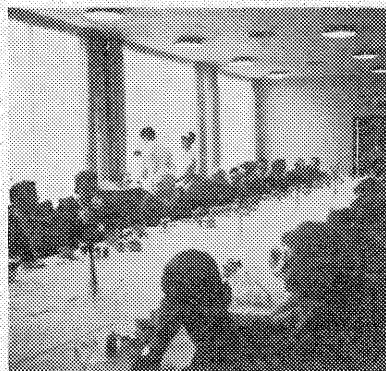




Our 2.5 million dollar tower complex was officially opened by the Hon. J. Grant MacEwan, the Lt. Governor of Alberta at 9:00 p.m. Wednesday. The official opening party was made up of F/L.R.R. Hawgood, A.D.C., the Hon. R. H. McKinnon, Minister of Education, and the Hon. F. C. Clement, Technical and Vocational Branch, representing the Federal Government. Also in attendance were many members of the cabinet, other officials, dignitaries and their wives.



PRESS LUNCHEON A HIGHLIGHT OF OPEN HOUSE ACTIVITIES

Representatives of news media from and around the City of Edmonton, attended a luncheon sponsored by the Northern Alberta Institute of Technology at 11:30 a.m., last Tuesday. In attendance were representatives from the Edmonton Journal, the Alberta Hotel Review, CBC, and CFRN radio and television, radio stations CHED, CHQT, CJCA, CKUA, and CHFA as well as Public Information Officer from the Provincial Government, Mrs. P. Algie. Also members of the Administration of NAIT and representatives of the NORTHERN TORCH — NAIT's student year book, NAIT Radio, and the NUGGET were present. Many thanks go to Mr. Smith, his students and staff, for the lovely luncheon they prepared on this occasion. If you are interested in seeing some of their fantastic work, including a Gumpaste model of the C.N. Tower, do not miss their display in the main auditorium.

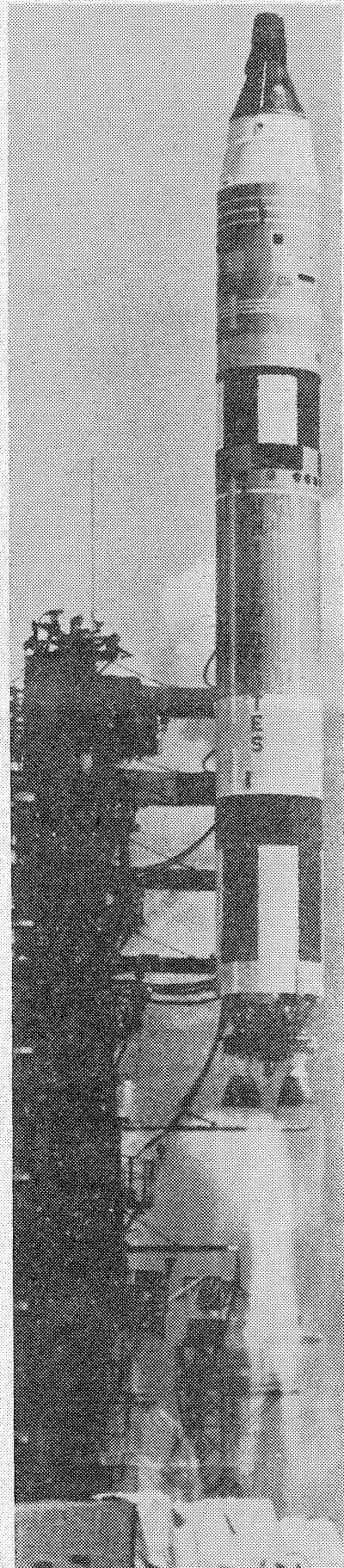
NEW ADDITIONS

Additions to N.A.I.T. since OPEN HOUSE one year ago include the 2½ million dollar TOWER and the 600,000 dollar ANNEX.

With the additions, the Northern Alberta Institute of Technology has become one of the largest Technological Institutes in North America. Its 19 acres of floor space contain 255 classrooms, shops and laboratories, 203 offices, numerous service areas such as the cafeteria, library, gymnasium, auditorium, student

areas, power plant, mechanical equipment rooms, etc. Total floor area is now 796,560 square ft.

Just to mention two features that will unquestionably prove a must to visitors at OPEN HOUSE this year: the Forestry Laboratory in the ANNEX, which includes a growth chamber to simulate ideal conditions for plant life; and the PENTHOUSE atop the TOWER. The so-called TOWER LOUNGE is glass-enclosed and will serve as a study and lunch area for students. It will accommodate 250 persons at one time.



N.A.I.T. IN HOT PURSUIT

NUGGET

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MAURICE PRITZ

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Features Editor Les Tomlin
Office Mgr. Sandra Robinson
Cartoonist Gerrit Steenbergen

Staff Advisor Dr. A. Bolle
Sports Editor Mike Donahoe
Business Mgr. Terry Baker
Photography Jim Yakiwchuk

STAFF THIS ISSUE: This Open House issue was put together by all of us as we don't have an official copy and layout man. Special thanks go to Ken Repchin, ace reporter; Dallas Hague, Darlene Stevenson, August Bakke, Ron Garront, Mike Zander, Brian Jessup, Mary Politsky, Norm McIntire, Gordon Lorenz, Richard Chen, Denise Trembath, Alice Fryer, Getta Mader, Vernon Hafso and Douglas Rognvaldson, Don Garry — all of them did their little part in making this issue possible. And, of course, we couldn't have made it without the sage counsel of Brian Bottorff, past Editor, and Harold Nelson, past Associate Editor.

THE NUGGET is published weekly by the students' association of the Northern Alberta Institute of Technology. The Editor is responsible for all material published herein. Final copy deadline for next issue, 1:00 p.m., Wednesday, March 23, 1966. Circulation (This issue) — 12,000. Offices, E-129: Phone 474-7375 and 425. Printed by Willis Printing and Lithographing Co. Ltd.

PAGE TWO

FRIDAY, MARCH 18, 1966

EDITORIAL

The editors and staff wish to welcome you to the Northern Alberta Institute of Technology. A special welcome is extended to the many high school students, some of whom we soon hope to have with us as fellow students and co-workers.

This issue of the Nugget was especially prepared to give you, the visitor, some insight into the many courses offered at this institute. The write-ups you see throughout this issue are by no means the product of staff or administration — each one was compiled and written by a student of that particular technology or department about which you read. This is how the students themselves feel about their courses.

It is quite likely that if you have not been at NAIT before today, you were surprised, perhaps overwhelmed at the size, population and technological equipment at this institute. Fear not, many students upon graduation, find they have not seen or heard of many departments at N.A.I.T. after two or three years of attendance.

In your tour through our labyrinth of hallways, classrooms, and laboratories you may have heard that by this time next year, including our brand new seven-floor Tower Complex, NAIT will be accommodating students to its full capacity of 7500 every 24 hours, five days a week. Maybe you have wondered why, with such tremendous expansion in just four years, provisions were not made to prevent overcrowding; why the whole north section is made up of only single storey structures; why there are no official residences?

When approval was made for the construction of NAIT, the powers that be were very skeptical, perhaps lacking in foresight, with regard to the establishment of our institute of technology in Northern Alberta. The government had fears of investing your money in a White Elephant. As you have seen, this White Elephant has, in just three years, developed into a Golden Fleece. The value of the Northern Alberta Institute of Technology can not be measured in dollars and cents or by any other tangible means. How can one measure the value of success wrought from possible stagnation of failure?

It is fact that there is a great demand in industry for graduates from NAIT. It is fact that today's automated society demands educated technologists to keep it producing effectively. It is fact that we, the students of the Northern Alberta Institute of Technology, need your support in prompting the government in keeping up expansion as long as it is needed.

We have not let you down, all we ask is to have sufficient facilities for learning, don't let us down.



The reasons for this could result from pressures by the administration to keep the students under thumb, the inability of the student executive (NAITSA) to competently carry out the job they were elected to do, or their lack of an honest and sincere concern for the students.

Whatever the reason may be, however, I feel the students and the persons they elect to the various positions should govern their life and activities here at N.A.I.T. (within limitations set by the administration).

CHANGE IN N.E.S. PERSONNEL

Mr. Vic Stobee, Student Placement Officer at NAIT since its opening three years ago, has been transferred to a position at the University of Alberta, Edmonton. Mr. Stobee made many friends during his term of employment at NAIT. His personal concern for students

WHY N.A.I.T.?



MR. J. P. MITCHELL
Director of Technical and Vocational
Education

NAIT exists for two purposes. The first is to provide young people of Alberta with an opportunity to develop their interests and talents of a practical or applied nature, so that they may become useful and happy citizens. The other purpose is to provide modern industry and business with the necessary technically competent and skilled personnel.

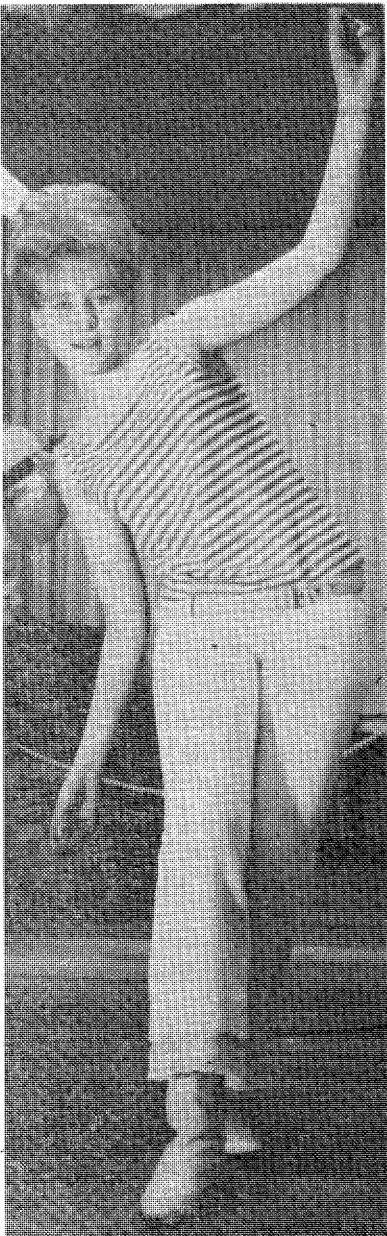
The training provided at NAIT is both broad and specific. Graduates are expected to be flexible and adaptable, and have the essential background to meet the changing requirements of industry during their lifetime of work. Similarly, they are provided with a sufficient measure of specific knowledge and skill that they are immediately useful to their employer. It must be stressed, however, that to graduate from NAIT is but part of securing complete occupational competence, for much remains to be learned while in employment.

It is now quite apparent that for Canada to maintain and improve the standard of living of its citizens, it must increase its productivity. To do this, we must produce more per

unit of energy and time. This will largely come about by effective application of new technical processes and mechanical devices. NAIT is dedicated to providing technical knowledge and mechanical skills to the youth of Alberta, for the benefit of the nation, the Province, the community, and the individual.

Young people with interest and aptitude for occupations requiring a high measure of technical knowledge and practical skills could hardly do better than attend the Northern Alberta Institute of Technology.

Go-Go Girl For Caesar A Go-Go



N.A.I.T.S.A. PRESIDENT



As President of the NAIT Students' Association, it gives me great pleasure to extend a warm welcome to those of you visiting NAIT during our annual Open House. I urge you to visit as many of the displays as

possible so that the impression you carry away from NAIT will be indicative of the various types of education available here. We as students are anxious to have NAIT seen as an institution offering educational opportunities for everyone at reasonable cost. We are also endeavoring to overcome the popular misconception that only the apprentice trades are being taught at NAIT. These trades are indeed offered at this institute and produce highly skilled workmen in vital trades. But NAIT also has many technologies and courses available that are not well advertised and thus generally unknown to the average citizen. The Students' Association, an instrument of student government, urges all visitors to have a long and comprehensive look at this

N.A.I.T. RADIO

As in other years NAIT Radio will be your official information center at the Northern Alberta Institute of Technology. Since the opening of the institute NAIT Radio has been instrumental in providing the news media and general information for the students and staff of NAIT. During Open House NAIT Radio will

present the best in public service and programming.

NAIT Radio is a service for the students by the students. NAIT Radio is composed of students from all technologies, and is supported by both the Students' Association and Administration. The Radio is on the air between the hours of 11:15 and 1:00 p.m. everyday.



new and modern institute. As Canadians and taxpayers, you owe it to yourselves.

Jack McCutcheon
President

Why Change Your Name?

**WE'RE
PLEASED YOU ASKED.**

NORDRAFT: Abbreviated Telex answer back for Northern Drafting.

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TO CANADA'S GROWTH



Technology, standing on an academic and training basis above the high schools of Alberta, is divided into four main divisions. These include: Apprenticeship, Technology, Business and Evening.

Apprenticeship. In Alberta there are 28 apprenticeable trades. Twenty-four of these are taught at the institute. Apprenticeship training involves men and women who have obtained employment in their chosen vocation and who have bound themselves to their employers as "apprentices". Each year for four or five years, these men and women leave their places of work for periods ranging from four to eight weeks to return to the classrooms and laboratories of N.A.I.T. Upon completion of the rigid program of training, they become Journeymen, and later may write Master's Papers. This merely marks three stages of expertise in a chosen field, and it is these men and women who will build the material benefits that all men strive to attain. By their apprenticeship training, these people rise to higher levels of efficiency, they increase the productivity of our industries and at the same time, increase their own earning and consuming power.

Technology. The Technology Division encompasses four departments, each one divided into sections, of which there are thirteen in all. Each

section is an avenue to a particular job in the industrial complex of Canada. For example, there are students at N.A.I.T. studying to become Medical Laboratory Technologists, Civil, Materials and Gas Technologists, X-ray Technicians, and many, many more. This is post-high school training, in which a high degree of emphasis is placed on practicability. The student receives from one to two years of extensive training, a type of education which is being demanded more and more in our evolving society. The graduate receives a Diploma of Technology — the key which opens many doors in Canadian industry. He is then ready to stand beside the professional, undertaking complex tasks which frees the PhD. for more demanding tasks, such as research, in which his extensive university training can be better utilized.

Business. Comparable to the Technology Division, but directed to the wide field of business, the huge business complex at N.A.I.T. trains students in Business Administration, Distributive Technology, Data Computing, Banking, Secretarial Training, Barbering, and Food Services. It is in this division that the High School student who lacks mechanical or scientific aptitude may find the type of training that will provide him with the job in which he may find enjoyment and fulfilment. The Business graduate receives a Diploma of Applied Arts — public recognition of ability to handle the complex and varied tasks in our developing business society.

Evening. One of the major problems in any dynamically growing country is the need for constant retraining of her labor force. This need occurs because of technological innovations, such as automation. Here, in the Evening Division of N.A.I.T., this ideal becomes a reality. With a course curriculum that numbered 243 courses last September, the Evening Division of the Northern Alberta Institute of Technology is one of the largest of its kind in North America. Catering to the needs and wishes of thousands of adult Albertans, there are academic, upgrading, interest and hobby courses.

This, then, is the Northern Alberta

Institute of Technology. It is not an alternative to, but rather an addition to, the high school system of the province. It provides education which stands as an alternative to the training offered by universities. It is just one of the vital cogs in the wheels which are now churning, transforming Alberta into an industrial giant. It was built by and for the people of Alberta and Canada. We feel that you may be justly proud of your contribution.

HEAVY DUTY EQUIPMENT TECHNOLOGY

Because of the great advancements in design and complexity of modern machines a position has developed for someone who could bridge the gap between the journeyman and the designing engineer. The person who could qualify for this position needs special qualifications: one, that he could readily work alongside and understand the problems facing a journeyman; second, having the ability to communicate on the same level as the professional engineer with regard to technical subjects related to the heavy equipment industry.

Thus, due to advancing science a new position arose and to accept this challenge a completely separate and distinct technology was established by which persons could be trained to meet the demands of an ever expanding industry.

Students successfully completing the academic program can find numerous positions available for their talents. These include service supervisors, maintenance foremen, sales technicians, industrial plant educators, development and research technicians, or any position where heavy equipment is being maintained and operated.

In the first year the student is made acquainted with the use of hand tools, the art of welding and basic engine theory. Following this comes advanced theory, engine construction and overhaul where practical experience is gained in the diesel shops. An introduction to basic and advanced electricity, magnetism, hydraulics and fuel injection completes the first year of study.

The second year is restricted to those who have completed the first year or have taken the light month course at the Southern Alberta Institute of Technology. The course includes such subjects as thermodynamics or study of heat engines and laboratory application of engine testing, blueprint reading and sketching to develop technical skills in drafting and to learn to read engineering drawings. This is followed by study of fuels and lubricants, hydraulics, practical work and theory in the machine shop. The study of properties of materials completes the second year.

Graduates of the course will find that they are ready to accept employment in the Heavy Equipment industry, with the knowledge that they will be able to serve their employer profitably.

schools was reanized. One of the results of that recognition of need was the Northern Alberta Institute of Technology.

Construction of N.A.I.T. began in 1962 and by the end of that year there were instructors on staff training a small body of students in automotive, construction, electrical and the metal trades. These were arduous days for staff and students but because they believed in the future of Canada, in the future of Alberta, and of the Institute, they persevered. Today, the Northern Alberta Institute of Technology stands as an educational monument to the people of Alberta, and all Canada; it stands as our assurance of Canada's continued economic growth.

Divisions



DRAFTING TECHNOLOGY COVERS WIDE RANGE

Drafting is the graphical communication and documentation of ideas, wishes, and works. The draftsman therefore forms the liaison between the engineers and the people actively involved in the construction of a project. To be able to do this, all draftsmen must be trained to have a thorough understanding of the following basic areas: building and construction techniques, and technical terms.

To accomplish this proficiently the prospective draftsman enters a two or three year program depending on his qualifications. During this time he is exposed to quite an extensive program of mathematics, physics, technical report writing, machine shop procedures, construction techniques, structural analysis and design, and drafting.

A few of the courses taken individually may seem to have no bearing on drafting but do, in actuality, form a basic ground work for further advancement of drafting skills necessarily found in all drafting graduates.

In regards to the actual drafting the student is trained to control appearances by linework, geometric construction, lettering, dimensioning and freehand sketching. These procedures are carried out through all the different phases of the drafting field which encompasses mechanical, structural, topographical, Photo drafting, electrical, and architectural. Each field has its own distinct and specific characteristics and the student is entailed to learn and acquire such knowledge as is neces-

sary to successfully complete each course.

To familiarize the students with the actual use of drafting techniques in industry, field trips are an integral part of a number of courses taken.

INSTRUCTORS HIGHLY QUALIFIED

Qualified instructors have an important roll in the rounding out of the future draftsman. The student in most cases when looking for assistance, usually finds and receives such, from all teaching personnel.

The results of a survey taken in the U.S.A. indicate draftsmen will be in increased demand until the year 1975, beyond which no information was processed. A conclusion drawn from this survey indicates the rate of technological development will make it increasingly difficult for technical institutions to turn out the required number of graduate technicians called for by industry. As this is the case, job opportunities are at a new high for draftsmen with the ability and technical background by many industries.



APPRENTICESHIP TRAINING

If we would understand the Apprenticeship training scheme offered in Alberta and their school training at the Northern Alberta Institute of Technology, we should first learn more about what being an Apprentice means.

What is an Apprentice? An Apprentice is a person who is employed by a firm engaged in one of the 28 trade areas now designated in the Province of Alberta. This person and his employer will have entered into a contract, with the contract forms duly processed through the Provincial Government Apprenticeship Board. The contract will spell out the length of Apprenticeship; the minimum education requirements; the number of weeks per year of schooling; the wages — expressed at a percentage of the prevailing journeyman's wage, and other particulars pertaining to that trade.

The Northern Alberta Institute of Technology and Southern Alberta Institute of Technology provide most of the trade schools training for the Apprentices. Generally, the Apprentice will go to school for six to eight weeks each year for four years and, while he is at school, he is treated as a regular student, with the normal responsibilities toward the school. The course of training with the student will have been prepared by the Apprenticeship Board, with the assistance of the particular Trade

Advisory Committee and close liaison with the school. The school report, the Apprenticeship Board final examination at the end of each school term, and the employer's report; these three will determine whether the Apprentice has progressed sufficiently well and if he has served the required time in the field of work, he may progress into the next year.

There is a minimum education requirement. For many of the trades it is Grade X, with emphasis on mathematics, science and English. Other trades may have a Grade IX minimum requirement. Many employers do not accept this minimum as a trade minimum; they may require a young fellow to have Grade XI and sometimes, Grade XII. We can, therefore, expect to have some pretty high quality Apprentices in some of the trades.

Let us look now at some of the trades in the Province. In the construction trades we have the carpenter, the bricklayer, the plasterer, the painter and decorator, the tile setter and the lather. In the trades closely associated with the construction industry, we have the piping trades, the plumber, steamfitter, gasfitter. We have the sheet metal mechanics, the iron worker, the roofer, the glassworker, the welder.

We have 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. We also have the radio technicians, involved in the repair of radio and television equipment.

In the automobiles and diesel area we have the motor mechanics, heavy duty mechanics, auto body mechanics and the partsman. We have the refrigeration mechanics and the appliance serviceman, who is involved in the repair and servicing of household appliances. We also have the machinist and the millwright.

In the food preparation areas, we have the cook and the baker.

You will note that the names of these many trades lead us to conclude that Apprentice training is available in a great many diverse fields. At the Northern Alberta Institute of Technology, training is offered to 23 of the 28 trades.

The school training includes the particular trade theory and shop or lab work, and supporting subjects such as mathematics, science, blueprint reading and general business knowledge. These supporting subjects are closely related to the particular trade, and are intended to help produce a well trained journeyman.

The employer plays a very important role, for if we consider the ideal of Apprenticeship it was the training of a young man under the daily guidance of a master crafts-

man, so that by learning as he worked this young man may also become a skilled craftsman. This ideal carried forward to this day suggests an ideal employer offers supervision, variety of experience and instruction to the Apprentice while he is not at school — but spending most of his time in the field of work.

The economy of Canada and of Alberta is expanding. We are in the construction boom and a population boom. This "booming" brings on a steady increase in the number of well trained tradesmen required.

There are many opportunities available to young men 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.

While the Apprentice is at school he receives a subsistence allowance ranging from \$12.00 per week for a single man living at home to \$36.00 per week for the head of a family living away from home.

Perhaps the motto of Apprenticeship training might be "Learn While You Earn", and with today's rapidly changing technology much emphasis must be placed on continuing learning.

MEASURE, DISPLAY, MONITOR, CONTROL - INSTRUMENTATION

Many people have asked what Instrumentation Technology is; well, about the only definition appears to be as follows: "Instrumentation is the science of applying devices and techniques to measure, display, monitor and control plant equipment and process operations".

Instrumentation technology is a new and expanding field requiring a great degree of knowledge in electronics, pneumatics and chemistry of processes. Because this is a new field of endeavor there is lack of properly trained people in industry. It is therefore the function of this institute to train young men to function efficiently in the atmosphere of industrial instruments.

The basic two year instrumentation course is devoted to training the student in the operation of instruments, actual lab training by using the instruments, theory and operation of basic electronic circuits, chemistry, mathematics and English. As the course progresses the amount of time spent in the lab increases to about half the total training hours. Here you learn fault analysis, instrument repair and installation. At this institute we are fortunate enough to have perhaps the most completely equipped instrument lab in Canada.

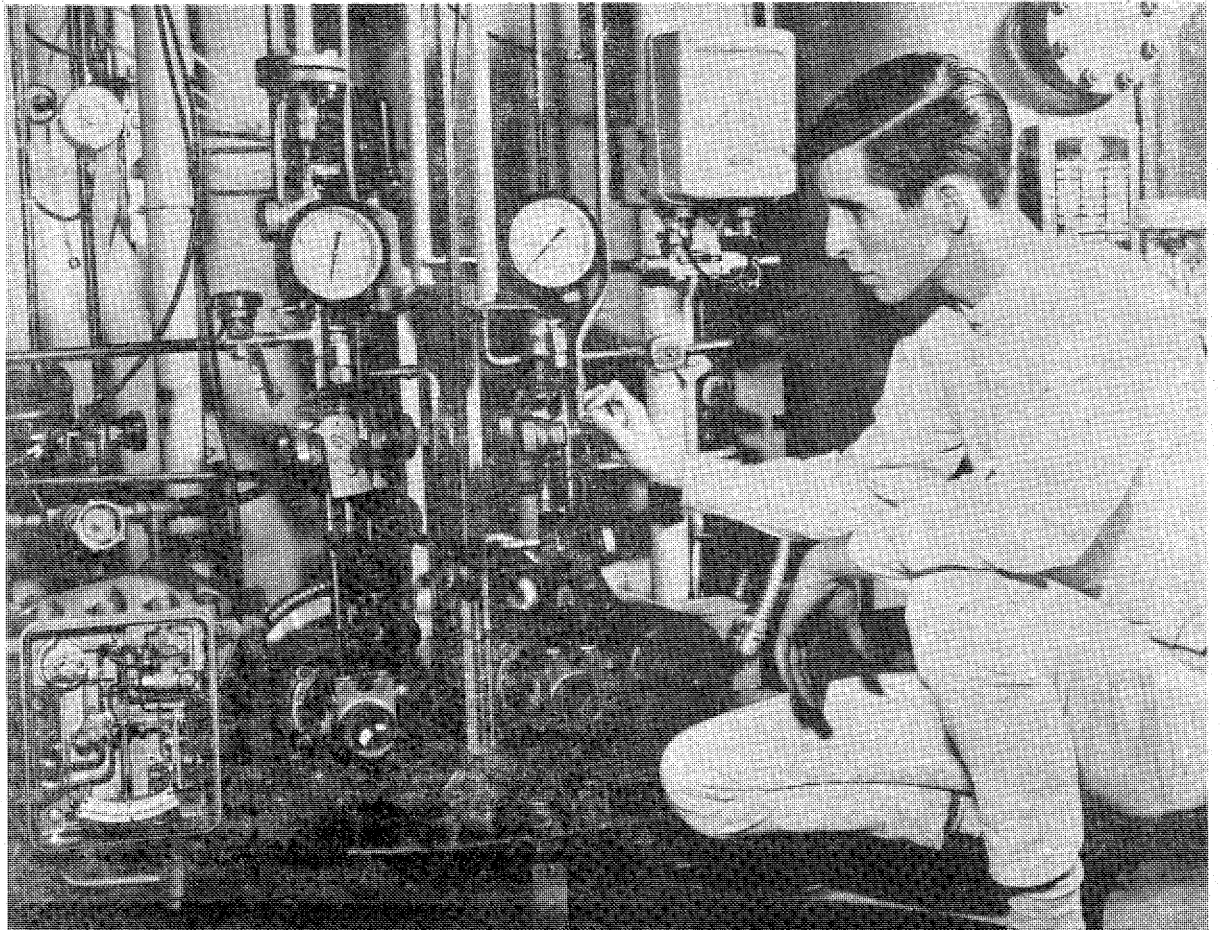
This course like any new course has and is having its growing pains. Courses thought necessary have been altered and replaced to make the course more functional. It has been found necessary to alter the course administration, this move leaving the students with many unnecessary texts. This will, however, be corrected in the approaching term to make the entire course evolve more systematically.

Many people wonder what the job opportunities are in this field. They are excellent by all standards. In Canada, there are only three institutes training instrumentation technologists consequently the demand is greater than the supply of graduates. Last year the average was in the order of two and one half jobs per graduate. The general wage was also found satisfactory. These jobs were divided primarily between industry and sales positions.

For any young person graduating

from high school and looking for further training to prepare him for employment, he should investigate the area of Instrumentation Techno-

logy. Since Canada's industry is growing it seems logical that there will be an ever increasing need for people trained in this field.



DIETARY TECHNICIANS EARN WHILE THEY LEARN

Do you know what a Dietary Technician is and what she does? She is a person trained to assist registered Dietitians and also assume a major share of the responsibilities in a small institution that does not have the services of a Dietitian.

Classes for the course commence in September and conclude in May. The summer months are then spent working in a hospital with classes resuming again in September to February. She then travels to Calgary to spend three months training there. The summer pay after the first year is eighty dollars and one-hundred dollars after the second year. The fees for the course are sixty dollars of which five dollars is a registration fee. This amount does not include textbooks.

COURSE CONTENT VARIED

Approximately nine-hundred hours are spent on lectures and labs. Nutrition, foods and psychology are continued for the whole year with the addition of health, physiology, food microbiology, chemistry and business math in the first quarter; institutional management, chemistry lab and typing in the second quarter; and first aid, sanitation and safety and Business English in the third quarter. The students also spend five weeks in the N.A.I.T. kitchen in the third quarter, to acquaint them with kitchen procedures so they are able to supervise the kitchen and staff.

The courses in the second year include therapeutic nutrition, personal management, food service planning, food purchasing, record keeping, purchasing and inventory control, dietary office procedure, advertising and three months of practical training.

Most of the textbooks used during the two years at N.A.I.T. will serve

as good reference material when the graduates are out working. The dietary courses are also based on these texts.

Daily apparel consists of a white uniform, which is supplied by the school at a nominal fee, plus white shoes and stockings, supplied by the student. A graduating Dietitian wears a standard uniform plus cap and pin.

Because of the need for practical as well as theoretical training, the Dietary Service Technology course has become affiliated with several hospitals and restaurants in Alberta. During the practical training sessions, the students are placed in these institutions to get as much on-the-job experience as possible.

Opportunities for jobs are very widespread covering restaurants, orphanages, cafeterias, Senior-citizen Homes, residence dining halls and resorts not only in Alberta but really anywhere in the world. From the fourteen first-year students, not one

has had less than two job offers and they haven't even graduated.

ENTRANCE REQUIREMENTS

Preference will be given to students with a minimum of sixty-seven high school credits with a "B" standing in math, science, and English. A transcript of marks must be enclosed with the application form.

The Dietary Technology students have formed their own club which has developed a sense of class togetherness. This club has been extremely active in sponsoring several school events. Dances, candy sales, and competition against other technologies for the N.A.I.T. Challenge Cup not only have helped the club raise money but have added greatly in developing "school spirit".

If you are the kind of person who has a keen interest in people, enjoys the challenge of difficult tasks, and would like a very interesting vocation, then you belong in the active, energetic group of Dietary Technicians.

SOMETHING TO THINK ABOUT

We must not let science hypnotize us into believing that simply by sitting in front of desks and drawing boards and instruments all day, we are contributing to the character of man.

The most useless exercise in the world is running into debt.

WATCH YOUR OXYGEN

UNESCO FEATURES — The earth's 3,000 million inhabitants are consuming enough oxygen for 43,000 million, according to the director of the biotechnical Academy at Laufen, near Salzburg in Austria. Industrialization accounts for the excess.

On a 600-mile drive, a car uses as much oxygen as a human being needs for a whole year, he said. To burn a ton of coal takes the normal yearly ration of ten persons.

Forests and green belts, nature's dispersers of oxygen, are fast disappearing in industrial regions where they are most necessary. Although some countries are replanting trees on a large scale, they are usually far from towns and industrial centres.



ELECTRONICS LOOKS TO FUTURE

The 20th century has been referred to as the space-age, the atomic age, the age of population explosion and the age of automation. Coupled with our ever increasing technical industry is a society more complex and more demanding than man has known to date. The handwriting is on the wall. Man must prepare carefully for his place in the sun.

Alarmists present a bleak picture for the future of our society. Automation has and will remove many people from the labour force. Rather than fear our scientific "resourcefulness", we can accept it and in so doing enjoy a rich and rewarding life; a Utopian life as dreamed of by such ancients as Aristotle and Plato. The first positive step in preparation for a role in this century of achievement is enrolment in a technology course, at the Northern Alberta Institute of Technology.

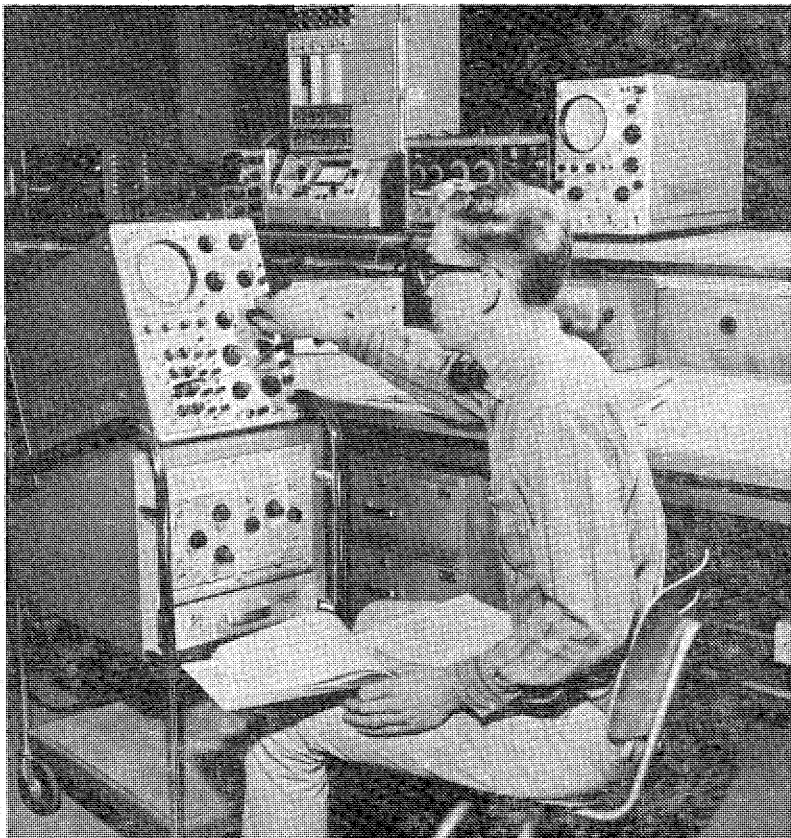
NAIT can and will prepare you for a career in space exploration, industrial automation, communications, and medical electronics. The present electronic technology course is a healthy blend of electrical engineering and practical know-how. The new students starts with basic "ac/dc" theory, and applied mathematics such as calculus and physics. With the basic behind him the stu-

dent next studies such interesting courses as instrumentation, pulse theory, wave and antenna theory, radio communications, micro-wave, radar theory, industrial and colour television, computers and special transistor theory. Courses such as physics, mathematics and English will be accepted as Grade Twelve credits by the Department of Education. To make sure that the course is complete in every way an advisory board made up of employers make suggestions to the school regarding course content.

Last years graduating class in Electronics was employed with salaries varying from \$325 to \$560 a month. Each student had the freedom of selecting one of three possible jobs available to him. Today's employment picture reveals only two groups of students that enjoy such a wide selection of jobs from which to choose. The two groups are university students with doctorates and technology students with diplomas.

The next era may indeed be a period of industrial and social confusion; an age of paradox.

Rather than sitting around waiting to become obsolete, enroll in a technology program at NAIT. "Preparation today will mean preservation Tomorrow."



WHAT IS A DENTAL TECHNICIAN?

A Dental Technician is a person trained in the constructions of appliances in restorative dentistry. This includes such fields as complete and partial dentures, crowns and bridges, ceramics, and orthodontics.

Applicants must have a minimum of a high school diploma, but credit in Science 20, and preferably Chemistry 30 would be a great asset. The applicants must enjoy working with their hands.

The courses studied in Dental Technology include Math, English, Chemistry, Physics, Dental Materials, Anatomy, and Bacteriology. However, the most important hours are spent in the lab where practical work is done.

SUMMER EMPLOYMENT

Although a person may not make as much money in the summer months working at a job in the Dental Technology field as he might elsewhere, the invaluable experience gained will be of great assistance in the second year of studies and also the students future. In the past year exceptional co-operation was received from Dental Mechanics Association in the placement of students and it is hoped that in the future the same co-operation will come from Dentists and the Dental Technicians Association in the Province of Alberta.

Although the demand is somewhat limited, the success of a student Dental Technician depends largely upon himself. His job opportunities and wages will advance with his ability and workmanship.

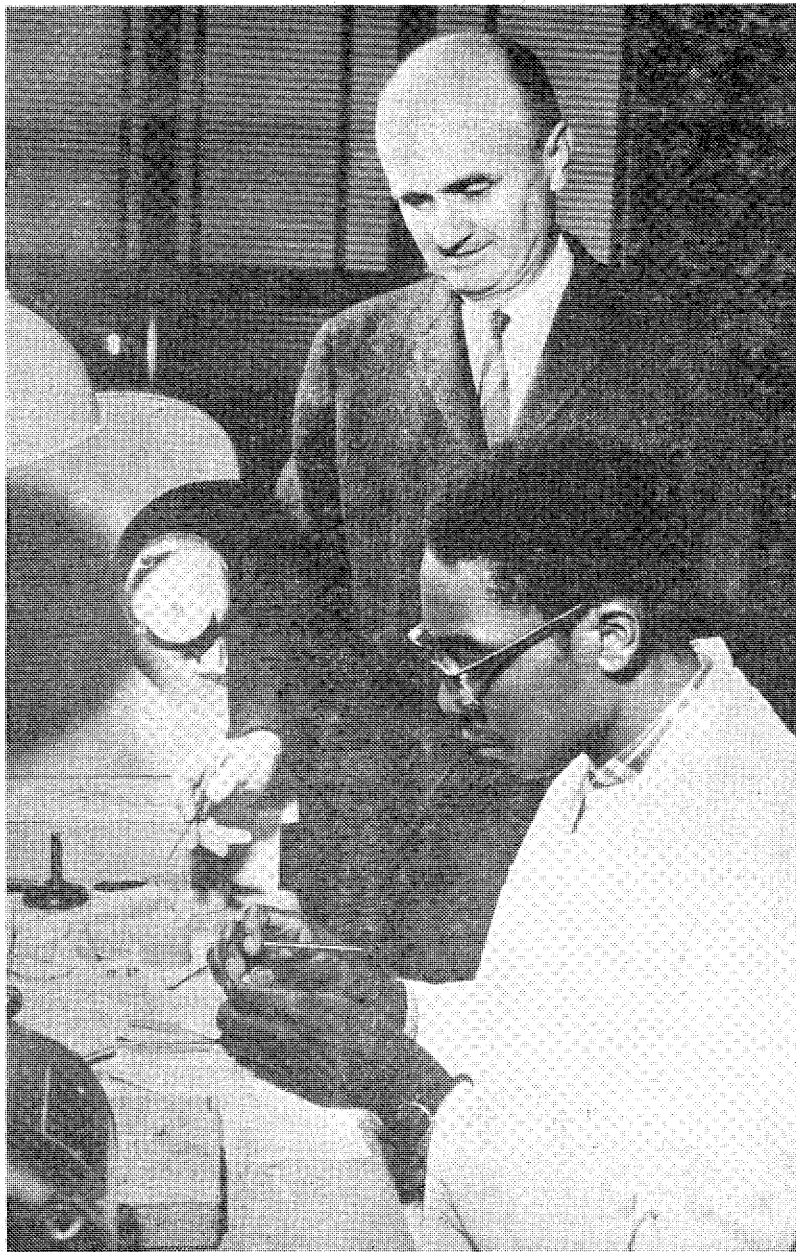
The Dental Technicians and Dental Assistants have joined to form a club called the N.A.I.T. Dental Club. Although the club is not yet functioning as well as expected, it is hoped that in the future the club will become an integral part of the students courses of studies. The club is not purely educational though as several social functions have been planned.

CHANGE IN N.E.S. PERSONNEL



Following completion of high school in Edmonton, Mr. O'Keefe studied Arts at the University of Ottawa and on returning to Edmonton he started with Eldorado Mining and Refining Ltd., in their Edmonton personnel office.

In January, 1962, Mr. O'Keefe joined the National Employment Service, and since that time has worked in various departments in the downtown office. Most recently, prior to coming to NAIT, he spent six months at the University Student Placement Office.



BUSINESS ADMINISTRATION OFFERS FOUR PATTERNS

Business Administration was first offered at NAIT in 1963. It is a two year program leading to a Diploma in Applied Arts. During the first year the student is introduced to such courses as Accounting, Economics, Business Law, Credit and Collections, and other related business courses. In his second year, the student has a choice of four major patterns: Credit Administration, Business Organization and Management, Accounting, or Office Administration.

CREDIT ADMINISTRATION

The Credit Administration option will appeal to students who feel that they would enjoy a career in credit granting, credit reporting, and collection procedures. The program is broad in nature, providing students with a general understanding of the economics of credit and its functional importance in our society. During the third quarter students are placed with various credit agencies and credit departments for a minimum of one hundred hours of on-the-job training. This provides the student with supervised practical experience that is a definite aid to him upon graduation.

BUSINESS ORGANIZATION AND MANAGEMENT

Business Organization and Management is an option that prepares students for future supervisory administrative positions in commerce, industry, or government. After a period of orientation with an employer, a graduate may find himself in a responsible position in the general office, plant work, sales, finance, marketing, or traffic; to name only a few potential areas of employment.

ACCOUNTING (R.I.A.)

Opportunities in Accounting are unlimited and this option results in students obtaining work as accountants, controllers, and cost analysts. Part of the course also includes written and oral communication, so important in our everyday life. Graduating students are allowed to write the second year examinations leading to a Registered Industrial Accountant degree. If they are successful, they are able to continue their accounting training in the third year of the R.I.A. program at a recognized school of accounting.

OFFICE ADMINISTRATION

The Office Administration pattern acquaints the student with the problems to be encountered in the planning, organization, controlling, and co-ordinating of business data, so that the objectives of the enterprise can be achieved most effectively. In this pattern, emphasis is placed on the importance of electronic data processing in today's business world. Graduates may find employment in such areas as production, marketing, records management, insurance and government. A successful graduate of the Office Administration major may be permitted to enroll in the second year of Computing Technology at the discretion of Mr. H. Daum, Head of the Business Administration Department.

NO EASY COURSE

Students in their first year in Business Administration will find that the course involves a good deal of work and study, apart from the time spent in classes. If a student is to succeed, he will have to deve-

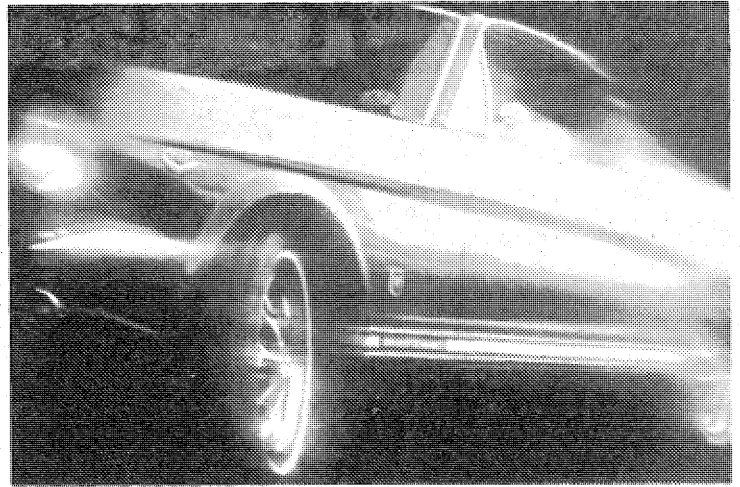
lop sound working habits and persist in them throughout the year. Only about twenty of the fifty students who enrolled in Business Administration the first year it was offered at the Institute received their diplomas. Anyone taking Business Administration with the idea that it will be an easy way to a diploma may be sadly disappointed before many months have passed and could find himself looking for a job sooner than he had anticipated. Another thing for a student to realize is that obtaining his diploma will not guarantee that he will automatically become a success in business. Although the value of higher education cannot be overlooked, it is still the individual's performance on the job that decides where and how far he will go in the work-a-day world.

Poor work habits and attitude that may be a part of the student while he is at the Institute will not suddenly leave him upon receipt of his diploma. One of the objectives of institutions of higher learning is to teach people to think and act maturely, and intelligently. This is what the Instructors at NAIT are trying to accomplish.

The majority of the students presently taking Business Administration feel that it is a very worthwhile and comprehensive course, and that it will be a valuable asset to them in their future occupation.

The first graduates in Business Administration from NAIT, were all able to obtain good positions prior to graduation. Thanks to the fine job done by Mr. Stobee, NAIT's Placement Officer, a large number of prospective employers have been conducting interviews at the Institute. This has resulted in some excellent job offers to students of Business Administration who are graduating this year.

NAVIGATION RALLY



- * SUNDAY, MARCH 20, 1966; 12:30 p.m.
- * N.A.I.T. PARKING LOT-TO-POINTS UNKNOWN (60 ml.)
- * SECRET AGENT CONTACTS
- * 30 CAR LIMIT
- * ENTRY FEE \$4.00 PER CAR
- * CONTACT LES TOMLIN
469-5375

COMMERCIAL SIGNWRITING

Commercial Signwriting is a one year course program covering most facets of the sign business. Although the course includes theory and shop drawing, most important and essential to a good signwriter, is the practical or shop work. Shop drawing basic design, color and color harmony for sign work, silk screen processing, estimating, the various alphabets and their characteristics, surface preparation and manipulation of the quill and sable, are fundamentals studied in the course. The instructor, Mr. G. Pezzani, is one of the best, having many years of lettering and commercial signwriting experience from which to instruct. Once the basics are taught, the student is left somewhat on his own, and just how far he or she advances is left up to the individual. Many hours of practical work are required both in and out of the shop classes.

Although the Commercial Signwriting course as it stands, is a good one, and has much to offer to any individual talented and inte-

rested in the field of art, it could well be improved. The one year day course program, according to some students is not enough. Signwriting can be just as interesting and intriguing as one would have it. As students in the course we have become acquainted with the sign business, and know just how advanced it can become. This is why we feel that the course should be lengthened to a two year program. You might be asking yourself just what else there is to be studied in this field. Such things as illustrating, the use of plastics, carpentry as it applies to signwriting, advanced silk screen work, and advanced design are some of the other facets of the sign business that should and could be added to make it a more complete and advanced two year program.

When you come to open house, before you decide you've seen everything come to the Industrial Annex Building where you can tour the signwriting classroom and have a fascinating look into the world of signs.



UNIT RECORD + COMPUTER PROGRAMMING = DATA PROCESSING



The Unit Record, Data Processing Course offered here at N.A.I.T. is a one year program designed to give the students a complete knowledge of Data Processing and how it affects the business world. The individual courses all relate directly to data processing.

Specifically, students are trained to be competent operators of the unit record machines. Unlike courses offered at the University or elsewhere, this course entails more practical work than theory. Unit record assignments are given many practical assignments to be worked on the machines to give them a better understanding of what they are expected to do in the business world. Being able to work on the machines as much as the student wants, helps to give him an idea of how he will like working in this field.

The program requires that students work fairly hard, but it is certainly worthwhile and rewarding to know that they have conquered machines instead of the machines conquering them. Homework assignments average around two and one half hours per night. This is not really too much when you think about it.

The students enrolled in the program this year have found it most exciting and interesting. They are given a basic knowledge of computers as well as a substantial background in Unit Record.

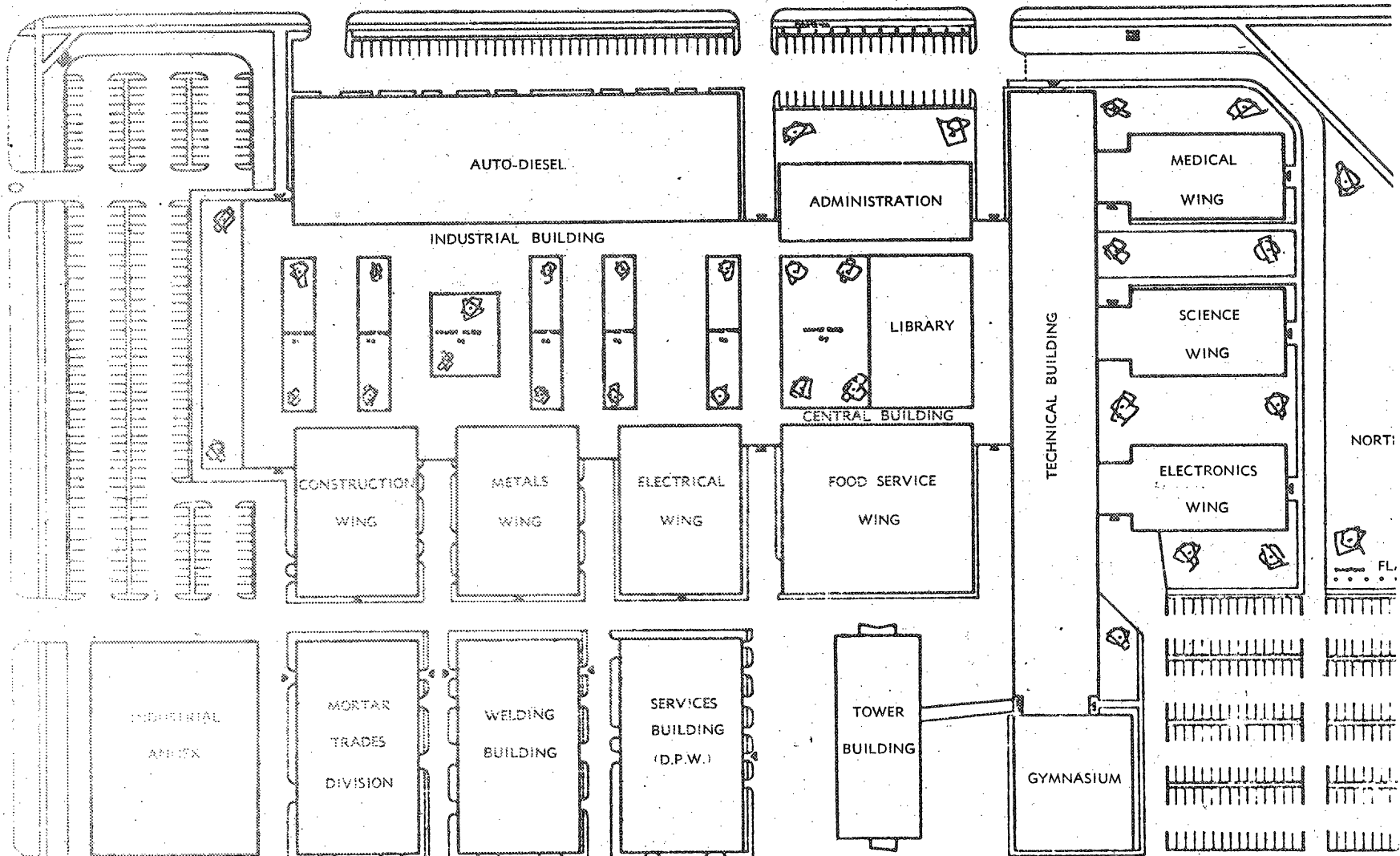
The two year, Computer Programming course, is preparing students to enter the business world in the field of Data Processing. It is one of the newest courses offered at N.A.I.T. and those who are taking

it are finding it both challenging and rewarding. They learn to solve business problems through the use of various electronic data processing concepts. The first year of Computer Programming is nearly the same as the one year course, Unit Record. But the second year involves the study of statistics, advanced programming techniques, and a comprehensive study of systems. It is this very important second year which will lift successful students out of the routine jobs and into important positions in business, industry, and science.

Emphasis is placed on business procedures so that students have the knowledge to define and implement solutions to business problems. Each quarter at least fifty hours of lab. time is required. In the lab. problem solving methods are tested on practical applications. This course is an excellent foundation for many rewarding positions and is extremely interesting for those who apply themselves.

Prospective students and other interested persons desiring more information are invited to visit the Data Centre, Room 312 in the Tower Building, during Open House. Practical applications will be in progress and visitors will have an opportunity to question the students about their courses.

106TH STREET





EXPLORATION - A SEARCH

What is Exploration? The dictionary defines it as: the act of searching into; careful investigation or search. From these definitions we can define an explorationist as one who searches for wealth in the form of oil, natural gas, or minerals. In order that such a search be carried out successfully, the explorationist has to be trained in the use and operation of the available equipment as well as having a knowledge of the geology of the area under investigation.

GEOLOGY AND GEOPHYSICS MAIN STUDY

The courses taken in Exploration Technology are comparatively few, but all are inter-related and important. Before a student can understand the complete operation of the seismic instruments and the principles involved, he must have a good background in physics, mathematics and electronics. These requirements are met in the first year of instruction. Geophysics, its uses and applications, are taught for a full year. Geology is taught for two years. English instruction is given to all students, with emphasis on technical writing. With the increasing use of computers in industry, Exploration students are given a course for two quarters in computer programming and its uses.

GEOLOGY

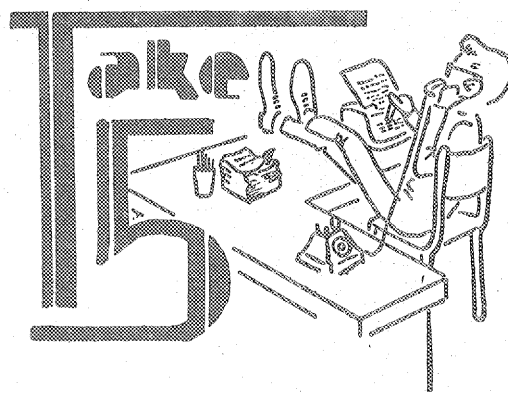
Geology is the study of the earth, its structure, the changes it has undergone, and the causes which have operated in producing such alterations in the crust of the earth. The formation of oil, its migration, and the formation of oil traps are extensively studied. This emphasis is due to the Alberta oil industry and therefore many students will be employed by the oil companies. The formation of mineral deposits has not been neglected. The graduate students can either join the oil industry and its related industries, or go to the mineral industry. The geological laboratory is equipped with some of the best equipment found anywhere. To study the properties of rocks, thin sections are used in conjunction with petrographic microscopes. Thick

slides are studied under stereoscopic microscopes. The laboratory has rock samples from all over the world.

GEOPHYSICS

Geophysics is the study of the earth below the surface by physical measurements. Like all people, the explorationist is curious and he would like to learn what the earth consists of below the crust. To determine the properties of the rocks and their structural features, instruments like the gravimeters, magnetometers, and seismic detectors are used. The uses and operations of the geophysical instruments are learned in a very well-equipped laboratory. Very little expense has been spared in equipping the geophysical laboratory. Almost any type of equipment can be found here, from a small simple magnetometer to a complex electronic seismic playback centre. The student learns the use of all the equipment. Practical problems, with field data, are calculated and determination of the underground structure is made.

What does the future hold for an explorationist? It seems that his own desires will determine his ultimate position. Jobs are available in the oil and mining industries. From the response that we, the students, are getting, there definitely are more jobs available than the number of students. As the industry sees what kind of training the students are receiving, and actually observes the work done by exploration students, undergraduates and graduates, many more jobs will become available to us.



with LES

Have you ever walked into a desk to apply for a job? Or, have you ever written on "This space for office use only"? I sympathize with you if you have also had this misfortune.

Last week, I was applying for summer employment and I have a lump on my head and Company "X" had to file an application form under "G" as a tribute to my rather botched up, form-filling, free-for-all, for-all.

The company to which I was applying had a stunning blonde as receptionist. Stunning eyes, stunning legs, stunning figure — she was stunning all over. This sensuous sexpot surely could have sold me size 85 girdles if she had not been sitting behind a rather stunning desk that left her slender legs exposed to my eyes — now no more than six inches from the desk.

At a nod from this angel, I started toward her, casually wiping the drool from my sagging jaw. But I dropped my hat. Then I stepped on my hat. Then I tripped on my hat. There was momentary teetering and then my head made a stunning contact with the stunning desk.

After the laughter had died down in the rest of the personnel office, I nonchalantly dropped my application only three times before burrowing into a small corner of the reception room. There, cowering in a chair, I completed the form. I don't remember anything on the application form, but I do remember that I couldn't answer all of their silly little questions. Perhaps the heat in the office had something to do with it — my ears were just burning!

I carefully stumbled back across the reception room to my cackling nineteen year old crone and handed her my completed form. She glanced at it from a distance and snarled, "You shouldn't have filled in this section, we usually use this section for office notes".

Needless to say, I haven't heard from Company "X" yet, because I keep thinking I saw the girl at the reception desk drop my form on the floor — probably just my imagination. Oh, well, there is always the civil service if worse comes to worst.

Ever noticed how those chaps in the advertisements in Playboy and Esquire appear to look so modish and suave with a pipe dangling from their chiseled-featured face at a devilish angle? Ever tried to do the same?

One night, not long ago, I put on my pale-yellow, button-down shirt; a brown print ascot, a pair of dark brown wool-worsted slacks; my English tweed sports jacket, purchased the previous Saturday from the Army and Navy; a pair of dark, brown, over-the-calf socks; my hand-stitched leather slip-ons; and topped off my racy outfit with a semi-bent pipe at a devil-may-care angle, I thought.

Looking at myself in the mirror, I identified myself with the fellow on the front of Esquire. A perfect example of high-style and a sure fire bet to gas some poor broad right out of her mind. Nonchalantly, I reached into my pocket and pulled out a match. With equal nonchalance, I struck the match on the corner of the mirror and started to light my pipe. It certainly is not funny to watch all that you've built crumble before your tear-filled eyes.

My suave and modish appearance seemed to be more aptly described as pained and agonized. My ascot seemed much-too-much against my greenish complexion. And my over-the-calf socks, through the coughing, gasping, wheezing, and choking, had a rather tough time staying as high up as my ankles. Why don't the tobacco manufacturers print on the pouches, "DO NOT INHALE" for those of us who don't know any better?

I'm back to smoking Alpine and Du Maurier cigarettes and have cancelled my subscriptions to Playboy and Esquire. And after all, I certainly wouldn't want to get cancer of the lip from smoking a pipe!

DISTRIBUTIVE TECHNOLOGY A FIRST IN CANADA

First in Alberta, first in Canada; this is the enviable position of Distributive Technology. A course which is cutting a wide swath in the Business world of Western Canada, Distributive Technology endeavors to establish in industry the qualified people to handle and cope with our evolving economy.

Distributive Technology is a two year course, offered at the Northern Alberta Institute of Technology in Edmonton. The course provides a varied program of study to train those people who will eventually be involved in the distribution or trafficking of goods and services from producer to consumer.

Begun in 1964 under the guidance of George Carter, then supervisor of Business Education at NAIT, the first year of operation saw twenty-two students take a giant step forward. Since then, each year's quota has been doubled. The first-year quota for 1966-1967 has been set at 80 students, which, according to Lorne Thompson, Distributive Technology Head, is the predicted demand of industry in 1968.

FORTY-ONE COURSES

There are 41 courses each student must complete in fields such as Economics, Business Law, Marketing, Retailing, Accounting, and Business Mathematics. Students must also attain above-average grades in Basic English, written and spoken, Credit and Collection, Typing, Personnel, and Office Organization and Management. There is also stress put on courses such as Consumer Sales, Sales Administration, Wholesaling, Economic Geography, Transportation, and International Trade.

As a student enters his second year, an area of major study is chosen from one of three, and possibly four options. One may choose to direct this study in the field of Advertising, General Sales, Retailing, or possibly Traffic and Transportation, which may be offered in September, 1967.

"ONCE AN EXPERIMENT, NOW A REALITY"

Another immeasurable step toward better trained businessmen and businesswomen has been taken by Distributive Technology in its offering of "on-the-job" training to all its students. This on-the-job training is not offered by any similar courses in North America at the Technological or University level. Small wonder why all of the students from Distributive Technology have jobs prior to graduation.

On-the-job training is made available in the second year by having classes from 8:15 a.m. to 1:15 p.m., with students working at their places of employment from 2 to 4 hours per day. The students are assessed and graded on their performance on the job just as they are in the classroom.

After a student has completed his two-year course, he has a more mature and responsible attitude to the business world. This attitude usually takes "other-schooled" applicants up to six or seven months to equal a point of an efficiently operating, full-time employee.

In almost all cases, a student who was hired by a firm on a part-time basis, has remained with that firm as a full-time employee, capable of being relied upon, to have responsibility delegated to him, and to have some sense of the latest

market trends through his classroom research and study.

The on-the-job training, according to Mr. Thompson, "... probably marks the first time that the scheme has been purposely instituted, carefully guided, and meticulously graded. Its success is obvious, we feel, because of the number of requests from industry that we receive for students. It all began as an experiment; it is now a functioning and continuing reality."



AIR-CONDITIONING AND REFRIGERATION TECHNOLOGY OFFERS LATEST IN CONTROLS

Great strides in technical advancement have been made by the heating and air-conditioning industries in recent years. This has made the need for air-conditioning technicians a demanding one.

The Northern Alberta Institute of Technology is one of the few technical institutions in Canada which conducts a comprehensive course in air-conditioning and refrigeration. The ultimate objective of the training program is to produce highly skilled technicians to assist mechanical engineers on the job or in a design office.

This course covers every aspect of this engineering field such as: the fundamentals of electricity, theoretical and practical air-conditioning and refrigeration, design of different types of air-conditioning, refrigeration and heating systems, equipment selection, installation and servicing of refrigerators, air-conditioners and heating apparatus and fundamentals of automatic controls.

From the academic aspect of the course, a student receives instructions on subjects like Mathematics,

English, Physics, and Industrial Relationship, which are co-related with the main course.

Teaching is not mainly confined to classrooms, as the student spends most of his time in the laboratory to gain practical experience. The lab is fully equipped with the most up-to-date equipment and apparatus. There is a large training unit for air-conditioning practice. This unit is also incorporated with the latest in automatic control systems. Besides this, there are other facilities which are used for the teaching of refrigeration and automatic controls, and all the necessary apparatus for the accomplishment of the course.

The English Department trains the student on the preparation of technical reports, correct speech, data presentation and industrial relationship.

There are also supplemental subjects on welding, machine-shop and sheet-metal work relating to air-conditioning and refrigeration.

TWO-YEAR COURSE

In the first part of the course emphasis is made on mechanical refrigeration theory and practice. This covers installation and servicing of refrigerators, freezers and industrial processing.

In the second part, the student concentrates on air-conditioning and heating system design and installation, as well as interpretation of engineers' and architects' plans and specifications. The different types of automatic control systems are also included.

STUDY TOURS PART OF COURSE

Study tours of large industries in and around Edmonton are also included in the curriculum so that a student can familiarize himself with what he has been studying. Experienced men in this field are frequently invited to give talks to students so that on completion of his course a student will know what to look forward to and which firm he would like to work for.

There have been many jobs offered to air-conditioning technicians by well-known firms and industries in Canada... they are well-paid jobs, too! Therefore, upon completion of this course a student will always find a position waiting for him.

GOVERNMENT OF CANADA REQUIRES

CENSUS CLERKS (CASUAL)

\$1.25 an hour

and

CLERICAL SUPERVISORS (CASUAL)

\$2.00 an hour

Dominion Bureau of Statistics
Edmonton, Alberta

Approximately 60 clerks and 7 clerical supervisors are required in the Edmonton Census Regional Office for checking and processing returns from the 1966 Census of Canada. The duration of this employment will be approximately 3 months and appointments will be made during the latter part of May and beginning of June.

For the supervisory positions, experience in office supervision or teaching is desirable.

A written examination will be held on Saturday, April 2, 1966.

Application forms, obtainable at the Student Placement Office, N.A.I.T., should be filed with the Student Placement Office not later than March 18, 1966.

WHERE IS
VE6MR
???

WHAT ARE THEY DOING?
WE DON'T KNOW EITHER.

Hen Party

What does NAIT mean to you? I have been asking this question of many people lately. Some didn't know what I meant by NAIT, so I had to give the full name; still some didn't fully understand what it was. The excuse, I hope, is because we are a new institution here in Edmonton.

This being our open house issue, I would like to share with you some of the opinions I was given when I asked this question of university students.

To many university students, particularly those who do not have a close friend attending NAIT, our student body consists of high school drop-outs and students unable to meet the university entrance standards. This is not true. Although there are several courses requiring only a grade eleven standing, the majority of our courses require at least a high school diploma. There are some programs which almost demand that the students have their high school matriculation or special preparation such as provided by the vocational high schools. I am sure that many of the students enrolled in such courses have their university entrance but perhaps find it financially impossible to attend or were just unable to find a university program which was of any interest to them.

The university students, in general, felt that we were taking "Mickey Mouse" courses and that when we finished classes for the day at 9:00 p.m., we would perhaps have one or two hours of homework to do.

My next comments are from my own experiences, for I did not check

with the other technologies and since I felt that the information probably holds true for them also. No matter what school or university we attend, we will always have at least one subject we find easy. I don't think that too many of our subjects are below university level; particularly some of the math, chemical, electrical, civil, and architectural courses being offered here.

In fact, I am sure that if we were to take a university course related to the technology we were in, we would find that we would be repeating some of these subjects. Naturally they would become more complicated for the university courses are at least two years longer, thus enabling them to offer more detailed subjects.

As for the 4:00 p.m. classes, how many of you don't have at least one 5:00 p.m. class per week, if not more? And for homework, well we can all dream. I think that three hours is a bare minimum that we are able to spend on homework and still pass with a decent mark, and our hours get longer as the end of each quarter draws near.

One of the greatest assets we have, is that we are being taught the practical aspects of the subjects, not just theory as is often done in the universities.

Since the University and NAIT are the two highest institutions of learning in Edmonton, they should learn to respect each other. Perhaps in another couple years NAIT will be recognized as an institution for higher education and not a place for drop-out high school students.

Wendy Scollon

TELECOMMUNICATIONS BRAND NEW COURSE WITH GREAT PROMISE

Telecommunications is the newest of the major technologies to be offered at NAIT. The program is articulated with the vocational schools in that a student in Grade XII enrolled in an electronics pattern would be taking a course similar to Year 'A' at the Institute. Upon entering NAIT, the student would complete Years 'B' and 'C'. Those without the vocational background could enter Year 'A' of the program from Grade XI; providing they have at least 67 Alberta high school credits and a 'B' standing in Math. 20 or 22, Science 20 or 22, and English 20. In addition to the three year program, there is an accelerated two year course which is six weeks longer than the usual term and combines Years 'A' and 'B' together. It is an extensive course offered to a select group of students holding an Alberta high school diploma and having a fairly high standing in Math, Physics, and English. Tuition, registration, and Student's Association fees, tools, books, and other supplies should not exceed \$150 per term.

BROAD COVERAGE

The Telecommunications technician works in a broad field related to telephone, carrier, and microwave communications systems. This course provides him with a good knowledge of Math., English, Physics, electrical and electronic theory, and the operation of communications systems equipment to make him a versatile employee in industry. Employment ranges from plant construction and maintenance, sales assistants, communications draughtsmen, assistant designers, specification writers; to assistant engineers. Although there have not been any graduates as yet; probable employers would be: City of Edmonton Telephones, Alberta Government Telephones, B.C. Telephones, Saskatchewan Telephones, Manitoba Telephones, Canadian National Telecommunications, Northern Electric, Automatic Electric, Lenkurt Electric, AEI, and IBM. Salaries would commence at about \$400 per month; and increase with experience and position achieved.

PHYSICS, MATH STRESSED

The entire course covers 2790 instructional hours. The English program covers general reading and composition, mechanics of English, elements of reports, techniques of exposition, and formats as applied to industrial points of view.

The Physics program is a follow-up to the high school Physics 30 or 32 course. It covers all aspects of mechanics, heat, matter, forces, wave motion, light behavior, matter waves, and basic quantum mechanics.

The Mathematics program covers advanced algebra, trigonometry, complex numbers and phasors, logs and exponentials. This is followed up with an extensive course in calculus; covering differentials, derivatives, integrals, partial derivatives, double integrals, and differential equations. A combined Math.-Electronics course goes into Binary Arithmetic and Boolean Algebra; which is used in the study of computer operation and programming.

The fundamentals of electronics and electricity are taught in a 200 hour lecture series and an associated 200 hour lab course. An instrumentation lecture — lab combination is also taken to learn the operation of all types of test equipment used in the communications industry. The Switching I program introduces the technician to telephone schematic diagrams, sequence charts, relay operation, telephone set components, modern telephone

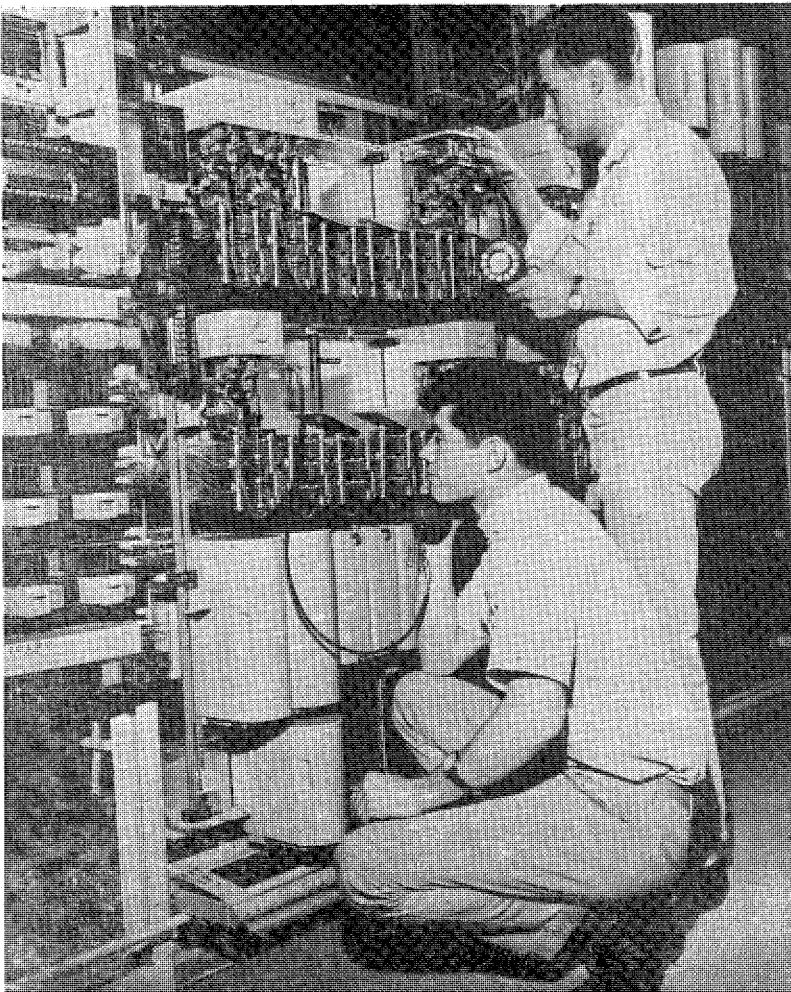
sets, pay station equipment, PBX switchboards, and key telephone systems. Switching II introduces the concept of step-by-step switching on the three types of equipment in the NAIT communications lab: Siemens, Automatic Electric, and Northern Electric. The technician must know thoroughly the operation of each type of equipment and be able to find simulated common faults. Carrier systems are studied for alignment, speech compression, noise loading, and intermodulation. Frequency division multiplex systems are studied from the point of view of components, layout, and design objectives. Practical work is conducted in an associated lab course.

Year 'C' contains an extensive combination of courses in which individual communications systems are studied. Direct Distance Dialing (DDD) is an important development in the telephone industry. This is a relatively new concept and will be introduced in the Edmonton area in the Fall of 1966. Also studied along with DDD are switching machines, routing of national and international calls, signaling systems, Central Automatic Message Accounting (CAMA), and automatic number identification. Field trips to industrial sites will be included in the course.

Microwave and scatter are also studied. This involves the nature of TV and multiplex signals; and their behavior. Special components and designs of systems are also analysed.

Computers are studied from the point of view of computer terminology, circuit operation, and memory units. A subsequent course covers computer programming and program applications.

Other specialized courses cover pulse and switching circuits, data transmission, antennas, servo-mechanism, VHF and UHF telecommunications, common control switching (crossbar), and the latest big development in communications; electronic switching.



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ARCHITECTURAL TECHNOLOGY

Although higher education has always been considered desirable by most persons, the course of human events has made it quite clear that it has become a fundamental necessity, both for the individual and for the society in which he lives.

One of the greatest issues of our times is the explosion in human knowledge which has led to what can properly be called the "Scientific-Technological Revolution". We can no longer rely on intuition.

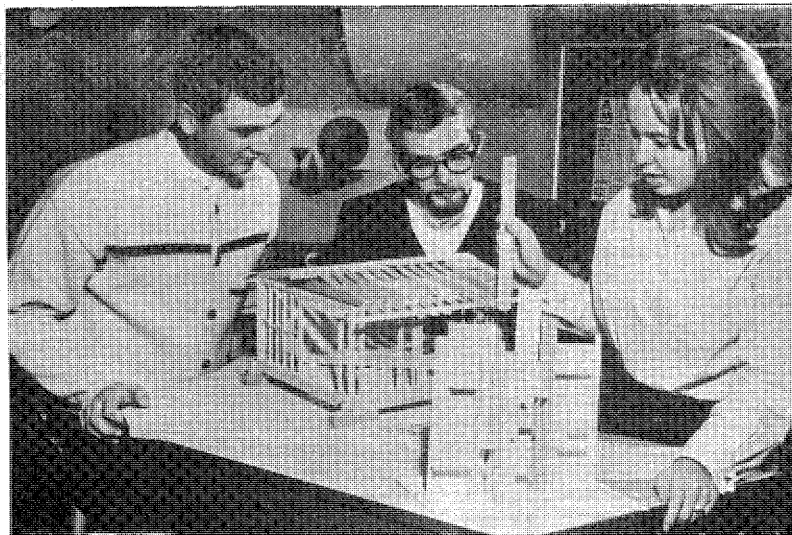
Nothing is more important to the survival of our society and its traditions than the highest quality of education and research. Within the next ten years, our society will also require and construct more buildings than in all previous history. This will create a much increased demand for technicians, especially graduates of Architectural Technology.

Architectural Technology demands that a person have intelligence and perseverance plus a certain amount of artistic abilities. The latter however lies latent in most persons and can only be realized through special training. The course provides practical background through the exercise of constructional methods in the shop, and an extensive study of the materials of construction. Skills, knowledge, and aesthetic abilities are developed in freehand drawing and illustration, in mechanical drawing and in general artistic and architectural design courses. Perspective drawings and renderings, and presentation drawings are made in various black and white and colored media. Models of proposed buildings and design projects are constructed. Numerous design projects in two and three dimension and employing various coloring techniques are completed.

Technical studies are made of strengths of materials and the structural design of buildings, of the mechanical systems of buildings and of the organization and contractual relationships within the industry.

To provide the academic tools necessary to competently accomplish the preceding work, studies are made in relevant areas of English and the pure and applied sciences.

It should be noted that although there exists a route by which graduates may serve articles and write professional examinations to become a registered Architect, this route is not to be recommended.



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CHAPLAINS SERVE 5 DENOMINATIONS

On the bulletin board outside the Physical Education offices at NAIT there is, and has been for some months, a notice announcing the NAIT Chaplaincy Drop-In program. The reluctance of most students to take advantage of this service is perhaps indicative of a general misconception of what the Chaplaincy is, and of what purpose it serves.

The chaplaincy office is not occupied during the hours in question (11:00 a.m. to 1:00 p.m., Monday to Friday) by eager clerics waiting to pour forth an unending stream of dogma in an attempt to proselytize any unsuspecting student who walks through their door — but rather, strangely enough, by friendly human beings who are concerned about students and are willing to be patient and understanding about their problems.

The Chaplaincy exists to serve. The Chaplains work in cooperation with the Guidance and Counselling Department and students may be referred to one of the chaplains if their problems are of a religious or spiritual nature. By providing a place for the discussion of this type of problems, both for those who are referred by the counselling service and for others who drop in, the Chaplaincy can encourage a fuller development of the lives of individual students, and therefore also to the welfare of the student body as a whole. Certainly if more students can acquire more responsible attitudes in all areas of their lives the student body and school spirit will benefit.

Chaplains are not here only to talk to people who have distressing problems. They are also here to listen to others who have something to say and want someone to say it to. I suspect that one of the reasons why the Chaplain's office is not more regularly frequented is that many of you have found that leaving home and going off to school has given you a chance to break many of the ties that have held you since childhood. Perhaps you find that now, in your new-found freedom, the church is no longer relevant, and has nothing significant to say to you. But the church should be relevant to you in your situation and it is difficult for it to be so unless it knows how you think and what your problems are. The Chaplaincy can serve as a channel for feedback to help the church know you and face your problems and interests.

If you have other suggestions as to how the Chaplains can serve you better — drop in and talk it over with one of us. We are here to serve you.

MATERIALS TECHNOLOGY ONLY ONE IN CANADA

This course is designed to produce technologists of a high calibre to work in research, inspection, selection and application of engineering materials. These materials include metals, plastics, concrete, asphalt, ceramics, and soils (with emphasis on metals). A more extensive course in plastics will be offered this fall. The first four quarters are designed to give the student a broad education in the engineering sciences, the subjects vary from welding to modern physics. Intensified courses in testing, inspection, and properties of these engineering materials are taken in the last two quarters.

When the students graduate, they will probably take jobs with the large metallurgical companies to become supervisors in their quality control laboratories. Others will find employment as non-destructive testing inspectors in the aircraft, pipeline, or construction industries. The Research Board and the Atomic Energy Commission will require other Material Technologists graduates.

The opportunities in this challenging field are unlimited. It has been estimated that we will need at least 1000 Material Technologists and the United States another 10,000 within the next 10 years. N.A.I.T. is the only institution in Canada that offers this course.

EXTENSIVE COURSE COVERAGE

The Materials Technologists stu-

dent takes a wide variety of courses. The metallurgical course covers destructive testing which includes Tensile, Fatigue, Charpy, Izod, Torsion, Rockwell, Brinell, and Tukon tests. Non-destructive testing covers X-ray, Gamma-ray, Photography, Ultrasonics, Magnaflux, Dye-Penetrants, and Filtered Particle equipment. The study of Physical Metallurgy includes mechanisms of hardening metals, mechanisms of failure, corrosion, equilibrium diagrams, solutions, phase changes, and diffusion. The theory is supplemented by experimentation and lab work, including specimen preparation and the use of the microscope and metallograph which assist in the identification of various microstructures. The course in non-metallics covers items such as properties, structure, selection, and uses of non-metallic engineering materials such as wood, cement, gypsum, plastics, and ceramics.

Other courses the student takes are Physics, Math, Statics, Dynamics, Chemistry, English, and some instruction in welding, photography, drafting, and machine shop.

Due to the fact that Materials Technology is unique in Canada, no text books have been written specifically for the various metallurgical courses. However, excellent reference texts are selected to provide the student with abundant sources of information.



Dental Assistants at Work



the Bay

SALUTES THE INSTITUTE OF TECHNOLOGY

EDUCATION IS TO THE MIND AS SCULPTURE
IS TO A BLOCK OF MARBLE.

OVER 200 COURSES OFFERED IN EXTENSION DIVISION

Continuing Education or Adult training has become not only desirable but necessary in our modern world of work. The entire facilities of N.A.I.T. are available for adult evening, summer school and special programme training. During the year 1965-66 more than three thousands adults will have attended evening classes.

The general objectives of the Extension Division are as follows:

a) To assist those already engaged in a trade or occupation by providing them with instruction in the technical and theoretical aspects of their work and to bring such students up to date with the latest information and practices in their own particular areas.

b) To provide sufficient basic instruction to those who wish to change to a new occupation or prepare for such a change.

c) To work in close cooperation with professional organizations, i. e., The Association of Professional Engineers of Alberta and The Alberta Society of Engineering Technologists, in the planning and promotion of courses required by these professional organizations.

d) To develop and provide a method by which working adults may acquire a technology diploma of equal stature to the day diploma.

e) To develop Summer School courses as required.

f) To provide short, intensive day courses for specific purposes as may be required by industry.

g) To assist those who seek occupational advancement.

h) To provide pre-employment training for persons over the compulsory school attendance age who have left elementary or secondary school and who require such training to develop or increase occupational competence or skills.

i) To provide courses for those who wish to improve their use of leisure time, when space and facilities are available.

j) To organize and promote any other courses for which there is a demand from industry, labour or the general public, where advisable and in accordance with the general policy of the Institute.

Fees: Tuition fees depend upon the length of the particular course and range from \$10.00 to \$60.00 with the average being \$26.00 plus a registration fee of \$5.00.

How and When to Enroll: Extension evening classes commence in September and January of each year and continue to the month of April. A complete calendar of courses for '66-'67 will be available by May 31. You may obtain a copy by completing and mailing the coupon attached below or by telephoning 479-3513 or 477-1053.

Pre-registrations are desirable if you are to be assured of a place in the class of your choice. Simply complete the registration form and forward to the Extension Division Office along with the \$5.00 registration fee. Applications for September will be accepted on and after June 1.

If you are in doubt as to the course of studies you should follow, you may discuss your problem with the Director or the Counselor by coming to the Institute. The office hours from May 1 to September 1 are

8:00 a.m. to 4:30 p.m. each week day Monday to Friday inclusive, from September 1 to May 1 8:15 a.m. to 4:45 p.m. Monday to Friday and from 6:30 to 9:30 p.m. Monday to Thursday inclusive.

"COURSES AVAILABLE" FOR 1966-67

NOTE:

Other courses will be arranged as required. The list set out hereunder is not intended to be complete.

ART CLASSES

Drawing
Design & Color
Basic Life Drawing
Fundamentals of Painting
Water Color

AUTOMOTIVE DEPARTMENT

Wheel Alignment & Frame Analysis
Advanced Wheel Alignment & Frame Analysis
Brake Service & Analysis
Automatic Transmissions Torque Converters
Ford dual Range Design
G.M. Aluminum Power Glide
Chrysler Aluminum Torqueflite
Automotive Tune Up

- Fundamentals of Electricity, Magnetism
- Circuitry & Batteries
- Starter Systems
- Charging Systems
- Ignition Systems
- Fuel System & Tune-up Procedures
- Related Subjects.

BUSINESS EDUCATION

DEPARTMENT

Typing Basic
Typing Refresher
Pitman Shorthand Basic
Pitman Shorthand Refresher
Business Machines
Office Machine Design
Accounting BA 120
Accounting BA 121
Accounting BA 111
Accounting BA 112
Salesmanship
Professional Salesmanship
Credit & Collections
Advertising Techniques
Income Tax Procedures In Business
Business Law
Oral Communications (Public Speaking)
Advanced Hair Dressing
Advanced Barbering & Hair Styling
Voice Improvement
Public Relations
Homemaker Training
Interior Design
Data Processing Appreciation
Introduction to Unit Record Data Processing
Introduction to Digital Computers
Fortran (Formula Translation)
Symbolic Programming System

CHEMISTRY SECTION

Gas Chromatography
Ultraviolet Spectrophotometry
Intra Red Spectrophotometry
Polarography
Combustion Methods
High Vacuum Techniques
Introduction to Inorganic Chemistry
Inorganic Quantitative Chemistry

Oil Chemistry
Introduction to Organic Chemistry
Organic Synthesis & Purification
Glassblowing
Instrumental Analysis — Optical Instruments
Instrumental Analysis — Spectrophotometry
Instrumental Analysis — Advanced Gas Analysis
Instrumental Analysis — Electrochemistry
Introduction to Physical Chemistry
Plastics
Practical Workshop — Thermo Plastics
Introduction to Thermo Plastics Technology
Practical Workshop Thermo Sets

CIVIL DEPARTMENT

Statics I
Surveying Theory
Survey Field Work
Concrete Technology
Soil Mechanics I
Soil Mechanics II
Highway Technology I
Asphalt Technology
Highway Technology II
Elementary Drafting
Survey & Topographic Drafting
Basic Technical Mathematics
Foundations
Triaxial Testing of Soils
Geological & Topographic Drafting
Statics II
Strength of Materials
Surveying
Strength of Materials II
Structural Analysis I
Structural Design in Steel
Structural Analysis II
Specifications & Contracts
Reinforced Concrete Design
Structural Design In Wood
CONSTRUCTION DEPARTMENT
Advanced Plastering
Clay Modelling Course
Introduction to Commercial Sign Writing

Carpentry Upgrading
Building Construction Estimating I
Building Construction Estimating II
Journeyman Painting & Decorating
Bricklaying

DIESEL DEPARTMENT

Basic Diesel Mechanics
Advanced Diesel Mechanics

DRAFTING DEPARTMENT

Elementary Drafting
Geological & Topographical Drafting
Survey & Topographical Drafting
Mechanical Drafting I
Mechanical Drafting II
Structural Drafting I
Structural Drafting II
Architectural Drafting I
Architectural Drafting II
Architectural Drafting III
Architectural Drafting IV
Design I
Design II

Design III
Design IV
Drawing & Sketching

ELECTRICAL DEPARTMENT

Basic Electronics
Basic Transistors
Industrial Electronic Controls
DC Circuits & Meters I
AC Circuits & Electronics I
Electrical Machines I
Three Phase Theory & Lab
Electrical Machines II
Basic Electricity
Basic Electronics
Radio Communications
Telecommunications Electronics
Switching I & Power
Switching II
Carrier
Transmission
Mathematics (Boolean)

AIR CONDITIONING & REFRIGERATION SECTION

Basic Refrigeration (Theory & Lab)
Refrigeration (Theory & Lab)

ELECTRONICS DEPARTMENT

Basic Electronics & Electricity
DC & AC Fundamentals Lab
Electricity & Electronics
Basic Electronics Lab
H. F. Communications Lab I
Radio Communications I
Radio Communications II
H. F. Communications Lab II
Instruments I
Television Theory II
Television Lab II
Microwave & Radar Theory
Basic Electronic Theory
Radio & Audio Theory
Transistor Theory
Color Television Instrumentation

ENGLISH DEPARTMENT

English for Pre-technology
English Part II
English Part III
Engineering Economics & English
Part IV (For Professional Engineers)

FOOD SERVICE DEPARTMENT

Elementary Ice Carving
Meat Cutting & Quality Buying
Hors D'Oeuvres, Fancy Salads & Sandwiches
Continental Cookery
Gum Paste, Chocolate & Marzipan Working
Food Sales & Service (Host & Hostess)

Waiter, Waitress

FOREMANSHIP & SUPERVISOR TRAINING

Administrative Controls
Work Study Analysis
Industrial Personnel Administration
Production Technology

GAS DEPARTMENT

Valuation of Reserves

MACHINE SECTION

Basic Machine Tools
Advanced Machine Shop Practice
Intermediate Machine Shop

Extension Division
N. A. I. T.
11762 - 106 Street

Please forward a calendar and application form for 1966-67.

NAME _____

ADDRESS _____

EXTENSION DIVISION Contd.**MATERIALS SECTION**

Basic Metallurgy
Strength of Materials & Destructive Testing

Non-Destructive Testing II
Non-Destructive Testing Lab II

Advanced Metallurgy

MATHEMATICS SECTION

Basic Tradesmen's Mathematics
Intermediate Tradesmen's Mathematics

Advanced Tradesmen's Mathematics
Pre-technology

Technical Mathematics

Calculus for Electronics

Elementary Calculus

Advanced Calculus for Electronics

Advanced Calculus

PHOTOGRAPHY SECTION

Advanced Black & White Photography

Black & White Print Control

Basic Color Printing

PHYSICS SECTION

Pre-technology Physics

Physics III

Physics IV

SEWING DEPARTMENT

Basic Sewing

Intermediate Sewing

Advanced Sewing

Basic Sewing — Commercial (Bishop Method)

Advanced Sewing (Bishop Method)

Pattern

Drafting

SHEET METAL SECTION

Pattern Development

Art Sheet Metal

Upgrading Shop Practice & Pattern Development for Sheet Metal Tradesmen

STEAMFITTING SECTION

Steamfitting — Upgrading

Gas Controls — Basic Course

Gas Controls — Advanced Course

Plumbing

Millwrights — 3rd Class Steam Engineer

GAS SECTION

Gasfitting — Upgrading

WELDING SECTION

Oxy-Acetylene Welding

Electric Welding

Electric Welding (Second Class)

Pattern Development & Blueprint Welders & Fitters

Downhand Pipe Welding

Electric Welding (Journeyman)

T. I. G. Welding

Electric Welding (B Pressure)

Aluminum Welding

Oxy-Acetylene & Electric Welding (Pre-employment)

Pre-test Tune-up



QUALITY CONTROL, ORGANIC COMPOUNDS STRESSED IN CHEMICAL TECHNOLOGY

Have you ever passed the oil refineries, the chemical plants, or the science departments of a university and wondered: What do they do in there? Have you ever seen a synthetic fabric, a plastic cup, a bag of fertilizer and wondered: How do they make that? Obtaining answers to these questions can result in an interesting vocation. Pursuing a chemical vocation is not easy but the rewards are well worth the effort.

The chemical industry is of increasing importance, particularly in Alberta because of the tremendous strides that are being made in the petroleum and natural gas industries. The chemical technician can apply his knowledge to a variety of fields. The greatest need for his services is in process or quality control of a variety of chemical products. His knowledge is also utilized in such places as the universities, Research Councils and the research departments in private industry. Because of the wide field that is open to the chemical technician, his knowledge must be broad.

To qualify for a diploma, a student must successfully complete two years in the Chemical Technology program. Since the main industry in Western Canada involves the manipulation of organic compounds, the two years are naturally slanted in this way.

Theory of some subjects such as polymerization of plastics is covered in detail as well as the actual production of pharmaceuticals such as aspirin and sulfa drugs. With the exception of the universities, N.A.I.T. is the only institute that instructs in the use of high vacuum equipment. We can prepare compounds of high purity at 1/100,000 atmospheric pressure working with

temperatures as low as -320°F . A course in scientific glass blowing can also be taken as an option. As well as these sophisticated courses, we are instructed in basic subjects such as advanced mathematics, physics and even English in the form of written and oral communication.

OVER \$100,000 IN EQUIPMENT

As indicated by the surroundings, N.A.I.T. is new and therefore educational aids such as laboratory equipment and library reference material are not as plentiful as we would like them to be but time will see our needs fulfilled. The equipment in the instrumental analysis laboratory has already attained a value of about \$100,000; the most expensive piece of machinery being the Infra-red Spectrophotometer at \$9,000.

The greatest asset of the chemical technician is his practical knowledge of chemistry which enables him to go to private industry with very little time wasted for on-the-job training. Already some of the graduating students have attractive positions with many companies ranging from applied research to food analysis. Again this year, we expect that there will be more jobs available than there are graduating students.

THE COMMITTEE

The dictionary says that a committee is a group of people chosen to function in a certain capacity. But don't believe a word of it. Function is the "expected" activity which implies (hopefully) that something will be accomplished. And who knows of a committee that ever accomplished anything—of value? Or, which could not have been done faster and better by the right person?

Has there ever been anything worthwhile created by a committee? The Ten Commandments? Hamlet? The Law of Gravity? America the Beautiful? Electricity? Antisepsis surgery? The Madonna della Pieta? The polio vaccine? Your success?

Although the original source we know not, the best definition of a committee is the one which says that a giraffe is a horse that a committee put together. But who needs a giraffe?

Yet it looks as though committees will be here for longer than I care to think about, so let's understand them with Lytle Robinson's glossary.**

The committee met and evaluated the situation:

Half the members showed up and talked a while.

We explored all possible solutions to the problem:

Everybody talked a lot.

A great deal of additional work will be necessary before the proposal can be acted upon:

Nobody understood it.

The results were inconclusive:

Nothing was accomplished.

While no agreement was reached, we feel that definite progress was made toward resolving differences: Nobody budged an inch.

The estimate has been made that...

Somebody guessed.

It is suggested that the wisest and most feasible course...

This is what I think.

It is widely accepted that...

One other person agrees with me.

Therefore, the consensus is...

A couple of others think so, too.

As yet, it has not been possible to provide definite answers:

Nobody understood the questions.

The prospects for success appear...

Excellent: fair

Good: so-so

Fair: poor

Doubtful: non-existent

Further investigation is recommended:

Delayed indefinitely.

This concludes the committee's appraisal of the situation:

We absolve ourselves of all future responsibility.

It is hoped that this report will stimulate increased interest in the problem:

Let somebody else do it the next time.

*

P.S.—OF COURSE, THESE FINDINGS DO NOT APPLY TO ANY COMMITTEE I WANT APPOINTED!

**Robinson, Lytle, W., Glossary For Committee Reports, Minutes, Nationwide Insurance, Columbus, Ohio, February 1962.

EDITOR'S LAMENT

Getting out a paper is no picnic. If we print too many jokes, folks say we are silly.

If we don't they say we lack variety.

If we publish things from other papers we are too lazy to write.

If we stay on our job we ought to be rustling for news.

If we don't print contributions, we don't show proper appreciation.

If we don't print them the paper is filled with junk.

Like as not some fellow will say we swiped this from another paper.

So we did.

GAS TECHNOLOGY OFFERS OFFICE AND FIELD WORK

Gas Technology is a program designed to create a technician who is highly specialized and has an intimate knowledge of the operations and functions of the natural gas industry.

The Gas Technology program acquaints students with all phases of the industry, beginning with the geological occurrence of natural gas, continuing on to the exploration, drilling and production aspects of the industry, and ending with studies of the intricacies of gas processing and transportation. Mathematics, Physics, Chemistry, and English form an integral part of the program. In addition to these subjects, Materials Testing, Surveying, Electronics, Instrumentation, and Computer Programming give the Gas Technician an invaluable insight into various fields associated with the oil and gas industry.

WHAT IS A GAS TECHNICIAN?

The Gas Technician is an engineering technician.

He acts as liaison between the engineer and the skilled tradesman as he has an understanding of the intricacies of engineering problems along with a general knowledge of how these problems can be put to practical use.

He is specialized in the specific field and therefore is most concerned with the practical application of established principles and theories.

FUTURE OF A GAS TECHNICIAN

The production and sales of natural gas is one of Canada's largest and most rapidly expanding industries. Major companies in the gas industry have indicated a desire to employ Gas Technology graduates. It is expected that there will be a demand for the next fifty years for gas graduates and this fact is proving itself true at the present time.

Employment opportunities exist in two major fields of the industry:

ENGINEERING ASSISTANT

Duties consist of:

- Planning and execution of engineering and construction activities.
- Developing cost reduction program, preparing estimates and making recommendations.
- Design and construction of gas processing equipment.
- Calculation of flow rates, open flow potentials and gas reserves.

PLANT OPERATIONS

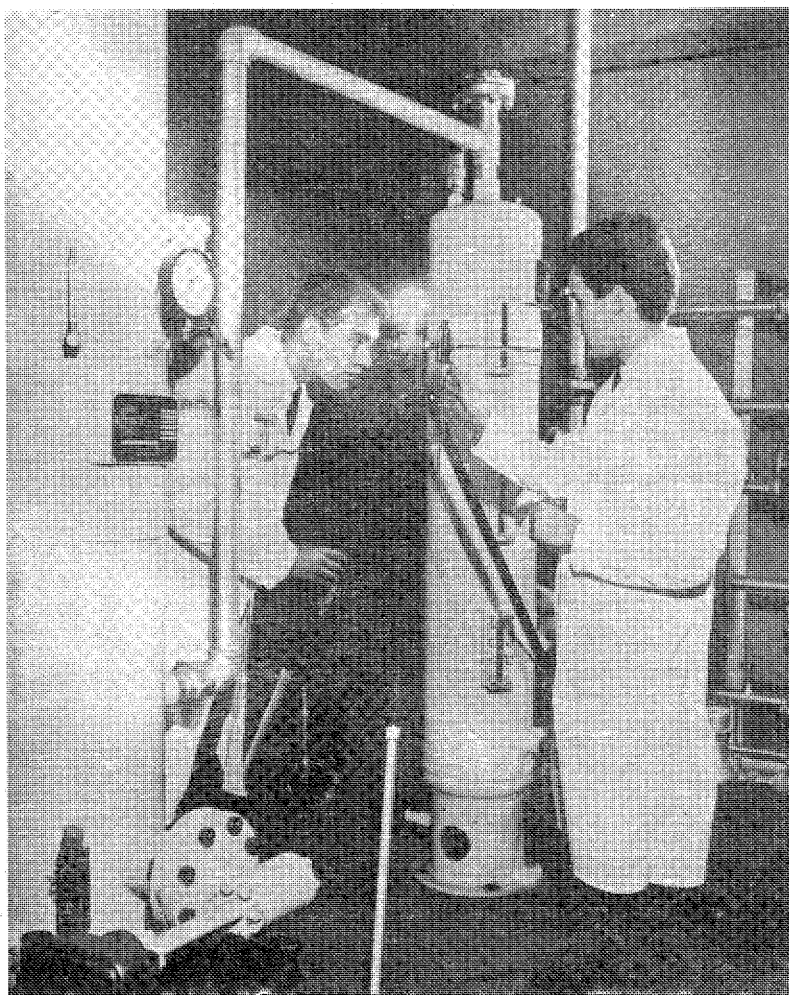
Duties are:

- Operation and maintenance of gas field production equipment.
- Testing of gas wells.
- Operation and maintenance of gas gathering and transmission systems.
- Operation and maintenance of gas treating, dehydration, measuring, and processing equipment in the field and plant.
- Sales and servicing of gas field and plant equipment.

SCHOLARSHIPS AVAILABLE

Excellent financial aid is available through student loans and scholarships. Scholarships available are:

1. Canadian Manufacturer's Association Scholarship, awarded by British American Oil Company Limited — \$50.00
2. Shell Canada Limited — \$250.00
3. Chevron Standard Company — \$200.00
4. Queen Elizabeth Prizes — \$50.00.



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WISH TO ACKNOWLEDGE THE OUTSTANDING AND SUCCESSFUL CONTRIBUTION THE NORTHERN ALBERTA INSTITUTE OF TECHNOLOGY IS MAKING TO THE BUSINESS WORLD.
WE SALUTE YOUR PROGRESS AND WISH YOU CONTINUED SUCCESS.

INDUSTRIAL ELECTRICAL TECHNOLOGY IN STRIDE WITH INDUSTRY

Mr. Harold Pluemer, the Regional Director for Aerospace Education for the United States Air Force expressed the need for education when he said, "The greatest single influence of our time is the scientific revolution we are now experiencing. These explorations into the many technical fields will have a profound impact on everyone regardless of age, profession or location. Everyone must be aware of the extent to which this explosion of knowledge, this crescendo of accomplishment, is changing his life."

This is particularly true in the science and technology of the electrical field, which at the present time is growing at such a rate that industry can not find enough trained personnel to fill all the jobs that are available.

MORE JOBS THAN GRADS

Since N.A.I.T. opened its doors in 1964, the eyes of the electrical field have been opened to such an extent that at the present time there are more jobs available than graduates. Some of the industries in which the electrical graduate may find employment are, Calgary Power Company, Industrial Power, Atomic Energy of Canada, National Resource Board of Canada, Potash Mines in

Saskatchewan, Bell Telephone, Alberta Government Telephones, Edmonton Electrical Distribution System, Chemical Limited, and International Power Consultants located in Vancouver. These are just a few of the employment possibilities in the electrical power field and the forecast for the future is even better.

The electrical graduate may, if he wishes, apprentice for two years after leaving a technical school and receive his journeyman electrical papers and from here he may work his way into a Supervisor's position. Electrical drafting is another field that is open in such companies as the Edmonton Electrical Distribu-

tion System, International Pipeline, International Power Consultants in Vancouver, and Atomic Energy of Canada. The electrical graduate may also work as an assistant engineer in the design field and if he is a hard-working industrious person may qualify to write for his Professional Engineers papers.

COURSE COVERAGE COMPLETE

The course that you will be receiving at N.A.I.T. will give you the basics of both direct and alternating current, and how these systems convert energy into useful work for mankind.

You will learn the construction of D.C. and A.C. motors and how they work, the instrumentation that is essential in the measurement of electrical power, the design of electrical control circuits, basic electronics and transistorized circuits, that plays an important part in controlling the many and complete electrical circuits and the generation and

distribution of electrical energy.

You will also receive courses in Physics, Math, Drafting, and English. The English course being important because a technician must know how to write technical reports, communicate his ideas and thoughts in writing to the Supervisor and executive of the company that he will be working for.

The course provides a broad, basic background rather than detailed emphasis on any one specific area of the electrical industry. With this broad base to build on a graduate is well equipped to specialize in the area of his chosen employment.

**BOWLING IS
FUN
AT
BONNIE DOON
BOWLING LANES**



ment. In addition to this, 2,500 employers in Edmonton and district receive a bulletin which features on its cover and in an editorial the desirability of employing NAIT graduates and undergraduates for permanent and summer personnel needs. This campaign is becoming more effective each year.

Mr. O'Keefe, NAIT's new Student Placement Officer, states: "The National Employment Service is used by employers on the basis of its reputation for service. Students of NAIT are also hired on the basis of their reputation for good service to employers. The best legacy the student can leave to those who come after is a job well done. It is only natural that an employer who has found a NAIT student to be conscientious and reliable will be happy to employ another when he needs help. It is also to be expected that if the employer is disappointed with the performance of a student, he will not be inclined to employ students in the future." Mr. O'Keefe offers another "word to the wise" by suggesting that students keep employers informed with regard to acceptance or rejection of job offers. This should be done within a reasonable time from the date on which a student receives an offer of employment. A good, business-like conduct in letting an employer know where he stands can save considerable disappointment to both student and employer and will enhance the reputation of the student and the Institute.

NES HERITAGE FOR GOOD SERVICE

The National Employment Service established its office in the Northern Alberta Institute of Technology in the Institute's first year of operation — the 1963-'64 term. For the first time this year, students of three year courses are available for placement in business and industry. The growing popularity of technical school students is illustrated by the increase in the number of employment interviews which have taken place in the NES Student Placement Office this year. The figure as of the end of February stands at 1,173; the comparable figure for 1965 was 590.

Permanent opportunities for graduates of most courses are good. This includes Technologies, Business Education and Vocational. For graduates of some courses, a little more effort is required to locate suitable permanent employment.

Summer employment in work related to course training is more frequently difficult to discover. While the majority of technical students experience little difficulty in obtaining related summer employment, it requires more aggressive effort to uncover summer employment opportunities for those in the Dental, Photographic, and Medical Technology courses. In the Business Education and Vocational Division, locating related summer employment is more difficult. Students should not be disheartened by this picture however. While related employment is most desirable, students with other skills or experience are often easily placed in non-related but re-

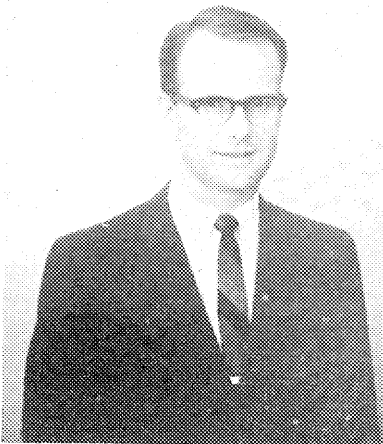
munerative employment. Any employment experience has some value in equipping a young person to meet the demands of our society.

The NES Student Placement Office is committed to giving help to every student with or without work experience. Each is an individual and is dealt with on his or her own merit.

In the employment picture, there is no substitute for effort and achievement by the student in whatever course he is taking. Employers tend to judge the potential value of a student by his scholastic achievement. While this is not always the case, it frequently happens the better job goes to the better student, as employers tend to look upon student achievement as an indication of potential achievement within a company.

Personal development should not be overlooked as a second consideration in qualifying for employment. The ability to meet social situations can make the difference between a relaxed and effective interview and a strained, ineffective talk with an employer. Participation in student and extra-curricular activities involving other people is the best means of getting the practice which gives assurance in handling employment which calls for meeting the public, business interviews, etc. It has been the experience of the Student Placement Office that employers often attach considerable

importance to extra-curricular activities. Institute groups, associations, newspaper and student union activities are all noted as being significant when employers are considering applicants. The grooming of an applicant is also highly significant to the employer.



D. G. O'KEEFE

The NES Student Placement Office at NAIT maintains a close liaison with the main NES office at 10210 - 107 Street in Edmonton. NES personnel call upon a large number of employers each month for the purpose of promoting the use of National Employment Service facilities. At the same time, these employers are approached regarding the use of NAIT and U. of A. students for summer and permanent employ-

N.A.I.T.'S NEW STUDENT PLACEMENT OFFICER

Following completion of high school in Edmonton, Mr. O'Keefe studied Arts at the University of Ottawa and on returning to Edmonton he started with Eldorado Mining and Refining Ltd., in their Edmonton personnel office.

In January, 1962, Mr. O'Keefe joined the National Employment Service, and since that time has worked in various departments in the downtown office. Most recently, prior to coming to NAIT, he spent six months at the University Student Placement Office.

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