a look at

SPRAGUE ELECTRIC COMPANY

2nd Family Day • September 15, 1951
Welcome to the
Second Sprague Electric Family Day

In 1949, it gave me a great deal of pleasure to welcome you to the first Family Day. Because our employees and their families displayed such genuine interest, it was decided to have Family Day again this year.

As you tour the plants, you will see evidence of the changes which have been made and which are taking place in conjunction with our expansion program.

Today, as the guest of the employees of the Sprague Electric Company, you are afforded the opportunity of seeing how we operate and what we produce — all accomplishments of the entire Sprague team.

It is my sincere desire to greet each guest, but as this is not possible I am taking this means to extend a cordial welcome to you all.

R. C. Sprague
President
Safety Regulations

SMOKING REGULATIONS: It is requested that you refrain from smoking while in the various departments. Smoking is permissible only in the Cafeterias.

NO CAMERAS: It is an established rule of the Company that no cameras are permitted inside the Plants.

GUIDES: Guides are stationed throughout the various plant areas for your convenience. Please feel free to request their services.

SAFETY PRECAUTIONS: It is requested that you refrain from touching any machinery or equipment in the Plants. Please visit only the designated areas. This precaution is for your own convenience as well as your safety.

FIRST AID: The Dispensary at each Plant is staffed during Family Day and will accommodate visitors.

REST ROOMS: Rest Room facilities are plainly marked for your convenience.

Transportation

Between the BROWN and BEAVER Street plants there will be 2 buses shuttling from 9 a.m. - 12 noon for the convenience of employes and their families.

At the MARSHALL Street plant the Sprague Electric Clipper will operate from the rear yard outside the Ceramics and Formation Departments to return visitors to the front gate. This service will be available from 2 p.m. - 5 p.m. only.
Production

Top right: Heat test inspecting and recording of Industrial Oil units at Brown Street plant

Lower left: Final inspection of Metal Clad Tubulars under magnifying glass at Beaver Street plant

Lower right: The final assembly and finish operation for AC motor-starting electrolytics at Marshall Street plant

Maintenance

Maintenance men installing modern equipment and painting new kitchen in preparation for opening of new cafeteria at Marshall Street plant

This intricate mechanism controls the functioning of the dial system now in operation at the Marshall and Brown Street plants
Offices

A section of the larger, modern offices in the new Personnel-Employee Relations building at Marshall Street plant

Research and Engineering

Top: Taking a lab check test of ceramic capacitors

Left: Removing test-fired sample ceramic bodies from kiln
Like many other women, Mrs. Monette, who is employed in the Metal Clad Tubular Assembly Department, works to give our fighting men, among whom she has two sons, the needed equipment at the right time in order to do the most good.

Previous to entering military service, Armand was employed in the Dry Tubular Department and Raymond worked in the Dry Tubular Finish Department.

Other Sprague Electric Employes in Service are

Andognini, Peter J.
Babeau, Raymond F.
Baker, Leon A.
Beazie, Marion
Beckwith, George J.
Belding, Holice F.
Belouin, Raymond M.
Bissaillon, John B.
Blondin, Albert S.
Boni, Rudolph A.
Bonnewille, Raymond A.
Bourdon, Francis L.
Brooks, John G.
Brule, Arthur W.
Bush, Harold, Jr.
Clark, Edwin R.
Clark, Harry G.
Cole, Jack H.
Cooper, William T.
Crowley, Paul J.
Danforth, Joseph
Dempsey, Robert E.
Daub, George F.
DuBois, Rene J.
Dupre, Edward J.
Dupuis, Edmund W.
Fairbanks, Norman R.
Fowler, William C.
Frost, William H.
Gagne, Roland R.
Gassett, Frank S., Jr.
Girard, Charles A.
Girard, Wilfred A.
Goff, Robert D.
Goss, Ronald S.
Gregalis, Thomas J.
Groves, Robert H.
Hamel, Gerald T.
Harper, Harry H.
Harwood, Victor K.
Haskins, Kenneth
Heyes, Arthur
Jones, Maurice E.
Keyworth, Philip W.
Kimball, Silas P.
Knox, Robert
LaBomardi, Lawrence W.
Lamore, Leo J.
LaFrance, Joseph A.
Lampman, Walter E.
Lauzon, Joseph P., Jr.
Leonesio, John W.
Lewitt, Leonard
LeSage, William
Lyons, Edward
Lyons, Gordon H.
Lord, Bernard
MacFarland, Hugh D
Mahar, Donald S.
Mangono, Salvatore
Marchegiani, Frederic
Marcoux, Roger F.
Maroni, Hugo
Miller, Ralph L.
Montesanti, Francesco A.
Morandi, William J.
Morin, Normand G.
Murcrich, John A.
O'Brien, Donald
O'Dell, Ernest H.
O'Grady, William B.
O'Keefe, Donald E.
Palmer, Herbert H.
Pedercini, Alfred J.
Pedercini, William A.
Perreault, Richard W.
Perreault, William A.
Pitoniak, Robert R.
Plantier, Valmore F.
Racette, Donald J.
Reilly, John H.
Reopell, Albert F.
Richard, Omer A.
Richards, William A.
Rondeau, Harry L.
Ross, Nephtali L.
Roy, Carlton F.
Sere, Roger R.
Simon, George J.
Sinderman, Robert P.
Smith, James H., Jr.
Solari, Peter B.
St. Cyr, Ernest P.
Strange, Jay L.
Tatro, Ronald
Thomas, Normand L.
Tyler, Manley A.
Unsworth, Samuel J.
Veazie, Edward E.
White, Sally A.
Whiteway, John B.
Williams, Foster C.
Williams, Franklin A.
Williams, Robert
Windered, Robert
Zappone, Vincent J.

Each Sprague Electric employe is instrumental in making up the world picture of today. If only we could realize how much our individual jobs count. It is quite possible that the excellent workmanship on our products could be partly responsible for successful combat operations in Korea or could allow a downed pilot to send out an SOS on his emergency radio set. A careless piece of workmanship could easily mean his life or death.

Among the many vital military applications of our products, Ceramic coated copper wire is of great importance. This specially treated copper wire also finds use as magnet wire in coils, transformers, chokes, motors and other electrical equipment. The Miniature Metal Clad capacitor is employed in different electronic devices, including proximity fuzes and guided missiles. Pulse networks find use in radar equipment. Miniature molded tubular capacitors and miscellaneous paper, mica and ceramic capacitors are used widely by the military.
WHAT IS A CAPACITOR?

A Capacitor or electric condenser is a device for storing electrical energy — and returning it as required. It has storage space, i.e. capacity, for electricity. Hence, “Capacitor”.

WHAT DOES IT CONSIST OF?

A Capacitor consists of 2 plates or systems of plates of electricity conducting materials such as thin aluminum and an insulating medium such as air, mica sheets, ceramic wafers, waxed or oiled layers of paper, or electrolytically formed chemical film. Such a unit can “hold an electric charge” waiting to be released.

WHAT DOES IT DO?

Wherever electricity is used, you may find Capacitors. On electric power lines, they improve “Power Factor” by cutting down “Waste” circulating currents. In fluorescent lamp starters and automobile distributors, they eliminate excessive contact sparking. In electronic circuits capacitors filter or bypass unwanted signals; “Block” or isolate direct current (current flowing in one direction only) while passing alternating current (current that periodically reverses its direction); tune circuits to radio and television station signals; eliminate radio noise; store energy for precision timing circuits and stroboflash photographic lamps, etc.

HOW MANY ARE USED?

Sprague Electric has made over one billion Capacitors since the company began. For some idea of where they go, remember that a radio will use about 15 and a television set about 115 Capacitors.
A Resistor is a device used for regulating the voltage in an electrical circuit. It has resistance to the flow of electricity. Hence, “Resistor”.

**WHAT DOES IT CONSIST OF?**

The most common type of Resistor consists of a high resistance medium such as powdered carbon mixed with a binder and formed in the shape of a solid cylinder. This type of Resistor cannot be made to accurate resistance values, so a unit made of high resistance, alloy wire, such as nickel chrome, is used. The wire is wound on a tubular form so as to form a unit with a lot of resistance in a small package. Where great amounts of current will pass through the element, wire-wound resistors are used since carbon resistors will not withstand the heat produced.

**WHAT DOES IT DO?**

Electrical Resistors and resistance elements are used for two reasons: (1) to control current flow and (2) to produce heat. The heating coils in electric stoves, heaters, etc., are nothing more than high resistance metal alloys which produce heat as a result of restricting the flow of current. Resistors are used to control the current flow in nearly every type of electronic apparatus such as radios, television sets, amplifiers, transmitters, etc.

**HOW MANY ARE USED?**

Resistors and resistance elements are used by the millions. There are more resistors than capacitors in most radios, television sets, and other electronic devices. Only a few of these are of the wire-wound type.
Twenty-five years ago, Mr. Robert C. Sprague started the Sprague Specialties Company in Quincy, Massachusetts. Mr. Sprague, at that time an officer in the peacetime United States Navy, discovered while building occasional crystal and one-tube sets, that the tone of a radio could be changed by placing condensers of varying capacity across the loudspeaker. He perfected a device made up of a special condenser which could be adjusted for any one of seven capacity values, and which could be plugged in between the radio set and the loudspeaker, which were then separate units. Feeling that he had discovered something worthwhile, the young inventor organized the Sprague Specialties Company, and proceeded to devote all of his spare time to the young business.

It is interesting to note that although the Sprague Electric Company (the name of the company was changed in March, 1944) is regarded today as one of the world’s leading manufacturers of radio condensers, or capacitors as they are now known, the original product manufactured was a tone control, not a condenser or capacitor. The design of a capacitor was only incidental to the manufacture of the tone control. The Company turned to the production of capacitors and began to sell them in December, 1926.

The development work on the original Tone Control was done in the Sprague home at Quincy, Massachusetts. Miss Avery did her typing on the Sprague dining room table, and Mrs. Robert C. Sprague helped by handling telephone calls and mailing orders. Mr. Julian Sprague joined the young company and ably assisted in the design and manufacture of the original “midget” capacitors. Soon the concern moved, first to 1380 Hancock Street, Quincy, then to larger quarters in the Aywon Storage Battery Company on Washington Street. Another move was made in order to gain more space and the offices were moved to 1511 Hancock Street, Quincy. Three years after its start, the Company employed about 500 people.

In 1929, they began to develop capacitors of a fundamentally new design which were smaller, better, and cheaper. The result was Sprague’s first wet electrolytic capacitor.

With the Company growing by leaps and bounds and developing new products, it was obvious that the Quincy location was no longer adequate. North Adams was chosen after considering its location, factory facilities, labor supply, electric power, and transportation facilities, and, particularly, because of financial assistance given to the young company by the citizens of North Adams, its four local banks, and the North Adams Industrial Company. A sentimental factor also entered into it, as Mr. Sprague’s
father, Mr. Frank J. Sprague, noted inventor in the electrical field, had lived and gone to school in North Adams when he was a boy. In May of 1930, the Company had completed the move to the present Beaver Street plant and production was started in North Adams.

In 1933, Harry Kalker set up the Sprague Products Company to distribute Sprague capacitors to jobbers and to the retail trade.

The Company continued to grow and soon additional space was needed for its operations. In February 1937, the Brown Street plant in North Adams was purchased. There, products were manufactured for military use, including, with the help of the Wall-Streeter Shoe Company, civilian-type and military-type gas masks.

However, still more space was needed and in December, 1944, the Company purchased the Marshall Street plant after leasing some space there for the previous year.

At the present time, the Sprague Electric Company employs about 3500 people in its three North Adams plants, and 4500 people in all its plants. The Company also has an operation in Barre, Vermont, which is being operated for it by the Rock of Ages Corporation of that city; and a branch plant in Nashua, New Hampshire, which was started in April, 1948. The Herlec Corporation is a subsidiary located in Milwaukee, Wisconsin. It was purchased in March, 1948. In addition, the Company operates a small plant in Saugerties, New York and another plant in Bennington, Vermont. The operation in Saugerties is a joint venture of the Sprague Electric Company and Philips Industries, Inc. A new branch plant, to be leased by Sprague Electric, is being built in Kingston with occupancy proposed for the latter part of this year.

On June 1, of this year we observed our Twenty-fifth Anniversary at ceremonies in the cafeterias. Special birthday cakes were presented to Mr. Robert C. Sprague by the union presidents. At the Annual Service Pin Dinner in November of this year, there will be six people receiving twenty-five year pins. There was also a special edition of the Sprague Electric LOG, the publication for the three North Adams plants, in commemoration of the Twenty-fifth Anniversary.

The Sprague Electric Company has become a large and intricate organization. The duties which were once carried out by a handful of people in one room, now are the problems of hundreds of people, three plants in North Adams plus several branch plants and subsidiaries. Sprague Electric has been a constantly growing organization which has adapted itself to many changes. It has always strived to maintain an alert and forward-looking policy. As we look back over the history of the company, we feel sure that the last twenty-five years of growth and progress are indicative of the future.
World-wide Broadcast

On April 16, Sprague Electric employees were given an opportunity to tell the peoples of the world how they feel about democracy and their life in America. A crew of three men from Station WRUL in Boston interviewed nineteen employees in the Beaver, Brown, and Marshall Street plants. These interviews were transcribed on a tape recorder, later edited and then beamed to Europe and South America on May 11 and 12, as a part of the “Voice of Freedom” series, entitled “Freedom Speaks”.

The program “Freedom Speaks” is sponsored by the World Wide Broadcasting Foundation, a non-profit organization supported by interested individuals and groups. This Foundation does not receive government support and is the only short-wave outfit of its type in the country. Its purpose is to retain friends in foreign countries, make new friends, and boost the morale of oppressed people. The World Wide Broadcasting Foundation does not propagate democracy, but merely shows how the American way of life actually works. The programs reveal that we are enjoying our freedom and hope less privileged people may also enjoy freedom.

The three Aragose sisters speak in Italian to their relatives in Italy

Erast Viksins beams a message to Latvia in his native language

John Robinson describes life in South America

Belgian-born Frans Fonteyn expresses his opinion of America

Irene Chouinard assists in French translation for Augustin Fourtou

The WRUL crew relaxes for a moment during their day of interviewing at Sprague Electric. Art Mathews, Sprague Electric Safety Director, and Courtney Flanders of the Employee Relations Department, aided in the interviews.
Social Activities

A group of guests enjoying themselves at the annual Management Club Dinner Dance

Miss Antoinette Sacco receives her twenty-year pin at the ten, fifteen, twenty-year Service Pin Dinner

Master of Ceremonies pins corsage on Editor at annual LOG Banquet

Time out for a snack at the annual ICW No. 2 Clambake

Right
Sports play an important part at the annual Management Club Clambake
Athletic Activities

Top, left: The Sprague Lassies won the Good Sportsmanship Trophy at New England AAU Girls Basketball Tournament last season.

Top, right: Inter-department bowling matches are enjoyed by the women. They have several teams within the company. Awards for outstanding scores are presented at their annual Bowling Banquet.

Lower, left: Softball is a favorite sport among the men. Many department teams compete during the season.

Center, right: The Sprague Royals compete with other men’s teams within the area.

Lower right: The men also have department bowling teams and at the end of each season there is a banquet at which prizes are awarded.
We hope that you have enjoyed your visit to the plants of the Sprague Electric Company today and that your tour has been interesting as well as informative.

Through Family Day, we attempt to bring to the families of our employes a clearer picture of the importance of the industry in which we are engaged.
Anniversary
1926-1951

SPRAGUE ELECTRIC COMPANY