

□ ONE DAY IN MAY

A CAPABILITIES REPORT



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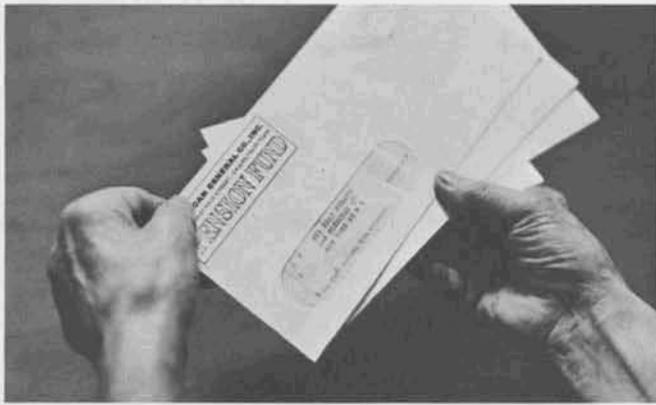
A CAPABILITIES REPORT.....OF
COMPUTER USAGE COMPANY, INC.

What does **Computer Usage Company** do?
What are its capabilities?

These questions could be answered most easily by taking each reader of this brochure, whether shareholder, client or prospective client, on a one-day tour of CUC's five offices to observe our staff of over 200 professionals working on current projects.

Since this isn't practical, let's take this tour via pictures illustrating the projects worked on by CUC's staff on a typical day. The day was May 1, 1964, which is of special significance because it marked the beginning of our tenth year of service in the data processing industry.

Our tour doesn't cover all of CUC's activities for the day, but does reveal enough of our current client assignments to give a meaningful picture of the range of computer problems we are called upon to solve.



Pension plans are becoming more important as our senior population increases. Working closely with a leading group of actuaries, CUC is creating an automatic programming system designed to allow current and accurate evaluation of pension plans.

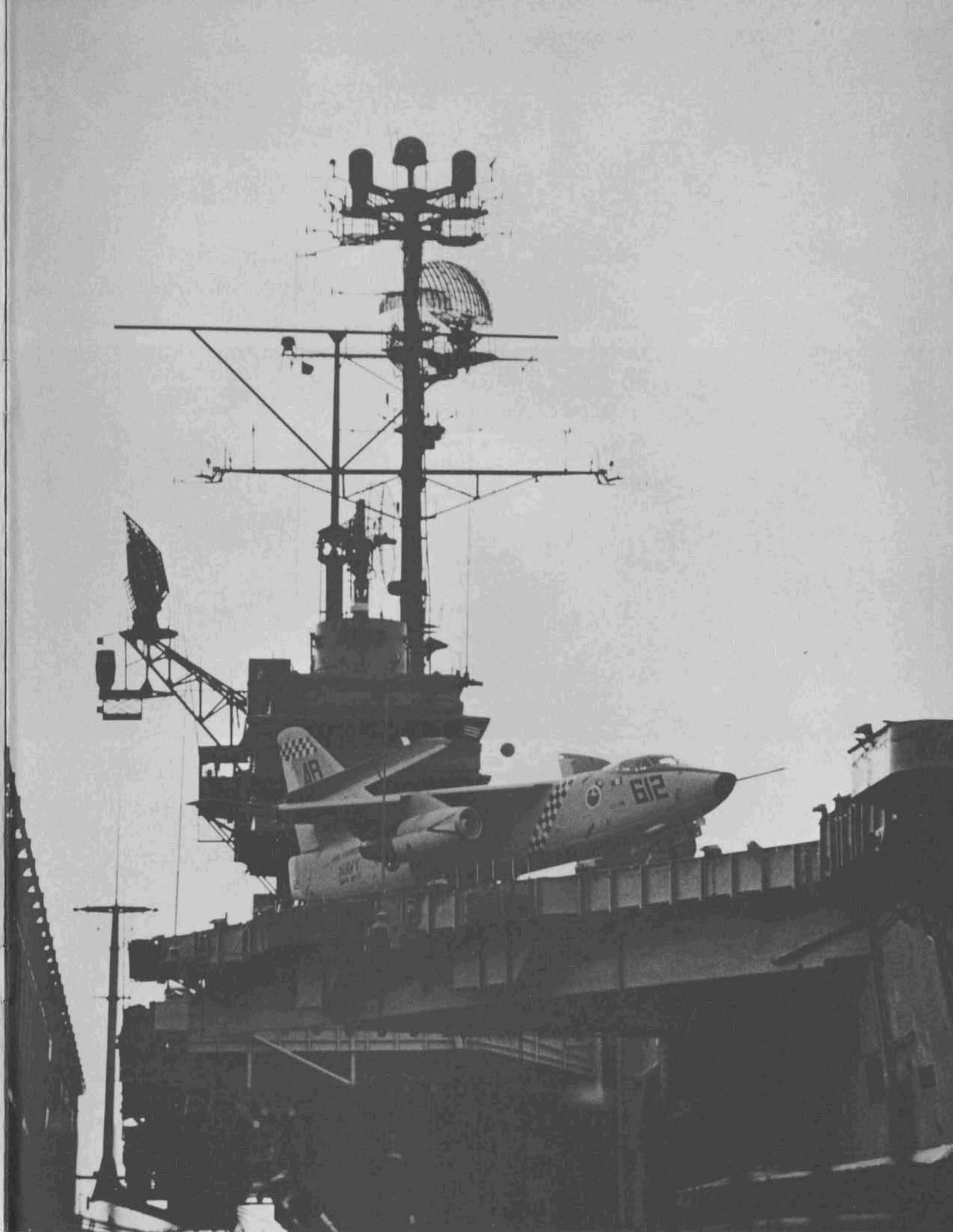


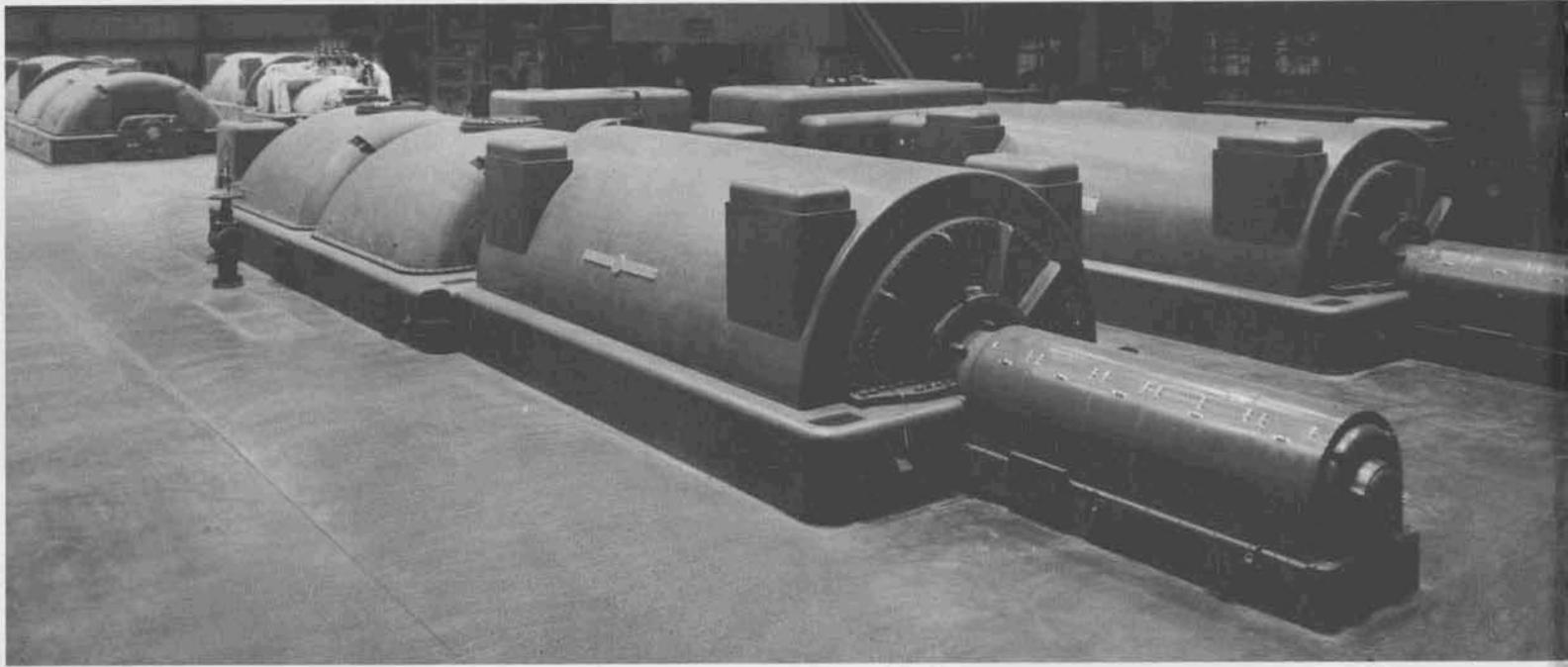
Any ship in our Navy might be crippled without an essential spare part. Since storage facilities are limited, it is necessary to consider the multitude of **parts that equip a Naval ship**, and then determine which shall be placed on board as spares. CUC is working with the Navy, using a computer to trace and analyze these items.



CUC is working with a noted **architectural engineering firm** to develop methods and computer programs that will evaluate accurately the radioactive shielding of different structural building designs.

For a major hotel chain, CUC is designing and implementing an **accounts-payable system**. This will include an accounts-payable register prepared for management review prior to issuance of checks. Additional features will include the production of payment checks and a cash disbursement register as well as reports on what is bought and how it is distributed.





The United States Census offers a vast source of valuable information. Since not all of this data is relevant to the needs of an organization concerned with a particular question, CUC has written specialized computer programs which will **extract and edit Census data**. Typical at present is a project for a department of the government which will prepare more than one thousand tables describing certain home owners by income groups, age of home, size of home and other pertinent information.

Staff members of CUC, in collaboration with a **major public utility**, are developing a data reduction system to process information about the long term performance of electrical generating equipment. This industry-wide project involves hundreds of utility companies throughout the country. The automatic processing of this data will save many man-years of manual effort and provide results of substantial value to the utility industry.

CUC is using computers to generate statistics that will help improve **controlled breeding and feeding of dairy herds**.



Helicopter trainers can save millions of dollars each year by **simulating the "feel" of aircraft for pilot training**. In the past, analog trainers that have been tied closely to one type of aircraft have been used extensively. CUC is creating programs which will permit a digital computer to be used at the heart of the trainer, permitting it to simulate more than one type of helicopter.



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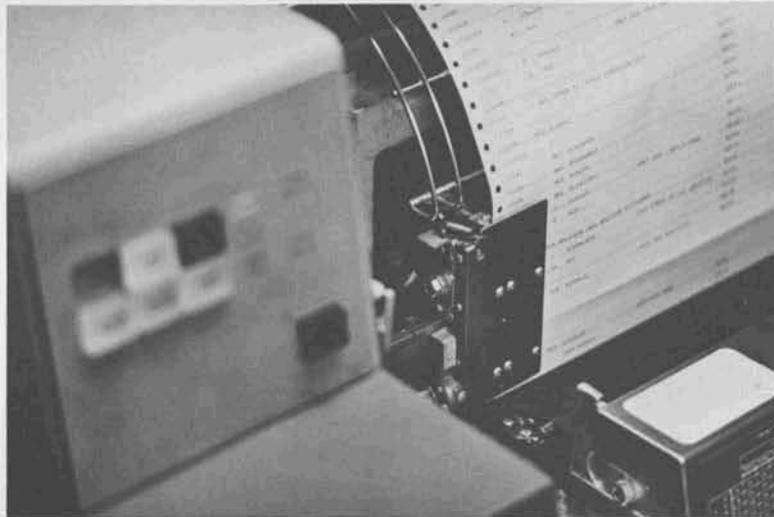
CASE HISTORY
LARRY'S PINK
EARTH

Lab - February
1969



Because of the nature of a public utility's service and its large number of employees and subscribers, it is faced with an unusually demanding **cost control and accounting system**. CUC is installing a nationwide budget control, payroll and accounting system for one of the nation's largest public utility companies.

Insurance companies have pioneered in the use of electronic data processing techniques to dispatch information to company personnel and policyholders. At present, CUC is developing programs which will allow large insurance companies to produce new rate books as well as dividend and premium notices through high-speed EDP equipment.



Modern electronic computers are so complex that proper diagnosis of their failure can be difficult, time-consuming and expensive. It is possible, however, to have the computer assist maintenance engineers detect and isolate the causes of its own malfunction. A program is being developed by CUC to **systematically "check out" a computer** and provide the maintenance engineer with information revealing the cause of failure.



◁ A mentally disturbed person is likely to receive treatment from many institutions during a period of illness. This makes gathering of comprehensive histories extremely difficult. CUC is developing a computer-based system to permit **the assembly of patient histories** in spite of such obstacles as the volume of data, name changes, and patient movement.



The number of items that make up a military or commercial aircraft is counted in the hundreds of thousands. How is it possible to keep track of all the parts, and yet have accessibility and availability when needed? A **large-scale inventory control system** is being implemented by CUC for this purpose.



Data obtained from **survey questionnaires** must be statistically tabulated to be suitably interpreted. A CUC developed programming system and service now provides statistical tabulations with extreme flexibility, versatility and low cost.

In the area of **corporate trust and mutual fund processing**, CUC is developing EDP methods to produce a variety of stockholders' lists which can be separated into such categories as geographic area or number of shares held. Also furnished are statistical analyses by geographic area and type of ownership, such as individual, joint, trust fund and so forth.



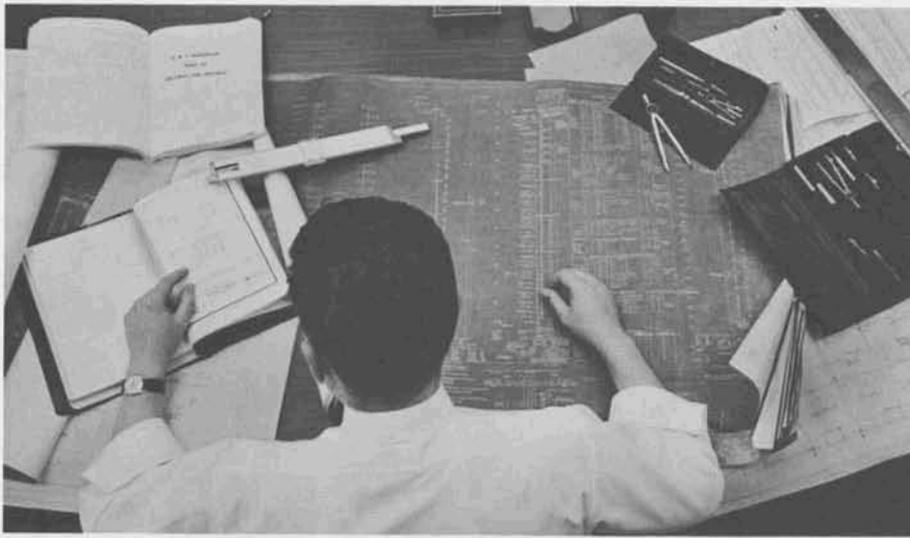
An increasing cataloguing problem is presented by the vast amounts of scientific and engineering data amassed by our libraries. CUC is simplifying the operation of a technical library and making its resources more easily accessible through automatic processing and maintenance.



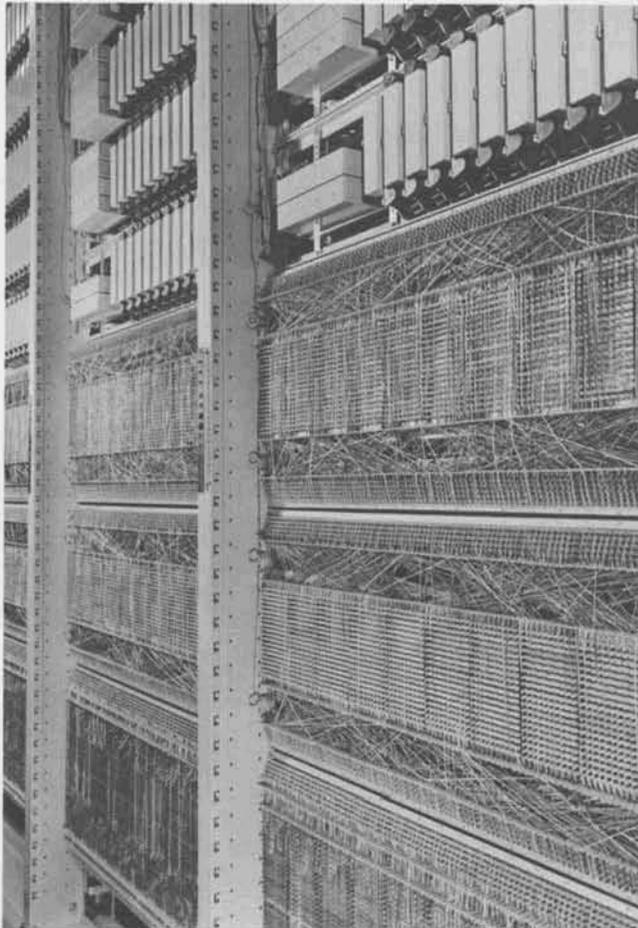
The **increasing volume of sales** by retail chain stores requires that they have rapid, accurate and low cost merchandising reports. CUC now provides the retailing industry with complete stock and sales information, including provision for automatic replenishment of basic inventory items and management reports following the end of a business week.

Our Armed Forces make substantial use of **aptitude testing** in order to determine suitable assignments. In order to be effective, these tests must be evaluated question-by-question. This includes a massive statistical computation which CUC is performing.

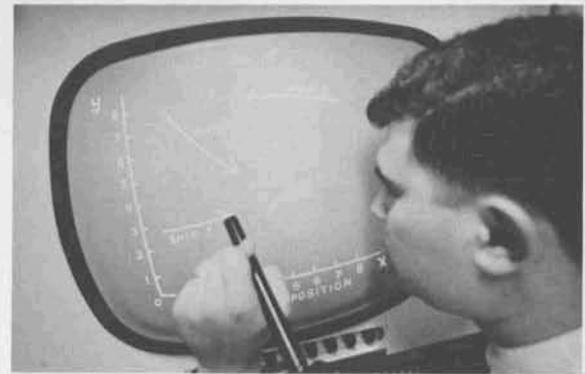




CUC is conducting a comprehensive study concerning **engineering data requirements** for the Army. The large number of processes and devices for which engineering data is required in many locations demands an information storage, retrieval and communication system.



Better-controlled **rapid communications networks** are needed by many large organizations. To meet this problem, CUC is developing programs for a major data processing equipment manufacturer, which will allow a central computer to control "real time" (immediate response) data communications networks. The system allows for flexibility in handling of messages as well as considerable variety in terminal transmitting and receiving devices.



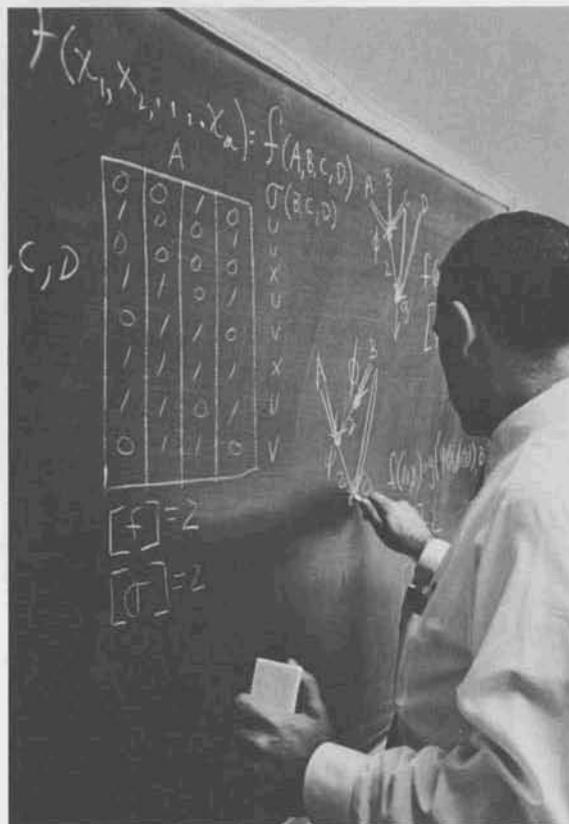
For some applications, it is sometimes desirable that the operator be able to "talk" to the computer through diagrams. The operator, working before a display unit much like a television screen, will receive information from the computer in the form of geometric patterns and English text. He in turn will use a "light-pen" on the screen in order to insert information into the computing system. CUC is developing a **display control program** to allow a computer to perform in this manner.

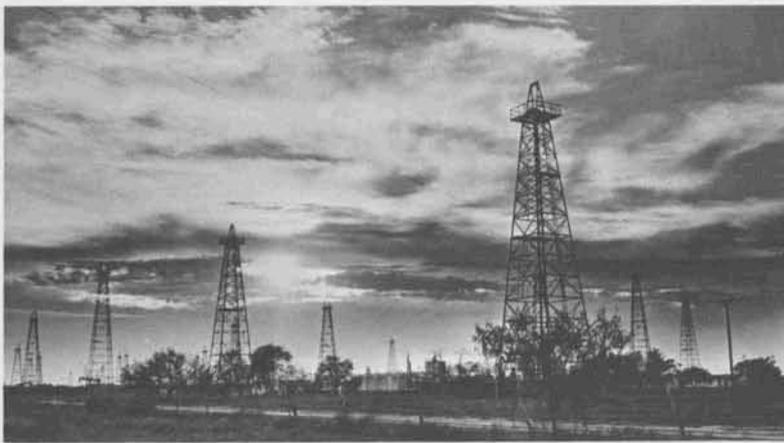
△ In the entertainment industry rapid and accurate royalty accounting is a requirement most difficult to obtain by the large organization without the use of automatic data processing techniques. CUC is developing for a major entertainment firm a complete accounting system that will include financial reporting for independent producers and artists associated with them in the fields of motion pictures, radio, television, recording and sheet music sales.

The area of **"real time" command and control** is one of the more significant requirements calling for computer ingenuity. In order to design a large-scale computer system for this purpose, it is necessary to use a programming language which simplifies the statement of problems in such areas as tracking, logistics and scheduling. CUC is developing a processor for such a programming language for one of the largest and fastest data processing machines.

By observation of the many satellites currently orbiting the earth it is hoped that much can be learned **concerning the earth and its geodetic characteristics**. CUC, working with the U. S. Navy and one of the largest and fastest computing systems ever built, is developing programs to digest and analyze the information resulting from these observations. This information will be vital to navigation and space travel.

CUC has been assigned a task of basic research in mathematical problems concerned with the development of **"artificial intelligence."** We seek techniques for breaking down large complex problems into simpler, smaller problems. This effort is an extension of work done over the past 15 years in the mathematical design of computing machines.



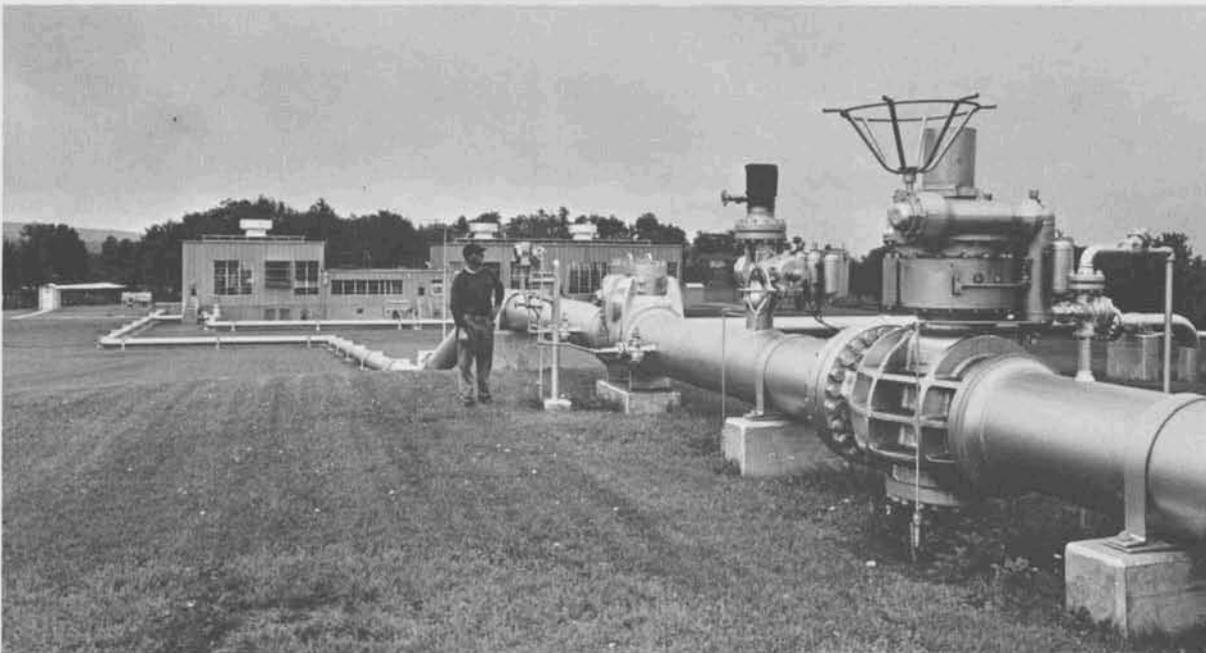


Detailed movements of oil, gas and water in **large petroleum reservoirs** are predictable by a mathematical model developed by CUC. Studies based on this model are being used to evaluate oil recovery by production techniques such as water flooding or gas injection.

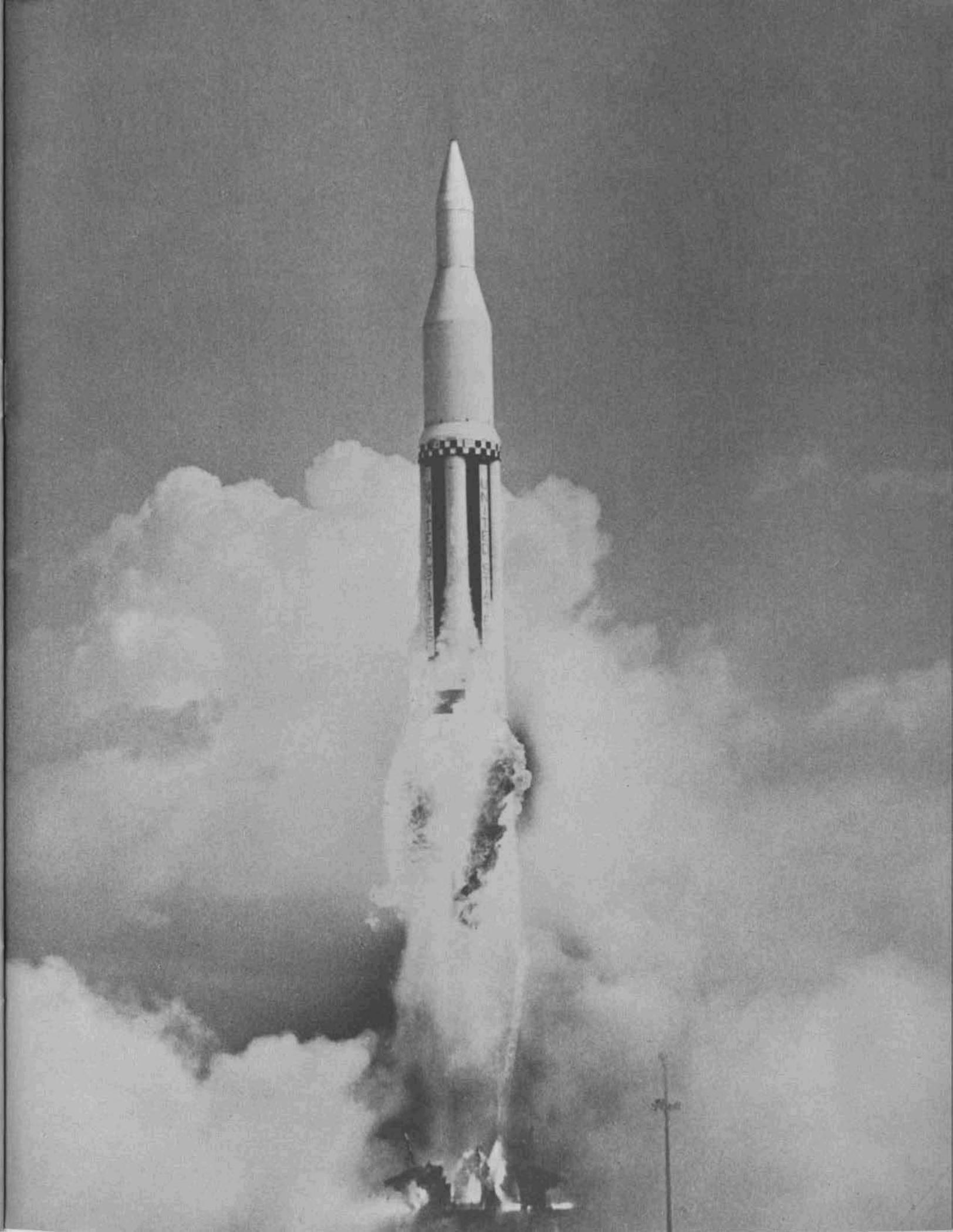


CUC's PROFIT program computes, for the life insurance agent or company, a set of ideal **personalized life insurance financing guides** for present or potential clients, with computer accuracy. This permits the agent to update and combine many policies and insurance alternatives to best serve the particular needs of his client, and is a valuable tool for helping establish more comprehensive insurance programs.

CUC is assisting a Federal Commission in its effort to **compile and evaluate data on natural gas regulations**. The computer programs are being developed to construct files, audit cost data and prepare composite reports upon which gas rate and pipeline certificate granting can be based.



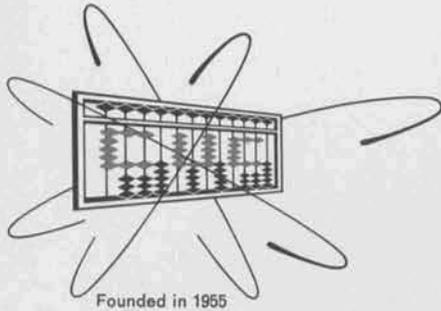
When a rocket is fired the flow of hot gases can cause the rocket motor casing to be deformed and charred. Such damage is aggravated if the rocket motors are turned on and off, causing rapid variations in temperature. CUC's numerical analysis and programming of this problem on a large scale computer will aid in better selection of rocket material and motor design.



This then, was a brief photographic presentation showing some computer applications we were concerned with one day in May. Of course, we use computers in science and industry for many more purposes than have been shown here.

CUC brings to these projects highly trained and imaginative programmers and analysts, people whose only job is to solve computer problems for others.

We hope that this pictorial tour has helped explain to you the capabilities of CUC and will encourage you to call us for assistance with your electronic data processing requirements.



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Loew's Hotels—page 2, bottom

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of New York, Inc.—page 4, center

New York Airways—page 5

U. S. Army—page 10, bottom

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MGM—page 12

Bell System Exhibit—N. Y. World's Fair
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