Season's Greetings

We send to one and all best wishes for the Holiday Season. We all have at least one real cause for happiness this year. Regardless of how many or how few candles are lighted on our Christmas tree we do not have to draw our shades when night falls. . . . . . . We know that to the outside world they will be taken only as a symbol of festivity and not as a target. Our concern about our children’s whereabouts will be because we do not want them to surprise “Santa” trimming the tree—not because they have been sent among strangers to escape a possible air raid.

Among the many greetings that you will receive some may be more original, but none will be more sincere than our “MERRY CHRISTMAS AND HAPPY NEW YEAR.”
THE ADVENTURES OF
MIKE ROE FARAD—REPAIR MAN

Mike Farad sat in his chair, his feet on the desk and his hat cocked over one eye. He was reading the latest issue of the Service Man's News, and out of the corner of his eye he was watching his new assistant taking a radio chassis out of its cabinet. The complaint of the owner of that set was that sometimes it would play an hour and then for no apparent reason would stop.

Before Mike had finished the page the phone rang. He jotted down the name and address of the customer, and picking up his test kit and tools, started for the door, telling the new man where he was going and saying, "The lady says her set sounds 'mushy'!" "A quarter says it's a tube," called the rookie. "I'll take it," said Mike. "I say it's a condenser." Mike closed the door, thinking, "I should have gotten odds on that one: tubes are safe at 2 to 1!'"

Mike beamed, for the youngster really knew. "That's right, Johnny, those three things determine what we call the capacity of the condenser."

Mrs. Jones was pleased at Johnny's knowledge but she was still puzzled. "Well for pity's sake, but what holds the electricity?"

"No one really knows what holds the electricity, not even the college professors, Mrs. Jones, but we know that the kind of material that fills the space between the plates helps to determine the amount of electricity the condenser will hold. All kinds of materials are used to fill the space, such as air, paper, oil, chemicals, and mica. These are called di-electrics."

Just then Johnny Jones, who had come in from school, chimed in, "Oh, we learned about that in physics, in school, Ma. How much electricity any condenser can store is fixed by three things: the area of the plates, the space between the plates, and by the kind of material that fills the space between the plates."

Mike beamed, for the youngsters really knew. "That's right, Johnny, those three things determine what we call the capacity of the condenser."

Mrs. Jones was pleased at Johnny's knowledge but she was still puzzled. "What has the kind of material got to do with it?" she asked.

"Boy, she is really getting technical!" thought Mike. "Well, if the space between the plates is filled with air the condenser will have a certain capacity, but if it is filled with certain other materials the condenser will have a higher capacity than it did with air. Some materials increase the capacity 30 or 40 times. Why one material differs from another, or what makes it produce a certain capacity, is one of the things we really do not know for sure yet. We do know, though, just what capacity we can get with a certain material, as the capacity effect of any material can be measured."

"Yeah, I know," said Johnny, "how much the capacity of a condenser is increased by filling the space with a material other than air is called the dielectric constant of that material."

"Go to the head of the class, Johnny," exclaimed Mike. Johnny was a swell stooge.

"But you know, Johnny," said Mike, "in radio, condensers are used not only to store electricity, but for other things, too. They are used mostly to allow a certain kind of electric current to pass, and to hold back another kind."

(Continued on next page)
Mike Farad

Mrs. Jones was all at sea again. “Are there two kinds of electricity?” she asked.

“Well, there are not really two kinds of electricity, but there are two kinds of electric current. One flows in a single direction all the time and is called Direct Current (D.C.), and the other kind reverses its direction at regular intervals and is called Alternating Current (A.C.).” Mike was beginning to wonder why he had ever started this.

“What has that got to do with condensers?” asked the perplexed Mrs. Jones.

“Condensers will allow A.C. to flow thru them, but with D.C. the condenser only charges up and no current flows thru,” piped up Johnny.

“That isn’t exactly true, Johnny, for a tiny bit of current can flow thru the condensers with D.C. because the material filling the space between the plates is not perfect and some current does leak thru. That is called leakage current. The better a condenser is, the lower will be the leakage current.”

“What has all that got to do with the condenser in our radio?” asked Mrs. Jones, with one eye on the clock and one ear cocked to hear if the stew on the kitchen stove was boiling over.

“Mrs. Jones, the condenser which has gone bad in your radio was used to allow only currents caused by sounds, such as music and voice (which are A.C.) to flow from one tube to the next. This condenser is supposed to prevent the D.C., which makes the tubes work, from flowing between the tubes. It has become leaky and allows too much D.C. leakage current to flow from one tube to the next and this interferes with the operation of the tubes and makes your set sound funny and distorted.”

“What makes it leaky?” asked Johnny.

“Well, several things can, Johnny,” replied Mike, “but most important is moisture which gets into the condenser from the air. Condensers have to be very carefully dried and impregnated with a moisture-proofing material, and have to be carefully sealed, since moisture inside the condenser will allow too much current to flow, because the electricity can pass thru moisture very easily. It might not flow thru the condenser deep inside the case, but that doesn’t make any difference, because if the moisture can get inside the case the current can flow right around the condenser and be just as harmful.”

“If condensers are so carefully sealed, how did ours get leaky?” Johnny thought he had Mike now.

“Maybe the manufacturer of the condenser wasn’t too careful about sealing it, or maybe the radio manufacturer crowded his set so much the parts operated too hot, and the sealing melted or cracked,” said Mike. “I’ll have to take the bad condenser out and inspect it and see what’s wrong.”

Mike sweated and stewed for a few minutes to get the radio chassis out, and when he turned it upside down it looked as though a bushel of parts had been dumped into it and been tamped down with a spade. With some difficulty he cut the defective paper tubular condenser loose from the crowded mess. He very quickly spotted a pin hole in the wax end seal near the terminal pigtail. Mike turned triumphantly to Mrs. Jones. “See there, that little pinhole probably leads right down inside the condenser and makes a perfect entrance for moisture.” He took his jack knife and cut the wrapper of the condenser away, and not at all to his surprise the pinhole was only the opening of a small bubble, and underneath the surface there was hardly any sealing compound around the condenser section.

“Humph,” said Mrs. Jones, “that one certainly wasn’t well sealed. You had better take the set with you and fix it up.” As she walked into the kitchen she thought, “that fellow, Mike Farad, certainly knows his business. I guess I’m getting my four dollars’ worth.”

Mike drove back to the shop, and as he walked in he noted the puzzled look on Tom’s (the new assistant) face. He put Mrs. Jones’s set on the work bench just as Tom spoke up. “This set played O.K. for an hour, and then when it got good and warm—bingo!—the volume dropped way down and the set sounded like a frog in a rain barrel. I poked around for quite a while, and found that if I wiggle this condenser on the volume control the set plays O.K. for a while and then goes sour again.”

“That’s easy,” said Mike, “Intermittent Open.”

“What do you mean, ‘intermittent open’?” said the puzzled Tom.

“Well the lead wires of the condensers must be very carefully attached to the condenser sections so as to make a good solid connection. Some manufacturers solder the pigtails to a tubular condenser, like that one, right to the foil, and some just depend on pressure contacts, which are mostly no good. If the condenser is vibrated by the loudspeaker, or if it is expanded by the heat inside the set, a poor contact may result—sometimes the set plays and sometimes not. That one you have there didn’t open until the set got real hot.”

Tom thought, “I’ll see for myself.” So he cut the paper condenser apart and there, sure enough, was the copper pigtail just pressing against the condenser section. Someone had attempted to solder it but the joint was just pressure contact.

“By the way, young fellow,” said Mike, “I’ll collect that quarter. The trouble with Mrs. Jones’s set was a bum condenser—looked like one of those dollar-a-bushel kind.”
Above: PRETUNER DEPT. MASQUERADE PARTY

Broad smiles, — and how! In the top row, from left to right: Phyllis Fleury, Zita DelPon, Jackie Powers, Vivian Scrivens, Lucy Davis, Rosalie Potvin. Those in the second row are: Dot Dupuis, Beatrice Bissadore, Teresa Landry, Frances Bissadore, Agnes McDonough and Bertha Salavantis. In the third row, we see: Frances Romeo, Laura Doran, Stella Beauchamp, Theresa Desnoyers, and Thelma Barbato.
The front row gives us Emily Maznick, Nini Sacco, Marion Strange, Ronny Fortini, and Isabelle Roy.

Below: PAPER ASSEMBLY DEPT. MASQUERADE PARTY

This group choose White Oaks in Williamstown. With masks on, you guess who!

Above: PAPER ROLLING DEPT. MASQUERADE PARTY

More smiles and attractive costumes are presented here. Reading from left to right, the top row shows Theresa Montagna, Tina Turgeon, Margaret Lamberti, Bessie Turgeon. In the middle row are: Lena Solari, Virginia Piaggi, Nancy Trinarchi, Mary Cerminara, Enis Montagna, Josephine Lamberti. Sitting on the floor, in the front row, we see Eva Daldoss, Viola Dupuis and Loretta Champagne.

Above: Here’s the Committee Masquerade Party at White Oak right, the members were: George Fitzgerald.
Campa Catches a Few Party Highlights

In charge of the Paper Assembly classes in Williamstown. From left to right: Frenier, Helen Searle, and Jimmy

Above: THE GRAND MARCH — ARMORY DANCE

Above: THE COSTUME WINNERS AT ARMORY DANCE
From left to right they are: Winnie Edwards, Priscilla Little, Lawrence Laliberte, Theresa Landry. Congratulations to this foursome!

Below: COMMITTEE IN CHARGE OF ARMORY DANCE
In the group scene below we see, from left to right: Carmen Vogel, Walter Carpenter, Tina Turgeon, Schuyler Dean, Margaret Lambert, William Landry, Lillian Stickles, Henry Gammari, Alice Senecal. Barbara Beebe is not in this picture, but she was one of the committee.
THE DRY FORMATION BOWLING TEAM. From left to right, you see Walter Lavarier, Ugo Milesi, Tom Dufraine, Frank Puppido, Wilfred Lebert, Silvio Gamari, Anthony Szetela, and Lou Siciliano.

STROLLING DOWN THE ALLEYS

Here is your bowling reporter with more news. The foremen are leading the league as of November 16th.

The Sprague team in Triple AA league (an individual league) is in first place, and the Sprague team in industrial league is in a three way tie for first place.

Bowling Prattle — The foremen also take first place for being the noisiest team in the league.

We wonder how Tina Turgeon drops the ball so easily and yet gets her pin falls.

We are glad to see the smiling face of "St. Louis Blues" Fawcett on Machine Shop team.

Alibis seem to go with bowling more than with any other sport. Listen to some of them any Wednesday and Friday floating around the shop.

The teams present a colorful appearance in the alleys this year with their new shirts with teams' and players' names printed on them.

Did you know that smiling Donald Meiklejohn bowled 130 for high individual single last week?

Watch out, fellows, for your Laurels, as this year's girls' teams are getting better every week.

"Larrupin' Lou" Quimby has high individual triple of 333.

Carmen Voghel is one of the reasons why the Paper Assembly is tied for top honors. She could cinch a place on the foremen's team for heckling opposing teams.

STANDING OF MEN'S BOWLING TEAMS AT END OF 8th LEAGUE GAME

<table>
<thead>
<tr>
<th>Team</th>
<th>Won</th>
<th>Lost</th>
<th>Team</th>
<th>Won</th>
<th>Lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foremen</td>
<td>18</td>
<td>6</td>
<td>Sprague Products</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Local 249</td>
<td>18</td>
<td>6</td>
<td>Owens</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Trimmers</td>
<td>15</td>
<td>9</td>
<td>Dry Formation</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Dry Assembly</td>
<td>15</td>
<td>9</td>
<td>Machine Shop</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Office</td>
<td>15</td>
<td>9</td>
<td>Paper Assembly</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Riveters</td>
<td>14</td>
<td>10</td>
<td>Maintenance</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>Silver Mica</td>
<td>14</td>
<td>10</td>
<td>Paper Salvage</td>
<td>4</td>
<td>20</td>
</tr>
</tbody>
</table>

GIRLS' BOWLING TEAM SCORES, END OF FIRST ROUND

<table>
<thead>
<tr>
<th>Team</th>
<th>Won</th>
<th>Lost</th>
<th>Team</th>
<th>Won</th>
<th>Lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper Assembly</td>
<td>11</td>
<td>4</td>
<td>Office</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Paper Rolling</td>
<td>11</td>
<td>4</td>
<td>Dry Rolling</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Block Assembly</td>
<td>10</td>
<td>5</td>
<td>Dru Assembly</td>
<td>1</td>
<td>14</td>
</tr>
</tbody>
</table>

OFFICE BOWLING TEAM. From left to right: Clara LeSage, Melba Niebur, Virginia Windover, Rita Bishop, and Helen Root.

GUESS WHO!

The boy at the left worked in Sprague Specialties Co. in 1934. The other three children are now employed here. They are brothers and sisters.

Answers to previous "Log's" Guess Who photos are: Florence Davis, Mr. and Mrs. Cooper, and William Spencer.

STANDING OF MEN'S BOWLING TEAMS AT END OF 8th LEAGUE GAME

<table>
<thead>
<tr>
<th>Team</th>
<th>Won</th>
<th>Lost</th>
<th>Team</th>
<th>Won</th>
<th>Lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foremen</td>
<td>18</td>
<td>6</td>
<td>Sprague Products</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Local 249</td>
<td>18</td>
<td>6</td>
<td>Owens</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Trimmers</td>
<td>15</td>
<td>9</td>
<td>Dry Formation</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Dry Assembly</td>
<td>15</td>
<td>9</td>
<td>Machine Shop</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Office</td>
<td>15</td>
<td>9</td>
<td>Paper Assembly</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>Riveters</td>
<td>14</td>
<td>10</td>
<td>Maintenance</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>Silver Mica</td>
<td>14</td>
<td>10</td>
<td>Paper Salvage</td>
<td>4</td>
<td>20</td>
</tr>
</tbody>
</table>

GIRLS' BOWLING TEAM SCORES, END OF FIRST ROUND

<table>
<thead>
<tr>
<th>Team</th>
<th>Won</th>
<th>Lost</th>
<th>Team</th>
<th>Won</th>
<th>Lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper Assembly</td>
<td>11</td>
<td>4</td>
<td>Office</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Paper Rolling</td>
<td>11</td>
<td>4</td>
<td>Dry Rolling</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Block Assembly</td>
<td>10</td>
<td>5</td>
<td>Dru Assembly</td>
<td>1</td>
<td>14</td>
</tr>
</tbody>
</table>

FIRST REPORTS OF THE 1939 DEER HUNTERS

We have had news of only two kills by any of the many hunters from the plant.

Harry Haskins had his usual good luck but we have not received the full details.

Early the first morning that the law was off Ugo Milesi sighted a big buck. His first shot did little more than make the deer mad and it charged. Quickly shouldering his gun again Ugo pulled the trigger — and it stuck! By this time the deer was nearly up to him. Now Ugo was out to get a deer and he was not going to let the deer get him or was not going to run and lose his deer. So, with only his own strength and power (strength of arms and power of lungs) to depend on, Ugo grabbed the antlers of the charging beast and just hung on and yelled! Very soon help arrived and now Ugo is eating venison.

Several employees who are members of Co. K. spent an extra week of training at one of the empty C.C.C. Camps near Pittsfield.

Those who reported for duty were —

Charles Belouin — Sergeant
Lawrence Laliberte — Sergeant
Armand Gibeau — Private 1st Class
Lou Quimby
Robert Rivard
Vincent Sanders
John J. Shields
Joseph (Doc.) Poissant

RIFLE TEAM

A rifle team has recently been organized in the plant. Anyone who is interested may get full information from Bob Boyer.
NEWS (Continued from Page 6)

On November 26th, twenty girls from the Paper Assembly Department met at the home of Eleanor Rhodes to celebrate the birthdays of Charlotte Grosz, Helen Corsi, and Aurora Oliver. A jitterbug contest was won by Marjorie Hickox and Helen Corsi. Music was furnished by Alice Marceau and Hilda Smith at the piano and Marion Roy at the drum. Refreshments were served by Geraldine Giusti and Hilda Smith.

On December 6th a party was held at the home of Mary Rogge. A spaghetti supper was served. Those attending were Carmen Vogel, Carmen King, Mary Rogge, Phyllis Brooks, Catherine Messina, Lena Simonelli, Jane Dufraine, and Gertrude Gentile. The occasion was Phyllis Brooks’ birthday.

PERSONAL ITEMS

Raymond Fawcell and family spent Thanksgiving week-end in Lowell.

Donald Meiklejohn attended the Princeton-Dartmouth game at Princeton November 11.

Theresa Bushka has accepted a position in Chicago.

Emma Underwood and Florence LeCoyer saw the Notre Dame-Army game November 4.

Mr. and Mrs. Succo and Mr. and Mrs. Mathews attended the Notre Dame-Army game November 4.

Frances Cruger spent a week at her camp in Vermont.

Others who have enjoyed vacations recently are — Roy Cook, Bronislaw Sojkowski, Leo Lemoine, Rose Gregory.

Joe O’Brien had the misfortune to break a bone in his foot while hunting.

Jack R. Shields has recently been promoted to acting Corporal in Co. K — Mass. National Guard.

Lou Sieliano took his vacation the week of Dec. 11 and Tom Dufraine took his Dec. 4.

Louise Blanchard was admitted to St. Luke’s Hospital in Pittsfield, Dec. 6 for a major operation. She is progressing nicely.

Norman Chenail has been in the hospital for a tonsillectomy.

HUNTERS ALL!


Of those who enjoyed the open season in Vermont, Art Caron was the only one reporting a kill.

Lawrence BISHOP

Geraldine BRUNDIGE

Ovens

Not employed here

NAME

DEPT.

DATE OF WEDDING

Marjorie HIFKO

Mira

St. Francis

Lawrence McCONNELL

Not employed here

Nov. 11

Dolores MILLER

Paper Rolling

St. Francis

Wayne DAVIS

D. C. Rolling

Nov. 25

Virginia WINDOVER

Sprague Products

Baptist

Arthur SPENCER

Not employed here

Nov. 30

Pearl PELTIER

Not employed here

St. Francis

Henry LUCZYNSKI

Paper Assembly

Nov. 11

Doris BLANCHARD

Paper Assembly

St. Francis

Charles GAUDETTE

Not employed here

Nov. 21

Dorothy DAVISON

Impregnating Dept.

St. John’s

Clarence BLISS

Impregnating Dept.

Nov. 25

Lucille FOOTE

Paper Assembly

St. Stanislaus

John PETROWICZ

Not employed here

Adams, Nov. 18

BIRTHS

A DAUGHTER to Mr. and Mrs. Busby WILLIAMS — Nov. 6. Joan Edna is the baby’s name.

A DAUGHTER to Mr. and Mrs. Edward ETHER. Mother is Glaids of Boxing Dept.

LOCAL 240 BOWLING TEAM. In this group, from left to right: Rudy Drobiak, Clinton Sweeney, George Scarbo, Robert Button, and Ken Russell.

THE DRY ASSEMBLY BOWLING TEAM. These smiling girls are, from left to right: Margaret Macksey, Marie Letalien, Beatrice Pierce, May Roy, and Jennie Chalifoux.
TEN SUGGESTIONS FOR HOLDING AND IMPROVING A JOB

I. Accept and welcome fair criticism. When executives find that certain men resent criticism, they stop criticizing and begin firing.

II. Don't give out unfair criticism. Don't be a chronic grouch or petty complainer. Stop listening to grouchy associates or you'll become like them.

III. Develop a “We” and “Our” attitude toward your company. Show an enthusiasm and interest in the company’s success. Realize that what hurts company business hurts you also.

IV. Hard work brings success just as fast today as ever. Remember this—if you never do more than you’re paid to do, you’ll never get paid for more than you do.

V. Prepare yourself to handle part or all of the work of men above you. A good understudy for an executive is too valuable to fire.

VI. Always be ready to lend a hand to others or do new tasks. Willing workers are hard to fire.

VII. Develop confidence in your abilities, but avoid over-confidence. Bluffers eventually get deflated. Confine your clock-watching to alarm clocks, and make a habit of getting to work on time.

VIII. Keep your head when the routine of work is varied or when an emergency arises. Accept responsibility whenever opportunity offers; a refusal kills chances for advancement.

IX. Don’t bury your nose in the details of your job. Organize your work and assign routine duties to your assistants whenever possible, so you will have time for more important things.

X. Devote a few minutes of each day to clear thinking about your job, your future and your company’s future. Jot down each worthwhile idea immediately, develop the idea in your mind for a few days, then write it up in detail for consideration by your superiors. Initiative of this form is welcomed and eventually rewarded.

J. E. SMITH

THERE ARE STILL FRONTIERS
(An Editorial)

The learned historian sighed wearily, closed the last of the many dusty books he had been reading, and rubbed his hand across his eyes. Then he muttered, half to himself, so that the words were scarcely audible—

"There aren't any more frontiers," the learned historian sighed to himself. "They're all gone. There's no more room for adventure. There's no more room for achievement. All we can do is sit down and write books about the opportunities of the past."

Meanwhile, in an industrial laboratory in the same city, two men were bending eagerly over a small flame and an array of glass tubes. They were watching the last stages of an experiment that had taken over a year. They were research men employed by an industrial company; their experiments were being backed up by that company; and they were on the verge of discovering a new product that would mean new jobs and new paychecks for hundreds of men.

The learned historian would never think of looking for new frontiers in industry. Yet that is just where they are to be found today.

To be sure, the old days of the wild West where the buffalo roam are gone forever. That frontier is no more. But that does not mean that frontiers, and the opportunity that goes with them, are nowhere to be found.

Today, these are to be found in science and research, working with American industry to produce the progress that can come only when new ideas are turned from theory into actuality. In that field, there lies far more scope, more of a chance for adventure and progress, than Daniel Boone or Buffalo Bill or Davy Crockett ever had.

The learned historian, lost among his dusty books, is very short-sighted indeed if he neglects these things. Last frontiers? Americans will never recognize them. There are no last frontiers for America.

J. E. SMITH

SPRAGUE EMPLOYEES SINCE 1930 OR BEFORE
From left to right, back row: William Kent, Charles Denn. Front row: Matthew Nazzewski, Leonard Bourrie, George Senechal, and Arthur Gibeau.

CAMERA HIGHLIGHTS OF THE MONTH
Scene 1 shows Francis Manns, Paper Assembly, at Pin Machine.
Scene 2 presents Bobby, son of Walter Rohane of Paper Assembly.
Scene 3 is Billy, son of Dorothy Skiffington, Paper Assembly.
Scene 5. Emily Cardimino and Raymond Trembley.
Scene 6 shows Clarence Ryan, Can Shop, at Riser Press.