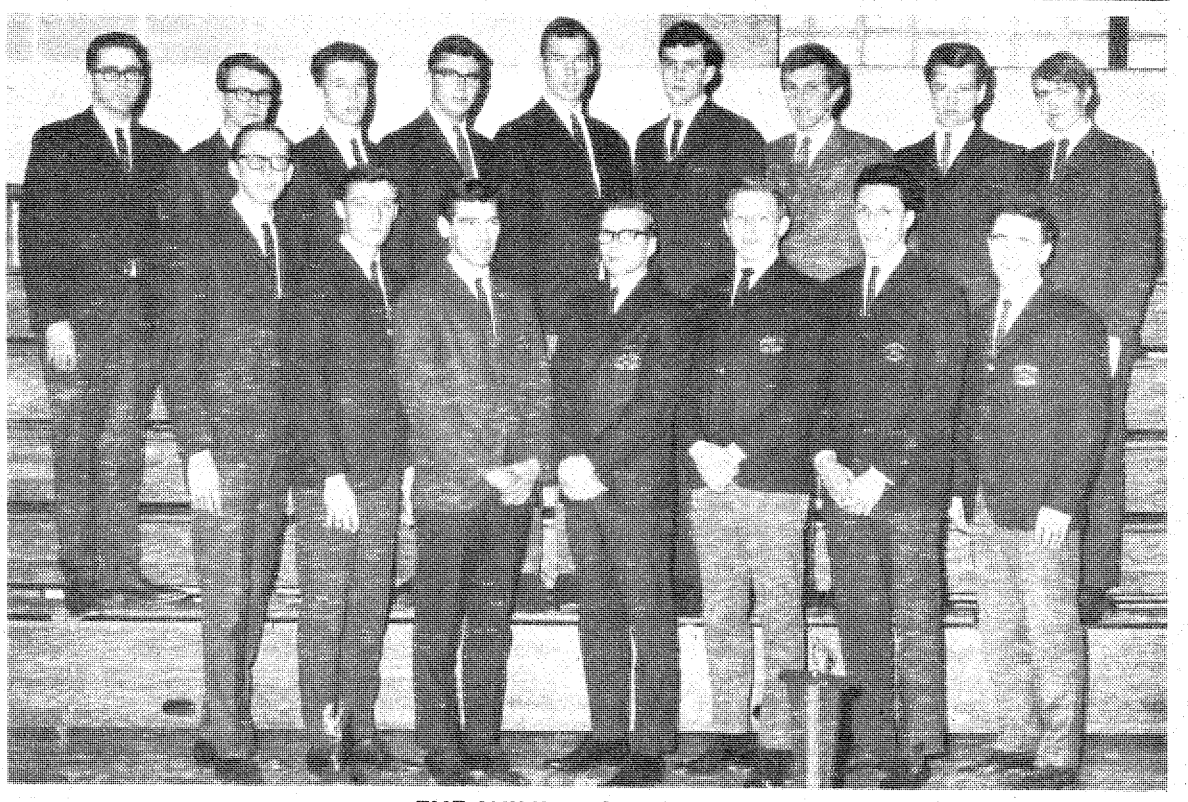
WRESTLING CHAMPS

The Western Inter-College Conference Wrestling Championships were held on the NAIT Campus February 9th and 10th.

Individual weight class champions from NAIT who received the maximum 10 points included: Sigaty (heavy weight), Hutchinson (191 lbs.), McLean (177 lbs.), McDonald (132 lbs.) and Willes (123 lbs.). Jones (167 lbs.) and Larson (137 lbs.) collected 7 points each in finishing second, while Ramsdell (157 lbs.) and Blackwood (147 lbs.) collected 5.5 points in finishing fourth.

Outstanding wrestling performances were exhibited by Gordon McLean in his three fights, as he demonstrated his prowess using a wide selection of wrestling maneuvers in defeating his opponents. Ken Sigaty who suffered from the NAIT team fight-offs with NAIT's giant Bill Gosset, demonstrated why he is being talked about in the coming Canadian Wrestling Championships, Coach McDonald feels that Ken Sigaty in good health will be tough come the Nationals & Olympic Trials.

This was a successful meet for NAIT's team, as they soundly defeated their opposition. The week previous NAIT also defeated the University of Calgary "A" Team. The boys have put a great deal of hard work into wrestling and deserve all the credit coming to them. Coach McDonald has done an excellent job in moulding the team into a fighting unit that represented their school very well. Congratualtions team!!



THE WINNING TEAM

OOKPIKS TAKE HOCKEY

The NAIT Ookpiks are WICC hockey champions for the second year in a row. They captured the title with an 11 and 1--won lost record with their only defeat coming at the hands of SAIT 4-3. The last two league games NAIT won against SAIT 7-3 and 4-2. They had almost as good a record in exhibition games winning six loosing three and tieing one.

The top scorer for the Ookpiks was Gary Leskow with 42 points consisting of 14 goals and 28 assists. Top goal getter and second in all round scoring was Dennis MacMillan with 21 goals and 14 assists for a total of 35 points.

There has been talk of possible expansion of the league next year to seven teams to include Red Deer Junior College, University of Alberta Junior Bears and University of Calgary. This should make next season even more exciting than this one just past. I think a real vote of thanks should go to Coach Doug Hall who in his rookie year in the job led his team to a league championship. The players themselves also deserve a great deal of credit, they represented their school very well and have something to be proud of,

standings in the league were as follows:

NAIT
Mount Royal
SAIT
University of Lethbridge

BASKETBALL TEAM MISSES CHAMPIONSHIP 61-64

GOOD JOB GUYS

STUDENT SERVICES

ATHLETIC PROGRAM

All first year students enrolled in the Business and Vocational Technology courses are required to take two hours of physical education per week. This course is the Physical Education Service Program.

The philosophy of the Institute and the Physical Education Dept. is that our students must be prepared to successfully cope with a world of increasing leisure time and automation. In order to do this we are presenting a program which will provide students with the necessary skills, knowledge and appreciation to constructively fill their abundant future leisure time. We hope to instill in them the fact that continuous recreation is required to maintain physical fitness in a world of high pressure and competition. If we can accomplish this then we feel that we will be contributing something of inestimable value in the student's quest for a happy, healthful life.

There are four major hopes for the future of the program. Firstly aquatics is a prime requisite for a program of our type thus the need for a pool. We hope to have one in the not too distant future. Secondly, it is hoped hoped an adaptive program may be included. It will be through this method only that we will be able to meet the needs of all students. If at all possible, the program will be corrective in nature as well as recreational.

Physical education is a vital and unique part of the sum total of life experiences which make man as we know him. The Department's philisophy is not elaborate but is does plainly state how universally important it feels physical education is in developing the total personality and in maintaining our democratic way of life.

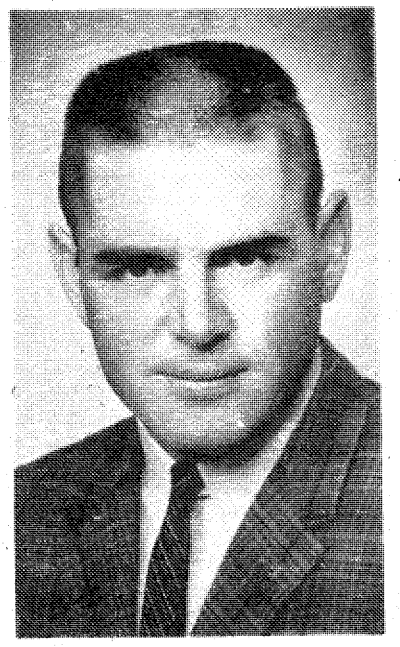
INTER-SCHOOL ACTHLETICS

Students at the Northern Alberta Institute of Technology can avail themselves either as spectator or player to a fairly diversified program of athletics. Competition is carried out within the Western Inter-College Conference, a conference formed several years ago to meet the need of competition at the Junior College level. The W.I.C.C. encompasses a large number of institutions and geographically represents almost all of the Province of Alberta. Member schools of the Western Inter-College Conference are presently – Lethbridge Junior College, The University of Calgary, Olds Agricultural and Vocational College, Red Deer Junior College, Camrose Lutheran College, and N.A.I.T. Activities offered in the Conference include Cross-Country; Golf; Volleyball; Curling; Basketball; Badminton; Bowling; Wrestling; Hockey and in the near future a fall sport such as Rugger or Soccer. Most of these activities are participated in by both men and women.

In the short time of its existance N.A.I.T. has enjoyed a great deal of athletic success and is presently the holder of the Lethbridge Herald Trophy which represents overall W.I.C.C. athletic supremacy.

INTRAMURAL PROGRAM

The Intramural Program at the Northern Alberta Institute of Technology is a sports recreational program that presents each student



MR. G. MEADUS
DIRECTOR OF
STUDENT SERVICES

the opportunity to compete in physical activity. Possibly the motto "A sport for everyone and everyone in a sport" would be a more expressive way to indicating the above statement. N.A.I.T. attempts to present a variety of activities so that the program will encourage participation from each student in at least one activity.

We at N.A.I.T. feel that Intramurals are for the students and therefore should be run by the students. We have an Intramural Board with membership compiled of first and second year students two from each technology. A member of the Physical Education staff acts as staf. advisor to the Board. This Board is directly responsible for the smooth operation of Intramurals.

We hope you will take this opportunity while you are visiting us at N.A.I.T. to look over and inquire about our intramural program. We plan to have displays set up so that you may get a better insight into the program.

WRESTLING

For students who enjoy physical contact sports, NAIT's wrestling programme representa a challenging, flourishing and successful activity. As an outgrowth of the Recreation and Physical Education programme for NAIT freshmen, wrestling is strongly supported in the Intramoural and Interschool sports program.

The three programs have been operating for three years, and students at each level of operation compete in ten weight divisions which range from 114 pounds to heavyweight. Reasons for its poplarity include the natural features of the sport itself, equal competitive situations, elements of competition, and the challenge presented to the student. This popularity is complimented by first - class equipment and facilities and competent instruction available at NAIT.

Points are awarded to the wrestler who is successful in manipulating his opponent into a "pin" or "rest pin" or "rest pin" situation. Executing point awarding manoeuvres requires a great deal of speed, a g i l i t y, balance and strength. Of course, a great deal of practice is required to perfect these factors.

NAIT TAKES VOLLEY BALL

On December 1st and 2nd the NAIT Men's Volleyball team won the W.I.C.C. Championship.

The tournament was held at SAIT and consisted of a round robin during which each team played two games against each of the other teams. The competing teams were NAIT, SAIT, MRC, RDSC, OAVC and University of Lethbridge. After the round robin NAIT and Red Deer were tied, both defeating the other teams but splitting the two games between themselves. In the playoff which was a two out of three series NAIT won two games in a row 15-12 and 15-8.

In the girls division, the same teams participated and NAIT finished fourth, with a three way tie for first finally broken and Olds winning it.

Lethbridge Herald Trophy

The Western Inter College Conference, what is it? This question has been asked by many students and the explanation is as follows. W.I.C.C. is comprised of the following schools:

NAIT
SAIT
Camrose Lutheran College
Red Deer Junior College
Olds Agriculture Institute
University of Lethbridge

It co-ordinates inter - school competition in a great variety of athletic endeavors such as hockey, basketball, wrestling, golf and many others. It is purely athletic in nature and fosters a great competitive spirit between the schools involved. TV personality Al McCann is the Commissioner of the conference. Overall supremacy in the conference is recognized by the beautiful Lethbridge Herald Trophy. This has been won ever since its donation two years ago by NAIT and we started off on the right foot this year by winning the golf championship. The victorious golfers were Earl Gilles, Art Barry and Jim McClean, they defeated runner up SAIT by six strokes. Not only good participation in our school teams is required, but good support of these teams by the student body is a must for another successful year in the W.I.C.C.

INTRAMURAL BOWLING

Bowling was organized as a part of the Intramural Program back in 1963 by Betty Whittle)Women's Atheletic President) and Ken Shaw (Men's Atheletic President).

The Intramural bowling program is designed to give each technology an opportunity to enter teams. Bowling is not set up as a club nor does it have an executive. We have an Intramural Board that is reponsible for all activities taking place within NAIT and bowling is one of these activities. Normally one or two student managers operate the bowling alley. The Bowling League has been co-ordinated by the Intramural Director.

Since Intramurals is set up mainly for participation, we have not divided the league into equal team basis. Points are awarded to clubs for participation as well as winning.

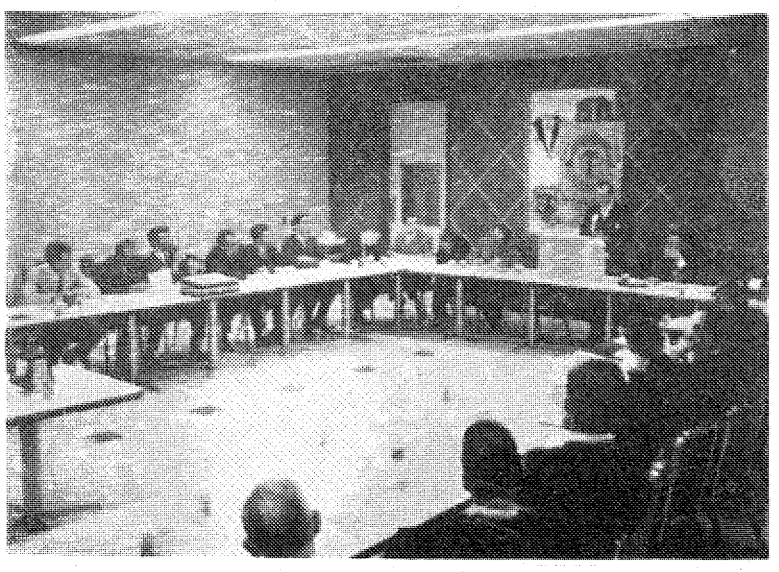
The past season girls have indicated an interest in bowling so a mixed league was set up to incorporate everyone.

In order to cover the cost of bowling alley managers and pinsetters each player pays 25 cents per game to bowl.

Intramural bowling is not recognized as an individual or even team sport. The individual bowls so as to accumulate points for his technology. Upon completion the technology with the greatest amount of points is awarded the bowling trophy. We do not award individual trophies in intramural activities.

The Interschool bowling comes under the jurisdiction of the W.I.C.C. All NAIT students are given an opportunity to bowl on the NAIT team. A tournament or a roll-off is set up for all interested student bowlers but only the top 10 men and 4 women are chosen for the team. The NAIT team then competes against all the other W.I.C.C. Bowling Teams on a Sports Weekend usually held in February.

CLUBS AND SERVICES



TOASTMASTERS

TOASTMASTERS 2491-42 WELCOMES YOU -- Our Toastmasters Club is a group of men interested in self improvement, and willing to work at it on the well-established principle of "learning by doing."

To this end, our members practice talking before the fellow members. Then they give each other their impressions of what has been said, and how it could have been said more effectively. Thus, we combine the two principles of "learning by doing" and "improvement through constructive criticism."

In addition to becoming a better Toastmaster and speaker, this club helps you to gain greater unstanding of the vast field of communications. We believe the field of communications is one of the fundamental assets of civilization. Human growth and progress are based on man's ability to communicate with his fellows. In Toastmasters, we seek to improve our ability to communicate, whether in public speaking or in conversation or in writing. We know that through successful communication, we arrive at understanding; and when we understand each other, we can work together constructively.

Our conception of public speaking is that it is, in the main, "enlarged conversation." Whether the audience is one, two, or a thousand the essential principles are the same. We gain valuable practice in public speaking by engaging in Table Topics, short impromptu speeches that help you gain the ability to think and talk on your feet, formal prepared speeches, and the opportunity to gain valuable practice in public speaking by watching one's manner of speaking in conversation.

We meet every Tuesday night at 5:30 in the north cafeteria to practice what we preach. In addition to this WE STILL HAVE ROOM FOR FOR YOU!!

NAIT HEALTH SERVICES

The Student Health Service provides all students and staff with a limited program of precentive and treatment care and supervision. The funds necessary for the maintenance of this programme are provided through an annual budget from the Department of Education.

The ultimate objectives of the health prgram are:

i to maintain a state of optium health both physical and emtional among the student body and staff

ii to reinforce healthful attitudes and

iii to instill important habits of personal and community health

The Student Health Service has a staff of two registered nurses and an nursing aide who acts as receptionist.

NAIT PUBLICATIONS

The N.A.I.T. newspaper, the Nugget and N.A.I.T.'s Yearbook, the Northern Torch, are student owned publications. The Nugget publishes 3000 issues every edition. The Yearbook is paid for through student fees and is given out the year following.

The purpose of the Nugget is to give students news of events happening in and around N.A.I.T. The Nugget is published every two weeks and usually is an eight page paper. The yearbook is a chronicle of the past year's activities. Each students picture is included as well as clubs, dances and other school events.

Both of these publications offer a chance for students to help the school by writing on photographing New students next year wishing to work for the Nugget on Yearbook are welcome to apply at the Nugget offices next September.

STUDENT STORES

The Nait Student Stores is operated by Business Administration in affiliation with the Nait Student Association. It is a service for the student of Nait provided by the students of the Business Administration Society.

The bookstore offers a complete shirts, used books and miscellaneous items at a reduced price level.

The store is used as a training ground for the students of the Business Administration Scoiety, with all the students participating in the functional operation of the store. It is the policy of the Business Administration Society to appoint two managers to run the store on a voluntary basis with expenses paid.

The managers and staff of the Naitsa Store sincerely hope that you will enjoy your visit at N.A.I.T. and hooe you get the opportunity to visit us in the store in Room E.131.

McNALLY LIBRARY

Our NAIT meeting place is known as the McNally Library, named after a famous and much beloved educator, Dr. Fred McNally. periodicals and numerous pamphlets. These materials that give access to the thoughts and achievements of influential authors not only include serious technical and factual titles but the odd popular paper-back thriller as well as books for Reference, Tesearch and Relaxation.

This place of memory is ideally located, and is close to other services such as administrative, audio-visual, book store and cafeteria. This advantageous location enables future expansion by taking over the space occupied by the adjoining auditorium continuing to be the hub where the needs of student and staff can enjoy the experience of others. All that is needed is their keen desire to learn the truth and further their education through these books of ideas and facts.

In the general layout of the McNally Library there is a functional design in the bringing together of students and books by direct access to the open stacks, offering freedom for personal selection and leisurely browsing. Including the individual study carrels, which are scattered throughout, and counting the lounge chairs, the seating capacity is about 260, Comparing our attendance of 1500 for the first months of operation in 1963, our monthly figures run between 15-20,000 now.

NAIT RADIO

Nait Radio was formed in 1963 when the institute first opened. It was organized by Dave Marezeska, who is now the staff adviser. NAIT Radio is open to students from any technology; all that is required is that a member attend two meetings. New members interested in becoming disc jockeys, in addition to attending meetings regularly, must learn how to operate the board, then can go "on air" when he is scheduled. Different positions in the club are: president, vice-president, secretary-treasurer, chief engineer, record librarian, continuity director and program director. Some of the duties for these people are responsibilities for maintainance of equipment (chief engineer), the formation of logs and announcements (Continuity) and the setting up of schedules to fit announcers free time (Program director) to insure that NAIT Radio is run as smoothly as possible.

Elections for the executive are held once per year, early in March or at the end of February. Nominees must be members of NAITSA, members of NAIT Radio, and have a second quarter average of 60% or better.

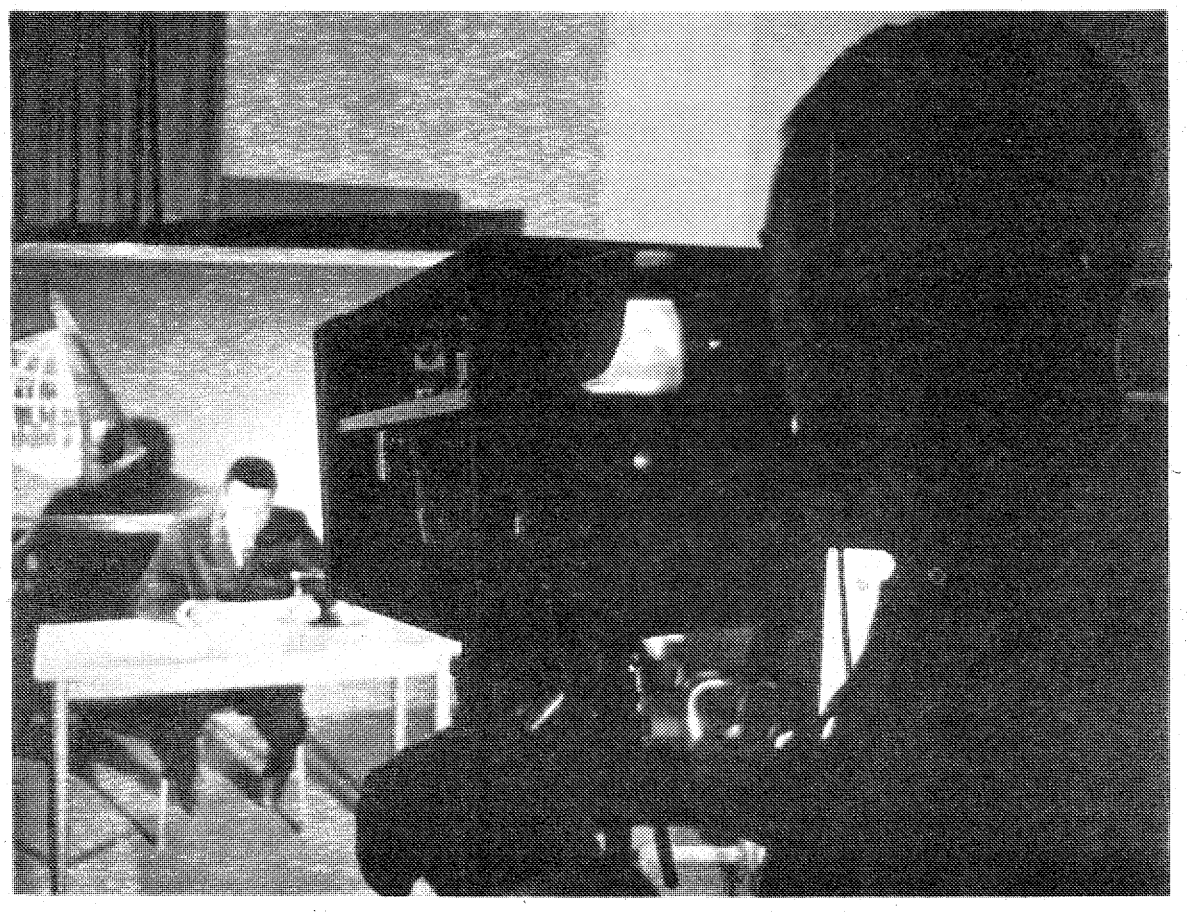
NAIT Radio broadcasts from the main lunch room every day of the school week except from twelve to one on Tuesday and Thursdays when NAIT T.V. takes over the circuit. Monday is easy-listening music, Tuesday is jazz, Wednesday is folk music, Thursday is western, and Friday is rock.

NAIT Radio hopes to get more office space for next year, and is also trying for a new broadcast booth, with new records and the addition of another tape recorder.

For Open House, NAIT Radio will broadcast from the auditorium from ten to ten on Friday and from nine to six on Saturday. It will provide a Lost and Found service and give out miscellaneous information about what is happening around the institute.

Friday programming is directed at high school students with "Top Pop" and "Old Gold" hits, while evening and Saturday shows will be based on easy - listening tunes.

Open House provides a wonderful opportunity for publicising NAIT, and NAIT Radio is proud to be a part of this event.



NAIT TELEVISION

NAIT T.V. serves the school in a variety of ways. The closed-circuit system provides both school and world news, live coverage of current events and videotape recordings of past events.

The news, collected from various technologies, offices, and recreation areas around the institute or elsewhere, including news obtained from a local Edmonton station, is seen near the beginning of program. Sports, which makes up a very large part of the programming usually seen right after the regular news. The sports is gathered from many of the same sources as the news, and also from coaches, players and officials. Obtaining the news is the job of small news and sports staff who collect items on their own time and initiative.

NAIT T.V. also broadcasts many special events held at the school. During the past few months, the station has been present at Dental Assisting's slave auction at which the girls were sold for high prices and made to carry books, clean, paint and perform all the jobs given them. The visit of Canada's new Governor-General Roland Mitchner to NAIT was an extra-special event covered by NAIT T.V. also. As the Governor-General was shown the displays prepared for him by the different technologies, he was followed by the NAIT T.V. cameras. The presentation of gifts to Mr. Mitchner including the Nait mascot Ookpik, and a record about NAIT, done of behalf of the students by the Radio and Television Arts club, was avidly enjoyed by the students when they watched it one the television sets around NAIT.

During the week of choosing the next NAIT Queen, the organization's cameras participated in all the dances and activities put on by the technologies for their Queen candidates. The students who couldn't attend the fun in person were provided an opportunity to see what was happening around the institute.

Along with these highlights are featured films which on occasion attract crowds around the television monitors to see the group turn out some hilarious commercials for wacky products and to watch skits about current events around NAIT.

The group itself consists mainly of Electronics students, assisted by Radio and Television Arts personnel, but it is open to anyone intereted.

Under the guidance and counselling from staff instructor Mr. G. Erkens, NAIT T.V. broadcasts during lunch hours on Tuesdays and Thursdays to monitors located in student areas such as the cafeteria, tower lounge and to the south lobby. During Open House, it will center its operations in the south lobby.

So if you chance to see a television screen at Open House with a program on it, watch. It may not be professional -- but it will keep your mind off your tired feet.

STUDENT PLACEMENT SERVICE

The Canada Manpower Centre of the Department of Manpower and Immigration maintains a Student Placement Office on Campus to provide a complete service to Students and Employers.

We would like the students to be aware of our services, which includes guidance and counselling to assist in career decisions, and to help the student to assess his own capabilities in planning an occupational goal.

The opportunity to meet employers and to make employer contacts, and to be able, at first hand, to assess the opportunities for employment that are offered.

We can provide the student with information on all labour market matters and have information as to requirements for the various technologies in all parts of the country and the mean averages of wages paid for those skills.

The Student Placement Office maintains an ample supply of reading material to assist in career planning, together with brochures from all of the large responsible firms who visit the campus. We work with other advisory services on campus and in other vocational settings, and by serving on various ad hoc committees, the Student Placement Office becomes aware of technological change and progress and can provide a broad information base to which the student may bring his problems and seek advice and counselling.

The needs of the Employer are vital to the operations of the office, and we provide the opportunity for employers to visit the Campus and to make contact direct with qualified students. These visits result in offers of employment to those qualified students who come closest to the requirement and needs of the employer. We also provide the opportunity for the employer to make contact with Instructors and other Institute personnel so that they may have first hand information in meeting their labour requirements.

The dissemination of labour market information, level of salaries, availability of graduating students, numbers graduating, and any changes in the technological vocational system is a two way street, and it is most important that we provide full information to the employer, and that, in return we secure all available information from employer sources which will assist us to serve the Faculty and students more effectively.

The student has the vital role in the work of the Student Placement Office. We want early registration, and we want you to bring your needs and employment problems to us. Each student must understand that, while we can provide the opportunity for you to interview prospective employers, your own behavior on interview, your dress and your grooming are vital matters of concern. When an employer has interviewed a number of students who have exhibited an average level of academic and technological education, he will then be guided in his choice by motivation, desire, and general deportment. Don't let yourself down by coming to an interview poorly prepared, poorly dressed or poorly groomed. You are to graduate as a highly skilled technological craftsman and it is this, together with the impression that you make on interview that will decide your employment future.

The Student Placement Office receives many requests for undergraduates to work in summer employment. Please make early registration for your summer work needs so that we can assist you to placement in any way possible.

Any enquiries should be directed to Mr. Thomas W. Oldfield and Mr. Donald O'Keefe at the Student Placement Office.

NAIT FLYING CLUB

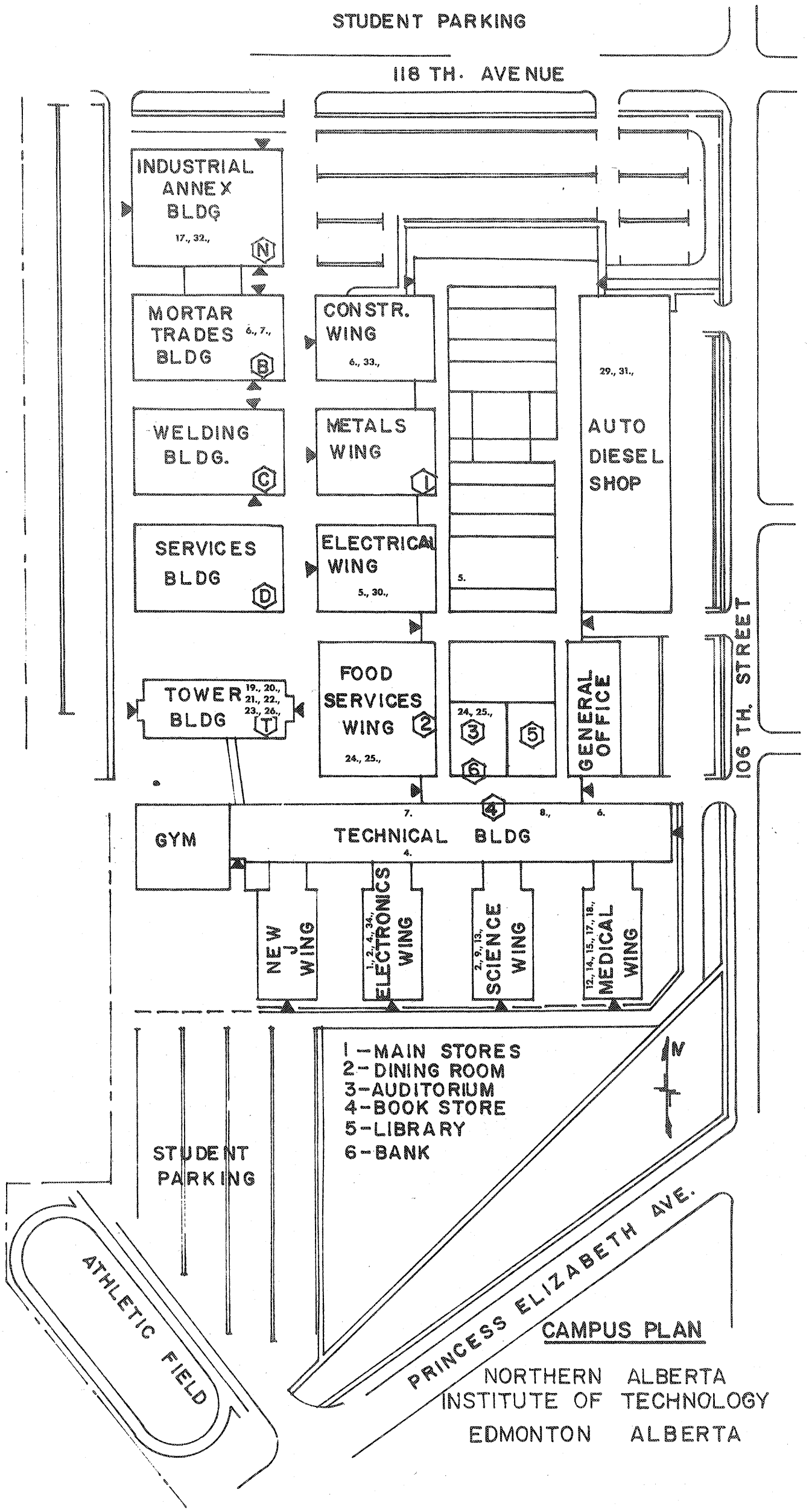
The object of the NAIT Flying Club is very well summed up in the constitution by the statement "Generally to Encourage and foster among its members appreciation of aviation as a way of life".

For many people aviation is planes and pilots -- and stewardesses. However, it can be well whorthwhile to look at aviation and all that it encompasses and can offer. Aviation is now number two in industry; the department of transport employs more electronic technicians than anybody else in Canada. Aviation is big, and lations, machinists, statisticians, accountants, sheet metal workers, of about 15% each year.

Aviation offers job opportunities to everyone. Not only are the jobs interesting and the benefits encouraging, the pay is good for qualified people. A few positions and monthly salaries would be as follows: pilot - $00 to 2500, stewardess - $250 to 700, technicians - $400 to 750. The airlines need all types of technicians. Other requirements are for electricians, programmers, carpenters, stenographers, sales representatives, painters, public relations, machinests, statisticians, accountants, sheet metal workers, clerks, secretaries, and economists.

If you are interested in flying, job opportunities or a good social club, you are invited to join NAIT Flying Club. Call us at 479-8471. local 260.

YOUR CAMPUS GUIDE



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