SPRAGUE ELECTRIC HONORED
FOR CONTRIBUTION TO APOLLO II

One of the special awards received by Sprague Electric Company following the Apollo 11 Moon Landing was the AIM-Apollo Achievement Award presented to Robert C. Sprague, Chairman of the Board and Chief Executive Officer, at the Associated Industries of Massachusetts Annual Meeting held on October 22nd at the Statler-Hilton in Boston.

The Award states:

"for significant participation in the Apollo Program, contributing to the historic landing of the first men on the Moon, July 20, 1969.

"Of all man's notable accomplishments, this giant step into the unknown ranks the highest.

"As a participator who helped make this venture possible, you share in the triumph of Astronauts Armstrong, Alden and Collins and the thousands of dedicated scientists and technicians of the space program.

"For the successful completion was also a triumph for American Private Industry, working within our free system of self-initiative and independent enterprise to meet the challenge in space and win...openly, before the eyes of the world and...peacefully, in the name of mankind."

AIM awards were presented to all Massachusetts companies which participated in the Apollo program either as contractors or subcontractors.

EMPLOYE AWARDS

In addition to the Company award, 4,000 employes who were involved in the production of the over 50,000 parts supplied by Sprague Electric to the Apollo 11 program, were presented individual recognition folders. The folders were presented..."in recognition of significant aid and assistance toward a flawless mission."

Certainly all employes could feel great pride and satisfaction in the contributions made by Sprague Electric to this most outstanding development of the century.

THE MARK OF RELIABILITY

High reliability components are the hallmark of our Company, but the importance of that extra measure of concern has seldom been more dramatically illustrated than in the Apollo flight.

Apollo 12 has now completed its historic journey and Apollo 13 is scheduled for the Spring of 1970. The thrill of the first flight will probably never be duplicated, but it is still extremely important that we remember that the safety of the astronauts rests in our hands - a component failure could be disastrous to any moon flight.
BARRE VERMONT

HAS LONG HISTORY OF CAPACITOR PRODUCTION

Capacitor manufacturing in Barre, Vermont dates back to 1945 when a full page advertisement in the local newspaper issued an urgent appeal for female employes. Five hundred women were needed for “vital war work” on either the day or night shift and the 49-hour work week had a starting rate of $27.04 for days and $29.74 for nights. Rock of Ages, Inc., Barre’s well known granite firm, undertook the War work as a subcontractor to Sprague Electric.

Women of the area responded to the patriotic appeal and production was soon rolling at a steady rate. In a short time, employment hit 630 and a volume of 1,000,000 units per week. VE Day in May 1945 did not alter the production schedule, but immediately following VJ Day, operations ceased abruptly. War orders had been cancelled and reconversion to peace time demands would take a little time.

During the War the condensers produced were used in the highly secret V-T proximity fuse which was acclaimed as one of the greatest inventions of the War. Not until after War’s end did the employes know, through a War Department release, the extent of their contribution to the War effort.

NEW PRODUCT

In 1947, Sprague Electric introduced a greatly improved paper dielectric capacitor, the molded tubular capacitor, which was to tremendously affect the demand for this already popular unit. It had been the custom to manufacture paper dielectric tubulars to the individual specifications of large customers. As a result, there was considerable variation in physical dimensions and markings, and most orders had to be handled separately. With the introduction of plastic molded tubulars, standard sizes and tolerances were established and units were marked with a color banding. This standardization, together with the improved characteristics of the plastic molded capacitors, made possible the manufacture of units for stock.

The molded capacitors were responsible for good sales volume for many years. Competitors found it difficult to produce comparable units of equal quality. Rolled paper capacitors are still the Barre product line, however, automatic rolling machines have largely replaced the original hand wound units. The Plant is currently in the third year of a five year master plan in which all operations will be functionalized — in other words, all rolling will be in one area, impregnation in another, etc. This will streamline operations, provide greater production capability at lower cost per unit and, hopefully, provide the needed advantage in the highly competitive electronics market.

POST WAR DEVELOPMENTS

The production of capacitors was not to end, however. Negotiations were soon underway between Sprague Electric and Rock of Ages for a permanent operation to manufacture units for the booming radio industry. Production operations were resumed on January 3, 1946 and in April of that year Rock of Ages Capacitors, Inc. moved to the extensively renovated granite shed on South Main Street which is still the home of the Barre operation. A two-story office building, attached to the main plant, was also completely overhauled to provide spacious and well lighted facilities for the office personnel.

The best description of the tremendous amount of renovating work done on both the main plant and the office building was the statement by a company representative, “We simply lifted the roof and made new buildings underneath.”
One of the real plus factors of the Barre operation has been the many long time employees. Longest in point of service is Elsie Clark, who joined the new company on January 7, 1946, and has been a hand roller since that time. She is presently the only hand winding operator. Elsie vividly remembers her starting job which paid $0.57 per hour. Her take home pay was $18 per week – which, incidentally, was considered a good wage!

Elsie also recalls that within a few days of opening, there were eight or nine rollers on the job. She has had only two layoffs in her 24 years of service and has never been on sick leave. An outstanding record!

The number one employee, in point of service, is Elsie Clark who joined the Barre operation on January 7, 1946. She has been employed as a hand roller ever since. Elsie will be eligible for her Quarter Century award in 1971.

Early this year, plans were announced for the purchase of Rock of Ages Capacitors, Inc. by Sprague Electric Company, and the transaction was completed on March 31, transferring ownership and management. Local management responsibilities are headed by Spero Dephtereos as Plant Manager. A Management Club has been formed and the group is active in community affairs. Their Christmas effort this year has been to assist with the Salvation Army Christmas collection stands. Twenty-five per cent of management personnel are also furthering their education under Company sponsorship and are enrolled in college bachelor and master’s programs. It all adds up to a dynamic and forceful group of employees at the Barre Plant.

At the time of the acquisition, William E. McLean, Vice President, Operations, stated, “We look forward to a continued satisfying experience with the Barre operation in which Sprague Electric has had an interest for many years.”
Barre Open House - 1953

To acquaint employee’s families and the community-at-large with the Rock of Ages Capacitor operation, a Family Day was held on June 13, 1953. A tour of the plant and its manufacturing facilities proved to be of tremendous interest. Pictures from a booklet prepared for the occasion are shown on this page. The Capacitor Plant was an important part of the Barre industrial picture.

Plant Manager, Bancroft Dwinell (center) and Superintendents Gerald Pryor (left) and Frederick Ralph were in charge of operations at the Rock of Ages Capacitor plant in 1953.

Then, as now, rolling was the first step in the production of the paper dielectric capacitors.

The Impregnation Department provided the second step in the manufacturing process.

In 1953, hand soldering was one of the largest areas in the manufacturing process.

Machine Shop personnel were a happy group.

Getting out the payroll was an important and time consuming job.
A fire in your home can take the merry out of Christmas. Here are safety tips for Christmas trees:

- Place base of the tree into a pail of water or wet sand.
- Use decorations that are fireproof or flame-resistant.
- Do not hang metallic icicles over wires or light bulbs.
- Before stringing lights, check for worn insulation or loose sockets.
- Too many lights plugged into one electrical outlet can cause overloading and a short circuit.
- Electric trains can throw sparks, so keep them away from the tree.
- And never put lighted candles on the tree.
- Gift wrappings should be thrown away promptly.
- Keep a fire extinguisher handy at all times.
- As soon as the tree shows signs of drying out, remove it from the home.

Celebrate Christmas in safety.
Christmas cards arriving daily...
Special secret projects—whispering and scurrying

For the youngsters, the jubilation of Christmas morning...
Little legs bounding down the stairs in eager anticipation

Sitting down to Christmas dinner with the family gathered round
All the good smells coming from the kitchen

Friends greeting friends with wishes of good cheer...
Happy faces and delighted children

Picking out just the right tree...
Bringing out the decorations from their year long storage places.
Snow crunching under foot as shoppers scurry for last minute gifts...

The rustle of packages being hidden from sight

Christmas carols being played all over town...

The happy voices of children singing the age old tunes

The crackle of a fireplace on a cold winter's night...

The fragrance of bayberry, pine and balsam

The stillness of new fallen snow...

The feeling of peace and good will that only Christmas brings

The tinkle of the Salvation Army's bell...

The jingle of coins as busy shoppers remember the less fortunate
High school students planning a college career are becoming increasingly aware of the many advantages offered in a cooperative program. Several colleges, notably Northeastern in Boston and Rochester Institute of Technology in Rochester, New York, provide the five-year programs which allow the student actual on-the-job experience after the first or second year of college.

Sprague Electric in North Adams has participated in the program with Northeastern since 1953 when the first student started his work experience in the Industrial Engineering Department. Since that time a total of 23 students have completed the program in the Industrial Relations Department at North Adams and after graduation seven remained on a full-time basis. In addition to the students in North Adams, Concord, Nashua, Sanford and Worcester have had, or are considering the Co-op Program.

**STUDENT ADVANTAGES**

What are the advantages of a co-op program to the student? First, and foremost, is the opportunity to learn about industry first-hand. It is highly probable that he will find it considerably different than he had anticipated. Will he enjoy working in a team effort? Will he find his responsibilities challenging? These are questions which no one can truthfully answer unless he has had an opportunity to work in industry. If he decides on a career in industry, will he prefer a large company or will he feel that he can be of more value in a small operation?

The Co-op student will also find that his work experience aids his school work. He will have the added benefit of seeing practical examples of his textbook studies, and upon completion of his college career will be better prepared to make a job decision. In all probability, he will receive at least one job offer from the company where he was employed. If he does not wish to accept that offer, he will certainly be in a better position to make a judgment on just what he does want to do.

The opportunity to "earn while you learn" can be an important factor with students and their parents, but the value of a cooperative program far outweighs even this consideration. The most important advantage is the added learning provided by textbook training and coordinated on-the-job training.

**COMPANY ADVANTAGES**

Why is a company like Sprague Electric interested in a cooperative program? It's very simple - the Company is always looking for permanent, well-qualified employees. What better way is there to obtain some of these employes than through a program in which they are employed at Sprague Electric during work experience. Not only is the student a valuable employe following graduation, but also during his college years. Each time he returns to work his salary is increased commensurate with his increased responsibilities. It is a satisfactory arrangement for both the student and the Company.

**TYPICAL PROGRAM**

A typical program is the one established for the Corporate Industrial Engineering Department. This program is especially suited to Industrial Engineering and Mechanical Engineering students and is varied to fit the requirements of students in other curriculums.

Richard Paoletti was awarded a Sprague Cooperative Engineering Scholarship in June 1968. He changed his major to mathematics and is now on his work assignment in the Mathematical Services Department where he is becoming familiar with computer programming.
Guidance Directors from high schools in the North Adams area were invited to tour Sprague Electric and see the various opportunities available for college cooperative students. Thomas Niediwiecz, (2nd left) a June 1969 graduate of Northeastern, accompanied one group and explained the program. Tom could speak from his own experience as he was a co-op student during his college studies.

Area high school students considering a Cooperative College program have also been invited to tour Sprague Electric. In the photo above, Tom Niediwiecz explains a new layout developed by the Planning Department. The boys also heard a brief talk by John H. Winant, Vice President of Facilities and Industrial Relations, and following the tour, participated in a question and answer period conducted by Donald Meiklejohn, Co-op Coordinator at Sprague Electric.

FIRST SESSION:
A. Familiarization with various product lines and all service departments.
B. Costing –
   1. Instruction and discussion of Sprague costing procedure and incentive system.
   2. One week assignment in Corporate Cost Department.
C. Motion Economy Course –
   1. Two 2-hour classes in motion economy and work place arrangement.
   2. Work with an active team on an immediate production problem in the application of the principles of motion economy.
D. Assigned to work with an Industrial Engineer.

SECOND SESSION:
Mechanical Engineering Students
A. Assigned to the Automatic Design Department for 13 weeks.
Industrial Engineering Students
A. Budget and Expense Control
   1. One week in Factory Accounting Department.
B. Work Measurement
   1. Two weeks in Work Factor Department.
C. Assigned to work with an Industrial Engineer.

THIRD SESSION:
A. Facilities Study.
B. Planning Layout
   1. Instruction in layout work.
C. Assigned to work with Planning Personnel in the Corporate Industrial Engineering Department.

FOURTH SESSION:
A. Value Engineering
   1. Attempt to schedule student in seminar.
   2. Work with a Value Engineering team actively working to reduce the cost of a product or a process.
B. Assigned to work with an Industrial Engineer.

FIFTH SESSION:
A. Inventory Control
   1. Two hour seminar on inventory reduction and control.
   2. Introduction to the Sprague Work-in-Process Ratio system of control.

SIXTH & SEVENTH SESSIONS:
A. A student is assigned an area of responsibility and is given considerable freedom of action in carrying out industrial engineering type work in this area. The work may consist of all the above mentioned phases or may be a concentration of any one of the responsibilities spelled out in the various sessions. The student, at this time, is approaching the duties and responsibilities of a Junior Engineer in the Corporate Industrial Engineering Department.

College bound students will do well to consider the advantages of a cooperative program.
During the Christmas season, frequent trips to the post office to mail gifts to family and friends can be a time consuming chore, but at Sprague Electric shipping is a highly specialized function every working day of the year.

Early this year, Philip B. Talarico, longtime head of Shipping activities, was promoted to Corporate Traffic Manager where his prime responsibility consists of providing assistance and guidance to Shipping personnel at all Sprague locations.

The terms “traffic” and “shipping” are apt to be misunderstood by the average layman. In very simple terms, shipping involves the actual physical handling of goods; while traffic pertains to the rules and regulations governing the transportation of those goods. Each Sprague plant has a shipping department, but traffic is handled on a corporate basis from North Adams.

Shipping at Sprague Electric generally involves large quantities of small units, and these shipments are primarily handled by trucking firms. Large tractor trailer trucks are familiar sights at the loading platforms each day as the various units produced are sped on their way to manufacturers of the many products containing Sprague capacitors, resistors, transistors, semiconductors, etc.

A small percentage of shipments are sent by air—something on the order of 8% on an overall basis. These are usually “rush” orders for one reason or another. Even then, trucks are employed to speed the shipment to the airport since no Sprague plants are located in cities having large air terminals.

United Parcel Service is also used extensively in areas where it is available. It operates as a common carrier under the Interstate Commerce Commission’s authority and, hopefully, will soon be commissioned in all 50 states. This private company takes on the mighty U. S. government and beats it at its own game.

Literally tons of paper work are required for the shipments with government orders, as might be expected, requiring additional forms. In North Adams alone, six girls are employed full time on Shipping and Traffic under the supervision of Mr. Talarico and Traffic Manager Alfred Bourdon and Shipping Foreman Stanley Pasierbiak. The large numbers of personnel are required because of the size of the North Adams operation and because of the Corporate responsibilities. At present all claims for damaged shipments are expedited through Corporate headquarters, but it is anticipated that some of this will be handled by the individual plants in the future.

In addition to shipments of finished products, many goods for various uses are shipped by Sprague-owned trucks between Company locations. Sprague trucks operate on a regular schedule between North Adams and the other New England plants, providing fast service between these locations.
An involved and time consuming effort of the North Adams Traffic Department is Export Shipping handled in conjunction with Corporate Overseas Operations. All necessary paperwork and documentation of shipments of raw materials and equipment to our overseas subsidiaries is handled in North Adams regardless of the point of origin or destination.

Foreign custom regulations vary from one country to another, but all are detailed and involved, requiring elaborate documentation and sometimes even photographs, of the materials being shipped.

To assist employees in Shipping Departments at all locations, a detailed Shipping Manual has been prepared. It prescribes the proper procedures and forms to be used for all possible shipments. A Traffic Manual is presently being prepared by Mr. Talarico. It is, Mr. Talarico states, “designed for Sprague Electric, whose approach to the management of transportation is not necessarily similar to other industrial firms.”

Shipping is an important support function to our manufacturing process. We salute this dedicated group for their contribution to our successful operation.
Local plant publications will be produced by several branch plants in the coming year. First on the scene is the Sanford, Maine paper, LOG II, shown above. Robert Arena, Sanford Industrial Relations Manager, plans to have six issues per year.

Concord employees recently held a contest to select the name of their paper. A $50 Savings Bond was awarded to Helen McLaughlin of QAR, for her idea of “The Yankee Quipper”. A total of 132 entries were received. The first issue will appear early in the year. All branch locations will be responsible for their own paper and may have a Bulletin, a printed newspaper, or both as they wish. The plant reporter system is also being revitalized to provide news of interest from various departments.

In North Adams, a local newspaper will be published six times per year beginning with a January-February issue. In addition, a quarterly magazine will be produced by Corporate Publications for all employees and an extensive outside mailing list. The next magazine issue will be the Annual Report to Employees which will be published in March.
Resolutions

IN THIS NEW YEAR
I AM GOING TO DARE TO BE MYSELF

I am going to surround myself with some like-minded friends, with whom I can be honest and natural. I am going to keep up with the Joneses, but the Joneses are going to be of my own picking.

I am going to live within my income. If I can't do that where I am living, I am going to move. If I can't do that with the way I am living, I am going to change my ways.

I am not going to let others dictate to me how much I am going to drink or smoke or spend.

I am going to be a part of my church, of my community, of my city, of my state, of my country, of my world.

I am going to be a better husband, or wife, or son, or daughter.

I am going to cut out hurry and worry. I am going to hate nobody and fear nothing—neither death nor life.

I am going to work more steadily, more thoughtfully, more scientifically, accomplishing more with less effort.

I am going to look for the good in others, not the bad.

I am going to read something worthwhile every day.

I am not going to be discouraged about the world, remembering that there have been other desperate times and that men and God together have worked out of them.

I am going "to look up, not down; out, not in; and lend a hand."

—DR. HENRY M. EDMONDS
Late Presbyterian minister, counselor, teacher, writer, and friend of people of all denominations and creeds in Birmingham and Alabama.

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