MONITORING THE FIELD

July, 1972 | Issued by Field Engineering Johnson Service Co., Milwaukee, Wis. | Vol. 16, No. 7

JOHNSON SERVICE EXTENDS RECORD

Johnson Service Company has reported second quarter earnings per share of 48 cents as compared with 46 cents a year earlier, running to 16 the number of consecutive quarters in which earnings per share have exceeded those of the corresponding period the prior year.

Net earnings for the second quarter were $2,092,000 as against $1,974,000 in 1971, while sales increased to $52,047,000 from $46,611,000.

For the first six months, earnings were $4,261,000 or $1 per share as against $4,098,000 and 96 cents in 1971. Sales rose from $91,136,000 to $100,800,000.

While there has been a general business upturn, Johnson Service Company has yet to notice any appreciable increase in its installed systems business.

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A token of appreciation was sent to **Donald Wuorinen** of the **Baltimore Office** Engineering Department. Don is the genius who suggested an alternative to the patented morning warmup cycle for unit ventilators. (See "Monitoring The Field," May, 1972.)

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WILKES-BARRE OFFICE PULLS THROUGH IN TIME OF CRISIS

Shortly after the devastating floods hit the eastern portion of the country, the following news item appeared in the Allentown *Call Chronicle*:

Flood-Hit Firm Switches Service To Philadelphia

Lloyd Warneka, manager of the Johnson Service Co., Wilkes-Barre, has announced that anyone in the Lehigh Valley needing service of the company should contract the Philadelphia office.

The Johnson firm installs and services control systems, including automatic controls for heating, air-conditioning, humidity and ventilation.

Many major industries and businesses in the area are serviced by Johnson systems, Warneka said. In the event of a major breakdown customers should not try to reach the Wilkes-Barre office, which is the office people in the Lehigh Valley usually do business with.

Calling from. Scranton, he said, "The direct line to our Wilkes-Barre office is wiped out. There is no phone service out of Wilkes-Barre. Anyone in need of service should call our Philadelphia office. the area code there is 215 and the number is 637-1700."

Acts such as this demonstrate that Johnson Service Company is a good neighbor; it also does a tremendous amount for our public image.

THE BEIMS PROGRAM

PHASE I – THE PRESENT

Phase I of the long awaited **B**ranch **E**ngineering and **I**nstallation **M**anagement **S**tandards Program has been completed! Each branch office has been sent a BEIMS Manual and has selected its BEIMS Training Director. Plans are in motion to hold training sessions in each region for the BEIMS Training Directors and/or Branch Managers.

On behalf of the entire Company, we wish to thank and congratulate each BEIMS Team Member for his contribution to the development of the BEIMS Program (See Page 2). It is the most impressive and valuable tool ever produced by our Company for improving the efficiency of engineering and installation in our branch organization. The BEIMS Program is successful only because of individuals such as these men who were willing to give of their time and talents in this very unique and special way. They can be justifiably proud of what they accomplished. The goals set by the BEIMS Chairmen were very ambitious. Many of us questioned, "Can it be done?" Well, they did it, and in only eight months!

PHASE II – THE FUTURE

The next goal is implementation, whereby we all stand to benefit from increased profits with jobs made easier in the office and field, thus making us more competitive in the marketplace.

Special emphasis will be placed upon providing our Installation Men with better tools to do their jobs. Included in the plans are:

1. Complete and accurate control drawings.
2. Adequate construction materials and tools.
3. Correct material delivered to meet job progress.
4. Improved communications among all of us, at the job site, office, region and factory.
5. Training program covering environmental control installations.
6. Project Planning and Control System (PPCS) to determine how to accurately manage a job more efficiently.

This is a BRANCH program which involves every one of us. We have an untapped wealth of ideas in both our engineering and installation personnel. The BEIMS Program is "putting it all together" so that we can all benefit from sharing our best ideas. Talk to your BEIMS Training Director for more details on how you can help.

The following is a list of all the BEIMS Team Members who took part in the development of the Branch Engineering and Installation Management Standards Program.

ENGINEERING MANAGEMENT
Chairman: Herb Korff, Chicago
Chuck Andolsek, Rochester
Ralph Broadwater, Atlanta
G. R. Fownes, Montreal
Jerry Hintz, Milwaukee
Jim Lloyd, San Francisco
Vern Pickel, Kansas City
Bob Tisdale, New York

ABBREVIATIONS & SYMBOLS
Chairman: John Bailes, Toronto
Jerry Bell, Dallas
H. Cosentino, Hartford
Jim Davis, Washington, D.C.
Don Engstler, La Crosse
Bob Spicer, Cincinnati

ENGINEERING DATA
Chairman: Norm Janisse, Milwaukee
P. K. Ng, Toronto

ENGINEERING FORMS
Chairman: Ken House, SERO, Atlanta
John Arbaugh, Baltimore
Cliff Badger, Edmonton
Jim Baker, Chicago
L. Bergeron, Los Angeles
Steve Lasewicz, Hartford
Arnold Peterson, Appleton
Joe Radolec, Pittsburgh
Bob Wolff, St. Louis

PNEUMATIC CONTROL DRAWINGS
Chairman: Gene McNally, Boston
Bill Edwards, Panel Division
Carl Farwell, Detroit
John Hardin, Union
Dean McGeorge, Minneapolis
Ron McMaster, Regina
Nelson Moffett, Houston
Elroy Roessler, Milwaukee
Don Scarlet, Salt Lake City
Bob Seiberlich, Philadelphia
Leon Taisey, Syracuse
Ervin Varner, Greensboro
Howard White, Dayton

ELECTRICAL CONTROL DRAWINGS
Chairman: George Eckert, WRO, Denver
Sam Green, Atlanta
John Benson, Phoenix
Bob Dunham, Columbus
C. Fitzgerald, Baltimore
Al Hess, Houston
Jim Wallace, Toronto

CONTROL CENTER DRAWINGS
Chairman: Kevin Higgins, SWRO, Dallas
Jim Barker, Hamilton
Bill Edwards, Panel Division
John Erickson, WRO, Denver
Jim Gregory, SWRO, Dallas
D. Kittrell, SERO, Atlanta
P. Meria, MWRO, Lincolnwood
E. Muller, MARO, Philadelphia
Joel Richmond, CCSG, Milwaukee
Bob Sobol, New York
Bill Toth, CRO, Cleveland
Dave Weaver, PCRO, San Francisco

TRAINING
Chairman: Clyde Frampton, Milwaukee
M. Ubhaus, Los Angeles
Jim Hughes, Houston
J. T. Jones, Albany, Ga.
Ron Kent, Milwaukee
Ray Martin, Chicago
J. Patterson, Winnipeg
C. Scruggs, Wilmington
Paul Wichman, Milwaukee
J. O'Connor, New York

PROJECT PLANNING and CONTROL SYSTEMS TASKING
Chairman: Joe Lewis, Milwaukee
Al Perrone, New York
Joe Klassen, Toronto
C. Peruchini, Milwaukee
L. Dienert, Washington, D.C.
Jim Wilson, Chicago
D. Gruszynski, San Francisco
Jack Gunter, SWRO, Dallas
Mike Martin, Dallas
Paul Rhen, Harrisburg
Les Riedling, Atlanta
Dale Shore, Toronto

ADVISERS:
B. G. Martin, Milwaukee
J. L. Pollick, Philadelphia
T. S. Brown, New York
A. Quakkelaar, Milwaukee

"$UCCE$$ I$" T O R I E $

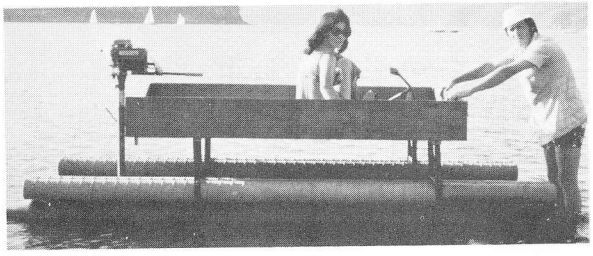
. . . by and for the Johnson SERVICE Organization

JOHNSON INGENUITY

Here's an example of efficiency in action. Alan McKenzie, Regional Engineer in Sydney, Australia, and his assistant, Aurelio Cavallaro, set out to build themselves a vessel to further their hobby of fishing. The main criteria for building the vessel was a budget not to exceed $10.00! Most materials were "bludged" (Australian term for politely asking one to make a donation) from a construction site. The main drain on the budget was for strap iron and angle iron to hold the pontoons in place.

The second prerequisite was to have a simple propulsion mechanism. Propulsion consists of a worn out lawn mower engine rehabilitated and mounted in a strap iron bracket. The shaft consists of a piece of copper pipe left over by a mechanical contractor. At the bottom of the engine shaft is a brass collar to which are brazed several blades cut from brass sheets. The collar fits on the end of the engine shaft so it drives the water vertically downward. This propeller is then inserted in a 90° elbow so the vessel is in fact propelled by driving water into the top of the elbow vertically and out the rear, thus propelling the vessel forward.

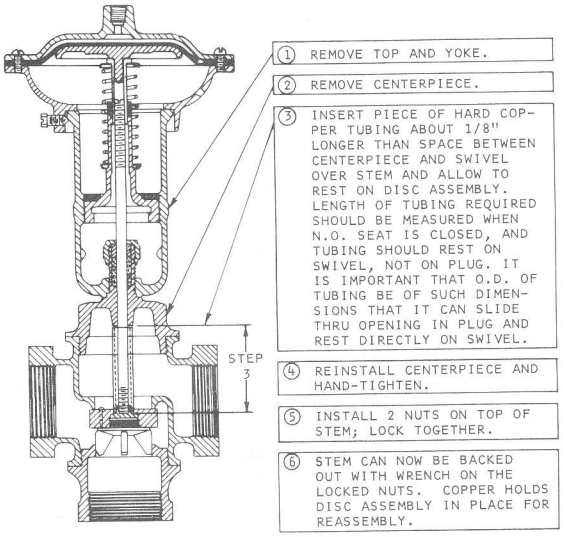
When our two geniuses started this project, they wanted the vessel to be light enough to transport on top of their car. As you can see from the amount of sheet metal and angle iron in the final product, such a feat was impossible. Before making its debut in the harbor (right along with all the millionaires' yachts) the vessel had to be taken apart, loaded on top of the car, and then reassembled. However, the vessel was completed well below the budget, many fish have been caught and a good time was had by all. The current report is that the vessel is up on the auction block for sale to the highest bidder, F.O.B. Sydney, Australia.



Aurelio Cavallaro and his wife Irenee relax aboard their "Australian fishing vessel."

VALVE STEM REMOVAL

Bill Barnes, Jr., Construction Manager in the **Grand Rapids Office**, came up with a method for removing and replacing the stems in 3-way mixing valves without removing the valve from the system. Grand Rapids had a service job where all valves were installed without unions and the valves had to be cut and reinstalled. By using Bill's method, his branch saved $$, and "Success Is" will send him a $20.00 award for his efforts.



Editor's Note: When valves have been in service under severe conditions for a long time, a higher torque may be required to remove the stem. If the stems break off or pins break, the valve would then have to be removed.

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CONGRATULATIONS TO **JIM ECKELS**, SERVICE SALESMAN IN THE **INDIANAPOLIS** BRANCH OFFICE. JIM WAS SELECTED AS HIGHEST IN HIS CLASS AT THE DALE CARNEGIE SALES COURSE HE JUST COMPLETED.

CONSTRUCTION NEWS

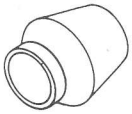
7-72

TOOL TALK

Here is a brief summary of the newest listings in the Construction Materials and Tools Catalog.

Plastic Ferrule (Page CM/10):

A new plastic ferrule has been added to the construction materials line. It is to be used in connecting 3/16" tubing with a standard 1/4" compression fitting. No insert is required. Through this standardization we can eliminate the requirements for stocking 1/4" and 3/8" to 3/16" reducing fittings.



F-1000-309 PAGE CM/10
Plastic Ferrule – Reducing
1/4" to 3/16" O.D. to be used with 1/4" compression fittings and copper or Polyethylene Tubing.

General Mechanics Tool Kit "A" (Page CT/1):

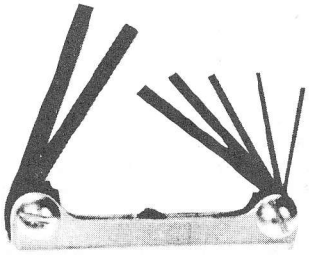
The 1/4"drill motor has been eliminated from the kit. You will have your choice of any of the drill motors listed on Page CT/11. From now on, drill motors must be ordered separately.

Folding Allen Wrench Set (Page CT/62):

Sizes have been changed as follows:

Old Set and New Set: 1/16", 5/64", 3/32", 1/8", 5/32", 3/16"

Old Set: 7/32"
New Set: 7/64", .050", 9/64"



X-100-166 PAGE CT/62
Allen Wrench Set
(Pocket Knife Type)

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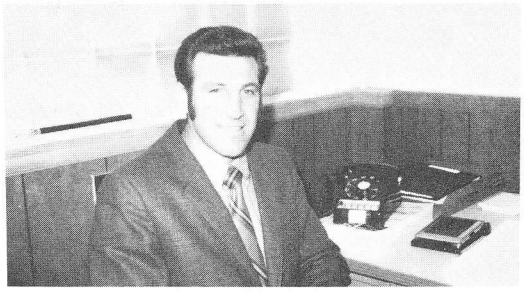
Construction News is contributed by the Central Construction Department and all correspondence concerning it should be directed to Clyde Frampton, 8-383, Milwaukee.

SPOTLIGHT ON CONSTRUCTION



Chuck Beeson, Construction Manager
Tulsa, Oklahoma Branch Office

This month's spotlight moves to the Southwest Region and focuses on Chuck Beeson, Construction Manager in our Tulsa Office.

Chuck has been with Johnson for 14 years. He was first employed as a pipefitter, was later made a foreman, and in April of 1971 he was appointed Construction Manager.

One of Chuck's continuing efforts is to impress upon the contractors the importance of installing our equipment in the manner recommended by Johnson Service Company on approved shop drawings.

Chuck attended Kansas State Teachers' College in Pittsburg, Kansas and has 15 hours of pre-engineering to his credit. He belongs to Pipefitters Local #205 in Tulsa and is active in the educational program for the Local's Journeymen and Apprentices. He is currently teaching a temperature control class at the Apprentice Training School.

On the personal side, the Beeson family includes Chuck, his wife and three children. Chuck is a Little League baseball coach while also serving as Athletic Director for the Junior High School. Rounding out the sports scene are skiing in winter and quail and pheasant hunting in season.

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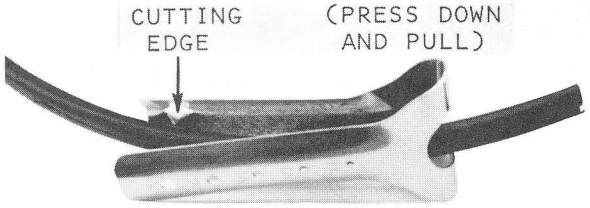
"You want me to recommend something for your tired, run-down feeling? How about a tool box?"

IDEA OF THE MONTH
Cable Ripper

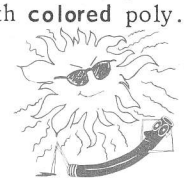


Jim Meeks, an electrician in our **Washington, D.C.** Branch Office, suggests using an "Ideal" Cable Ripper, Catalog No. 45-018 for cutting into multi-tube bundles of Poly-Cor tubing. These tools are available from most electrical supply houses at approximately 50¢ each. A $20.00 award is in the mail to you, Jim.

* * *

POLYETHYLENE TUBING: A few months ago we began presenting fact and fiction information concerning the installation of polyethylene tubing. The first two articles covered, 1) appearances and practices, and 2) rodent damage. Old Wives' Tale No. 3 deals with ultra-violet resistance of polyethylene tubing. The objections related to this particular subject have some valid basis as this problem has been true in the past with **colored** poly.

OLD WIVES' TALE NO. 3:



Fiction: Polyethylene falls apart if it is exposed to sunlight or fluorescent light.

Fact: Many types of commercial grades of polyethylene will, in fact, become embrittled and crack if exposed to sunlight or fluorescent light (which has almost the same ultra-violet wavelengths as sunlight) over long periods of time. For all practical purposes, this is true only of colored tubing. The use of colored tubing is recommended only for protected areas such as limited panel board work.

Approximately 90% of all polyethylene tubing sold is black. There is an excellent reason for this; adding carbon black to the base resin has proven to be the most effective screen for ultra-violet waves. It is safe to say that black polyethylene tubing is virtually impervious to ultra-violet degradation. This statement is not made in an off-hand manner. When tests are conducted on polyethylene tubing, three areas concerned with ultra-violet resistance are carefully checked:

1. Type and particle size (50 millimicrons of the carbon black).
2. Concentration of the carbon black (approximately 2%).
3. Probably the most important single point is uniform dispersion in the resin of the carbon black particles.

Since ultra-violet resistance is important to the overall performance of our poly tubing, you can rest assured that the tubing made for us has the highest degree of ultra-violet resistance available and is virtually impervious to any normal sources of ultra-violet degradation.

The following article was reprinted from the July 1, 1972 issue of *Contractor*.

UA Advice: CONTRACTORS SHOULD MANAGE MEN, NOT OVERMAN JOB

"He was characterized by PHCC's first vice-president, Sam Bloom, as a dedicated labor leader and a true 'revolutionary.'

"With that introduction Martin J. Ward, general president of the United Association, addressed the National Association of Plumbing-Heating-Cooling Contractors for the first time at its annual convention in Anaheim, California last month.

"Ward lived up to the billing, telling the p-h-c contractors that he was strongly in favor of getting a solid days work out of a journeyman. But he felt the productivity issue had been 'greatly overplayed in some areas.'

"He cited various measurements of productivity, those used by the Labor Department and the Bureau of National Affairs, as being somewhat unreliable and not presenting an accurate picture of what was going on at the job site.

"Ward offered his own solution. 'I think the way you measure productivity is by going out to the jobs and seeing how many guys are standing around. Compare it to how many guys were standing around in the 1940's and 1950's, when no one was complaining about productivity.'

"However, he admitted that on some jobs and, in many areas, his UA men 'are not working up to what we ought to.'

"Ward maintained his argument with contractors was that they, too, had a responsibility on the job. To some extent, he suggested, management had given up its rights to run a job and had come to the union to enforce the collective bargaining agreement when management itself should have been enforcing it.

"'You're as much a party to that agreement as we are,' he said.

"'In many cases over the past five or 10 years they've (management) expected the business agent to enforce the collective bargaining agreement.'

"'Now that's not the way it was in the forties and fifties. Employers had certain things in an agreement and they enforced those things. They insisted that the job be done.'

Jobs Overmanned

"Ward also expressed his opinion that many jobs are overmanned – particularly the larger jobs. He said a three-man committee at UA headquarters was making a study of various jobs to determine if there were more men than required to do the job.

"'Now that's a hell of a thing for a general president of a union to have to do... But I think the situation is so bad, and the image of construction so bad, that we have to do something about it.'

"'Maybe that's what you meant, Sam, when you said **revolutionary**,' Ward said. 'But I'm sick and tired of having the union get blamed for a lot of things that we're not really responsible for, or are only partially responsible for.'

Relates Story

"To illustrate his point on contractors overmanning jobs, Ward related the following story:

"'I worked on a job in Kankakee, Illinois, many years ago. It was a government job and everybody was anxious to get it done. We were pretty well overmanned – and there was an old Irish labor foreman there whose responsibility it was to have a couple of laborers dig a hole.

"'So he puts two laborers to digging the hole and the project manager comes along and says: 'How many men you got diggin' in that hole?' And the foreman said two. And the project manager said: "How long will it take?" 'Well, it will take two hours for them to dig the hole.' And the project manager said: 'Why don't we put four men on the job and they'll be able to dig it in one hour?'

"'And the Irish labor foreman said: 'Why the hell don't we put eight in the hole and we won't have to dig it at all!'

"'So I think a lot of this has to do with your planning of jobs and our planning of jobs. I'm not asking our guys to work any harder, I think they ought to work smarter. I think we ought to plan our jobs better, And I think that in talking to our people and trying to get productivity increased, we can accomplish some of those things,' Ward concluded."